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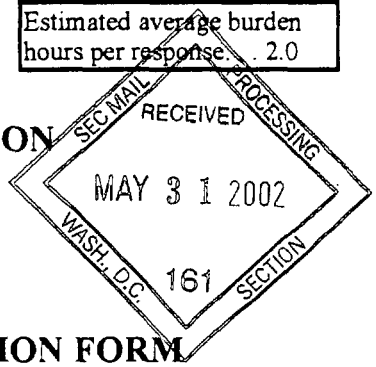
*** An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid control number. Any member of the public may direct to the Commission any comments concerning the accuracy of this burden estimate and any suggestions for reducing this burden. This collection of information has been reviewed by OMB in accordance with the clearance requirements of 44 U.S.C. 3507.**



02037990

OMB APPROVAL
OMB Number: 3235-0518
Expires: March 31, 2005
Estimated average burden hours per response . . 2.0

EXHIBIT VOLUME 1



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form CB/A

TENDER OFFER/RIGHTS OFFERING NOTIFICATION FORM
(AMENDMENT NO. 1)

Please place an X in the box(es) to designate the appropriate rule provision(s) relied upon to file this Form:

Securities Act Rule 801 (Rights Offering)	☒
Securities Act Rule 802 (Exchange Offer)	☐
Exchange Act Rule 13e-4(h)(8) (Issuer Tender Offer)	☐
Exchange Act Rule 14d-1(c) (Third Party Tender Offer)	☐
Exchange Act Rule 14e-2(d) (Subject Company Response)	☐

PROCESSED
JUN 0 5 2002
THOMSON FINANCIAL

Autogen Limited
(Name of Subject Company)

Not Applicable
(Translation of Subject Company's Name into English (if applicable))

Australia

(Jurisdiction of Subject Company's Incorporation or Organization)

Peter Lee, Company Secretary, Autogen Limited

(Name of Person(s) Furnishing Form)

Ordinary Shares

(Title of Class of Subject Securities)

Not Applicable

(CUSIP Number of Class of Securities (if applicable))

Brian Brodrick, Esq.
Phillips Nizer LLP Tel: 212-841-0700
666 Fifth Avenue, New York, New York 10103

(Name, Address (including zip code) and Telephone Number (including area code) of Person(s) Authorized to Receive Notices and Communications on Behalf of Subject Company)

May 17, 2002*

(Date Tender Offer/Rights Offering Commenced)

*Date of first publication. Subject to 7 day exposure period pursuant to Australian Corporations Act of 2001.

GENERAL INSTRUCTIONS

I. *Eligibility Requirements for Use of Form CB*

A. Use this Form to furnish information pursuant to Rules 13e-4(h)(8), 14d-1(c) and 14e-2 (d) under the Securities Exchange Act of 1934 ("Exchange Act"), and Rules 801 and 802 under the Securities Act of 1933 ("Securities Act").

Instructions:

1. For the purposes of this Form, the term "subject company" means the issuer of the securities in a rights offering and the company whose securities are sought in a tender offer.

2. For the purposes of this Form, the term "tender offer" includes both cash and securities tender offers.

B. The information and documents furnished on this Form are not deemed "filed" with the Commission or otherwise subject to the liabilities of Section 18 of the Exchange Act.

II. *Instructions for Submitting Form*

A. You must furnish five copies of this Form and any amendment to the Form (see Part I, 2

Item 1.(b)), including all exhibits and any other paper or document furnished as part of the Form, to the Commission at its principal office. Each copy must be bound, stapled or otherwise compiled in one or more parts, without stiff covers. The binding must be made on the side or stitching margin in such manner as to leave the reading matter legible.

B. The persons specified in Part IV may manually sign the original and at least one copy of this Form and any amendments. You must conform any unsigned copies. Typed signatures are acceptable so long as manually signed copies are retained by the filing person for five years.

C. You must furnish this Form to the Commission no later than the next business day after the disclosure documents submitted with this Form are published or otherwise disseminated in the subject company's home jurisdiction.

D. In addition to any internal numbering you may include, sequentially number the manually signed original of the Form and any amendments by handwritten, typed, printed or other legible form of notation from the first page of the document through the last page of the document and any exhibits or attachments. Further, you must set forth the total number of pages contained in a numbered original on the first page of the document.

III. *Special Instructions for Complying with Form CB*

Under Sections 3(b), 7, 8, 10, 19 and 28 of the Securities Act of 1933, and Sections 12, 13, 14, 23 and 36 of the Exchange Act of 1934 and the rules and regulations adopted under those Sections, the Commission is authorized to solicit the information required to be supplied by this form by certain entities conducting a tender offer, rights offer or business combination for the securities of certain issuers.

Disclosure of the information specified in this form is mandatory. We will use the information for the primary purposes of assuring that the offeror is entitled to use the Form and that investors have information about the transaction to enable them to make informed investment decisions. We will make this Form a matter of public record. Therefore, any information given will be available for inspection by any member of the public.

Because of the public nature of the information, the Commission can use it for a variety of purposes. These purposes include referral to other governmental authorities or securities self-regulatory organizations for investigatory purposes or in connection with litigation involving the Federal securities laws or other civil, criminal or regulatory statutes or provisions.

PART I – INFORMATION SENT TO SECURITY HOLDERS

Item 1. *Home Jurisdiction Documents*

(a)

You must attach to this Form the entire disclosure document or documents, including any amendments thereto, in English, that you have delivered to holders of securities or published in the subject company's home jurisdiction that are required to be disseminated to U.S. security holders or published in the United States. The Form need not include any documents incorporated by reference into those disclosure document(s) and not

published or distributed to holders of securities.

(b) Furnish any amendment to a furnished document or documents to the Commission under cover of this Form. Indicate on the cover page the number of the amendment.

Item 2. ***Informational Legends***

You may need to include legends on the outside cover page of any offering document(s) used in the transaction. *See* Rules 801(b) and 802(b).

Note to Item 2. If you deliver the home jurisdiction document(s) through an electronic medium, the required legends must be presented in a manner reasonably calculated to draw attention to them.

PART II – INFORMATION NOT REQUIRED TO BE SENT TO SECURITY HOLDERS

The exhibits specified below must be furnished as part of the Form, but need not be sent to security holders unless sent to security holders in the home jurisdiction. Letter or number all exhibits for convenient reference.

(1) Furnish to the Commission any reports or information (in English or an English summary thereof) that, in accordance with the requirements of the home jurisdiction, must be made publicly available in connection with the transaction but need not be disseminated to security holders.

(2) Furnish copies of any documents incorporated by reference into the home jurisdiction document(s).

(3) If any name is signed to this Form under a power of attorney, furnish manually signed copies of the power of attorney.

PART III – CONSENT TO SERVICE OF PROCESS

(1) When this Form is furnished to the Commission, the person furnishing this Form (if a non-U.S. person) must also file with the Commission a written irrevocable consent and power of attorney on Form F-X.

(2) Promptly communicate any change in the name or address of an agent for service to the Commission by amendment of the Form F-X.

PART IV – SIGNATURES

(1) Each person (or its authorized representative) on whose behalf the Form is submitted must sign the Form. If a person's authorized representative signs, and the authorized

Peter Lee

(Signature)

PETER LEE SECRETARY

(Name and Title)

May 24, 2002

(Date)

http://www.sec.gov/divisions/corpfin/forms/cb.htm
Last update:03/25/2002

AUTOGEN LIMITED

Part II Exhibit List to Form CB

Volume 1

1 Research and License agreement (Field of Obesity) dated 28 April 1999 ("Obesity Research Agreement"), as amended by the Addendum dated 15 March 2001

2 Research and License Agreement (Field of Diabetes) dated 28 April 1999 ("Diabetes Research agreement") as amended by the addendum dated 16 March 2001

3 Commercialisation License (Field of Obesity) "Beacon" dated 28 April, 1999 ("Commercialisation License")

4 Research and License agreement (Strategic Alliance in Human Gene) dated 11 February 2002 ("Human Gene Research Agreement")

5 Service Agreement dated 21 December 2001 entered into with Sequenom Inc. ("Sequenom Agreement")

6 Research agreement dated 28 February 1997 entered into with Deakin University and IDI ("Deakin agreement I")

7 Research, License and Commercialisation Agreement dated 14 January 1998 entered into with IDI ("IDI Agreement II")

8 Research Agreement with the International Diabetes Institute and Menzies Research Unit dated 7 February 2002 ("Menzies Agreement")

9 Research, License and Commercialisation agreement dated 16 August 2000 entered into with Deakin University ("Deakin agreement III")

10 Licensing Arrangement with Kyokuto Pharmaceutical Industrial Co. Ltd.

11 Arrangements with AXIS Consultants Summary of Service Agreement dated 25 November 1988

Volume 2

12 Company Constitution

13 Consents

14 ASX Announcements

AUTOGEN PTY LTD 2

DATE 1999

AUTOGEN PTY LTD

and

LIPHA S.A.

RESEARCH AND LICENCE AGREEMENT
(Field of Obesity)

DUNHILL
MADDEN
BUTLER
Solicitors

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Schedule 3 Proforma Commercialisation Licence
Schedule 4 Joint Venture Agreement
Schedule 5 Stage 1 Research

THIS AGREEMENT is made on APRIL 28TH, 1999

BETWEEN

Autogen Pty Ltd ACN 074 636 847
of 210 Kings Way, South Melbourne, Victoria, Australia

("**Autogen**")

AND

Lipha S.A.
of 37 rue Saint Romain, 69379 Lyon, CEDEX 08, France

("**Lipha**")

RECITALS:

A. Lipha has for many years, been strongly involved in the research, development, manufacturing and commercialisation of pharmaceuticals addressing metabolic diseases and has invented, developed, manufactured and marketed pharmaceutical products containing metformin, one of the leading oral anti-diabetic products throughout the world.

B. Lipha has agreed to provide research support to the Autogen/Deakin/International Diabetes Institute (IDI) research program for the discovery of novel genes involved in obesity, the product of these genes being able to be used as therapeutic agents or as a target for drug discovery as well as providing in house facilities including combinatorial chemistry to advance subsequent drug development in that field.

C. Lipha and Autogen have entered into "Heads of Agreement" dated December 15th, 1997, under which Autogen has agreed to carry out Research with an option for Lipha to continue such research program.

D. Lipha and Autogen have agreed in accordance with provisions of Heads of Agreement to enter into this research and licence agreement related to research into obesity and novel genes involved in obesity. Lipha and Autogen have simultaneously entered into a substantially similar agreement in respect of diabetes.

OPERATIVE PROVISIONS:

1. INTERPRETATION

1.1 Definitions

In this agreement the following expressions have the following meanings:

"**Affiliate**" means with respect to a party, any person which directly or indirectly Controls, or is Controlled by, or is under common Control with, such party.

"**Autogen Know-How**" means Know-How owned by or licensed to Autogen in relation to the Autogen Patents, or of relevance or use in relation to the Licensed Field or the conduct of Stage 1 Research or Stage 2 Research but excludes Stage 1 Know-How.

"**Autogen Patents**" means the patents and patent applications owned by or licensed to Autogen related to the Licensed Field including but not limited to those referred to in **Schedule 1** and including:

(i) any re-issue, renewal or extension of such a patent or patent application (whether in whole or in part) and any patent of addition thereto; and

(ii) any supplementary protection certificate or other form of extension based on or arising from such patents or patent applications.

"**Base Rate**" means the PIBOR rate published as such by the French Association of Banks (Association Francaise de Banque (AFB)) or EURIBOR rate applicable on 1 January 1999 or at any later date, should such date be postponed for any reason and published as such by the European Federation of Banks (Federation Europeenne de Banque (FEB)) plus in either case the amount of 1.5% per annum.

"**Business Day**" means a day on which the trading banks are open for general banking business in both Melbourne, Australia and Lyon, France.

"**Commencement Date**" means the date of execution of this agreement by the party last signing it.

"**Commercialisation Licence**" means a licence in respect of Patents and Know-How in the form of the agreement contained in **Schedule 3**.

"**Complementary Agreement**" means a detailed agreement, if any, entered into towards the end of Stage 2 Research, including all the terms of the Commercialisation Licence, unless the parties agree to amend the same, and otherwise taking account of the terms of any Joint Venture Agreement.

"**Control**" means the possession, directly or indirectly, of the power to direct or cause the direction of the management of policies of a person.

"**Diabetes Agreement**" means the agreement dated around the same date as this agreement and on substantially similar terms, save that it relates to diabetes rather than obesity.

"**Dollars**" or "$" means Australian dollars.

"**Europe**" means those countries specified in **Schedule 2.**

"**EUR**" means the new European currency called EURO .

"**FFR**" means French Francs.

"**Force Majeure**" means any cause which is not within the reasonable control of the party affected by it including, but not limited to, acts of God, industrial disputes of any

kind, war declared or undeclared, civil disturbance, acts or omissions of Government or other competent authority, fire, lightning, explosion or flood.

"**Further Development**" means the program of further research and development in relation to a Product or potential Product undertaken after completion of Stage 2 Research.

"**IDI**" means International Diabetes Institute, a company established in Victoria, Australia.

"**Insolvency Event**" means any event of insolvency, bankruptcy or liquidation of the relevant party, including any voluntary or involuntary judicial liquidation or re-organisation proceedings.

"**Joint Venture Agreement**" means a joint venture in respect of certain specified Patents and Know-How, containing the definitions and provisions contained in this agreement as specified in **Schedule 4**, and dealing with such other matters as are specified in that schedule.

"**Know-How**" means technical, commercial and other information, data, know-how, drawings, specifications and/or designs, animal or other models, methodologies and biological materials embodied in some Material Form, and without prejudice to the generality of the foregoing includes:

(i) all experimental, manufacturing, process, analytical, packaging, product, warehousing, quality control and quality assurance and marketing specifications, standards, procedures, processes, methods, instructions and techniques, samples, prototypes, formulae, writings of any kind, opinions or otherwise unwritten data or in the form of computer software or computer programs or any part thereof in any code; and

(ii) all other information and other material supplied to or received by a party or its Representatives from another party or Representatives on a confidential basis pursuant to this agreement.

"**Licence**" means the right and licence granted by Autogen to Lipha pursuant to this agreement.

"**Licensed Field**" means the field of human therapeutic applications for the treatment or prevention of obesity. For clarity it is noted that this does not include diagnostics or veterinary applications.

"**Lipha Fields**" means the Licensed Field and the "Licensed Field" as described in the Diabetes Agreement, so long as that agreement remains in full force and effect.

"**Loss**" means any loss, damage, cost, interest, expense, fee, penalty, fine, forfeiture, assessment, demand, action, suit, claim, proceeding, cause of action, liability or damages incurred by a person, and includes:

(i) the cost of any action taken by the person to protect itself against any loss or to preserve any right it has under this agreement; and

(ii) where applicable reasonable legal costs.

"**Material Form**" in relation to Information includes any form (whether visible or not) of storage from which Information can be reproduced, and any form in which Information is embodied or encoded.

"**Month**" means calendar month.

"**Novel Gene Product**" means any new gene, novel protein or novel antigen, and any product arising from the transcription of these genes.

"**Option Period**" means the Research Term and the 24 month period following the Research Term within which Lipha has the option to decide whether it wishes to progress some part of Stage 1 Research to Stage 2 Research.

"**Party**" means Autogen or Lipha and their respective successors and permitted assigns and "Parties" means both of them.

"**Patent**" means any patent or patent application as defined in the *Patents Act 1952* (C'th) and any similar international, national or regional patent or patent application and includes any and all extensions, renewals, continuations, patent-of-addition and/or supplementary protection certificates to any of the foregoing and includes any corresponding patent or patent application taken out or applied for in any country in the Territory which is fairly based upon or derived from any of the aforesaid patents.

"**Pre-Stage 2 Results**" means the Autogen Patents, Autogen Know-How, Stage 1 Patents and Stage 1 Know-How.

"**Products**" means any products produced or arising out of use of the results of Stage 1 Research or Stage 2 Research or arising out of all and any further development by Lipha pursuant to Stage 1 Research or Stage 2 Research or both.

"**Project Patents**" means the Autogen Patents, the Stage 1 Patents and/or the Stage 2 Patents.

"**Project Research**" means the research in the area of obesity and of novel genes involved in obesity and the research arising therefrom, consisting of the Stage 1 Research and the Stage 2 Research.

"**Representatives**" of a party means that party's directors, officers, employees or agents.

"**Required Insurance**" means:

(i) public liability insurance in respect of Losses up to a limit of $5,000,000 covering property damage and personal injury as may be relevant to the performance of each party's obligations under this agreement to the other, including (without limitation) liability, loss or damage due to negligent or malicious damage, data corruption or loss, fire, theft, electrical and water damage; and

(ii) if the relevant party sells a Product, product liability insurance in respect of Losses up to a limit of $20,000,000 covering any liability associated with use or misuse of the Product including, personal injury and consequential loss.

"**Research Agreement**" means the Research Agreement dated 28 February 1997 between Autogen, IDI and Deakin University to carry out research in the field of, amongst other things, obesity

"**Research Term**" means the period which started on December 15, 1997 corresponding to the signature of Heads of Agreement and which shall end on December 14, 1999, unless otherwise extended pursuant to **clause 3.4**.

"**Scientific Board**" means the board established under **clause 5.1**.

"**Stage 1 Know-How**" means the Know-How relating to or arising out of Stage 1 Research.

"**Stage 1 Patents**" means Patents relating to or arising out of Stage 1 Research.

"**Stage 1 Research**" means discovery of Novel Gene Products, characterisation and studies of such Novel Gene Products in animal models and human gene expression studies as resulting from such Stage 1 Research performed according to this agreement as described in **Schedule 5**.

"**Stage 1 Results**" means the Stage 1 Know-How and the Stage 1 Patents.

"**Stage 2 Know-How**" means in the context of a Stage 2 Research Program, the Know-How relating to or arising out of that Stage 2 Research Program.

"**Stage 2 Patents**" means in the context of a Stage 2 Research Program, Patents relating to or arising out of that Stage 2 Research Program.

"**Stage 2 Research**" means generally antibody production, large scale protein production, structural analysis, screening of compounds affecting such Novel Gene Product, combinatorial chemistry, toxicological studies and first clinical studies in obese patients and completion of dose efficiency relationship studies in obese patients (clinical Phase 2), performed on products or technologies generated by Stage 1 Research according to this agreement as described in **Schedule 5**.

"**Stage 2 Research Program**" means a program of Stage 2 Research in respect of a Novel Gene Product.

"**Stage 2 Results**" means in the context of a Stage 2 Research Program, the Stage 2 Know-How and the Stage 2 Patents for that Stage 2 Research Program.

"**Target Compound**" means a compound or small molecule, or group of the same, identified in the course of Project Research, being a compound which it is expected will be Covered By a Project Patent.

"**Term**" means the period this agreement is in force pursuant to **clause 13.**

1.2 Construction

In this agreement unless the context otherwise requires:

(a) **Business Day**. If any day appointed or specified by this agreement for the payment of any money or the doing of any act or thing falls on a day that is not a Business Day, the day so appointed or specified is deemed to be the next day which is a Business Day.

(b) **Collective references**. Reference to any thing (including, without limitation, any amount) is a reference to the whole or any part of it and a reference to a group of things or persons is a reference to any one or more of them.

(c) **Defined expressions**. If a word or phrase is defined, cognate words and phrases have corresponding definitions.

(d) **Gender**. Words importing any gender include the other genders.

(e) **Headings**. Headings must be ignored in construing this document.

(f) **Joint liability**. An obligation of two or more parties binds them jointly and severally.

(g) **Joint obligations**. An obligation incurred in favour of two or more parties is enforceable by them jointly and severally.

(h) **Month**. Means a calendar month.

(i) **Numbers**. Words importing the singular include the plural and vice versa.

(j) **Parts of agreement**. References to this agreement include its recitals, schedules and annexures.

(k) **Persons**. References to persons include corporations and bodies politic.

(l) **Reconstituted bodies**. References to a body which has ceased to exist or has been reconstituted, amalgamated, reconstructed or merged, or the functions of which have become exercisable by any other person or body in its place, is taken to refer to the person or body established or constituted in its place or the person or body by which its functions have become exercisable.

(m) **Representatives and assigns**. References to a person include the legal personal representatives, successors and permitted assigns of that person.

(n) **Statutory amendments**. A reference to a statute, ordinance, code or other law includes regulations and other statutory instruments under it and consolidations, amendments, re-enactments or replacements of any of them (whether of the same or any other legislative authority having jurisdiction).

(o) **Variation**. References to this or any other document include the document as varied or replaced, and notwithstanding any change in the identity of the parties.

(p) **Writing**. References to writing include any mode of representing or reproducing words in tangible and permanently visible form, and include telex and facsimile transmissions.

1.3 Diabetes Agreement crossover

Whilst and so long as the Diabetes Agreement remains in full force and effect, the parties agree, that for the purposes of the following defined terms as included in the Diabetes Agreement those terms will have in that agreement an extended meaning which includes the corresponding defined term as defined in this agreement and vice versa:

(a) Novel Gene Product;

(b) Stage 1 Know-How;

(c) Stage 1 Patents;

(d) Stage 2 Know-How; and

(e) Stage 2 Patents.

2. CONDITION AND INITIAL PAYMENT

2.1 Approval by parent

This agreement is conditional on the written approval of the Pharma Management Board of Merck KGaA, the parent company of Lipha, of both this agreement and the Diabetes Agreement. If such approval is not obtained by Lipha within 60 days of execution of this agreement by Autogen, then this agreement will lapse and be of no further force and effect. Lipha must use all reasonable endeavours to procure satisfaction with this condition. If as a result of the non-satisfaction of this condition, this agreement lapses, then the following will apply:

(a) Autogen will not be liable to repay any up-front payment made to it;

(b) Lipha will have no entitlement to any Stage 1 Results;

(c) Lipha will have no rights to any Stage 1 Results;

(d) Lipha must immediately return to Autogen any and all Autogen Know-How and Stage 1 Know-How; and

(e) the provisions of **clauses 9, 18, 20 and 21** will continue to apply.

2.2 Up-front payment

Lipha has paid as an up-front payment to Autogen 1,000,000 FFR in consideration of Autogen entering in to the Heads of Agreement, and this agreement, and granting to Lipha a licence of the Autogen Patents and Autogen Know-How.

3. STAGE 1 RESEARCH

3.1 Undertaking of Stage 1 Research

Autogen has been carrying out and must continue to carry out through arrangement with Deakin University and IDI under the Research Agreement Stage 1 Research for the period of the Research Term. The currently agreed program for Stage 1 Research is as set out in **Schedule 5**. The general objective of Stage 1 Research is to identify Novel Gene Products that may be of utility in the Licensed Field.

3.2 Initial contribution

Lipha has paid the sum of 500,000 FFR in respect of the first year of the Research Term and a further 500,000 FFR in respect of the second year of the Research Term as a part contribution to the cost of the research being funded by Autogen under the Research Agreement in the Licensed Field.

3.3 Lipha contribution

At Autogen's request, but at Lipha's cost, Lipha agrees to perform biotechnological studies for production and yield optimisation of protein and limited animal pharmacological studies as part of Stage 1 Research up to a limit of 1,000,000 FFR.

3.4 Extension of Stage 1 Research

(a) If Stage 1 Research is not completed during the Research Term Lipha shall have the right to require Autogen to continue Stage 1 Research, and at the same time extend the Research Term, for successive periods of one year, by giving written notice to Autogen not less than 3 months prior to the expiry of the current Research Term.

(b) Where Lipha does extend the Research Term then:

(i) Lipha shall pay to Autogen for each renewal period the amount of 500,000 FFR as part contribution to the research being funded by Autogen under the Research Agreement in the Licensed Field; and

(ii) Autogen will then continue to carry out through arrangement with Deakin University and IDI the Stage 1 Research for the extended period of the Research Term.

(c) Following the giving by Lipha of notice under clause **3.4(a)**, the parties will liaise in relation to the content of the Stage 1 Research for the following year, which will, unless otherwise agreed, be conducted under the Research Agreement. Initially this liaison will take place through the Scientific Board, who will prepare a draft research plan which is to be finally agreed between the parties.

(d) The research being undertaken under the Research Agreement may include more than just Stage 1 Research, and Autogen is solely responsible for funding this as well as the balance of the funding required to conduct the Stage 1 Research.

(e) If Lipha elects not to extend the Research Term, then without in any way limiting Lipha's discretion in relation to such decision, Lipha will give Autogen written reasons why it has elected not to do so.

3.5 Transition to Stage 2 Research

Lipha is entitled at any time during the Option Period to exercise its right by notice in writing to Autogen to proceed to Stage 2 Research. Lipha in exercising its option will identify the Novel Gene Product in respect of which Stage 2 Research is to commence.

3.6 Action on option

Upon receipt by Autogen of such notice of exercise by Lipha of its option, under **clause 3.5**:

(a) Lipha must, in the case of the first transition of a Novel Gene Product to Stage 2 Research only, pay to Autogen the sum of 3,000,000 FFR such amount to be paid within 30 Business Days of exercise by Lipha of its option, it being acknowledged that Lipha will not have to pay such sums for transition of further Novel Gene Products to Stage 2 Research following such first transition; and

(b) the Parties will execute a Commercialisation Licence in respect of such Novel Gene Product.

This option may be separately exercised by Lipha in respect of separate Novel Gene Products, and each exercise will lead to additional Commercialisation Licences and Stage 2 Research Programs.

3.7 Autogen and Stage 1 Research Rights

Subject to the terms of this agreement and any other licence granted by Autogen in favour of Lipha, Autogen will own and have an unfettered right to use and exploit all Stage 1 Patents and Stage 1 Know-How in any and all fields.

3.8 Lipha research licence

Whilst Lipha is continuing Stage 1 Research, Stage 2 Research, Further Development or paying royalties to Autogen under any Commercialisation Licence, Lipha has a non-exclusive royalty free right to use the Pre-Stage 2 Results for the purposes of its own internal research for human therapeutic purposes. This research licence extends to Affiliates of Lipha.

3.9 Option lapsing

If Lipha does not exercise its option under **clause 3.5** during the Option Period then Lipha and its Affiliates must not thereafter in any way exploit, benefit or use directly or indirectly Pre-Stage 2 Results save and except for the purpose of their own internal research, but, for the sake of clarity not for any research into Novel Gene Products discovered in the course of Stage 1 Research.

3.10 Stage 1 Patents

(a) Where either party in the course of Stage 1 Research makes or discovers any patentable invention then it must forthwith advise the other party in writing together with full details. Lipha will have the first option to patent such invention at its own cost, and if it elects not to do so then Autogen may do so at its cost. Any such patent application in respect of Stage 1 Research will be in the name of Autogen.

(b) If Autogen has patented an invention under **clause 3.10(a)** and paid the costs of such patenting, and Lipha elects to exercise its option in respect of the Stage 1 Research to which the invention relates, Lipha will then reimburse to Autogen the reasonable external costs incurred by Autogen in respect of each patent.

(c) If Lipha does not exercise its option in respect of the Novel Gene Product within the Option Period then Autogen will be free to offer the Novel Gene Product to third parties on such terms as it considers appropriate. In doing so Autogen may grant to such third parties a licence in respect of the Autogen Patents and the Stage 1 Patents to the extent that such a licence is necessary to exploit the Novel Gene Product and such licence will not be a breach of any licence granted by Autogen in the Lipha Fields to Lipha, the scope of any licence in favour of Lipha being commensurately reduced, such reduction being limited to a reduction in respect of such Novel Gene Product.

(d) In the case where Lipha patents an invention pursuant to **clause 3.10(a)** where the invention also has application in areas outside the Lipha Fields, Autogen may:

(i) require Lipha to patent the invention in such a manner as to include the application of the invention in those areas outside the Lipha Fields (and if this involves any additional external cost to Lipha, Autogen will reimburse to Lipha the reasonable additional external costs); or

(ii) patent the invention itself in so far as the invention has application outside the Lipha Fields and, in this case, Autogen can require Lipha to amend or limit the patent lodged by Lipha so that the patent only covers the Lipha Fields.

3.11 Continuing Research Agreement

Where Lipha has ceased to provide support for research being conducted under the Research Agreement as contemplated by **clause 3.4**, Lipha acknowledges it will have no rights in respect of any new or further Know-How or Patents arising under such Research Agreement.

4. STAGE 2 RESEARCH

4.1 Multiple Stage 2 Research Programs

The Parties acknowledge that there may be multiple Stage 2 Research Programs, each of which will be based on or around different Novel Gene Products, and will generate their own Know-How and Patents.

4.2 Undertaking Stage 2 Research

(a) Where Lipha has exercised its rights as provided in **clause 3.5** or **3.10** in respect of a Novel Gene Product, Lipha will have sole carriage of all research and development in respect of that Novel Gene Product until completion of the Stage 2 Research Program in respect of that Novel Gene Product. Each Stage 2 Research Program will be conducted and funded by Lipha until completion of that Stage 2 Research Program. Each Stage 2 Research Program must be directed at developing Novel Gene Products within the Licensed Field and discovering Target Compounds for use within the Licensed Field. Autogen may itself or through others seek to develop and exploit Novel Gene Products outside of the Licensed Field.

(b) Where Autogen desires to develop and exploit Novel Gene Products outside of the Licensed Field through a third party, then Autogen will at first instance engage in discussions with Lipha with a view to looking at opportunities for the parties to work together on such development and exploitation.

4.3 Licence to Lipha

Where Lipha is undertaking a Stage 2 Research Program then:

(a) all Stage 2 Know-How or Stage 2 Patents in respect of that Stage 2 Research Program will belong solely to Lipha, subject to the remainder of this clause and **clauses 4.6, 4.8** and **4.9**, and Lipha will be solely responsible for the cost of obtaining and maintaining any patent or other protection, provided that:

(i) Lipha may not assign any Stage 2 Results to a third party without the prior written consent of Autogen which consent will not be unreasonably withheld provided the assignee agrees to similar conditions in respect of such Stage 2 Results as are applicable under this agreement and the relevant Commercialisation Licence and in a manner which makes those conditions enforceable against the assignee by Autogen; and

(ii) if Lipha seeks to patent an invention from the Stage 2 Research which has application exclusively outside the Lipha Fields, then Lipha must notify Autogen of such invention prior to lodgment of the application for the patent and Autogen can require Lipha to extend the patent in respect of claims or other matters outside of the Lipha Fields;

(b) Autogen grants to Lipha a licence in respect of the Pre-Stage 2 Results within the Licensed Field to the extent necessary to undertake the Stage 2 Research Program, but not to undertake commercialisation (which must be subject to the Commercialisation Licence or a Complementary Agreement), such licence to be exclusive in the Licensed field, royalty free and extending to Affiliates of Lipha.

4.4 Autogen Stage 2 Research assistance

Autogen agrees upon Lipha's request to cooperate with Lipha for Stage 2 Research and both Parties may agree on specific studies to be included in a Stage 2 Research Program which are to be performed by Autogen or through Autogen and paid by Lipha, provided

Lipha has previously given Lipha's written approval on the costs of such studies. Lipha agrees that it will not in respect of any Stage 2 Research contract directly with Deakin University or IDI without the prior written consent of Autogen, it being the expectation that any research conducted by those parties will be contracted through Autogen.

4.5 Obligations of Lipha

Lipha will use its best endeavours to progress each Stage 2 Research Program in a timely and diligent fashion and with a substantial dedication of resources. Where activities forming part of a Stage 2 Research Program could properly and effectively be undertaken at IDI or Deakin University, then Lipha will consider the possible performance of those activities at those institutions, subject to **clause 4.4**, and will not conduct such activities through other third parties without first offering them to IDI or Deakin University as appropriate.

4.6 Rights of Autogen

(a) Lipha grants to Autogen and its Affiliates, with a right to sublicencee to IDI and Deakin University, a non-exclusive royalty free right to use for the purposes of their own internal research the Stage 2 Results of all Stage 2 Research Programs.

(b) If such internal research leads to an invention which can be commercialised within the Lipha Fields, then Lipha will have the first option to commercialise such invention within the Lipha Fields, and the parties will negotiate in good faith in this regard. If agreement cannot be reached within 90 days of the making of a formal offer by Autogen, then Autogen will be free to offer the commercialisation opportunity to third parties, but on no better terms than those offered to Lipha, unless it first offers such better terms to Lipha, which will have 14 days to either accept or reject such terms.

(c) If the internal research conducted under **clause 4.6(a)** leads to the commercialisation of the results of such internal research outside the Lipha Fields by Autogen, either on its own account, or acting as licensee on behalf of IDI or Deakin University, then the parties agree to negotiate in good faith for the grant by Lipha of a royalty bearing licence in respect of the ongoing use of the Stage 2 Results in such commercialisation. The parties acknowledge that the natural outcome of such discussions may be that Lipha takes on the role of commercialisation of the results of such internal research.

4.7 Discontinuation of Stage 2 Research

Lipha has the right at its own option and without any liability to Autogen to stop a Stage 2 Research Program if further development is not justifiable due to Lipha's reasonable determination that for efficacy, safety or medical reasons, the validity of the Patents covering such Novel Gene Product, a substantial change of economic factors or otherwise, such development should be terminated. If Lipha does cease such development it must promptly advise Autogen and provide written reasons as to why Lipha has ceased such development, but Lipha's determination will prevail. Lipha must endeavour to consult with the Scientific Board prior to ceasing development.

4.8 Unwanted rights Stage 2 Results

Where in accordance with **clauses** 4.7 or 7.2 Lipha ceases a Stage 2 Research Program, Lipha retains the exclusive ownership of the relevant Stage 2 Results generated up to the date of the cessation of that Stage 2 Research Program, provided that Autogen may request a commercial and research licence of such Stage 2 Results, in which case the parties will negotiate in good faith the terms of a licence (which may be exclusive or non-exclusive) for development and commercialisation of such Stage 2 Results, and unless the negotiated licence otherwise provides, Autogen must not assign the rights licensed from Lipha to a third party without the prior written consent of Lipha, which consent must not be unreasonably withheld.

4.9 Commercialisation Licences required

In the event Lipha wishes to in any way use, commercialise, licence, or assign Stage 2 Results, then, unless it does so pursuant to a Complementary Agreement, it must enter into a Commercialisation Licence in respect of those Stage 2 Results, to the intent and with the effect that amongst other things Autogen will receive "royalties" in respect of such use, commercialisation, licensing or assignment.

5. RESEARCH GENERALLY

5.1 Scientific Board

The parties agree to establish a scientific board comprised of both parties' representatives to discuss between the parties the carrying out of Stage 1 Research. The Scientific Board will consist of 2 representatives of Autogen, initially Prof. Gregory Collier of Deakin University and Prof. Paul Zimmet of IDI and 2 representatives of Lipha.

5.2 Meetings of the Scientific Board

Scientific Board meetings will be held every 3 months, or as otherwise agreed by the parties and each party may have any of its employees participate in said meeting if the party considers it necessary. Such meeting shall take place alternating at each party's place of business or at any other place subject to prior agreement by the parties, and be chaired by a representative of the party who hosts the meeting. The chairman of the meeting must circulate the agenda for the meeting at least 2 weeks prior to each meeting and will issue the formal minutes of the meeting.

The parties agree that Scientific Board meetings are only a place to report and discuss:

(a) the progress of each party's research and development work related to Stage 1 Research; and

(b) the progress of Lipha's research and development work related to each Stage 2 Research Program,

but the Scientific Board does not have capacity to make decisions on important matters to bind either party, unless otherwise agreed.

5.3 Reports

(a) Autogen agrees that it will prepare and submit reports to Lipha every 3 months during Stage 1 Research and it shall promptly give to Lipha at the end of Stage 1 Research a final and detailed report on such Stage 1 Research.

(b) If Lipha performs part of Stage 1 Research , as contemplated by **clause 3.3**, it will prepare and submit reports to Autogen every 3 months on such studies related to Stage 1 Research and it shall promptly give to Autogen at the end of Stage 1 Research a final and detailed report on such studies.

(c) Lipha agrees that it will prepare and submit reports to Autogen every 3 months during each Stage 2 Research Program and it shall promptly give to Autogen at the end of each Stage 2 Research Program a final and detailed report on such completion of Stage 2 Research.

(d) The reports provided above must in each case set out in reasonable and informative detail the activities undertaken in the period to which the report relates, and the activities planned for the next reporting period, if any.

6. OPTION FOR FURTHER AGREEMENT

6.1 Multiple Complementary Agreements

If, and each time, Lipha exercises its option under **clause 3.5** or **3.9** then the parties agree, if it is necessary, to enter into a Complementary Agreement which will take effect no later than 6 months prior to completion by Lipha of relevant Stage 2 Research Program. A Complementary Agreement may not be required if Lipha does not elect to proceed with a Joint Venture Agreement.

6.2 Licence milestones

Within 30 days after the commencement of Phase III clinical trials in respect of a Product the subject of a Stage 2 Research Program Lipha must pay to Autogen a milestone payment of:

(a) if Lipha elects to proceed with a Joint Venture Agreement, 5,000,000 FFR (less any amount paid in respect of the first transition of a Novel Gene Product to Stage 2 Research under **clause 3. 6(a)**), which is non refundable and will not be credited against future royalty payments, if any, payable to Autogen; or

(b) in any other case 20,000,000 FFR (less any amount paid in respect of the first transition of a Novel Gene Product to Stage 2 Research under **clause 3.6(a)**) provided that 10,000,000 FFR of such milestone payment will be treated as an advance royalty and be credited against future royalty payments, if any, payable to Autogen.

7. COMMERCIALISATION LICENCE

7.1 Requirement for such a licence

Upon exercise by Lipha of its option to commence each relevant Stage 2 Research Program, the Commercialisation Licence for the Stage 2 Research Program will be deemed to be in force, and Lipha and Autogen must promptly execute a Commercialisation Licence.

7.2 Failure to sign Commercialisation Licence

In the event that the Commercialisation Licence in respect of a Stage 2 Research Program is not executed in accordance with **clause 7.1**, then:

(a) the relevant Stage 2 Research Program must cease; and

(b) the provisions of **clause 4.8** will apply.

7.3 Commercialisation

The obligations of each of the parties in respect of commercialisation will be as contained in the relevant Commercialisation Licence or Complementary Agreement (if any).

8. INDUSTRIAL AND INTELLECTUAL PROPERTY RIGHTS

8.1 Autogen Patents, Autogen Know-How and Stage 1 Results

The Autogen Patents, Autogen Know-How and Stage 1 Results (as per **clause 3.7**) are owned by Autogen, or exclusively licensed by it from IDI or Deakin University and are freely exploitable by it, subject to:

(a) a research licence in favour of Lipha and its Affiliates within the Licensed Field (as per **clause 3.8**);

(b) an exclusive licence in favour of Lipha within the Licensed Field for commercialisation in terms of the relevant Commercialisation Licence (if any); and

(c) if appropriate, the rights granted under the Joint Venture Agreement.

8.2 Scope of any exclusive licence

Any grant of an exclusive licence in a given limited field in respect of Patents or Know-How, does not preclude the licensing of the same Patents or Know-How for use or exploitation in some other field.

8.3 Stage 2 Results

As provided in **clause 4.3(a)** Stage 2 Results in respect of each Stage 2 Research Program are owned by Lipha and are freely exploitable by it, subject to:

(a) a research licence in favour of Autogen and its Affiliates, and IDI and Deakin University for the purpose of their own internal research, as provided in **clause 4.6**;

(b) a right for Autogen to seek a licence in certain circumstances as provided in **clause 4.8**;

(c) the use of, including the licensing of such Stage 2 Results, being subject to the same restrictions as are applicable to Pre-Stage 2 Results, under a Commercialisation Licence, save for the Licensed Field restriction, but including, amongst other things:

(i) the obligation to pay "royalties" to Autogen for the use or exploitation of the Stage 2 Results; and

(ii) the requirements in relation to the grant of licences of the Stage 2 Results,

to the intent that Stage 2 Results will be accorded the same treatment and generate for Autogen the same benefits and entitlements as Pre-Stage 2 Results, even though their legal ownership is different.

8.4 Use outside of Licensed Field

While Stage 2 Results are freely exploitable by Lipha outside of the Licensed Field (subject to **clause 8.3**), this does not imply any licence to use Pre-Stage 2 Results outside of the Licensed Field, and Lipha will need to seek a licence from Autogen in relation to the same, if such exploitation uses Pre-Stage 2 Results, or would amount to an infringement of Stage 1 Patents or Autogen Patents.

9. CONFIDENTIAL INFORMATION

9.1 Obligations to Autogen

Subject to **clauses 9.3** and **9.6**, Lipha covenants with Autogen as follows:

(a) to keep all Know-How belonging to Autogen or supplied to it by Autogen, including the existence of such Know-How, strictly secret and confidential (including from all its employees, servants and agents), exercising at least the same degree of care as it uses to maintain its own Know-How;

(b) to provide proper and secure storage for such Know-How within its possession or control;

(c) to use such Know-How only for the purposes of this agreement and not for any other activity or purpose whatsoever without the prior written approval of Autogen; and

(d) to not copy or reduce to writing or any other medium any part of such Know-How except as may be reasonably necessary for the purposes of this agreement.

9.2 Obligations to Lipha

Subject to **clauses** 9.3 and 9.6, Autogen covenants with Lipha as follows:

(a) to keep all Know-How belonging to Lipha or supplied to it by Lipha, including the existence of such Know-How, strictly secret and confidential (including from all its employees, servants and agents), exercising at least the same degree of care as it uses to maintain its own Know-How;

(b) to provide proper and secure storage for such Know-How within its possession or control;

(c) to use such Know-How only for the purposes of this agreement and not for any other activity or purpose whatsoever without the prior written approval of Lipha; and

(d) to not copy or reduce to writing or any other medium any part of such Know-How except as may be reasonably necessary for the purposes of this agreement.

9.3 Exceptions to obligations

The obligations of confidence set out in **clauses 9.1** and **9.2** do not extend to Know-How which:

(a) at the time of disclosure to a party is in the public domain;

(b) after disclosure to a party becomes part of the public domain otherwise than as a result of the wrongful act of that party or one of that party's disclosees;

(c) a party can show was in its possession at the time of disclosure and was not acquired directly or indirectly from the other party; or

(d) is received from a third party provided that it was not acquired directly or indirectly by that third party from a party to this agreement or under an obligation of confidence;

(e) is required by compulsion of law to be disclosed,

provided that:

(f) the onus is on the party alleging the same to prove that one of the above exceptions has application; and

(g) in any case of uncertainty as to whether the obligations in **clauses 9.1** or **9.2** have application to any information, such information must be treated as subject to the obligations until advised otherwise by the party to whom the obligations are owed.

9.4 Rights in Know-How

Each party acknowledges and agrees that each other party has made a substantial investment in that party's Know-How and has a legitimate right to protect itself against wrongful disclosure or use of such Know-How.

9.5 **Term of obligation**

The obligations in this **clause 9** survive the expiry or termination of this agreement for whatever reason and continue for a period of 10 years, subject always to the exceptions included in **clause 9.3**.

9.6 Permitted disclosures

Each party ("the first party") is permitted to disclose Know-How belonging to another party or supplied to it by another party ("the other party") to such of the first party's Representatives as require access to such information for the purposes of this agreement, provided that:

(a) only such Know-How as needs to be disclosed to a person for the purposes of this agreement will be disclosed to that person; and

(b) the first party must:

(i) have obtained from each such person undertakings in favour of the other party substantially in the form of the relevant obligations and undertakings in this **clause 9** (but not this **clause 9.6**);

(ii) be responsible for the performance of its Representatives' undertakings referred to in **clause 9.6(b)(i)**; and

(iii) take whatever steps are reasonably necessary, including the institution of legal proceedings, to ensure that each of its Representatives is bound by and observes the terms of the undertakings referred to in **clause 9.6(b)(i)**.

9.7 Delivery-up of Know-How

All of a party's Know-How and all materials containing or embodying such Know-How and all copies of or extracts from or notes on the same in the possession, power or control of another party or any of its employees, servants or agents together with all forms and other materials relating to practices and procedures in relation to the Know-How to the extent possible must:

(a) in the event of the expiration or sooner termination of this agreement, be delivered up by the other party to the first party at the expense of the other party; and

(b) in the event of any demand made by the first party be delivered up by the other party to the first party at the expense of the first party.

9.8 Terms of this agreement

Lipha and Autogen shall not disclose any terms or conditions of this agreement to any third party without the prior consent of the other party, except as required by applicable law or local regulations or to a third party with whom Autogen or Lipha has entered into or proposes to enter into a business relationship, provided that such third party shall enter into a confidentiality agreement with, or otherwise owe a duty or confidentiality to Lipha or Autogen, as applicable.

9.9 Public Announcement

Except as required by law, order or regulation of a governmental agency or a court of competent jurisdiction, no other announcement, public release or notice of any kind may be issued without the express written consent of both parties, which consent shall not be unreasonably withheld, provided, however, the parties shall prepare a joint press release announcing the transaction set forth in this agreement to be issued promptly upon execution of this agreement.

9.10 Continuous disclosure obligations

Autogen is a subsidiary of Australia Wide Industries Limited ("AWI") ACN 000 248 304, which is listed on the Australian Stock Exchange ("ASX"). As such Autogen is subject to the continuous disclosure requirements of the ASX. The obligations of Autogen under this agreement will not restrict it or AWI from making whatever disclosures are necessary for the purposes of fulfilling the requirements applicable to AWI as a company listed on the ASX, and neither Autogen or AWI is under any obligation to delay the public release of any required announcement pending the provision of any consent or approval from Lipha. The above provision will also apply with such adaptations as are necessary to disclosure obligations imposed upon Lipha as a subsidiary of its listed parent Merck KGaA.

10. LIABILITY

10.1 Responsibility for Products

Lipha must ensure at all times that Stage 2 Research is conducted and Products are developed, manufactured, tested and used strictly in accordance with all relevant applicable requirements and standards of relevant jurisdictions and Lipha will be responsible for conducting its own independent examination and verification of the accuracy and suitability of Pre-Stage 2 Results and for ensuring the same are suitable for the purposes for which the same are used.

10.2 Autogen not liable

Except as provided in **clauses 11.2** and **17.2**, Autogen is not liable (in contract or tort or otherwise) to compensate Lipha for any loss howsoever arising suffered by Lipha arising directly or indirectly from the use by Lipha of Pre-Stage 2 Results or the sale of Products.

11. INDEMNITIES

11.1 Indemnity by Lipha

Lipha agrees to indemnify Autogen against and hold Autogen harmless from any and all Losses arising from or in connection with:

(a) a breach by Lipha of any of its warranties or obligations under this agreement;

(b) the conduct of Stage 1 Research by Lipha under **clause 3.3**; and

(c) the conduct of Stage 2 Research,

provided that Lipha is not required to indemnify Autogen for any Losses to the extent they result from Autogen's or its Representatives negligence or breach of any of Autogen's warranties or obligations under this agreement.

11.2 Indemnity by Autogen

Autogen agrees to indemnify Lipha and hold Lipha harmless from any and all Losses, arising from or in connection with:

(a) a breach by Autogen of any of its warranties or obligations under this agreement;

(b) the negligent performance by Autogen, IDI or Deakin University of the Stage 1 Research; and

(c) the termination of the Research Agreement as a result of the failure of Autogen to provide research funding under that agreement (other than as a result of any act or omission of Lipha or its Representatives),

provided that Autogen is not required to indemnify Lipha for any Losses to the extent they result from Lipha's or its Representatives' negligence or breach of any of Lipha's warranties or obligations under this agreement.

11.3 Notification regarding indemnity

Each party must promptly notify the other of any claims or suits for which the first party may assert indemnification from the other party and the first party will permit the other party and its insurer at the other party's expense to assume or participate in the defence of any such claims or suits and the first party will co-operate with the other party or its insurers in such defence when reasonably requested to do so.

12. INSURANCE

Each party must have and must maintain for the Term the relevant Required Insurance. The Required Insurance must be with a reputable insurer and name the other party as an additional insured. Each party will at the others request provide to that party a certificate from a reputable insurance broker confirming that the insurance required by this clause in currently in effect.

13. TERM AND TERMINATION

13.1 Term

Subject to making of the payment contemplated by **clause 3.4(a)**, or earlier termination pursuant to the further provisions of this **clause 13**, the initial term of this agreement will expire on 14 December 1999, subject to extension pursuant to **clause 3.4**. In the event that Lipha exercises its option in relation to undertaking Stage 2 Research, then this agreement will be extended and continue to apply whilst and so long as any Stage 2 Research Program continues, it being acknowledged that in such circumstances Lipha is

not obliged to extend the Research Term (and comply with **clause 3.4(b)**) unless it wishes to extend Stage 1 Research in respect of some other Novel Gene Product.

13.2 Termination for breach

If one party breaches any term, provision or obligation of this agreement (the "Defaulting Party") and the Defaulting Party fails to:

(a) remedy such breach within 60 days after receipt of notice from the other party requiring remedy of the breach; or

(b) if the breach cannot be remedied within the said 60 day period, commence action within the said 60 day period to remedy the breach and undertake in writing to the other party to complete remedy of the breach as soon as practicable thereafter,

the other party has the right to terminate this agreement immediately upon the expiration of the said period of 60 days by written notice to the Defaulting Party.

13.3 Termination in default of payment

This agreement may be forthwith terminated by a party by giving notice to the other party if that other party defaults in the payment of any money due by that other party to the first party under this agreement and such default continues for a period of 30 days after notice has been given to the other party demanding the payment of such money.

13.4 Grounds for immediate Termination

Subject to **clause 13.5**, this agreement may be terminated by a party giving notice to the other party upon the happening of any of the following events in respect of that other party:

(a)

~~(b)~~ an Insolvency Event; or

(b) if the other party is in breach of an undertaking given pursuant to **clause 13.2(b)**.

13.5 Reconstruction exception

A winding up or liquidation for the purposes of reconstruction or amalgamation by the other party is not an event permitting or giving rise to termination if after that reconstruction or amalgamation the resulting corporation becomes bound by the terms of this agreement by way of assignment or novation.

13.6 Termination by Autogen

Autogen may terminate this agreement upon notice to Lipha if:

(a) there is a change of greater than 50% in the control of the issued voting capital of Lipha or a holding company (if any) of Lipha other than for the purpose of internal re-construction;

(b) a person or persons not previously in Control of Lipha obtain Control of Lipha or a holding company (if any) of Lipha; or

(c) if Lipha or any of its affiliates challenges or seeks or causes to be challenged the validity of the Project Patents.

13.7 Termination by Lipha

Lipha may terminate this agreement upon notice to Autogen if there is a change of greater than 50% in the control of the issued voting capital of Autogen or a holding company (if any) of Autogen other than for the purpose of internal re-construction.

13.8 Termination to be without prejudice

Any termination of this agreement is without prejudice to the rights which a party has against the other in respect of anything done or omitted to be done hereunder prior to such termination or in respect of any sums or other claims outstanding at the time of termination.

13.9 Survival of provisions

The provisions of **clauses 1, 3.8, 3.9, 4.3, 4.6, 4.8, 4.9, 8.3, 8.4, 9, 11, 12, 13.8, 13.9, 15.1, 19, 20** and **21** will survive termination of this agreement.

14. OBLIGATIONS AND RIGHTS ON TERMINATION

Immediately upon termination or expiration of this agreement, each party must return or destroy all copies of Know-How owned or supplied by the other party, except for the retention of a copy as necessary for that party to be able to exploit any continuing licenses.

15. WARRANTIES

15.1 General warranties

Each party represents and warrants to the other that:

(a) it has all necessary powers and authorisations necessary to enter into this agreement and observe its obligations hereunder and allow this agreement to be enforced against it; and

(b) all necessary consents, approvals and authorisations of all governmental authorities required to be obtained by that party in connection with this agreement have been obtained; and

(c) the execution and delivery of this agreement does not contravene any law, regulation or official directive or any obligations or undertakings, contractual or otherwise, by which it or any of its assets are bound or cause a limitation on its powers to be exceeded; and

(d) the performance of the party's obligations under this agreement:

(i) do not and will not conflict with or violate any requirement of applicable laws or regulations; and

(ii) do not and will not conflict with, or constitute a default under any contractual obligation of that party; and

(e) there does not presently exist any event which would either now or with the effluxion of time entitle the other party to terminate this agreement pursuant to **clause 13**; and

(f) it is not a party to any pending or threatened action or proceeding affecting it or any of its assets before a court, governmental agency, commission or arbitrator where an adverse outcome could reasonably be expected to adversely impact upon the performance of its obligations under this agreement; and

(g) it has no immunity from the jurisdiction of a court or from legal process (whether through service of notice, attachment prior to judgment, attachment in aid of execution, execution or otherwise).

15.2 Specific warranty re Autogen Patents

Autogen warrants to Lipha that:

(a) as at the date of this agreement it has disclosed to Lipha details of all prior art sighted by Autogen by way of international search in relation to the Autogen Patents, but does not warrant that it has undertaken a thorough or exhaustive search of prior art; and

(b) at the date of this agreement it is unaware of any other Patent which has not been disclosed to Lipha and which may be infringed by Lipha using the Autogen Patents in accordance with the terms of this agreement.

15.3 Warranties by Lipha

Lipha warrants to Autogen that:

(a) it will obtain or has obtained from its Representatives who have access to the Autogen Know-How and Stage 1 Know-How written obligations to treat such information as confidential strictly in accordance with this agreement.

(b) that it has made its own enquiries into the validity and enforceability of the Autogen Patents and satisfied itself that the usage by Lipha, its Affiliates or sub-licensees of the Autogen Patents and the Confidential Information do not and will not infringe the intellectual property rights of any third party.

16. PROTECTION OF PATENTS

16.1 Maintenance of Patents

Autogen is responsible for the cost of preparing filing prosecuting and maintaining the Autogen Patents but nothing expressed or implied herein necessarily obligates Autogen to

institute legal proceedings to protect same. The party responsible for the cost of preparing, filing, prosecuting and maintaining the Stage 1 Patents will initially be determined in accordance with **clause 3.10**, provided that as from the date that a Commercialisation Licence in respect of Stage 1 Patents is entered into between the parties, Lipha will assume full responsibility for the full cost of preparing, filing, prosecuting and maintaining such Stage 1 Patents. Lipha is responsible for the cost of preparing, filing, prosecuting and maintaining the Stage 2 Patents. Nothing expressed or implied herein necessarily obligates Lipha to institute legal proceedings to protect Stage 1 Patents or Stage 2 Patents.

16.2 Reporting infringements

A party must promptly report to the other in writing particulars of any action or activity of which the first party becomes aware which might reasonably amount to infringement of or challenge to any of the Pre-Stage 2 Results or Stage 2 Results.

16.3 Conduct of proceedings regarding Pre-Stage 2 Results

Lipha has the first right to take control of and conduct any infringement proceedings in respect of the Pre-Stage 2 Results where such infringement is within the Licensed Field. Should Lipha undertake such proceedings Autogen must fully co-operate with Lipha in relation to such action including the lending of Autogen's name to the action and assistance by personnel of Autogen. The costs and expenses of any such action will be borne by Lipha, and the proceeds of such action after payment of Lipha's reasonable external costs will be divided between Autogen and Lipha on the basis that Autogen gets 50% and Lipha the balance. In the event Lipha does not wish to undertake the conduct of such proceedings on its own, Autogen and Lipha must discuss whether they will undertake joint proceedings and if so on what basis. If no such agreement can be reached Autogen is entitled to bring an action in its own name, and Lipha must provide Autogen with all reasonable assistance including lending Lipha's name to such action. Autogen must bear all the costs of such an action, and the proceeds of any such action belong to Autogen absolutely.

17. INFRINGEMENT OF OTHERS RIGHTS

17.1 Notification of action

In the event that legal action is threatened or commenced against Lipha arising out of Lipha's use of Autogen Patents or Autogen Know-How, Lipha must not make any admissions or enter into any substantive steps in connection therewith but must promptly notify Autogen.

17.2 Autogen action

If such legal action against Lipha arises out of the use of the Autogen Patents or Autogen Know-How in accordance with the terms and conditions of this agreement in relation to Products, then Autogen must defend and/or assist in the defence of such litigation, and must bear the reasonable costs and expenses of such defence. If as a result of such proceedings any damages or awards are assessed against Lipha, then provided that Lipha has at all times followed the instructions of, or otherwise obtained the consent of,

Autogen in respect of the defence of such claims, then such damages or awards, as well as any and all reasonable costs incurred by Lipha, must be satisfied and paid by Autogen.

17.3 Lipha action

If such legal action against Lipha related to the use by Lipha, Lipha Affiliates or sub-licensees of the Autogen Patents or Autogen Know-How other than in accordance with the terms and conditions of this agreement or use of Stage 1 Patents, Stage 1 Know-How or Stage 2 Patents or Stage 2 Know-How Lipha must promptly notify Autogen of the commencement of legal action. Autogen must (at the expense of Lipha) assist Lipha's efforts to settle and/or defend such claims. Lipha must bear all its own costs and expenses and must be responsible for awards against it and Autogen, as well as any and all reasonable costs incurred by Autogen, to the extent that indemnification, warranties and other claims may not be available against Autogen. If any amounts are recovered by or awarded or paid to Lipha from or by a third party as a result of any such action or litigation, Lipha must from such amounts reimburse Autogen for all costs and amounts paid by Autogen in connection with such action or litigation and must, after deducting the legal costs incurred by it in taking such legal or other action, pay to Autogen from any compensation recovered thereby, Autogen's part thereof determined in accordance with the respective interests of the parties in such compensation.

18. FORCE MAJEURE

18.1 Party not liable

Where a party is required under this agreement to perform an obligation or do any act or thing by a designated time or date (other than an obligation to make payment) ("**Obligation**"), the party is not to be liable for any delay in performing or for failure to perform an Obligation where the delay or failure arises from Force Majeure and that party has complied with this clause.

18.2 Notice of Force Majeure

A party who claims Force Majeure must:

(a) give the other party prompt notice of the Force Majeure with reasonably full particulars and an estimate of the extent and duration of its delay in performance, or inability to perform; and

(b) use all possible diligence to remove the Force Majeure as quickly as possible provided that this will not oblige the party to settle on terms unsatisfactory to that party any strike, lockout or other labour difficulty, or any investigation or proceeding by any governmental authority or any litigation by any third party.

18.3 Termination in case of Force Majeure

If the delay continues beyond 30 Business Days, after the notice given under **clause 18.2**, the parties must meet to discuss in good faith a mutually satisfactory resolution of the problem and, if unable to achieve such a resolution within a further 30 Business Days, either party may elect to terminate this agreement by 5 Business Days prior written notice to the other.

19. ARBITRATION

In case of any disputes arising between the parties or arising out of the performance or non-performance of the obligations of either party hereunder, or the termination of this agreement, the parties will endeavour to settle such disputes amicably between themselves. If the parties fail to resolve such disputes, then such disputes shall be finally resolved by arbitration in accordance with the Rules of Conciliation and Arbitration of the International Chamber of Commerce (ICC) by one or more arbitrators appointed in accordance with the said rules.

Any such arbitration will be held in English language and take place in Paris - FRANCE.

20. NOTICES

20.1 Form of Notice

Any notice, approval, consent or other communication ("notice") from one party to another ("Recipient") must be in writing and be signed by a person duly authorised by the person giving the notice.

20.2 Manner of Service

A notice must be served by:

(a) leaving it at the Recipient's address;

(b) sending it by ordinary pre-paid post (airmail if being sent from or to a place outside of Australia) to the Recipient's address; or

(c) sending it by facsimile to the facsimile number of the Recipient.

20.3 Address for Service

Until other details are specified by a Party as its address or facsimile number for service the following apply:

Autogen

Address : 210 Kings Way, South Melbourne, Victoria, Australia

Facsimile : 61 3 9234 1190

Attention : Company Secretary

Lipha

Address : 37 rue Saint Romain, 69379 Lyon, CEDEX 08, France

Facsimile : 33-4-78-75-39-05

Attention : Head of Legal Department

20.4 Time of Service

A letter or facsimile will be taken to be served:

(a) in the case of a delivered letter, on the day of delivery, unless delivery is made on a non Business Day or after 4:30 p.m. (local time in the place of receipt) on a Business Day, in which case it will be taken to be served on the next Business Day;

(b) in the case of a posted letter, on the third (or seventh in the case of airmail) Business Day after posting; and

(c) in the case of a facsimile, on receipt by the party giving the notice of a transmission confirmation report, unless within one Business Day of receipt the Recipient has informed the party giving the notice that the transmission was incomplete or garbled, provided that in any case if transmission is completed after 4:30 p.m. (local time in the place of receipt) or is received on a non Business Day, the notice will be taken to be served on the next Business Day.

21. MISCELLANEOUS

21.1 Severance

If any provision is held invalid or unenforceable, in whole or in part in any jurisdiction, then such invalidity or unenforceability will only affect such provision or part thereof in such jurisdiction, and will not in any manner affect the provision in this agreement in any other jurisdiction. To the extent legally permissible an arrangement which reflects the original intent of the parties must be substituted for such invalid or unenforceable provision.

21.2 Waiver

The failure, delay, relaxation or indulgence by any party in exercising any power or right given to that party under this agreement will not operate as a waiver of that power or right, nor will any single exercise of a power or right preclude any other or further exercise of it or the exercise of any other power or right under this agreement. A power or right may only be waived in writing, signed by the party to be bound by the waiver.

21.3 Relationship of parties

Nothing contained in this agreement is to be construed so as to place any party in the relationship of principal, employee, agent, partner, joint venturer or legal representative of any other party. The parties expressly agree and acknowledge that each of the parties is an independent contracting party and does not, unless expressly provided, have the authority or power for or on behalf of any other party to enter into any contract, to incur debts, to accept money, to assume any obligations or to make any warranties or representations.

21.4 Injunctive relief

If there is any conduct or threatened conduct which is or may be a breach of this agreement, both parties acknowledge that damages may be inadequate compensation for such a breach and that the other party is entitled to apply to any court of competent jurisdiction for interim or permanent injunctive relief or both restraining the other party from committing any breach or threatened breach of this agreement without showing or proving any actual damage sustained by it. Such rights and remedies will be cumulative and in addition to any other rights or remedies which that party may be entitled to at law or in equity.

21.5 Proper law

This agreement must be construed in accordance with and governed by the laws of the United Kingdom and its form, execution, validity, construction and effect is to be determined in accordance with the laws of the United Kingdom.

21.6 Rule of construction

No rule of construction applies to this agreement to the disadvantage of a party because that party was responsible for the preparation of this agreement or any part of it.

21.7 Variation

Any modification, alteration, change or variation of any term or condition of this agreement must be in writing, executed by all parties.

21.8 Assignment

This agreement is personal to the respective parties and neither is entitled to assign in whole or in part without the prior written consent of the other party.

21.9 Further documents

Each party agrees that it will forthwith upon the request of the other party execute and deliver all such instruments and agreements and will take all such other actions as the other party may reasonably request from time to time in order to give effect to the provisions and purposes of this agreement.

21.10 Affiliates' actions

Each party will ensure that none of its Affiliates takes any action which is inconsistent with that party's obligations under this agreement, or which if it was done or not done under this agreement by that party would amount to a breach of this agreement by that party.

21.11 Costs and Taxes

Each party must pay its own costs and expenses in relation to the negotiation, preparation, execution, delivery, stamping and registration, completion, variation and discharge of this agreement and Lipha must pay any Tax in respect of the execution, delivery,

performance, release, discharge, amendment, enforcement or attempted enforcement or otherwise of any of the following:

(a) this agreement;

(b) any agreement or document entered into or signed under this agreement;

(c) any transaction contemplated under this agreement; and

(d) any payment made or received in respect of this agreement,

except in any case to the extent to which such Tax is payable in Australia or on or in respect of the income of Autogen.

21.12 Interest on overdue amounts

If any amount due under this agreement is not paid when due, then the party obliged to make payment must pay to the other party interest at the Base Rate on the amount due and payable, accruing from day to day and to be computed from the date for payment of the amount until payment of the amount in full.

21.13 Counterparts

This agreement may be executed in counterparts, and by the parties on separate or the same counterparts, each of which is deemed an original, but all of which constitute one and the same instrument.

21.14 Registration of agreement

If this agreement or any associated transaction is required by the law of any country, other than Australia, to be either approved or registered in any country or with any governmental agency, Lipha is responsible for obtaining such approval or registration including without limiting the generality of the foregoing, causing this agreement to be stamped, recorded and registered at its cost in such country. Autogen agrees to co-operate in any such application or registration procedure. Lipha must furnish proof of compliance with the foregoing to Autogen when and if Autogen so requires.

21.15 Not obliged to act contrary to law

No party is obliged to carry out or perform any of the terms of this agreement where doing so would constitute a violation of any treaty, law, code or regulation of any governmental authority whether local, national or supranational. In any event the other terms of this agreement nevertheless continue and the parties must use all reasonable endeavours to re-negotiate and amend this agreement so that the performance of this agreement as so amended will not involve any such violation.

21.16 Statutory rights not limited

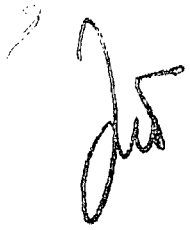
The powers, remedies and rights conferred upon the parties by or under any statute are (except to the extent inconsistent with the terms and provisions expressed in this agreement) be in addition to the powers, remedies and rights conferred by this agreement.

21.17 Consents

Unless this agreement provides otherwise and to the extent permitted by law, a party may, in its absolute discretion, conditionally or unconditionally give or withhold any approval or consent permitted or required to be given by it pursuant to this agreement.

21.18 Entire agreement

This agreement constitutes the entire agreement between the parties in relation to the subject matter of this agreement. Any prior arrangements, agreements, representations or undertakings are superseded and, except as expressly provided, each party acknowledges that it has not relied on any arrangement, agreement, representation or understanding which is not expressly set out in this agreement.



SCHEDULE 1

Autogen Patents

(Referred to in **clause 1.1**, definition of "Autogen Patents")

International Patent Application No. PCT/AU 98/00902 based on Australian Provisional Patent Application Nos PP0117/97 and PP0323/97 "A novel gene and uses therefor", filed on 31 October, 1997 and 11 November, 1997 respectively, in the names of International Diabetes Institute and Deakin University.

Both applications have a Priority Date of 31 October 1997.

SCHEDULE 2

Europe

Albania
Austria
Belgium
Belarus
Bosnia-Herzegovina
Bulgaria
Croatia
Cyprus
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Iceland
Ireland
Italy
Latvia
Liechtenstein
Lithunia
Luxembourg
Macedonia
Malta
Moldavia
Netherlands
Norway
Poland
Portugal
Romania
Russia
San Marino
Slovak Republic
Slovenia
Spain
Sweden
Switzerland
Turkey
Ukraine
United Kingdom
Yugoslav Federal Republic (Serbia-Montenegro)

SCHEDULE 3

Proforma Commercialisation Licence

5

DATE 1999

AUTOGEN PTY LTD

and

LIPHA S.A.

RESEARCH AND LICENCE AGREEMENT
(Field of Diabetes)

DUNHILL MADDEN BUTLER
Solicitors

575 Bourke Street
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Tel: (03) 9235 0235
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BRISBANE • CANBERRA • MELBOURNE • SYDNEY

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Schedule 1 Autogen Patents
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Schedule 3 Proforma Commercialisation Licence
Schedule 4 Joint Venture Agreement
Schedule 5 Stage 1 Research

THIS AGREEMENT is made on APRIL 28TH, 1999

BETWEEN

Autogen Pty Ltd ACN 074 636 847
of 210 Kings Way, South Melbourne, Victoria, Australia

("**Autogen**")

AND

Lipha S.A.
of 37 rue Saint Romain, 69379 Lyon, CEDEX 08, France

("**Lipha**")

RECITALS:

A. Lipha has for many years, been strongly involved in the research, development, manufacturing and commercialisation of pharmaceuticals addressing metabolic diseases and has invented, developed, manufactured and marketed pharmaceutical products containing metformin, one of the leading oral anti-diabetic products throughout the world.

B. Lipha has agreed to provide research support to the Autogen/Deakin/International Diabetes Institute (IDI) research program for the discovery of novel genes involved in diabetes, the product of these genes being able to be used as therapeutic agents or as a target for drug discovery as well as providing in house facilities including combinatorial chemistry to advance subsequent drug development in that field.

C. Lipha and Autogen have commenced an initial program of research as from 1 June, 1998 which it was agreed would be on essentially the same terms as their arrangements in respect of obesity.

D. Lipha and Autogen have agreed in accordance with their current commitments to enter into this research and licence agreement related to research into diabetes and novel genes involved in diabetes. Lipha and Autogen have simultaneously entered into a substantially similar agreement in respect of obesity.

OPERATIVE PROVISIONS:

1. INTERPRETATION

1.1 Definitions

In this agreement the following expressions have the following meanings:

"**Affiliate**" means with respect to a party, any person which directly or indirectly Controls, or is Controlled by, or is under common Control with, such party.

"**Autogen Know-How**" means Know-How owned by or licensed to Autogen in relation to the Autogen Patents, or of relevance or use in relation to the Licensed Field or the conduct of Stage 1 Research or Stage 2 Research but excludes Stage 1 Know-How.

"**Autogen Patents**" means the patents and patent applications owned by or licensed to Autogen related to the Licensed Field including but not limited to those referred to in **Schedule 1** and including:

(i) any re-issue, renewal or extension of such a patent or patent application (whether in whole or in part) and any patent of addition thereto; and

(ii) any supplementary protection certificate or other form of extension based on or arising from such patents or patent applications.

"**Base Rate**" means the PIBOR rate published as such by the French Association of Banks (Association Francaise de Banque (AFB)) or EURIBOR rate applicable on 1 January 1999 or at any later date, should such date be postponed for any reason and published as such by the European Federation of Banks (Federation Europeenne de Banque (FEB)) plus in either case the amount of 1.5% per annum.

"**Business Day**" means a day on which the trading banks are open for general banking business in both Melbourne, Australia and Lyon, France.

"**Commencement Date**" means the date of execution of this agreement by the party last signing it.

"**Commercialisation Licence**" means a licence in respect of Patents and Know-How in the form of the agreement contained in **Schedule 3**.

"**Complementary Agreement**" means a detailed agreement, if any, entered into towards the end of Stage 2 Research, including all the terms of the Commercialisation Licence, unless the parties agree to amend the same, and otherwise taking account of the terms of any Joint Venture Agreement.

"**Control**" means the possession, directly or indirectly, of the power to direct or cause the direction of the management of policies of a person.

"**Dollars**" or "$" means Australian dollars.

"**Europe**" means those countries specified in **Schedule 2.**

"**EUR**" means the new European currency called EURO .

"**FFR**" means French Francs.

"**Force Majeure**" means any cause which is not within the reasonable control of the party affected by it including, but not limited to, acts of God, industrial disputes of any kind, war declared or undeclared, civil disturbance, acts or omissions of Government or other competent authority, fire, lightning, explosion or flood.

"**Further Development**" means the program of further research and development in relation to a Product or potential Product undertaken after completion of Stage 2 Research.

"**IDI**" means International Diabetes Institute, a company established in Victoria, Australia.

"**Insolvency Event**" means any event of insolvency, bankruptcy or liquidation of the relevant party, including any voluntary or involuntary judicial liquidation or re-organisation proceedings.

"**Joint Venture Agreement**" means a joint venture in respect of certain specified Patents and Know-How, containing the definitions and provisions contained in this agreement as specified in **Schedule 4**, and dealing with such other matters as are specified in that schedule.

"**Know-How**" means technical, commercial and other information, data, know-how, drawings, specifications and/or designs, animal or other models, methodologies and biological materials embodied in some Material Form, and without prejudice to the generality of the foregoing includes:

(i) all experimental, manufacturing, process, analytical, packaging, product, warehousing, quality control and quality assurance and marketing specifications, standards, procedures, processes, methods, instructions and techniques, samples, prototypes, formulae, writings of any kind, opinions or otherwise unwritten data or in the form of computer software or computer programs or any part thereof in any code; and

(ii) all other information and other material supplied to or received by a party or its Representatives from another party or Representatives on a confidential basis pursuant to this agreement.

"**Licence**" means the right and licence granted by Autogen to Lipha pursuant to this agreement.

"**Licensed Field**" means the field of human therapeutic applications for the treatment or prevention of diabetes and its complications. For clarity it is noted that this does not include diagnostics or veterinary applications.

"**Lipha Fields**" means the Licensed Field and the "Licensed Field" as described in the Obesity Agreement, so long as that agreement remains in full force and effect.

"**Loss**" means any loss, damage, cost, interest, expense, fee, penalty, fine, forfeiture, assessment, demand, action, suit, claim, proceeding, cause of action, liability or damages incurred by a person, and includes:

(i) the cost of any action taken by the person to protect itself against any loss or to preserve any right it has under this agreement; and

(ii) where applicable reasonable legal costs.

"**Material Form**" in relation to Information includes any form (whether visible or not) of storage from which Information can be reproduced, and any form in which Information is embodied or encoded.

"**Month**" means calendar month.

"**Novel Gene Product**" means any new gene, novel protein or novel antigen, and any product arising from the transcription of these genes.

"**Obesity Agreement**" means the agreement dated around the same date as this agreement and on substantially similar terms, save that it relates to obesity rather than diabetes.

"**Option Period**" means the Research Term and the 24 month period following the Research Term within which Lipha has the option to decide whether it wishes to progress some part of Stage 1 Research to Stage 2 Research.

"**Party**" means Autogen or Lipha and their respective successors and permitted assigns and "Parties" means both of them.

"**Patent**" means any patent or patent application as defined in the *Patents Act 1952* (C'th) and any similar international, national or regional patent or patent application and includes any and all extensions, renewals, continuations, patent-of-addition and/or supplementary protection certificates to any of the foregoing and includes any corresponding patent or patent application taken out or applied for in any country in the Territory which is fairly based upon or derived from any of the aforesaid patents.

"**Pre-Stage 2 Results**" means the Autogen Patents, Autogen Know-How, Stage 1 Patents and Stage 1 Know-How.

"**Products**" means any products produced or arising out of use of the results of Stage 1 Research or Stage 2 Research or arising out of all and any further development by Lipha pursuant to Stage 1 Research or Stage 2 Research or both.

"**Project Patents**" means the Autogen Patents, the Stage 1 Patents and/or the Stage 2 Patents.

"**Project Research**" means the research in the area of diabetes and of novel genes involved in diabetes and the research arising therefrom, consisting of the Stage 1 Research and the Stage 2 Research.

"**Representatives**" of a party means that party's directors, officers, employees or agents.

"**Required Insurance**" means:

(i) public liability insurance in respect of Losses up to a limit of $5,000,000 covering property damage and personal injury as may be relevant to the performance of each party's obligations under this agreement tothe other, including (without limitation) liability, loss or damage due to negligent or malicious damage, data corruption or loss, fire, theft, electrical and water damage; and

(ii) if the relevant party sells a Product, product liability insurance in respect of Losses up to a limit of $20,000,000 covering any liability associated with use or misuse of the Product including, personal injury and consequential loss.

"**Research Agreement**" means the Research Agreement dated 28 February 1997 between Autogen, IDI and Deakin University to carry out research in the field of, amongst other things, diabetes.

"**Research Term**" means the period which started on 1 June 1998 and which shall end on 31 May 1999, unless otherwise extended pursuant to **clause 3.4**.

"**Scientific Board**" means the board established under **clause 5.1**.

"**Stage 1 Know-How**" means the Know-How relating to or arising out of Stage 1 Research.

"**Stage 1 Patents**" means Patents relating to or arising out of Stage 1 Research.

"**Stage 1 Research**" means discovery of Novel Gene Products, characterisation and studies of such Novel Gene Products in animal models and human gene expression studies as resulting from such Stage 1 Research performed according to this agreement as described in **Schedule 5**.

"**Stage 1 Results**" means the Stage 1 Know-How and the Stage 1 Patents.

"**Stage 2 Know-How**" means in the context of a Stage 2 Research Program, the Know-How relating to or arising out of that Stage 2 Research Program.

"**Stage 2 Patents**" means in the context of a Stage 2 Research Program, Patents relating to or arising out of that Stage 2 Research Program.

"**Stage 2 Research**" means generally antibody production, large scale protein production, structural analysis, screening of compounds affecting such Novel Gene Product, combinatorial chemistry, toxicological studies and first clinical studies in diabetic patients and completion of dose efficiency relationship studies in diabetic patients (clinical Phase 2), performed on products or technologies generated by Stage 1 Research according to this agreement as described in **Schedule 5**.

"**Stage 2 Research Program**" means a program of Stage 2 Research in respect of a Novel Gene Product.

"**Stage 2 Results**" means in the context of a Stage 2 Research Program, the Stage 2 Know-How and the Stage 2 Patents for that Stage 2 Research Program.

"**Target Compound**" means a compound or small molecule, or group of the same, identified in the course of Project Research, being a compound which it is expected will be Covered By a Project Patent.

"**Term**" means the period this agreement is in force pursuant to **clause 13**.

1.2 Construction

In this agreement unless the context otherwise requires:

(a) **Business Day**. If any day appointed or specified by this agreement for the payment of any money or the doing of any act or thing falls on a day that is not a Business Day, the day so appointed or specified is deemed to be the next day which is a Business Day.

(b) **Collective references**. Reference to any thing (including, without limitation, any amount) is a reference to the whole or any part of it and a reference to a group of things or persons is a reference to any one or more of them.

(c) **Defined expressions**. If a word or phrase is defined, cognate words and phrases have corresponding definitions.

(d) **Gender**. Words importing any gender include the other genders.

(e) **Headings**. Headings must be ignored in construing this document.

(f) **Joint liability**. An obligation of two or more parties binds them jointly and severally.

(g) **Joint obligations**. An obligation incurred in favour of two or more parties is enforceable by them jointly and severally.

(h) **Month**. Means a calendar month.

(i) **Numbers**. Words importing the singular include the plural and vice versa.

(j) **Parts of agreement**. References to this agreement include its recitals, schedules and annexures.

(k) **Persons**. References to persons include corporations and bodies politic.

(l) **Reconstituted bodies**. References to a body which has ceased to exist or has been reconstituted, amalgamated, reconstructed or merged, or the functions of which have become exercisable by any other person or body in its place, is taken to refer to the person or body established or constituted in its place or the person or body by which its functions have become exercisable.

(m) **Representatives and assigns**. References to a person include the legal personal representatives, successors and permitted assigns of that person.

(n) **Statutory amendments**. A reference to a statute, ordinance, code or other law includes regulations and other statutory instruments under it and consolidations, amendments, re-enactments or replacements of any of them (whether of the same or any other legislative authority having jurisdiction).

(o) **Variation**. References to this or any other document include the document as varied or replaced, and notwithstanding any change in the identity of the parties.

(p) **Writing**. References to writing include any mode of representing or reproducing words in tangible and permanently visible form, and include telex and facsimile transmissions.

1.3 Obesity Agreement crossover

Whilst and so long as the Obesity Agreement remains in full force and effect, the parties agree, that for the purposes of the following defined terms as included in the Obesity Agreement those terms will have in that agreement an extended meaning which includes the corresponding defined term as defined in this agreement and vice versa:

(a) Novel Gene Product;

(b) Stage 1 Know-How;

(c) Stage 1 Patents;

(d) Stage 2 Know-How; and

(e) Stage 2 Patents.

2. CONDITION AND INITIAL PAYMENT

2.1 Approval by parent

This agreement is conditional on the written approval of the Pharma Management Board of Merck KGaA, the parent company of Lipha, of both this agreement and the Obesity Agreement. If such approval is not obtained by Lipha within 60 days of execution of this agreement by Autogen, then this agreement will lapse and be of no further force and effect. Lipha must use all reasonable endeavours to procure satisfaction with this condition. If as a result of the non-satisfaction of this condition, this agreement lapses, then the following will apply:

(a) Autogen will not be liable to repay any up-front payment made to it;

(b) Lipha will have no entitlement to any Stage 1 Results;

(c) Lipha will have no rights to any Stage 1 Results;

(d) Lipha must immediately return to Autogen any and all Autogen Know-How and Stage 1 Know-How; and

(e) the provisions of **clauses 9, 18, 20 and 21** will continue to apply.

2.2 Up-front payment

Lipha has paid as an up-front payment to Autogen 1,000,000 FFR in consideration of Autogen entering into this agreement, and granting to Lipha a licence of the Autogen Patents and Autogen Know-How.

3. STAGE 1 RESEARCH

3.1 Undertaking of Stage 1 Research

Autogen has been carrying out and must continue to carry out through arrangement with Deakin University and IDI under the Research Agreement Stage 1 Research for the period of the Research Term. The currently agreed program for Stage 1 Research is as set out in **Schedule 5**. The general objective of Stage 1 Research is to identify Novel Gene Products that may be of utility in the Licensed Field.

3.2 Initial contribution

Lipha has paid the sum of 500,000 FFR in respect of the first year of the Research Term as a part contribution to the cost of the research being funded by Autogen under the Research Agreement in the Licensed Field.

3.3 Lipha contribution

At Autogen's request, but at Lipha's cost, Lipha agrees to perform biotechnological studies for production and yield optimisation of protein and limited animal pharmacological studies as part of Stage 1 Research up to a limit of 1,000,000 FFR.

3.4 Extension of Stage 1 Research

(a) If Stage 1 Research is not completed during the Research Term Lipha shall have the right to require Autogen to continue Stage 1 Research, and at the same time extend the Research Term, for successive periods of one year, by giving written notice to Autogen not less than 3 months prior to the expiry of the current Research Term, or in the case of the first extension of the Research Term, not less than one month prior to expiry of the Research Term.

(b) Where Lipha does extend the Research Term then:

(i) Lipha shall pay to Autogen for each renewal period the amount of 500,000 FFR as part contribution to the research being funded by Autogen under the Research Agreement in the Licensed Field; and

(ii) Autogen will then continue to carry out through arrangement with Deakin University and IDI the Stage 1 Research for the extended period of the Research Term.

(c) Following the giving by Lipha of notice under clause **3.4(a)**, the parties will liaise in relation to the content of the Stage 1 Research for the following year, which will, unless otherwise agreed, be conducted under the Research Agreement. Initially this liaison will take place through the Scientific Board, who will prepare a draft research plan which is to be finally agreed between the parties.

(d) The research being undertaken under the Research Agreement may include more than just Stage 1 Research, and Autogen is solely responsible for funding this as well as the balance of the funding required to conduct the Stage 1 Research.

(e) If Lipha elects not to extend the Research Term, then without in any way limiting Lipha's discretion in relation to such decision, Lipha will give Autogen written reasons why it has elected not to do so.

3.5 **Transition to Stage 2 Research**

Lipha is entitled at any time during the Option Period to exercise its right by notice in writing to Autogen to proceed to Stage 2 Research. Lipha in exercising its option will identify the Novel Gene Product in respect of which Stage 2 Research is to commence.

3.6 Action on option

Upon receipt by Autogen of such notice of exercise by Lipha of its option, under **clause 3.5**:

(a) Lipha must, in the case of the first transition of a Novel Gene Product to Stage 2 Research only, pay to Autogen the sum of 3,000,000 FFR such amount to be paid within 30 Business Days of exercise by Lipha of its option, it being acknowledged that Lipha will not have to pay such sums for transition of further Novel Gene Products to Stage 2 Research following such first transition; and

(b) the Parties will execute a Commercialisation Licence in respect of such Novel Gene Product.

This option may be separately exercised by Lipha in respect of separate Novel Gene Products, and each exercise will lead to additional Commercialisation Licences and Stage 2 Research Programs.

3.7 Autogen and Stage 1 Research Rights

Subject to the terms of this agreement and any other licence granted by Autogen in favour of Lipha, Autogen will own and have an unfettered right to use and exploit all Stage 1 Patents and Stage 1 Know-How in any and all fields.

3.8 Lipha research licence

Whilst Lipha is continuing Stage 1 Research, Stage 2 Research, Further Development or paying royalties to Autogen under any Commercialisation Licence, Lipha has a non-exclusive royalty free right to use the Pre-Stage 2 Results for the purposes of its own internal research for human therapeutic purposes. This research licence extends to Affiliates of Lipha.

3.9 Option lapsing

If Lipha does not exercise its option under **clause 3.5** during the Option Period then Lipha and its Affiliates must not thereafter in any way exploit, benefit or use directly or indirectly Pre-Stage 2 Results save and except for the purpose of their own internal research, but, for the sake of clarity not for any research into Novel Gene Products discovered in the course of Stage 1 Research.

3.10 Stage 1 Patents

(a) Where either party in the course of Stage 1 Research makes or discovers any patentable invention then it must forthwith advise the other party in writing together with full details. Lipha will have the first option to patent such invention at its own cost, and if it elects not to do so then Autogen may do so at its cost. Any such patent application in respect of Stage 1 Research will be in the name of Autogen.

(b) If Autogen has patented an invention under **clause 3.10(a)** and paid the costs of such patenting, and Lipha elects to exercise its option in respect of the Stage 1 Research to which the invention relates, Lipha will then reimburse to Autogen the reasonable external costs incurred by Autogen in respect of each patent.

(c) If Lipha does not exercise its option in respect of the Novel Gene Product within the Option Period then Autogen will be free to offer the Novel Gene Product to third parties on such terms as it considers appropriate. In doing so Autogen may grant to such third parties a licence in respect of the Autogen Patents and the Stage 1 Patents to the extent that such a licence is necessary to exploit the Novel Gene Product and such licence will not be a breach of any licence granted by Autogen in the Lipha Fields to Lipha, the scope of any licence in favour of Lipha being commensurately reduced, such reduction being limited to a reduction in respect of such Novel Gene Product.

(d) In the case where Lipha patents an invention pursuant to **clause 3.10(a)** where the invention also has application in areas outside the Lipha Fields, Autogen may:

(i) require Lipha to patent the invention in such a manner as to include the application of the invention in those areas outside the Lipha Fields (and if this involves any additional external cost to Lipha, Autogen will reimburse to Lipha the reasonable additional external costs); or

(ii) patent the invention itself in so far as the invention has application outside the Lipha Fields and, in this case, Autogen can require Lipha to amend or limit the patent lodged by Lipha so that the patent only covers the Lipha Fields.

3.11 Continuing Research Agreement

Where Lipha has ceased to provide support for research being conducted under the Research Agreement as contemplated by **clause 3.4**, Lipha acknowledges it will have no rights in respect of any new or further Know-How or Patents arising under such Research Agreement.

4. STAGE 2 RESEARCH

4.1 Multiple Stage 2 Research Programs

The Parties acknowledge that there may be multiple Stage 2 Research Programs, each of which will be based on or around different Novel Gene Products, and will generate their own Know-How and Patents.

4.2 Undertaking Stage 2 Research

(a) Where Lipha has exercised its rights as provided in **clause** 3.5 or 3.10 in respect of a Novel Gene Product, Lipha will have sole carriage of all research and development in respect of that Novel Gene Product until completion of the Stage 2 Research Program in respect of that Novel Gene Product. Each Stage 2 Research Program will be conducted and funded by Lipha until completion of that Stage 2 Research Program. Each Stage 2 Research Program must be directed at developing Novel Gene Products within the Licensed Field and discovering Target Compounds for use within the Licensed Field. Autogen may itself or through others seek to develop and exploit Novel Gene Products outside of the Licensed Field.

(b) Where Autogen desires to develop and exploit Novel Gene Products outside of the Licensed Field through a third party, then Autogen will at first instance engage in discussions with Lipha with a view to looking at opportunities for the parties to work together on such development and exploitation.

4.3 Licence to Lipha

Where Lipha is undertaking a Stage 2 Research Program then:

(a) all Stage 2 Know-How or Stage 2 Patents in respect of that Stage 2 Research Program will belong solely to Lipha, subject to the remainder of this clause and **clauses 4.6, 4.8** and **4.9**, and Lipha will be solely responsible for the cost of obtaining and maintaining any patent or other protection, provided that:

(i) Lipha may not assign any Stage 2 Results to a third party without the prior written consent of Autogen which consent will not be unreasonably withheld provided the assignee agrees to similar conditions in respect of such Stage 2 Results as are applicable under this agreement and the relevant Commercialisation Licence and in a manner which makes those conditions enforceable against the assignee by Autogen; and

(ii) if Lipha seeks to patent an invention from the Stage 2 Research which has application exclusively outside the Lipha Fields, then Lipha must notify Autogen of such invention prior to lodgment of the application for the patent and Autogen can require Lipha to extend the patent in respect of claims or other matters outside of the Lipha Fields;

(b) Autogen grants to Lipha a licence in respect of the Pre-Stage 2 Results within the Licensed Field to the extent necessary to undertake the Stage 2 Research Program, but not to undertake commercialisation (which must be subject to the Commercialisation Licence or a Complementary Agreement), such licence to be exclusive in the Licensed field, royalty free and extending to Affiliates of Lipha.

4.4 Autogen Stage 2 Research assistance

Autogen agrees upon Lipha's request to cooperate with Lipha for Stage 2 Research and both Parties may agree on specific studies to be included in a Stage 2 Research Program which are to be performed by Autogen or through Autogen and paid by Lipha, provided

Lipha has previously given Lipha's written approval on the costs of such studies. Lipha agrees that it will not in respect of any Stage 2 Research contract directly with Deakin University or IDI without the prior written consent of Autogen, it being the expectation that any research conducted by those parties will be contracted through Autogen.

4.5 Obligations of Lipha

Lipha will use its best endeavours to progress each Stage 2 Research Program in a timely and diligent fashion and with a substantial dedication of resources. Where activities forming part of a Stage 2 Research Program could properly and effectively be undertaken at IDI or Deakin University, then Lipha will consider the possible performance of those activities at those institutions, subject to **clause 4.4,** and will not conduct such activities through other third parties without first offering them to IDI or Deakin University as appropriate.

4.6 Rights of Autogen

(a) Lipha grants to Autogen and its Affiliates, with a right to sublicencee to IDI and Deakin University, a non-exclusive royalty free right to use for the purposes of their own internal research the Stage 2 Results of all Stage 2 Research Programs.

(b) If such internal research leads to an invention which can be commercialised within the Lipha Fields, then Lipha will have the first option to commercialise such invention within the Lipha Fields, and the parties will negotiate in good faith in this regard. If agreement cannot be reached within 90 days of the making of a formal offer by Autogen, then Autogen will be free to offer the commercialisation opportunity to third parties, but on no better terms than those offered to Lipha, unless it first offers such better terms to Lipha, which will have 14 days to either accept or reject such terms.

(c) If the internal research conducted under **clause 4.6(a)** leads to the commercialisation of the results of such internal research outside the Lipha Fields by Autogen, either on its own account, or acting as licensee on behalf of IDI or Deakin University, then the parties agree to negotiate in good faith for the grant by Lipha of a royalty bearing licence in respect of the ongoing use of the Stage 2 Results in such commercialisation. The parties acknowledge that the natural outcome of such discussions may be that Lipha takes on the role of commercialisation of the results of such internal research.

4.7 Discontinuation of Stage 2 Research

Lipha has the right at its own option and without any liability to Autogen to stop a Stage 2 Research Program if further development is not justifiable due to Lipha's reasonable determination that for efficacy, safety or medical reasons, the validity of the Patents covering such Novel Gene Product, a substantial change of economic factors or otherwise, such development should be terminated. If Lipha does cease such development it must promptly advise Autogen and provide written reasons as to why Lipha has ceased such development, but Lipha's determination will prevail. Lipha must endeavour to consult with the Scientific Board prior to ceasing development.

4.8 Unwanted rights Stage 2 Results

Where in accordance with **clauses** 4.7 or 7.2 Lipha ceases a Stage 2 Research Program, Lipha retains the exclusive ownership of the relevant Stage 2 Results generated up to the date of the cessation of that Stage 2 Research Program, provided that Autogen may request a commercial and research licence of such Stage 2 Results, in which case the parties will negotiate in good faith the terms of a licence (which may be exclusive or non-exclusive) for development and commercialisation of such Stage 2 Results, and unless the negotiated licence otherwise provides, Autogen must not assign the rights licensed from Lipha to a third party without the prior written consent of Lipha, which consent must not be unreasonably withheld.

4.9 Commercialisation Licences required

In the event Lipha wishes to in any way use, commercialise, licence, or assign Stage 2 Results, then, unless it does so pursuant to a Complementary Agreement, it must enter into a Commercialisation Licence in respect of those Stage 2 Results, to the intent and with the effect that amongst other things Autogen will receive "royalties" in respect of such use, commercialisation, licensing or assignment.

5. RESEARCH GENERALLY

5.1 Scientific Board

The parties agree to establish a scientific board comprised of both parties' representatives to discuss between the parties the carrying out of Stage 1 Research. The Scientific Board will consist of 2 representatives of Autogen, initially Prof. Gregory Collier of Deakin University and Prof. Paul Zimmet of IDI and 2 representatives of Lipha.

5.2 Meetings of the Scientific Board

Scientific Board meetings will be held every 3 months, or as otherwise agreed by the parties and each party may have any of its employees participate in said meeting if the party considers it necessary. Such meeting shall take place alternating at each party's place of business or at any other place subject to prior agreement by the parties, and be chaired by a representative of the party who hosts the meeting. The chairman of the meeting must circulate the agenda for the meeting at least 2 weeks prior to each meeting and will issue the formal minutes of the meeting.

The parties agree that Scientific Board meetings are only a place to report and discuss:

(a) the progress of each party's research and development work related to Stage 1 Research; and

(b) the progress of Lipha's research and development work related to each Stage 2 Research Program,

but the Scientific Board does not have capacity to make decisions on important matters to bind either party, unless otherwise agreed.

5.3 Reports

(a) Autogen agrees that it will prepare and submit reports to Lipha every 3 months during Stage 1 Research and it shall promptly give to Lipha at the end of Stage 1 Research a final and detailed report on such Stage 1 Research.

(b) If Lipha performs part of Stage 1 Research , as contemplated by **clause 3.3**, it will prepare and submit reports to Autogen every 3 months on such studies related to Stage 1 Research and it shall promptly give to Autogen at the end of Stage 1 Research a final and detailed report on such studies.

(c) Lipha agrees that it will prepare and submit reports to Autogen every 3 months during each Stage 2 Research Program and it shall promptly give to Autogen at the end of each Stage 2 Research Program a final and detailed report on such completion of Stage 2 Research.

(d) The reports provided above must in each case set out in reasonable and informative detail the activities undertaken in the period to which the report relates, and the activities planned for the next reporting period, if any.

6. OPTION FOR FURTHER AGREEMENT

6.1 Multiple Complementary Agreements

If, and each time, Lipha exercises its option under **clause 3.5** or **3.9** then the parties agree, if it is necessary, to enter into a Complementary Agreement which will take effect no later than 6 months prior to completion by Lipha of relevant Stage 2 Research Program. A Complementary Agreement may not be required if Lipha does not elect to proceed with a Joint Venture Agreement.

6.2 Licence milestones

Within 30 days after the commencement of Phase III clinical trials in respect of a Product the subject of a Stage 2 Research Program Lipha must pay to Autogen a milestone payment of:

(a) if Lipha elects to proceed with a Joint Venture Agreement, 5,000,000 FFR (less any amount paid in respect of the first transition of a Novel Gene Product to Stage 2 Research under **clause 3. 6(a)**), which is non refundable and will not be credited against future royalty payments, if any, payable to Autogen; or

(b) in any other case 20,000,000 FFR (less any amount paid in respect of the first transition of a Novel Gene Product to Stage 2 Research under **clause 3.6(a)**) provided that 10,000,000 FFR of such milestone payment will be treated as an advance royalty and be credited against future royalty payments, if any, payable to Autogen.

7. COMMERCIALISATION LICENCE

7.1 Requirement for such a licence

Upon exercise by Lipha of its option to commence each relevant Stage 2 Research Program, the Commercialisation Licence for the Stage 2 Research Program will be deemed to be in force, and Lipha and Autogen must promptly execute a Commercialisation Licence.

7.2 Failure to sign Commercialisation Licence

In the event that the Commercialisation Licence in respect of a Stage 2 Research Program is not executed in accordance with **clause 7.1**, then:

(a) the relevant Stage 2 Research Program must cease; and

(b) the provisions of **clause 4.8** will apply.

7.3 Commercialisation

The obligations of each of the parties in respect of commercialisation will be as contained in the relevant Commercialisation Licence or Complementary Agreement (if any).

8. INDUSTRIAL AND INTELLECTUAL PROPERTY RIGHTS

8.1 Autogen Patents, Autogen Know-How and Stage 1 Results

The Autogen Patents, Autogen Know-How and Stage 1 Results (as per **clause 3.7**) are owned by Autogen, or exclusively licensed by it from IDI or Deakin University and are freely exploitable by it, subject to:

(a) a research licence in favour of Lipha and its Affiliates within the Licensed Field (as per **clause 3.8**);

(b) an exclusive licence in favour of Lipha within the Licensed Field for commercialisation in terms of the relevant Commercialisation Licence (if any); and

(c) if appropriate, the rights granted under the Joint Venture Agreement.

8.2 Scope of any exclusive licence

Any grant of an exclusive licence in a given limited field in respect of Patents or Know-How, does not preclude the licensing of the same Patents or Know-How for use or exploitation in some other field.

8.3 Stage 2 Results

As provided in **clause 4.3(a)** Stage 2 Results in respect of each Stage 2 Research Program are owned by Lipha and are freely exploitable by it, subject to:

(a) a research licence in favour of Autogen and its Affiliates, and IDI and Deakin University for the purpose of their own internal research, as provided in **clause 4.6**;

(b) a right for Autogen to seek a licence in certain circumstances as provided in **clause 4.8**;

(c) the use of, including the licensing of such Stage 2 Results, being subject to the same restrictions as are applicable to Pre-Stage 2 Results, under a Commercialisation Licence, save for the Licensed Field restriction, but including, amongst other things:

(i) the obligation to pay "royalties" to Autogen for the use or exploitation of the Stage 2 Results; and

(ii) the requirements in relation to the grant of licences of the Stage 2 Results,

to the intent that Stage 2 Results will be accorded the same treatment and generate for Autogen the same benefits and entitlements as Pre-Stage 2 Results, even though their legal ownership is different.

8.4 Use outside of Licensed Field

While Stage 2 Results are freely exploitable by Lipha outside of the Licensed Field (subject to **clause 8.3**), this does not imply any licence to use Pre-Stage 2 Results outside of the Licensed Field, and Lipha will need to seek a licence from Autogen in relation to the same, if such exploitation uses Pre-Stage 2 Results, or would amount to an infringement of Stage 1 Patents or Autogen Patents.

9. CONFIDENTIAL INFORMATION

9.1 Obligations to Autogen

Subject to **clauses 9.3** and **9.6**, Lipha covenants with Autogen as follows:

(a) to keep all Know-How belonging to Autogen or supplied to it by Autogen, including the existence of such Know-How, strictly secret and confidential (including from all its employees, servants and agents), exercising at least the same degree of care as it uses to maintain its own Know-How;

(b) to provide proper and secure storage for such Know-How within its possession or control;

(c) to use such Know-How only for the purposes of this agreement and not for any other activity or purpose whatsoever without the prior written approval of Autogen; and

(d) to not copy or reduce to writing or any other medium any part of such Know-How except as may be reasonably necessary for the purposes of this agreement.

9.2 Obligations to Lipha

Subject to **clauses 9.3** and **9.6**, Autogen covenants with Lipha as follows:

(a) to keep all Know-How belonging to Lipha or supplied to it by Lipha, including the existence of such Know-How, strictly secret and confidential (including from all its employees, servants and agents), exercising at least the same degree of care as it uses to maintain its own Know-How;

(b) to provide proper and secure storage for such Know-How within its possession or control;

(c) to use such Know-How only for the purposes of this agreement and not for any other activity or purpose whatsoever without the prior written approval of Lipha; and

(d) to not copy or reduce to writing or any other medium any part of such Know-How except as may be reasonably necessary for the purposes of this agreement.

9.3 Exceptions to obligations

The obligations of confidence set out in **clauses 9.1** and **9.2** do not extend to Know-How which:

(a) at the time of disclosure to a party is in the public domain;

(b) after disclosure to a party becomes part of the public domain otherwise than as a result of the wrongful act of that party or one of that party's disclosees;

(c) a party can show was in its possession at the time of disclosure and was not acquired directly or indirectly from the other party; or

(d) is received from a third party provided that it was not acquired directly or indirectly by that third party from a party to this agreement or under an obligation of confidence;

(e) is required by compulsion of law to be disclosed,

provided that:

(f) the onus is on the party alleging the same to prove that one of the above exceptions has application; and

(g) in any case of uncertainty as to whether the obligations in **clauses 9.1** or **9.2** have application to any information, such information must be treated as subject to the obligations until advised otherwise by the party to whom the obligations are owed.

9.4 Rights in Know-How

Each party acknowledges and agrees that each other party has made a substantial investment in that party's Know-How and has a legitimate right to protect itself against wrongful disclosure or use of such Know-How.

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9.5 Term of obligation

The obligations in this **clause 9** survive the expiry or termination of this agreement for whatever reason and continue for a period of 10 years, subject always to the exceptions included in **clause 9.3**.

9.6 Permitted disclosures

Each party ("the first party") is permitted to disclose Know-How belonging to another party or supplied to it by another party ("the other party") to such of the first party's Representatives as require access to such information for the purposes of this agreement, provided that:

(a) only such Know-How as needs to be disclosed to a person for the purposes of this agreement will be disclosed to that person; and

(b) the first party must:

(i) have obtained from each such person undertakings in favour of the other party substantially in the form of the relevant obligations and undertakings in this **clause 9** (but not this **clause 9.6**);

(ii) be responsible for the performance of its Representatives' undertakings referred to in **clause 9.6(b)(i)**; and

(iii) take whatever steps are reasonably necessary, including the institution of legal proceedings, to ensure that each of its Representatives is bound by and observes the terms of the undertakings referred to in **clause 9.6(b)(i)**.

9.7 Delivery-up of Know-How

All of a party's Know-How and all materials containing or embodying such Know-How and all copies of or extracts from or notes on the same in the possession, power or control of another party or any of its employees, servants or agents together with all forms and other materials relating to practices and procedures in relation to the Know-How to the extent possible must:

(a) in the event of the expiration or sooner termination of this agreement, be delivered up by the other party to the first party at the expense of the other party; and

(b) in the event of any demand made by the first party be delivered up by the other party to the first party at the expense of the first party.

9.8 Terms of this agreement

Lipha and Autogen shall not disclose any terms or conditions of this agreement to any third party without the prior consent of the other party, except as required by applicable law or local regulations or to a third party with whom Autogen or Lipha has entered into or proposes to enter into a business relationship, provided that such third party shall enter into a confidentiality agreement with, or otherwise owe a duty or confidentiality to Lipha or Autogen, as applicable.

9.9 Public Announcement

Except as required by law, order or regulation of a governmental agency or a court of competent jurisdiction, no other announcement, public release or notice of any kind may be issued without the express written consent of both parties, which consent shall not be unreasonably withheld, provided, however, the parties shall prepare a joint press release announcing the transaction set forth in this agreement to be issued promptly upon execution of this agreement.

9.10 Continuous disclosure obligations

Autogen is a subsidiary of Australia Wide Industries Limited ("AWI") ACN 000 248 304, which is listed on the Australian Stock Exchange ("ASX"). As such Autogen is subject to the continuous disclosure requirements of the ASX. The obligations of Autogen under this agreement will not restrict it or AWI from making whatever disclosures are necessary for the purposes of fulfilling the requirements applicable to AWI as a company listed on the ASX, and neither Autogen or AWI is under any obligation to delay the public release of any required announcement pending the provision of any consent or approval from Lipha. The above provision will also apply with such adaptations as are necessary to disclosure obligations imposed upon Lipha as a subsidiary of its listed parent Merck KGaA.

10. LIABILITY

10.1 Responsibility for Products

Lipha must ensure at all times that Stage 2 Research is conducted and Products are developed, manufactured, tested and used strictly in accordance with all relevant applicable requirements and standards of relevant jurisdictions and Lipha will be responsible for conducting its own independent examination and verification of the accuracy and suitability of Pre-Stage 2 Results and for ensuring the same are suitable for the purposes for which the same are used.

10.2 Autogen not liable

Except as provided in **clauses 11.2** and **17.2**, Autogen is not liable (in contract or tort or otherwise) to compensate Lipha for any loss howsoever arising suffered by Lipha arising directly or indirectly from the use by Lipha of Pre-Stage 2 Results or the sale of Products.

11. INDEMNITIES

11.1 *Indemnity by Lipha*

Lipha agrees to indemnify Autogen against and hold Autogen harmless from any and all Losses arising from or in connection with:

(a) a breach by Lipha of any of its warranties or obligations under this agreement;

(b) the conduct of Stage 1 Research by Lipha under **clause 3.3**; and

(c) the conduct of Stage 2 Research,

provided that Lipha is not required to indemnify Autogen for any Losses to the extent they result from Autogen's or its Representatives negligence or breach of any of Autogen's warranties or obligations under this agreement.

11.2 Indemnity by Autogen

Autogen agrees to indemnify Lipha and hold Lipha harmless from any and all Losses, arising from or in connection with:

(a) a breach by Autogen of any of its warranties or obligations under this agreement;

(b) the negligent performance by Autogen, IDI or Deakin University of the Stage 1 Research; and

(c) the termination of the Research Agreement as a result of the failure of Autogen to provide research funding under that agreement (other than as a result of any act or omission of Lipha or its Representatives),

provided that Autogen is not required to indemnify Lipha for any Losses to the extent they result from Lipha's or its Representatives' negligence or breach of any of Lipha's warranties or obligations under this agreement.

11.3 Notification regarding indemnity

Each party must promptly notify the other of any claims or suits for which the first party may assert indemnification from the other party and the first party will permit the other party and its insurer at the other party's expense to assume or participate in the defence of any such claims or suits and the first party will co-operate with the other party or its insurers in such defence when reasonably requested to do so.

12. INSURANCE

Each party must have and must maintain for the Term the relevant Required Insurance. The Required Insurance must be with a reputable insurer and name the other party as an additional insured. Each party will at the others request provide to that party a certificate from a reputable insurance broker confirming that the insurance required by this clause in currently in effect.

13. TERM AND TERMINATION

13.1 Term

Subject to making of the payment contemplated by **clause 3.4(a)**, or earlier termination pursuant to the further provisions of this **clause 13**, the initial term of this agreement will expire on 31 May 1999, subject to extension pursuant to **clause 3.4**. In the event that Lipha exercises its option in relation to undertaking Stage 2 Research, then this agreement will be extended and continue to apply whilst and so long as any Stage 2 Research Program continues, it being acknowledged that in such circumstances Lipha is not obliged

to extend the Research Term (and comply with **clause 3.4(b)**) unless it wishes to extend Stage 1 Research in respect of some other Novel Gene Product.

13.2 Termination for breach

If one party breaches any term, provision or obligation of this agreement (the "Defaulting Party") and the Defaulting Party fails to:

(a) remedy such breach within 60 days after receipt of notice from the other party requiring remedy of the breach; or

(b) if the breach cannot be remedied within the said 60 day period, commence action within the said 60 day period to remedy the breach and undertake in writing to the other party to complete remedy of the breach as soon as practicable thereafter,

the other party has the right to terminate this agreement immediately upon the expiration of the said period of 60 days by written notice to the Defaulting Party.

13.3 Termination in default of payment

This agreement may be forthwith terminated by a party by giving notice to the other party if that other party defaults in the payment of any money due by that other party to the first party under this agreement and such default continues for a period of 30 days after notice has been given to the other party demanding the payment of such money.

13.4 Grounds for immediate Termination

Subject to **clause 13.5**, this agreement may be terminated by a party giving notice to the other party upon the happening of any of the following events in respect of that other party:

(a)

~~(b)~~ an Insolvency Event; or

(b) if the other party is in breach of an undertaking given pursuant to **clause 13.2(b)**.

13.5 Reconstruction exception

A winding up or liquidation for the purposes of reconstruction or amalgamation by the other party is not an event permitting or giving rise to termination if after that reconstruction or amalgamation the resulting corporation becomes bound by the terms of this agreement by way of assignment or novation.

13.6 Termination by Autogen

Autogen may terminate this agreement upon notice to Lipha if:

(a) there is a change of greater than 50% in the control of the issued voting capital of Lipha or a holding company (if any) of Lipha other than for the purpose of internal re-construction;

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(b) a person or persons not previously in Control of Lipha obtain Control of Lipha or a holding company (if any) of Lipha; or

(c) if Lipha or any of its affiliates challenges or seeks or causes to be challenged the validity of the Project Patents.

13.7 Termination by Lipha

Lipha may terminate this agreement upon notice to Autogen if there is a change of greater than 50% in the control of the issued voting capital of Autogen or a holding company (if any) of Autogen other than for the purpose of internal re-construction.

13.8 Termination to be without prejudice

Any termination of this agreement is without prejudice to the rights which a party has against the other in respect of anything done or omitted to be done hereunder prior to such termination or in respect of any sums or other claims outstanding at the time of termination.

13.9 Survival of provisions

The provisions of **clauses 1, 3.8, 3.9, 4.3, 4.6, 4.8, 4.9, 8.3, 8.4, 9, 11, 12, 13.8, 13.9, 15.1, 19, 20** and **21** will survive termination of this agreement.

14. OBLIGATIONS AND RIGHTS ON TERMINATION

Immediately upon termination or expiration of this agreement, each party must return or destroy all copies of Know-How owned or supplied by the other party, except for the retention of a copy as necessary for that party to be able to exploit any continuing licenses.

15. WARRANTIES

15.1 General warranties

Each party represents and warrants to the other that:

(a) it has all necessary powers and authorisations necessary to enter into this agreement and observe its obligations hereunder and allow this agreement to be enforced against it; and

(b) all necessary consents, approvals and authorisations of all governmental authorities required to be obtained by that party in connection with this agreement have been obtained; and

(c) the execution and delivery of this agreement does not contravene any law, regulation or official directive or any obligations or undertakings, contractual or otherwise, by which it or any of its assets are bound or cause a limitation on its powers to be exceeded; and

(d) the performance of the party's obligations under this agreement:

(i) do not and will not conflict with or violate any requirement of applicable laws or regulations; and

(ii) do not and will not conflict with, or constitute a default under any contractual obligation of that party; and

(e) there does not presently exist any event which would either now or with the effluxion of time entitle the other party to terminate this agreement pursuant to **clause 13**; and

(f) it is not a party to any pending or threatened action or proceeding affecting it or any of its assets before a court, governmental agency, commission or arbitrator where an adverse outcome could reasonably be expected to adversely impact upon the performance of its obligations under this agreement; and

(g) it has no immunity from the jurisdiction of a court or from legal process (whether through service of notice, attachment prior to judgment, attachment in aid of execution, execution or otherwise).

15.2 Specific warranty re Autogen Patents

Autogen warrants to Lipha that:

(a) as at the date of this agreement it has disclosed to Lipha details of all prior art sighted by Autogen by way of international search in relation to the Autogen Patents, but does not warrant that it has undertaken a thorough or exhaustive search of prior art; and

(b) at the date of this agreement it is unaware of any other Patent which has not been disclosed to Lipha and which may be infringed by Lipha using the Autogen Patents in accordance with the terms of this agreement.

15.3 Warranties by Lipha

Lipha warrants to Autogen that:

(a) it will obtain or has obtained from its Representatives who have access to the Autogen Know-How and Stage 1 Know-How written obligations to treat such information as confidential strictly in accordance with this agreement.

(b) that it has made its own enquiries into the validity and enforceability of the Autogen Patents and satisfied itself that the usage by Lipha, its Affiliates or sub-licensees of the Autogen Patents and the Confidential Information do not and will not infringe the intellectual property rights of any third party.

16. PROTECTION OF PATENTS

16.1 Maintenance of Patents

Autogen is responsible for the cost of preparing filing prosecuting and maintaining the Autogen Patents but nothing expressed or implied herein necessarily obligates Autogen to

institute legal proceedings to protect same. The party responsible for the cost of preparing, filing, prosecuting and maintaining the Stage 1 Patents will initially be determined in accordance with **clause 3.10**, provided that as from the date that a Commercialisation Licence in respect of Stage 1 Patents is entered into between the parties, Lipha will assume full responsibility for the full cost of preparing, filing, prosecuting and maintaining such Stage 1 Patents. Lipha is responsible for the cost of preparing, filing, prosecuting and maintaining the Stage 2 Patents. Nothing expressed or implied herein necessarily obligates Lipha to institute legal proceedings to protect Stage 1 Patents or Stage 2 Patents.

16.2 Reporting infringements

A party must promptly report to the other in writing particulars of any action or activity of which the first party becomes aware which might reasonably amount to infringement of or challenge to any of the Pre-Stage 2 Results or Stage 2 Results.

16.3 Conduct of proceedings regarding Pre-Stage 2 Results

Lipha has the first right to take control of and conduct any infringement proceedings in respect of the Pre-Stage 2 Results where such infringement is within the Licensed Field. Should Lipha undertake such proceedings Autogen must fully co-operate with Lipha in relation to such action including the lending of Autogen's name to the action and assistance by personnel of Autogen. The costs and expenses of any such action will be borne by Lipha, and the proceeds of such action after payment of Lipha's reasonable external costs will be divided between Autogen and Lipha on the basis that Autogen gets 50% and Lipha the balance. In the event Lipha does not wish to undertake the conduct of such proceedings on its own, Autogen and Lipha must discuss whether they will undertake joint proceedings and if so on what basis. If no such agreement can be reached Autogen is entitled to bring an action in its own name, and Lipha must provide Autogen with all reasonable assistance including lending Lipha's name to such action. Autogen must bear all the costs of such an action, and the proceeds of any such action belong to Autogen absolutely.

17. INFRINGEMENT OF OTHERS RIGHTS

17.1 Notification of action

In the event that legal action is threatened or commenced against Lipha arising out of Lipha's use of Autogen Patents or Autogen Know-How, Lipha must not make any admissions or enter into any substantive steps in connection therewith but must promptly notify Autogen.

17.2 Autogen action

If such legal action against Lipha arises out of the use of the Autogen Patents or Autogen Know-How in accordance with the terms and conditions of this agreement in relation to Products, then Autogen must defend and/or assist in the defence of such litigation, and must bear the reasonable costs and expenses of such defence. If as a result of such proceedings any damages or awards are assessed against Lipha, then provided that Lipha has at all times followed the instructions of, or otherwise obtained the consent of,

Autogen in respect of the defence of such claims, then such damages or awards, as well as any and all reasonable costs incurred by Lipha, must be satisfied and paid by Autogen.

17.3 Lipha action

If such legal action against Lipha related to the use by Lipha, Lipha Affiliates or sub-licensees of the Autogen Patents or Autogen Know-How other than in accordance with the terms and conditions of this agreement or use of Stage 1 Patents, Stage 1 Know-How or Stage 2 Patents or Stage 2 Know-How Lipha must promptly notify Autogen of the commencement of legal action. Autogen must (at the expense of Lipha) assist Lipha's efforts to settle and/or defend such claims. Lipha must bear all its own costs and expenses and must be responsible for awards against it and Autogen, as well as any and all reasonable costs incurred by Autogen, to the extent that indemnification, warranties and other claims may not be available against Autogen. If any amounts are recovered by or awarded or paid to Lipha from or by a third party as a result of any such action or litigation, Lipha must from such amounts reimburse Autogen for all costs and amounts paid by Autogen in connection with such action or litigation and must, after deducting the legal costs incurred by it in taking such legal or other action, pay to Autogen from any compensation recovered thereby, Autogen's part thereof determined in accordance with the respective interests of the parties in such compensation.

18. FORCE MAJEURE

18.1 Party not liable

Where a party is required under this agreement to perform an obligation or do any act or thing by a designated time or date (other than an obligation to make payment) ("**Obligation**"), the party is not to be liable for any delay in performing or for failure to perform an Obligation where the delay or failure arises from Force Majeure and that party has complied with this clause.

18.2 Notice of Force Majeure

A party who claims Force Majeure must:

(a) give the other party prompt notice of the Force Majeure with reasonably full particulars and an estimate of the extent and duration of its delay in performance, or inability to perform; and

(b) use all possible diligence to remove the Force Majeure as quickly as possible provided that this will not oblige the party to settle on terms unsatisfactory to that party any strike, lockout or other labour difficulty, or any investigation or proceeding by any governmental authority or any litigation by any third party.

18.3 Termination in case of Force Majeure

If the delay continues beyond 30 Business Days, after the notice given under **clause 18.2**, the parties must meet to discuss in good faith a mutually satisfactory resolution of the problem and, if unable to achieve such a resolution within a further 30 Business Days, either party may elect to terminate this agreement by 5 Business Days prior written notice to the other.

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19. ARBITRATION

In case of any disputes arising between the parties or arising out of the performance or non-performance of the obligations of either party hereunder, or the termination of this agreement, the parties will endeavour to settle such disputes amicably between themselves. If the parties fail to resolve such disputes, then such disputes shall be finally resolved by arbitration in accordance with the Rules of Conciliation and Arbitration of the International Chamber of Commerce (ICC) by one or more arbitrators appointed in accordance with the said rules.

Any such arbitration will be held in English language and take place in Paris - FRANCE.

20. NOTICES

20.1 Form of Notice

Any notice, approval, consent or other communication ("notice") from one party to another ("Recipient") must be in writing and be signed by a person duly authorised by the person giving the notice.

20.2 Manner of Service

A notice must be served by:

(a) leaving it at the Recipient's address;

(b) sending it by ordinary pre-paid post (airmail if being sent from or to a place outside of Australia) to the Recipient's address; or

(c) sending it by facsimile to the facsimile number of the Recipient.

20.3 Address for Service

Until other details are specified by a Party as its address or facsimile number for service the following apply:

Autogen

Address : 210 Kings Way, South Melbourne, Victoria, Australia

Facsimile : 61 3 9234 1190

Attention : Company Secretary

Lipha

Address : 37 rue Saint Romain, 69379 Lyon, CEDEX 08, France

Facsimile : 33-4-78-75-39-05

Attention : Head of Legal Department

20.4 Time of Service

A letter or facsimile will be taken to be served:

(a) in the case of a delivered letter, on the day of delivery, unless delivery is made on a non Business Day or after 4:30 p.m. (local time in the place of receipt) on a Business Day, in which case it will be taken to be served on the next Business Day;

(b) in the case of a posted letter, on the third (or seventh in the case of airmail) Business Day after posting; and

(c) in the case of a facsimile, on receipt by the party giving the notice of a transmission confirmation report, unless within one Business Day of receipt the Recipient has informed the party giving the notice that the transmission was incomplete or garbled, provided that in any case if transmission is completed after 4:30 p.m. (local time in the place of receipt) or is received on a non Business Day, the notice will be taken to be served on the next Business Day.

21. MISCELLANEOUS

21.1 Severance

If any provision is held invalid or unenforceable, in whole or in part in any jurisdiction, then such invalidity or unenforceability will only affect such provision or part thereof in such jurisdiction, and will not in any manner affect the provision in this agreement in any other jurisdiction. To the extent legally permissible an arrangement which reflects the original intent of the parties must be substituted for such invalid or unenforceable provision.

21.2 Waiver

The failure, delay, relaxation or indulgence by any party in exercising any power or right given to that party under this agreement will not operate as a waiver of that power or right, nor will any single exercise of a power or right preclude any other or further exercise of it or the exercise of any other power or right under this agreement. A power or right may only be waived in writing, signed by the party to be bound by the waiver.

21.3 Relationship of parties

Nothing contained in this agreement is to be construed so as to place any party in the relationship of principal, employee, agent, partner, joint venturer or legal representative of any other party. The parties expressly agree and acknowledge that each of the parties is an independent contracting party and does not, unless expressly provided, have the authority or power for or on behalf of any other party to enter into any contract, to incur debts, to accept money, to assume any obligations or to make any warranties or representations.

21.4 Injunctive relief

If there is any conduct or threatened conduct which is or may be a breach of this agreement, both parties acknowledge that damages may be inadequate compensation for such a breach and that the other party is entitled to apply to any court of competent jurisdiction for interim or permanent injunctive relief or both restraining the other party from committing any breach or threatened breach of this agreement without showing or proving any actual damage sustained by it. Such rights and remedies will be cumulative and in addition to any other rights or remedies which that party may be entitled to at law or in equity.

21.5 Proper law

This agreement must be construed in accordance with and governed by the laws of the United Kingdom and its form, execution, validity, construction and effect is to be determined in accordance with the laws of the United Kingdom.

21.6 Rule of construction

No rule of construction applies to this agreement to the disadvantage of a party because that party was responsible for the preparation of this agreement or any part of it.

21.7 Variation

Any modification, alteration, change or variation of any term or condition of this agreement must be in writing, executed by all parties.

21.8 Assignment

This agreement is personal to the respective parties and neither is entitled to assign in whole or in part without the prior written consent of the other party.

21.9 Further documents

Each party agrees that it will forthwith upon the request of the other party execute and deliver all such instruments and agreements and will take all such other actions as the other party may reasonably request from time to time in order to give effect to the provisions and purposes of this agreement.

21.10 Affiliates' actions

Each party will ensure that none of its Affiliates takes any action which is inconsistent with that party's obligations under this agreement, or which if it was done or not done under this agreement by that party would amount to a breach of this agreement by that party.

21.11 Costs and Taxes

Each party must pay its own costs and expenses in relation to the negotiation, preparation, execution, delivery, stamping and registration, completion, variation and discharge of this agreement and Lipha must pay any Tax in respect of the execution, delivery,

performance, release, discharge, amendment, enforcement or attempted enforcement or otherwise of any of the following:

(a) this agreement;

(b) any agreement or document entered into or signed under this agreement;

(c) any transaction contemplated under this agreement; and

(d) any payment made or received in respect of this agreement,

except in any case to the extent to which such Tax is payable in Australia or on or in respect of the income of Autogen.

21.12 Interest on overdue amounts

If any amount due under this agreement is not paid when due, then the party obliged to make payment must pay to the other party interest at the Base Rate on the amount due and payable, accruing from day to day and to be computed from the date for payment of the amount until payment of the amount in full.

21.13 Counterparts

This agreement may be executed in counterparts, and by the parties on separate or the same counterparts, each of which is deemed an original, but all of which constitute one and the same instrument.

21.14 Registration of agreement

If this agreement or any associated transaction is required by the law of any country, other than Australia, to be either approved or registered in any country or with any governmental agency, Lipha is responsible for obtaining such approval or registration including without limiting the generality of the foregoing, causing this agreement to be stamped, recorded and registered at its cost in such country. Autogen agrees to co-operate in any such application or registration procedure. Lipha must furnish proof of compliance with the foregoing to Autogen when and if Autogen so requires.

21.15 Not obliged to act contrary to law

No party is obliged to carry out or perform any of the terms of this agreement where doing so would constitute a violation of any treaty, law, code or regulation of any governmental authority whether local, national or supranational. In any event the other terms of this agreement nevertheless continue and the parties must use all reasonable endeavours to re-negotiate and amend this agreement so that the performance of this agreement as so amended will not involve any such violation.

21.16 Statutory rights not limited

The powers, remedies and rights conferred upon the parties by or under any statute are (except to the extent inconsistent with the terms and provisions expressed in this agreement) be in addition to the powers, remedies and rights conferred by this agreement.

21.17 Consents

Unless this agreement provides otherwise and to the extent permitted by law, a party may, in its absolute discretion, conditionally or unconditionally give or withhold any approval or consent permitted or required to be given by it pursuant to this agreement.

21.18 Entire agreement

This agreement constitutes the entire agreement between the parties in relation to the subject matter of this agreement. Any prior arrangements, agreements, representations or undertakings are superseded and, except as expressly provided, each party acknowledges that it has not relied on any arrangement, agreement, representation or understanding which is not expressly set out in this agreement.

SCHEDULE 1

Autogen Patents

(Referred to in clause 1.1, definition of "Autogen Patents")

Nil.

SCHEDULE 2

Europe

Albania
Austria
Belgium
Belarus
Bosnia-Herzegovina
Bulgaria
Croatia
Cyprus
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Iceland
Ireland
Italy
Latvia
Liechtenstein
Lithunia
Luxembourg
Macedonia
Malta
Moldavia
Netherlands
Norway
Poland
Portugal
Romania
Russia
San Marino
Slovak Republic
Slovenia
Spain
Sweden
Switzerland
Turkey
Ukraine
United Kingdom
Yugoslav Federal Republic (Serbia-Montenegro)

SCHEDULE 3

Proforma Commercialisation Licence

ADDENDUM No. 1

DEED dated MARCH 16TH, 2001

BETWEEN:

AUTOGEN RESEARCH PTY LIMITED ABN 84 074 636 847 of 210 Kings Way, South Melbourne, Victoria 3205 ("**Autogen**");

AND

LIPHA S.A. of 37 rue Saint Romain, 69379 Lyon, CEDEX 08, France ("**Lipha**");

RECITALS

A. In April 1999 the parties entered into an agreement ("**Research and Licence Agreement**") setting out the terms and conditions for the provision for certain Stage 2 Research (as defined in that agreement) services by or through Autogen.

B. The parties now agree to further extend and vary the Research and Licence Agreement subject to the terms and conditions of this deed.

AGREEMENT

1. EXTENSION OF TERM

With effect on and from 1 July 2000 the parties agree that the term of the Research and Licence Agreement is extended until 30 June 2006 ("**Extended Term**") (unless the Research and Licence Agreement is earlier terminated in accordance with its terms). During the Extended Term the terms and conditions of the Research and Licence Agreement will continue to apply except to the extent to which they are inconsistent with anything set out in this deed, in which case the provisions of this deed will prevail to the extent of the inconsistency.

2. PAYMENT AND RESEARCH PROPOSAL DURING EXTENDED TERM

During the Extended Term:

(a) the payment program set out in Schedule 1 to this deed will be substituted for any payment program previously applying under the Research and Licence Agreement; and

(b) the research proposal set out in Schedule 2 to this deed will be substituted for any research proposal previously applying under the Research and Licence Agreement provided that such research proposal will be reviewed by the parties and updated once during each year of the Extended Term.

EXECUTED AS A DEED

(*) INCLUDING BOTH DIABETES AND OBESITY FIELDS

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THE COMMON SEAL of)
AUTOGEN RESEARCH PTY LIMITED)
ABN 84 074 636 847 was hereunto affixed)
in accordance with its Articles of)
Association in the presence of:)

AUTOGEN RESEARCH PTY LTD A.C.N. 074 636 847
The Common Seal of

.....
Director/Secretary

.....
Director

THE COMMON SEAL of)
LIPHA S.A. was hereto affixed in)
accordance with its Constitution in the)
presence of:)

MERCK
Lipha S.A.
France
37, rue Saint-Romain
F - 69379 LYON CEDEX 08

J.N. TREILLES

.....
Director/Secretary

.....
Director

Dr Yves BONHOMME
DIRECTEUR GÉNÉRAL

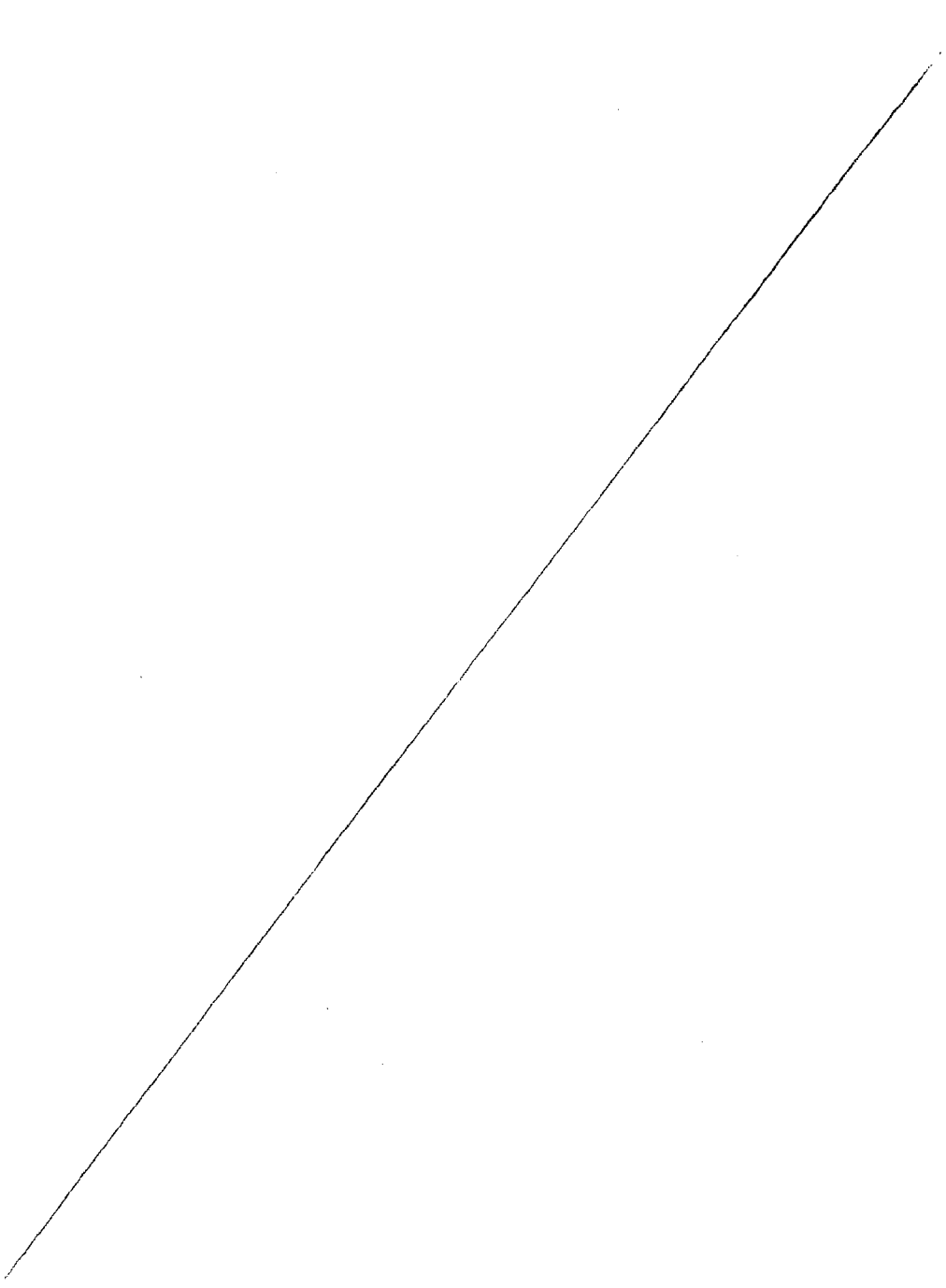
SCHEDULE 1

Funding 1 July 2000 to 30 June 2001 as attached.

Payable by Lipha to Autogen as follows:

Funding consists of quarterly net payments of Euros147,775 made in advance. The first installment of Euros147,775 is to be paid on or about the date of this deed with the second, third and fourth installments to be paid respectively in October 2000, January 2001, March 2001 and June 2001.

SCHEDULE 2



Budget (July 2000 – June 2001)

Salaries (plus on costs)

3X Post-doctoral fellows

5X Graduate Research Assistants

2X Full time equivalent (part time) Research Assistants

Euros 296,525

Consumables

Project 1 (Beacon)	Euros 87,512
Project 2 (B55)	Euros 69,602
Project 3 (H 24)	Euros 16,763
Project 4 (Calpain 3/Titin)	Euros 17,527

Sub-total: consumables	Euros 191,404
Sub-total: Personnel	Euros 296,525
Equipment	Euros 4,655
Sub-total	Euros 492,584
Infrastructure costs (20%)	Euros 98,516
Total	**Euros 591,100**

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Milestones (July 2000 – June 2001)

Beacon

July – September 2000

Beacon (76 aa) production at Silenus.
Beacon (73 aa and 75 aa) as 6XHis and GST fusion protein.
MAb – Production in bags from two selected lines.
PAb – Test and assess sera from two rabbits.
Beacon promoter – cloning and expression.
Inducer effects on beacon gene expression – in different cell lines – by Taqman.
Beacon / CLK – co-expression and co-immunoprecipitation.
Cloning of hCLK1, 2, 3 and 4 isoforms.
ICV studies - "A" animals – dose response studies.
In vitro studies – setting up of functional assays and macroarrays.

October – December 2000

Beacon (76 aa or 73 aa if available) production at Silenus.
Beacon (73 aa and 75 aa) expression and purification - optimization.
MAb –A, B and C, fed and fasted animals by immunohistochemistry.
PAb – Test, assess and process sera from third and fourth rabbits.
Beacon promoter – identification of additional promoter and enhancer elements, analysis of inducer effects.
Beacon / CLK – co-expression and co-immunoprecipitation – comparison of four hCLKs.
ICV studies with "B and C" animals – infusion with optimized amounts.
In vitro studies – glucose and fatty acid uptake measurements.
Macroarrays to identify differentially expressed genes.

January – March 2001

Beacon (73 aa or 75 aa) production –protease free and homogeneous beacon.
Beacon (73 or 75 aa) production at Silenus.
PAb – Immunohistochemistry studies with purified antisera from third and fourth rabbits.
Beacon promoter – optimize high through put screening assay.
Beacon / hCLK – effects on down stream insulin signaling events with the best interacting hCLK.
ICV studies with "A" animals – 73 or 75 aa beacon infusion with optimized amounts.
In vitro functional studies with 73 aa beacon – glucose and fatty acid uptake, effects on insulin responsiveness.
GST-pull down assays – to fish for other, if any proteins interacting with beacon.



April – June 2001

PAb – Immunohistochemistry studies with other animal models with the most reactive antisera.
Beacon promoter – continue with optimization of high through put screening assay.
Beacon / hCLK – complete signaling studies, optimize high through put assay for drug screening.
ICV studies with "B and C" animals – 73 or 75 aa beacon infusion with optimized amounts.
In vitro functional studies – take leads from macroarray results and set up studies with the interesting genes.
Studies with other beacon interacting proteins identified from GST-pull down assay.

Band 55

July – September 2000

Gene expression profile in 3T3-L1 – glucose treatment effects.
Yeast 2 hybrid screen –sequence analyze 4 candidate interacting clones.
Cloning and expression - fragments of and full length B55 as 6XHis fusion products.
PAbs – characterization of antisera - B55 expression in tissues and transfected cells.
Adenoviral expression – cloning and in vivo recombination of B55, B55 with N- and C-terminal tags into adenoviral vectors.
Antisense oligos – design and testing of oligos in cell culture.

October – December 2000

Yeast 2 hybrid screen – isolation of full length clones of interacting partners, sequencing, subcloning into expression vectors.
Expression and purification - recombinant 6XHis-B55 fusion proteins.
Recombinant protein production at Silenus.
PAbs – begin immunizing rabbits with recombinant B55.
Adenoviral expression – production of B55 adenoviral stocks in 293A cells.
In vitro functional studies with B55 Adenovirus.
Localization studies by immunohistochemistry.

January – March 2001

Co-expression and co-immunoprecipitation - B55 and the candidate interacting partners.
Signaling pathway – set up assays to analyze downstream signaling events.
GST-pull down assays with C- and N-terminal recombinant B55 fragments – identify other strongly interacting proteins.
A second Y2H screen to isolate other interacting clones from human liver cDNA library.
Cloning and expression of B55 promoter.
Studies with Biacore – fractionation of tissue homogenates by chromatography methods – test for interaction with immobilized B55.

April – June 2001

To further characterize the B55 interacting partners and their functional roles.
Continue with B55 promoter studies.
Set up high through put assays for drug screening based on either B55 promoter driven reporter activity or interaction between B55 and one of the interacting partners.



H24

July – September 2000

Preliminary ICV infusion studies with chemically synthesized peptide.
Immunization of rabbits with KLH-H24 conjugates.

October – December 2000

Further ICV infusion studies to analyze the dose dependent effects.
ICV infusion of A, B and C animals – to study the differences in response to treatments with peptide.
To analyze the test bleeds from rabbits for effective immune response.

January – March 2001

If the results from the previous quarter are encouraging, the following plan, modified as necessary, will be adapted to understand the functional role of H24 in energy homeostasis.

To affinity purify the antipeptide antisera and characterize for specificity.
Immuno-localization studies with crude and purified antisera.
To perform a set of in vitro functional studies using novel protein delivery techniques such as "Trojan peptides".

April – June 2001

As we have in the case of other genes, to implement techniques such as Yeast 2 hybrid analysis, GST-pull down assay and Biocore sensor systems to identify the H24 interacting proteins.

Calpain 3 / Titin

July – September 2000

Measurement of Titin in tissue samples, C2C12 and L6 cells by Western blotting.
Antisense – inhibition of calpain 3 expression in cells, analysis by Real time PCR.
Calpain 3 expression clone – plasmid preps and restriction mapping.
Over expression of calpain 3 in C2C12 cells and assay for effects on fatty acid uptake and insulin responsiveness.

October – December 2000

In vivo functional studies with best performing antisense oligos – monitor changes in Titin levels.
Complete in vitro studies with calpain 3.
Construct recombinant Calpain 3 Adenovirus and prepare viral stocks.

January – March 2001

Adenoviral mediated expression of Calpain 3 – in vitro functional studies in cell culture.
In vivo functional studies – IP and IM delivery of Adenoviral Calpain 3.

April – June 2001

Continue with in vivo functional studies.
If a physiological relationship between changes in Calpain 3 and Titin levels to the diabetic or obese state of the animals is once established, methods to modulate endogenous levels of Calapain 3 activity will be investigated.

Beacon – Research Proposal

Hypothesis

Increased expression of beacon in hypothalamus is found to be associated with increased food intake and increase in body weight.

Background

Beacon was initially discovered by the technique of differential display PCR, screening hypothalamic mRNA from lean vs obese *Psammomys obesus*. Beacon gene expresion in the hypothalamus positively correlated with the percentage of body fat. Intracerebroventricular infusion of beacon resulted in a dose dependent increase in food intake and body weight and increased hypothalamic expression of neuropeptide Y. The predicted protein product of beacon consists of 73 amino acids. Amino acid sequences deduced from human and mouse expressed sequence tags show 100% homology with *P.obesus* beacon, indicating that the protein is highly conserved between species. Strong homology (81%) was found with C. elegans protein and a weak similarity to Arabidopsis thaliana ubiquitin-like protein 8.

Beacon was also found to be expressed in various other tissues tested indicating its ubiquitous presence. In yeast two hybrid system, beacon has been found to interact with human homolog of mouse CLK4 (CDC like kinase). It is possible to predict a role for beacon in the downstream insulin signaling pathway involving PTP1β (Phospho Tyrosine Phosphatase 1 β) and CLK.

Our current efforts are directed towards understanding the precise functional role of beacon in the modulation of energy balance and develop a high through put screening assay for evaluation of drugs that interact with beacon.

Research Plan

Recombinant beacon:

Conditions for production of recombinant GST-Beacon fusion protein and Beacon cleaved off of GST have been optimised. The cleaved protein comprises the complete 73 amino acid beacon with additional three residues aReceived over 200 mg of GST-Beacon fusion protein and about 20 mg of cleaved beacon from Selinus, to whom we contracted the process. We are currently verifying the purity and yield of the samples. The samples will be used for raising and screening polyclonal and monoclonal antibodies to beacon as well as for functional studies.



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Monoclonal and Polyclonal antibodies:

Mice immunized with Pinpoint-beacon fusion protein were utilized for making monoclonals. GST-beacon is used for screening to select out pinpoint and select beacon specific hybridomas. Three lines from first fusion are currently being characterized for specificity. Single cell cloning and screening is under way for five positives from second fusion.

Four rabbits are currently being immunized with GST-beacon. The titers from first test bleeds of two of the animals are found to be low. However, we would expect the titers to improve on further boosts. We will try to enrich the sera for beacon specific antibodies by removing the GST reactive antibodies by affinity adsorption.

Antibodies will be used for immunolocalization and functional studies.

Beacon promoter:

We are currently subcloning 0.8 and 1.2 kb upstream sequence from the transcription start site in human beacon gene into promoter less pCAT vector. Promoter activity in the selected sequence will be analyzed by expression of the constructs in few different cell lines. Specific promoter elements will be further analyzed by screening of different fragments of promoter positive sequence.

We aim to establish a rapid luciferase reporter assay for high throughput drug screening based on alteration of beacon promoter activity.

Beacon / CLK interaction:

It is important to demonstrate that true interaction occurs between endogenously expressed beacon and CLK4 and may even be with other forms of CLK such as CLK1 and 2. We will isolate and sequence human homolog of CLK4. We will coexpress beacon and CLK4 as Flag, Myc or HA fusion proteins in selected cell lines. We will verify endogenous interaction between the two proteins by immunoprecipitation. Further, we will isolate human CLK1, 2 and 3 isoforms and examine the anticipated interaction with beacon, if occurs, by similar experiments.

Once the CLK / beacon interaction is established, we will develop a rapid screening assay in an ELISA plate format for screening drugs that modulate the interaction between the proteins. We will produce recombinant proteins either in cell culture or bacteria. We have options to incorporate different tags such as Alkaline phosphatase, GST, biotin or radioactive label for convenient monitoring of the interaction.



(For more details refer to the attached proposal on "Beacon / CLK interaction – HTS assay development").

Other Beacon interacting proteins:

Using GST-beacon, currently available in the lab, we will perform "GST-pull down assay" with fresh tissue homogenates from Sand rat and attempt to isolate, obtain partial sequence and identify the specifically interacting proteins. Further experiments will be designed based on the nature of proteins discovered to be interacting with beacon.

Immunolocalization of beacon:

Level and location of expression of beacon in the brain may have important implications in the maintenance of energy balance in animals and humans. Using the monoclonals and polyclonals prepared in house, a series of experiments will be performed to examine and compare the precise location and level of expression of beacon in the brains of Sand rats: lean / obese, fed / fasted, and also in different animal models such as ob/ob, db/db, tub etc.,

We will be able to further elucidate the beacon signaling pathway by examining co-localization of beacon with other signaling peptides in the brain such as NPY, CART, POMC, leptin using respective antibodies.

Beacon treatment – functional role:

Considering the significant effect the treatment with beacon peptide has on animals, we plan to perform a series of in vitro and in vivo functional studies with the available recombinant beacon.

In vivo functional studies:

We will repeat the in vivo ICV fusion experiments we have earlier carried out with beacon peptide with the full length recombinant protein and examine whether similar or different physiological changes in the animals follow. While we are more certain of a role for beacon in the CNS signaling, we do not yet know whether it is a secreted protein, exerting in addition some other regulatory effects on other organs. To address this question, we will design experiments to treat animals with intra-peritoneal injections of beacon and monitor any changes taking place in the animals food intake, plasma insulin and glucose levels, body weight and observe for any other symptoms animals develop compared to the control treated animals.
(Refer to the attached "In vivo functional studies with full length beacon")

In vitro functional studies:

Effect on glucose and fatty acid uptake:

On a simpler level, we will treat adipocytes (differentiated 3T3-L cells) and muscle cells (C2C12 or L6 cells) with varying concentrations of beacon and examine the changes in cells ability to take up glucose, fatty acid in response to with or without insulin. The results should indicate to us the role if any beacon plays in altering the insulin sensitivity of tissues such as liver and muscle. We have optimized a method to analyze fatty acid uptake and are currently working on standardizing method to analyze glucose uptake in cells.

Differential gene expression:

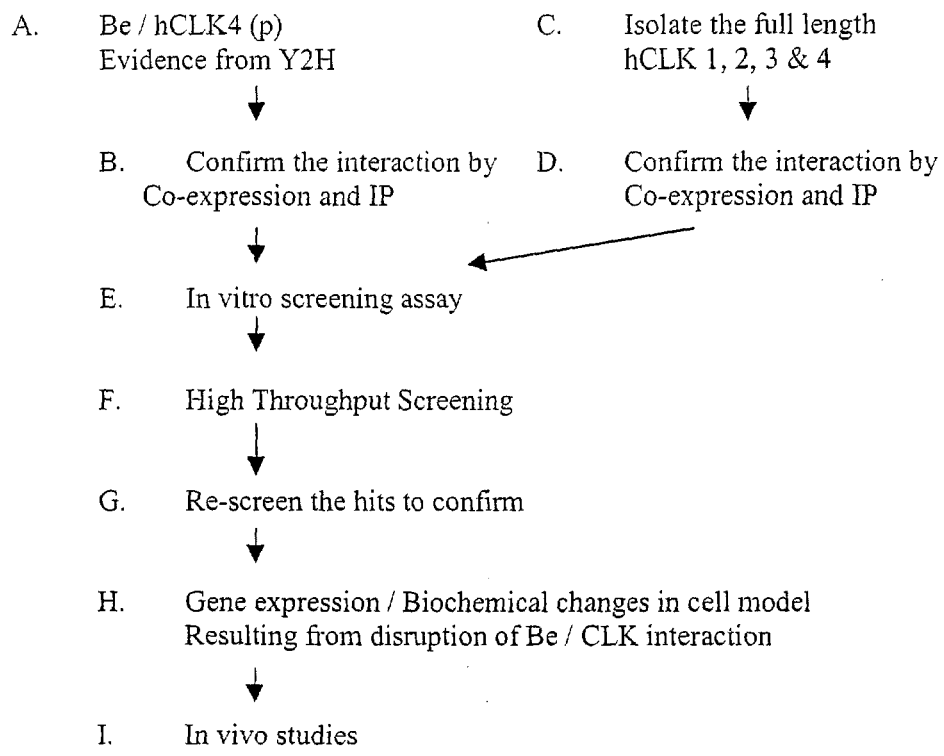
There is no evidence to think that the molecular pathways beacon is linked to will be simple. The level of beacon present in the animal may determine the expression levels of various genes that in turn may determine the level of food intake of the animal.

In cell culture, we will treat adipocytes and GT1-7 cells with two or three different concentrations of beacon, isolate mRNA, prepare labeled cDNA and probe hypothalamic and liver macroarrays using the procedures established in our laboratory. On further analysis, we will be able to identify the genes whose expression levels are significantly up or down regulated as a result of beacon treatment. We will if necessary, vary the treatment times (12h, 24h or 48h) and beacon concentrations (2, 5, 10 μM).

The information obtained will assist us in further elucidation of function of beacon.



Beacon / CLK interaction – HTS assay development



Abbreviations:

Be = Beacon, CLK = CDC like kinase, (p) = partial clone, AP = Alkaline phosphatase, GST = Glutathione S-transferase,
HTS = High throughput screening, IP = Immunoprecipitation.

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B. Confirmation of Beacon/hCLK4 interaction

A yeast two-hybrid (Y2H) screen using human brain cDNA library has identified CLK as a potential binding partner to beacon. The CLK sequence identified was partial and showed high sequence homology to mouse CLK4. We will further pursue to establish the biological relevance of this interaction.

Aim:

To confirm the interaction between beacon and hCLK4 using co-expression and immunoprecipitation.

Principle:

Clone Beacon into the epitope tagged vector pCMV-myc.
Clone partial hCLK4 into the epitope tagged vector pCMV-HA.
Co-transfect COS-7 or 293T cells.
Prepare cell lysates.
Perform immunoprecipitation with Anti-myc or Anti-HA antibodies.
Western blot and confirm co-immunoprecipitation of beacon/hCLK4.

Beacon/hCLK4 (partial) co-immunoprecipitation:

A commercially available kit, designed specifically for confirming two-hybrid interactions, has been purchased to facilitate these studies.

In the preliminary studies, we will utilise the partial hCLK4 clone obtained from Y2H screening. We also have plans (See section C) to clone the full length version and repeat the described co-immunoprecipitation experiments.

Alternatives:

If no interaction between beacon and hCLK4 is detected using the epitope-tagged vector set, a number of alternate options are available.

For example, should either protein express poorly in transfected cells, a GST 'pull-down' assay could be employed to allow confirmation of the beacon/hCLK4 interaction. Specifically, cell lysates prepared from cells overexpressing tagged hCLK4 can be



incubated with either GST or GST-Beacon coupled beads. Following incubation, bound proteins are eluted and subsequently analysed by western blotting.

The epitope-tagged vector set that will be used in studies listed above only allows for the expression of N'-terminal tagged proteins. Should the presence of N'-terminal tags on either protein result in disruption of the beacon/hCLK4 interaction, alternate C'-terminal and N'-terminal tagged vectors are available.

C. Determination of full-length, hCLK4 mRNA sequence

We will employ 5' RACE to obtain hCLK4 complete cDNA, hitherto unidentified member of the human CLK family. In addition, as the the partial hCLK4 sequence we have contains the highly conserved CLK active domain, it is possible that other members of the CLK family may also interact with Beacon. To validate this hypothesis, we will clone all members of the CLK family and test their ability to interact with Beacon.

Aim:

Using 5' RACE, determine the full-length mRNA sequence for hCLK4 and clone the predicted ORF into C' and N'-terminal epitope tagged mammalian expression vectors.

Using the published mRNA sequences for hCLK1, 2 & 3, ORF's will be isolated and cloned into C' and N'-terminal epitope tagged mammalian expression vectors.

Parallel Studies:

Isolation of genes encoding ISR, CLK homologues will be also be attempted. At this stage, however this work is of lesser priority in terms of the proposed research plan.

D. Interaction of Beacon other members of the hCLK family

Studies of beacon/hCLK interaction will essentially follow those described previously in section B. It is envisioned that the outcomes of testing Beacon interaction, with all CLK members, will allow for further elucidation of beacon action *in vivo*.

Aim:

To confirm the interaction between beacon and full-length hCLK4 using co-expression and immunoprecipitation.

To identify protein:protein interactions between beacon and hCLK1, 2 & 3.

Principle:

Refer to section B.

Alternatives:

If interaction between beacon and hCLK family members is not detected using the epitope-tagged vectors, alternate options are available such as the GST 'pull-down' assay described in section B.

Interaction of beacon with other hCLK members could also be validated and quantified using the Y2H system.

E. In vitro screening assay

Based on our studies in section D, we will select the particular isoform of human CLK that best interacts with beacon and set up a simple in vitro system for drug screening.

Aim:

To develop a simple assay system in a microtiter plate format using CLK and Beacon as Binding partners I & II (BP I & II) or vice versa.

Principle:

Coat the plate with BP I.
Add BP II fused / conjugated to an assay tag.
Wash the excess unbound BP II.
Assay for the bound tag.

CLK / AP-beacon interaction assay:

We will standardize the methods to produce large quantities of recombinant CLK using either GST or 6XHis fusion vectors.

We will produce required amounts of AP-beacon (Alkaline phosphatase fused beacon) in cell culture using the protocols, already developed in this laboratory.

We will try to establish an interaction assay using CLK as BP I and AP-beacon as BP II.

The binding efficiency will be determined by assaying for Alkaline phosphatase activity.

Alternatives:

In the event we do not achieve the required levels of binding efficiency or detection sensitivity, we will try to implement other tags and detection systems and evaluate their performance in the binding assay.

For example, it should be possible to substitute AP-beacon in the above method with GST-beacon and assay for GST.

Compared to beacon, AP and GST are large proteins and may interfere in the binding of beacon to CLK in which case we will try to substitute ^{125}I labeled beacon for AP-beacon and assay for interaction by measuring the bound radioactivity.

Proximity based fluorescence detection systems with reporter / quencher tags are novel, sensitive and appear to work well even for low affinity interactions. However, it will be our last option since it requires outside resources and special equipment for obtaining tagged proteins and to carry out the screening.

F. High throughput screening

At Lipha.

G. Re-screen the hits to confirm

At Lipha.

H. Gene expression / Biochemical changes in cell model

It is predictable that the disruption of the interaction between beacon and CLK could result in changes in expression of the genes involved in the down stream signaling pathway. On the other hand the changes could be biochemical in nature effecting the immediate signaling events.

It is possible for us to design experiments using established cell lines such as GT1-7 or 3T3-L. We can treat the cells with the compounds of interest, isolate mRNA and probe macro array membranes to identify the genes that show altered gene expression in response to the treatment.

We will be able to employ Anti-phospho tyrosine and Anti-phospho serine antibodies to study the changes in the overall phosphorylation and dephosphorylation patterns resulting as a consequence of the treatments rendered.



In Vivo Functional studies with full length beacon

Hypothesis:

Full-length beacon (73aa) will affect food intake and body weight in *Psammomys obesus*.

Background:

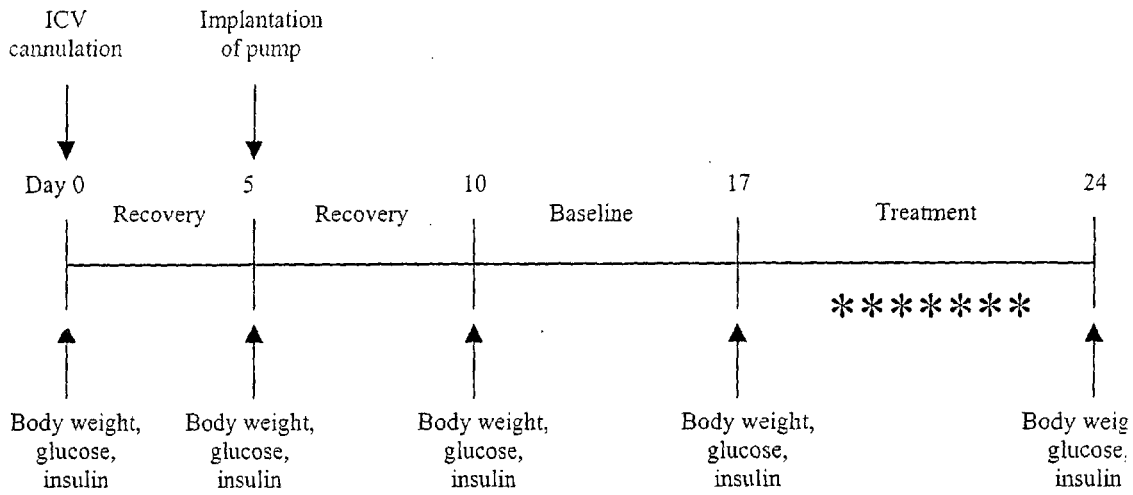
Beacon is a novel gene overexpressed in the hypothalamus of obese animals that encodes a small (73 amino acid) protein. Beacon mRNA gene expression in the hypothalamus was measured using TaqMan PCR and was positively correlated with percentage body fat ($p<0.01$) and body weight in *Psammomys obesus* ($p<0.05$). A 33 amino acid fragment of the predicted beacon protein was chemically synthesized to test for *in vivo* effects of beacon administration in lean, non-diabetic *Psammomys obesus*. Intracerebroventricular infusion of the 33-amino acid beacon fragment (3-30 μg/d) for 7 days resulted in a dose-dependent increase in food intake ($p<0.05$) and body weight ($p<0.001$), and resulted in a 2-fold increase in hypothalamic expression of neuropeptide Y (NPY; $p<0.005$), measured using TaqMan PCR.

Research Plan:

We currently have a supply of GST-beacon (obtained from Silenus). 6-8mg of cleaved GST-beacon is available, consisting of the 73aa beacon with an additional 3 amino acids at the N-terminus. GST-beacon is cleaved with thrombin for removal of the GST tag. The preparation was assayed for the presence of active Thrombin by using a fresh sample of GST-beacon as a substrate. We did not see any visible Thrombin activity. We feel that the Thrombin activity in beacon samples is either very low or none present. We are looking into having the samples tested using more traditional, plasma clotting assays as well to confirm the results.

It is difficult to predict what effects does the GST-beacon, slight contaminant present in the sample will have on treated animals. We may in future have a cleaner preparation of beacon. However, we decided to use the beacon preparation available as it is and conduct in vivo studies.

In the next two or three weeks, we will be performing the ICV studies using group A animals. Initially, an identical protocol to that in the Nature manuscript will be performed with the 76aa beacon. A dose-response of 0, 3, 15 and 30μg/day will be administered to n=8 animals in each group, as summarized in the timeline below. Timeframe for the completion of this study would be 6-8 weeks.



* Body weight and food intake measured daily during the treatment period.

An assessment needs to be made after this study. If the 76aa beacon does have an effect in Group A animals, we should test for similar effects in Group B and Group C animals. The experimental design would be the same as used in Group A animals above, however the time frame would be longer (16 weeks) as Group C animals are less common than Group A animals.

If 76aa beacon has effects on food intake and body weight in Group A animals, a calorimeter study should be conducted to investigate effects on substrate oxidation and energy expenditure. The protocol used would be the same as for the 33aa beacon experiments in Group A animals. The study would involve 8 treated and 8 control animals, with the beacon dosage determined from the food intake study. A summary of the experimental protocol is presented below.

B55 Research Plan

B55 Hypothesis:

B55 plays a role in the pathophysiology of type 2 diabetes mellitus and is potentially a target for anti-diabetic agents.

Background:

Band 55 was discovered in the liver of fasted compared to fed animals using the differential display technique. This pattern of expression was confirmed by real-time PCR. Band 55 was also found to be over-expressed in adipose tissue in response to fasting and in the liver in response to a two-week energy restriction. There is no difference in liver Band 55 expression between A, B and C in the fed state. Band 55 mRNA is 1155 nucleotides long and encodes a 189 amino acid protein. The protein sequence is predicted to have one transmembrane domain and overexpression studies in mammalian cells using epitope-tag vectors have indicated that Band 55 is a plasma membrane protein. Experiments conducted in HepG2 cells have shown a tenfold increase in expression of Band 55 in response to high glucose media compared to low glucose media. With addition of fatty acids to the cells, Band 55 expression was generally reduced in a dose-dependent manner. Overall these results suggest that Band 55 expression is modulated by metabolic signals and may be involved in the pathophysiology of type 2 diabetes in *Psammomys obesus*.

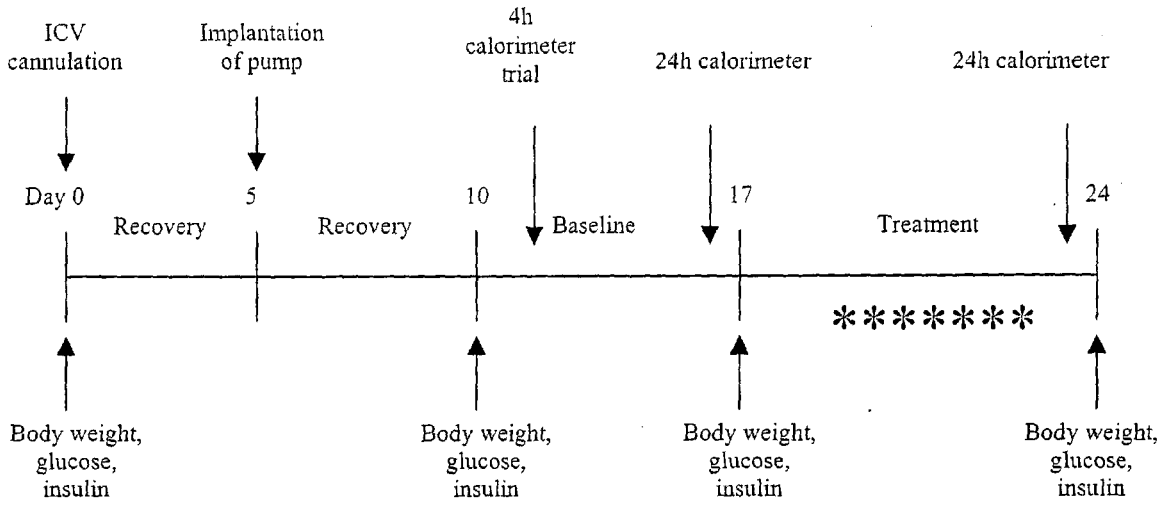
Research Plan:

Gene Expression Profiling

Finalising/repeating 3T3-L1 glucose treatment effects on B55 expression (3 weeks part time).

Yeast-Two Hybrid Screen

Identifying proteins that interact with full-length B55 using a human liver cDNA expression library.



* Body weight and food intake measured daily during the treatment period.

If 76aa beacon affects food intake/body weight in Group B and Group C animals, this calorimeter study will need to be conducted in these groups also.

In addition, after analysing the results of the ICV experiments we will also perform studies of IP beacon administration in group A animals. After a 7-day baseline period, animals will be administered beacon via a single daily IP injection for a period of 7 days. A dose-response of 0, 3, 15 and 30μg/day will be administered to n=8 animals in each group, and body weight, food intake, blood glucose and plasma insulin concentrations will be monitored. Timeframe for the completion of this study would be 6-8 weeks. Once again, results of these studies in Group A animals will determine whether similar experiments will be conducted in Group B and C animals.

So far, 30 clones have been identified as preliminary positives and 4 clones were further identified as containing potential interacting proteins due to induction of all three reporter genes (clone 10, 25, 27 and 28, all are yet to be sequenced).
To complete this study, need to finish screening for proteins that interact with B55 (>1 million transformants tested), confirm potential interactions and isolate plasmid DNA and obtain the sequence of the potential B55 protein partners identified (3 months part time).

Polyclonal Antibody

Very small amounts of B55 polyclonal antibody are beginning to be produced.
Need to finish isolating and purifying significant amounts of B55 polyclonal antibody, which will include performing Westerns and confirming specificity of the antibody for B55 (2-3 months full time).
Once the antibody is produced immunoneutralisation studies and cellular localisation studies are planned.

Recombinant B55 Expression

This study is ongoing and B55 has been expressed in E. coli using the GST-expression system, however the protein cannot be solubilised using this system. We will have to re-do this experiment in new system, possibly 6His tag
(2 months to complete pilot expression work, part time).

B55 Adenoviral Vector construction

It is estimated that PC2 classification should be completed within one month.
After this, work on the construction of the adenoviral vector can continue.
The recombinant adenoviral vector production will be completed using the AdEasy kit and then overexpression of B55 will be confirmed in vitro (3 months part time).

Adenoviral B55 *in vitro* and *in vivo* Treatments

After construction of the adenoviral vector is completed (in 4 months time)

- Test adenoviral B55 effects on glucose uptake, fat uptake and insulin effects in 3T3-L1 and Hep-G2 cells (2-3 months part time).

- Administer adenoviral vector to P. O. from groups A, B and C (n=8). Should be able to begin this study: collect animals, begin run-in/baseline period, treat animals within 6 months (4 months to complete full study).

Antisense Antagonism of B55 Expression

We currently have designed 3 antisense oligonucleotides and 1 control oligonucleotide. Testing of these has just begun and further characterisation and testing of B55 AS oligonucleotides is continuing (1-2 months full time).

To confirm decreased gene expression and protein expression in vitro Northern and Western blots may be performed (1 month full time).

Using the most potent antisense oligonucleotide (or combination of oligos) in vitro treatments with functional AS oligonucleotide and control oligonucleotide in HepG2 and 3T3-L1 cells can begin, including glucose and insulin treatments, glucose uptake studies (basal and insulin stimulated), and fat uptake studies (3-4 months part time)

B55 Localisation Studies

After polyclonal antibody is produced and specificity confirmed (2 months), examination of B55 localisation in sections of liver, adrenal gland and brain from P. O. can begin (9 animals, 1 month full time).

Continuing studies will include expression of B55 in lean/obese, fed/fasted P. O. and different animal models of obesity (ob/ob, Zuckers) (6 animals each study, 4 months full time).

H24 Research Proposal

Hypothesis

H24 plays a role in body weight regulation in the hypothalamus.

Background

H24 was discovered by differential display of hypothalamic cDNA. Taqman real time PCR showed that gene expression was greater in the hypothalamus of A animals than B and C animals, and there was a negative correlation with body weight, percent body fat and plasma insulin levels. Gene expression was also increased in the fasted state, to a larger extent in A and B animals. The H24 gene was found to be expressed only in the brain and testes, and not in muscle, adipose tissue, liver, heart or kidney. Expression in testes is interesting given the link between body weight regulation and reproduction. The H24 protein is predicted to be only 22 amino acids long, the N terminal end of which is hydrophobic and the C terminal end hydrophilic.

Research Plan

1. Further characterization of H24 expression in *Psammomys obesus*

A Northern blot will be performed to check that the transcript size predicted from 5' RACE is correct and that we have the full transcript sequence. The Northern blot will also be able to identify if there are any splice variants and both brain and testis RNA will be examined. 3' RACE has to be finalised as well although we are fairly sure that we have the 3' sequence.

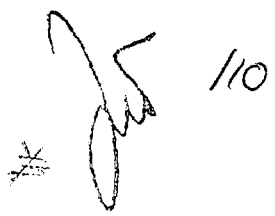
Taqman PCR will be performed on NPY, leptin and beacon-treated hypothalamus to examine H24 gene expression after these treatments.

Hypothalamic RNA will be extracted from the chronic energy restriction study currently being performed and Taqman PCR used to quantitate H24 gene expression levels.

2. Search for a human homologue

An ANGIS Notify has been set up to check new sequences entered onto GenBank database for homology to H24 on a daily basis. In the meantime, 3 approaches will be used to look for a human homologue to H24.

Once the Northern blots are working on *Psammomys obesus* brain, Northerns will be performed with human brain RNA. Cross species Northerns have been tried with band 55 and a single band of the expected size was seen in human liver RNA with a *Psammomys obesus* RNA probe.



If no band can be seen by Northern blot or expression levels are too low, a Southern blot will be performed with human genomic DNA. Genomic DNA will be cut with a number of restriction enzymes and probed with a H24 DNA probe.

The final approach will be to probe a human brain cDNA library to try and pull out a human H24 clone.

3. Functional studies

The H24 peptide is currently being chemically synthesised and should arrive early July. It will be used to ICV treat *Psammomys obesus* animals to examine if it has an effect on food intake, body weight or glucose or insulin levels. 8 A, 8 B and 8 C animals will be treated with 30 ug/day for 7 days and if an effect is seen 15 ug and 3 ug doses will be administered into further animals to establish a dose response.

Polyclonal antibodies will be raised to H24. H24 conjugated to KLH will be made and injected into rabbits. After 4 months (including 2-3 boosters), the antibodies will be isolated and purified, including Westerns to confirm the specificity of the antibody for H24.



Calpain 3/Titin Research Plan

Hypothesis

Altered expression/activity of calpain 3/titin contributes to type 2 diabetes.

Background

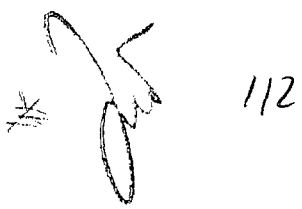
Several methods of gene discovery simultaneously identified the various components of this system as being differentially expressed in obese, type 2 diabetic *Psammomys obesus*. Differential display PCR in muscle of *Psammomys obesus* was used to identify titin and microarray analysis showed differential expression of calpastatin in diabetic animals. Subsequent analyses demonstrated that calpain 3 (CAPN3; p94) was overexpressed in the muscle of diabetic animals and the expression of this proteolytic enzyme was associated with blood glucose concentration independent of body weight and plasma insulin levels. Both fasting and 2-week dietary energy restriction significantly reduced the expression of CAPN3. In addition, calpastatin (CAST; endogenous inhibitor of calpain) gene expression was significantly reduced by fasting and dietary energy restriction in muscle. CAST was also overexpressed in the liver of diabetic and obese animals. Together these results suggest that dysregulation within the calpain/titin system may be involved in the pathophysiology of obesity and/or type 2 diabetes in *Psammomys obesus*.

Research Plan

1. Measurement of titin

A number of previous studies report the use of SDS-PAGE gels to quantitate the amount of titin present in tissue samples, and to measure breakdown of titin (eg. Fry et al., Acta Physiol. Scand. 1997; 161:473). The specificity of the fragments observed using SDS-PAGE are confirmed by Western blot. We will utilise this technique to investigate the levels of intact and degraded titin in a number of skeletal muscle tissues obtained from lean, obese and diabetic *Psammomys obesus*.

Frozen muscle samples will be serially sectioned using 40μm sections. 5 sections from each sample will be placed into 1.0ml of lysing buffer containing 10% (w/v) glycerol, 5% (v/v) β-mercaptoethanol and 2.3% (w/v) SDS in 62.5 nmol/L Tris-HCL (pH 6.8), and heated for 10 min at 65°C. 15μl of the extract will be loaded on 3-6% gradient SDS-polyacrylamide gels (pH 8.4) with 3% stacking gels (pH 6.8) and electrophoresed for 21h at 120V. Protein bands will be visualised using silver staining and quantitated using optical densitometry.



1/2

Western blots will be used to verify the identity of titin bands on the gels, using a monoclonal anti-titin clone T11 antibody (available from Sigma, St. Louis, MO). Immunoreactivity will be visualised with an anti-mouse secondary antibody and horseradish peroxidase chloro development reagent 4-chloro-1-napthol (Bio-Rad, Hercules, CA).

Titin content will also be measured in C2C12 and/or L6 cells

(1 month F/T)

TOTAL – 1 month

2. Inhibition of CAPN3 expression in vitro and in vivo

We will synthesise antisense oligonucleotides specific to the CAPN3 gene and test these for effects on glucose/fat uptake and titin levels and degradation.

Design 3-4 antisense oligonucleotides, test the oligonucleotides in cell culture (C2C12) using:
-several different concentrations
-different combinations

Using the most potent antisense oligo (or combination of oligos):
-do Real time PCR to show decreased gene expression and protein production after treatment with antisense oligonucleotide

(3 months F/T)

Following the demonstration of calpain inhibition using antisense oligonucleotides in the C2C12 muscle cell line, oligos will be injected intramuscularly into the hindlimbs of *Psammomys obesus*. The animals will be monitored for a 2 week period for changes in food intake, energy expenditure, body weight, blood glucose and plasma insulin concentrations.

(3 months F/T)

TOTAL – 6 months

3. Effect of overexpression of CAPN3 in muscle cell lines

We will be requesting from Koichi Suzuki from the University of Tokyo the mammalian expression vector that has been cloned with p94. If we are able to get this vector we will transfect and measure glucose and fatty acid uptake in response to insulin in C2C12 and/or L6 cells. If overexpression is achieved and a significant difference is observed then we will proceed to adenoviral work.

(2 months F/T)

4. Effect of overexpression of CAPN3 using an adenovirus

An adenoviral vector will be constructed to produce overexpression of CAPN3 both *in vivo* (*Psammomys obesus*) and *in vitro* (C2C12 cells). The virus will be constructed using AdEasy kit (Quantum Biotechnologies). Once we have confirmed overexpression of CAPN3 by the recombinant adenoviral vector, it will be administered locally in the hindlimb skeletal muscle of *Psammomys obesus* from groups A (lean, healthy), B (overweight, insulin resistant) and C (obese, diabetic; n=8 for each group). The animals will be monitored for a 2 week period for changes in food intake, energy expenditure, body weight, blood glucose and plasma insulin concentrations. SDS-PAGE and Western blotting will be used to measure intact and degraded titin levels in various muscle tissues from animals treated with the recombinant adenovirus.

Construction of adenoviral vector – 4 months (1/2 time)
Time-course experiments + physiological experiments – 10 weeks (1/2 time)

TOTAL – 6.5 months

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Schedule 1 Autogen Patents
Schedule 2 Stage 1 Patents

THIS AGREEMENT is made on APRIL 29TH, 1999

BETWEEN

Autogen Pty Ltd ACN 074 636 847
of 210 Kings Way, South Melbourne, Victoria, Australia

("**Autogen**")

AND

Lipha S.A.
of 37 rue Saint Romain, 69379 Lyon, CEDEX 08, France

("**Lipha**")

RECITALS:

A. Lipha has exercised its option to take a licence in respect of certain intellectual property and to conduct further research and development of the same with a view to the development and commercialisation of certain products.

B. Autogen has agreed to grant this licence to certain intellectual property on the terms and conditions set out.

C. Lipha has agreed to pay to Autogen certain payments as and by way of royalty in respect of the use by it of certain intellectual property licensed to it by Autogen and either used by it directly in the commercialisation of certain products or used by it in the research and development which has led to those products.

OPERATIVE PROVISIONS:

1. INTERPRETATION

1.1 *Definitions*

In this agreement the following expressions have the following meanings:

"**Affiliate**" means with respect to a party, any person which directly or indirectly Controls, or is Controlled by, or is under common Control with, such party.

"**Arms Length**" means in relation to a transaction or dealing, a transaction or dealing which might reasonably be expected to operate or apply between independent enterprises dealing wholly independently with one another and where neither bears the other any special duty or obligation and no special relationship exists between them and where the only consideration is cash.

"**Autogen Know-How**" means Know-How owned by or licensed to Autogen in relation to the Autogen Patents in relation to theBeacon Gene Product.

"**Autogen Patents**" the patents and patent applications owned by or licensed to Autogen related to the Licensed Field including but not limited to those referred to in **Schedule 1** and including:

(i) any re-issue, renewal or extension of such a patent or patent application (whether in whole or in part) and any patent of addition thereto; and

(ii) any supplementary protection certificate or other form of extension based on or arising from such patents or patent applications.

"**Base Rate**" means the PIBOR rate published as such by the French Association of Banks (Association Francaise de Banque (AFB)) or EURIBOR rate applicable on 1 January 1999 or at any later date, should such date be postponed for any reason and published as such by the European Federation of Banks (Federation Europeenne de Banque (FEB)) plus in either case the amount of 1.5% per annum.

"**Beacon Gene Product**" means the novel gene the subject of the Autogen Patents, and any novel proteins or novel antigens based on such novel gene, and any product arising from transcription of such gene.

"**Business Day**" means a day on which the trading banks are open for general banking business in both Melbourne, Australia and Lyon, France.

"**Claim Asserted in Good Faith**" means and is limited to any claim asserted in any Project Patent which can reasonably be considered to be patentable under the laws of the country where filed having regard to any and all references, prior art, novelty, inventiveness, utility and any and all other relevant legal criteria.

"**Commencement Date**" means the date of execution of this agreement by the party last signing it.

"**Control**" means the possession, directly or indirectly, of the power to direct or cause the direction of the management of policies of a person, whether through the ownership of voting securities, by contract or otherwise.

"**Covered By**" means when used in the context that a Product is covered by a Subsisting Claim or a Claim Asserted in Good Faith, that the Product or the normal method of operation or customarily intended use of such Product must, when such Product is manufactured, sold, or otherwise Exploited by Lipha or a Sub-Licensee constitute (but for the Licence or Lipha's ownership of Stage 2 Patents) an infringement of a Subsisting Claim or in the period of 5 years from the Commencement Date an infringement of a Claim Asserted in Good Faith, considered as if it were a Subsisting Claim.

"**Dollars**" or "$" means Australian dollars.

"**EUR**" means the new European currency called EURO.

"**Exploit**" means in respect of a:

(i) Product - to make, have made, hire, sell or otherwise dispose of the Product, to offer to make, sell, hire or otherwise dispose of the Product, to use or import it or keep it for the purpose of doing any of those things;

(ii) Process - use the method or process or do any act in respect of a product resulting from such use which falls within paragraph (a);

"**FFR**" means French Francs.

"**Final Judgment**" means a Judgment or decree which becomes not further appealable or reviewable through the exhaustion of all permissible applications for appeal, rehearing or review by any superior court or tribunal or through the expiration of time permitted for such applications.

"**Force Majeure**" means any cause which is not within the reasonable control of the party affected by it including, but not limited to, acts of God, industrial disputes of any kind, war declared or undeclared, civil disturbance, acts or omissions of Government or other competent authority, fire, lightning, explosion or flood.

"**Insolvency Event**" means any event of insolvency, bankruptcy or liquidation of the relevant party, including any voluntary or involuntary judicial liquidation or re-organisation proceedings.

"**Know-How**" means technical, commercial and other information, data, know-how, drawings, specifications and/or designs, animal or other models, methodologies and biological materials embodied in some Material Form, and without prejudice to the generality of the foregoing includes:

(i) all experimental, manufacturing, process, analytical, packaging, product, warehousing, quality control and quality assurance and marketing specifications, standards, procedures, processes, methods, instructions and techniques, samples, prototypes, formulae, writings of any kind, opinions or otherwise unwritten data or in the form of computer software or computer programs or any part thereof in any code; and

(ii) all other information and other material supplied to or received by a party or its Representatives from another party or Representatives on a confidential basis pursuant to this agreement.

"**Licence**" means the right and licence granted by Autogen to Lipha pursuant to this agreement.

"**Licensed Field**" means the field of human therapeutic applications for the treatment or prevention of obesity and as a secondary field, the field of human therapeutic applications for the treatment or prevention of diabetes and its complications. For clarity it is noted that this does not include diagnostics or veterinary applications.

"**Licensed Patents**" means the Autogen Patents and the Stage 1 Patents.

"**Licensed Technology**" means the Autogen Know-How and Stage 1 Know-How.

"**Loss**" means any loss, damage, cost, interest, expense, fee, penalty, fine, forfeiture, assessment, demand, action, suit, claim, proceeding, cause of action, liability or damages incurred by a person, and includes:

(i) the cost of any action taken by the person to protect itself against any loss or to preserve any right it has under this agreement; and

(ii) where applicable, reasonable legal costs.

"**Marketing**" means the promotion, advertising, distribution and sale of the Product and includes a product launch campaign.

"**Material Form**" in relation to information includes any form (whether visible or not) of storage from which information can be reproduced, and any form in which Information is embodied or encoded.

"**Month**" means calendar month.

"**Net Sales Value**" of a Product means in the case of an Arms Length sale the gross amount invoiced by Lipha (or the relevant Sub-licensee) to any customer less any and all of the following:

(i) any discount or rebates on sales of the Products;

(ii) insurance and freight;

(iii) the selling price of any returned goods or free replacements; and

(iv) taxes imposed on sales of the Products such as value added tax, excise tax and consumption tax.

"**Party**" means Autogen or Lipha and their respective successors and permitted assigns and "Parties" means both of them.

"**Patent**" means any patent or patent application as defined in the *Patents Act 1952* (C'th) and any similar international, national or regional patent or patent application and includes any and all extensions, renewals, continuations, patent-of-addition and/or supplementary protection certificates to any of the foregoing and includes any corresponding patent or patent application taken out or applied for in any country in the Territory which is fairly based upon or derived from any of the aforesaid patents.

"**Products**" means any products produced or arising out of use of the results of Stage 1 Research or Stage 2 Research or arising out of all and any further development by Lipha pursuant to Stage 1 Research or Stage 2 Research or both.

"**Project Patents**" means the Autogen Patents, the Stage 1 Patents and/or the Stage 2 Patents.

"**Project Research**" means the research in the area of obesity and of novel genes involved in obesity and the research arising therefrom, consisting of the Stage 1 Research and the Stage 2 Research.

"**Quarter**" means each period of three months commencing on the first days of each January, April, July and October during the Term.

"**Registration**" in respect of a country means the gaining of all permissions from all Regulatory Authorities in that country necessary to permit the commencement of Marketing in that country and includes any approval in respect of packaging or labelling and further includes the agreement of relevant authorities as to the level of pricing or reimbursement in respect of the relevant Products, where such registration is mandatory or a practical commercial imperative.

"**Regulatory Authority**" in respect of a country means any and all bodies and organisations regulating the importation, distribution, marketing or sale of the Product in any part of that country.

"**Representatives**" of a party means that party's directors, officers, employees or agents.

"**Required Insurance**" means:

(i) public liability insurance in respect of Losses up to a limit of $5,000,000 covering property damage and personal injury as may be relevant to the performance of each party's obligations under this agreement to the other, including (without limitation) liability, loss or damage due to negligent or malicious damage, data corruption or loss, fire, theft, electrical and water damage; and

(ii) if the relevant party sells a Product, product liability insurance in respect of Losses up to a limit of $20,000,000 covering any liability associated with use or misuse of the Product including , personal injury and consequential loss.

"**Research Agreement**" means the Research and Licence Agreement in the field of obesity between the parties dated APRIL 27TH, 1999.

"**Rights**" means the Licensed Patents and the Licensed Technology.

"**Royalty Period**" means each Quarter during the Term provided that where the Term commences or ends on a day other than first day of a Quarter the first and last reports will be for only so much of the Royalty Period as occurs during the Term.

"**Significant Competition**" means competition or potential competition to the Product from a third party's product which, notwithstanding the fact that it does not breach any Project Patent:

(i) is in whole or in part intended to have the same function or effect as the Product; or

(ii) in the country of manufacture or sale has taken or has the potential to take significant market share from the Product or has prevented or deterred or has the capacity to prevent or deter the Product from obtaining significant market share.

"**Stage 1 Know-How**" means the Know-How relating to or arising out of Stage 1 Research in relation to the Beacon Gene Product.

"**Stage 1 Patents**" means Patents relating to or arising out of Stage 1 Research including in particular the Patents set out in **Schedule 2**.

"**Stage 1 Research**" means the Research so described conducted under the Research Agreement.

"**Stage 2 Know-How**" means the Know-How relating to or arising out of the Stage 2 Research program in relation to the Beacon Gene Product.

"**Stage 2 Patents**" means Patents relating to or arising out of the Stage 2 Research program in relation to the Beacon Gene Product.

"**Stage 2 Research**" means generally antibody production, large scale protein production, structural analysis, screening of compounds affecting the relevant novel gene product, combinatorial chemistry, toxicological studies and first clinical studies in obese patients and completion of dose efficiency relationship studies in obese patients (clinical Phase 2).

"**Sub-licence**" means a sub-licence granted to an Affiliate or other third party under **clause 5**.

"**Sub-licensee**" means the person in favour of whom a Sub-licence is granted in accordance with **clause 5**

"**Subsisting Claim**" means and is limited to any valid claim of a validly issued unexpired and non-lapsed Project Patent which has not been held permanently revoked, unenforceable or invalid in a judgment or decree which becomes not further appealable or reviewable through the exhaustion of all permissible applications for appeal, rehearing or review by any superior court or tribunal or through the expiration of time permitted for such applications, (which judgment or decree has not been admitted to be invalid or unenforceable through reissue or disclaimer or otherwise). If there should be two or more decisions within the same country which are conflicting with respect to the invalidity of the same claim, the decision of the highest tribunal will thereafter control. However should the tribunals be of equal authority, then the decision or decisions holding the claim valid will prevail where the conflicting decisions are equal in number and the majority of decisions will prevail where the conflicting decisions are not equal in number. Where a Project Patent has been issued in a country other than Australia without a separate and independent examination by the relevant authorities of that country that patent will be deemed to have a scope equivalent to the scope of the claims of any corresponding Australian Patent which has had examination in Australia.

"**Term**" means the period during which this agreement is in force pursuant to **clause 11**.

"**Territory**" means the whole of the world

"**Year**" means each period of twelve months commencing on the first day of each January during the Term.

1.2 Construction

In this agreement unless the context otherwise requires:

(a) **Business Day**. If any day appointed or specified by this agreement for the payment of any money or the doing of any act or thing falls on a day that is not a Business Day, the day so appointed or specified is deemed to be the next day which is a Business Day.

(b) **Collective references**. Reference to any thing (including, without limitation, any amount) is a reference to the whole or any part of it and a reference to a group of things or persons is a reference to any one or more of them.

(c) **Defined expressions**. If a word or phrase is defined, cognate words and phrases have corresponding definitions.

(d) **Gender**. Words importing any gender include the other genders.

(e) **Headings**. Headings must be ignored in construing this document.

(f) **Joint liability**. An obligation of two or more parties binds them jointly and severally.

(g) **Joint obligations**. An obligation incurred in favour of two or more parties is enforceable by them jointly and severally.

(h) **Month**. Means a calendar month.

(i) **Numbers**. Words importing the singular include the plural and vice versa.

(j) **Parts of agreement**. References to this agreement include its recitals, schedules and annexures.

(k) **Persons**. References to persons include corporations and bodies politic.

(l) **Reconstituted bodies**. References to a body which has ceased to exist or has been reconstituted, amalgamated, reconstructed or merged, or the functions of which have become exercisable by any other person or body in its place, is taken to refer to the person or body established or constituted in its place or the person or body by which its functions have become exercisable.

(m) **Representatives and assigns**. References to a person include the legal personal representatives, successors and permitted assigns of that person.

(n) **Statutory amendments**. A reference to a statute, ordinance, code or other law includes regulations and other statutory instruments under it and consolidations, amendments, re-enactments or replacements of any of them (whether of the same or any other legislative authority having jurisdiction).

(o) **Variation**. References to this or any other document include the document as varied or replaced, and notwithstanding any change in the identity of the parties.

(p) **Writing**. References to writing include any mode of representing or reproducing words in tangible and permanently visible form, and include telex and facsimile transmissions.

2. GRANT OF LICENCE

2.1 Grant of licence

Autogen grants to Lipha with effect on and from the Commencement Date until expiry of the Term an exclusive licence within the Licensed Field, that is to the exclusion of Autogen and third parties, in the Territory within that Licensed Field, to use the Licensed Patents and the Licensed Technology and to Exploit the Products utilising the Licensed Patents and Licensed Technology.

2.2 Autogen's Rights

Autogen and Lipha agree and acknowledge that during the Term, except as set out in or permitted by this agreement:

(a) Autogen must not within the Licensed Field Exploit the Products in the Territory utilising the Licensed Patents or Licensed Technology; and

(b) must not grant or purport to grant to any third party any right in respect of the Licensed Patents or Licensed Technology which is inconsistent with the right and licence granted in **clause 2.1**.

2.3 Scope of exclusive licence

The grant of the exclusive licence contained in **clause 2.1** does not preclude:

(a) the licensing of the Licensed Patents and Licensed Technology for use or exploitation outside of the Licensed Field; or

(b) the use of the Licensed Patents or Licensed Technology by Autogen, the International Diabetes Institute or Deakin University for the purposes of their own internal research.

3. ROYALTIES

3.1 Royalty Obligation

In consideration of the grant of the Licence, Lipha agrees to pay to Autogen in respect of sales of Products Covered By Project Patents in the Territory a royalty equal to the following percentages of the Net Sales Value of such Products:

(a) for yearly Net Sales Value of Products up to US$100,000,000, at the rate of 5%; and

(b) until the yearly Net Sales Value of Products reaches US$300,000,000, in respect of yearly Net Sales Value between US$100,000,000 and US$300,000,000, 6%; and

(c) once the yearly Net Sales Value of Products exceeds US$300,000,000, in respect of all yearly Net Sales Value in excess of US$300,000,000, at the rate of 7%.

In this clause, yearly means from 1 January to 31 December in any year.

Where in accordance with the terms set out in the Research Agreement Lipha pursues the Joint Venture Option, the dollar amounts of US$100,000,000 and US$300,000,000 above will be replaced with US$33,000,000 and US$100,000,000 respectively.

3.2 Royalty on unprotected products

If the manufacture, sale or use of a Product in a particular country is not Covered By a Project Patent for any reason then so long as there is in respect of that Product no Significant Competition, royalties will still be payable in respect of such a Product as if it were Covered By a Project Patent, but at a rate equal to 50% of the royalty rate applicable to Products which are actually Covered By a Project Patent.

3.3 Multiple royalties

If the manufacture, use or sale of a Product, which attracts a royalty obligation under **clauses 3.1** or **3.2**, and also attracts a royalty obligation to a third party or parties, not being Affiliates of Lipha, and the aggregate of all such third party non-Affiliate royalties exceeds 10% of Net Sales Value, then the royalty rate payable under **clause 3.1** may be reduced in accordance with the following formula:

$$Rnew = \frac{Rold}{Rtotal} \times 10\%$$

Where:

(a) Rnew is the new royalty rate

(b) Rtotal is the total of the royalties payable in respect of the Product to third party non-Affiliates, including the royalty payable to Autogen

(c) Rold is the rate of royalty otherwise payable under **clause 3.1**,

provided that Rnew must not be less than half Rold.

4. REPORTS

4.1 Reporting requirements

Lipha must within 60 days of the end of each Royalty Period provide to Autogen a written report setting out in reasonably specific detail on a country by country basis:

(a) the gross sales value of all Products which have been sold by Lipha and its Sub-licensees during the preceding Royalty Period and the calculation of Net Sales Value from such gross sales,

(b) the calculation of the royalty payable on such Products, including details of the currency conversion rates used, any taxes or other amounts withheld and any adjustments on account of returns.

4.2 Products which don't attract royalty

Royalty will not be payable in respect of any Products supplied, used or consumed by Lipha or any of its Affiliates or Sub-licensees (provided Lipha itself receives no royalty in the following circumstances) for the purposes of testing, obtaining Registration or in good faith pre-marketing or post marketing studies or reasonable quantities of normal commercial samples.

4.3 Time of Sale

A Product is deemed to be sold at the time it is invoiced to the buyer.

4.4 Foreign currencies

Lipha will calculate royalties in local currencies and convert the same to Dollars (or to such other currency as Autogen may nominate from time to time) at the ruling rate of exchange as on the last day of the Royalty Period.

4.5 Payment mechanics

The royalty payable to Autogen must be paid to a bank account nominated by Autogen in Melbourne, Australia (or at such other location as Autogen may stipulate from time to time) within 60 days of the end of each Royalty Period.

4.6 Lipha to keep accounts and records

Lipha must keep and retain at least for a period of 36 months after the end of the Royalty Period to which they relate, true and particular accounts and records of all sales of Products sufficient to verify Lipha's calculation of Net Sales Value of Products sold, the calculation of royalty based thereon and conversion of such amounts into the relevant currency.

4.7 Inspection of accounts

During the Term and for a period of 2 years thereafter, Autogen or its duly authorised representatives reasonably acceptable to Lipha have the right to inspect and audit from time to time the accounts and records referred to in **clause 4.6** and such other matters as are directly relevant to the calculation of the amount of any payment due by Lipha to Autogen under this agreement and are entitled to take copies of such records, on the following conditions:

(a) inspection is limited to 2 times in any 12 month period;

(b) inspections must take place during normal business hours and upon reasonable prior notice to Lipha;

(c) the Representatives of Autogen who inspect such accounts and records must be suitably qualified personnel reasonably acceptable to Lipha and must:

(i) prior to inspecting such records and accounts, enter into a confidentiality agreement with Lipha containing undertakings similar to those in **clause 7**;

(ii) whilst inspecting such records and accounts, abide by all of Lipha's standard rules and regulations; and

(iii) Autogen must indemnify and hold Lipha harmless from all liability resulting from any negligence or any other activities on the part of Autogen's Representatives inspecting such records and accounts.

4.8 Settlement of discrepancies

If any discrepancy is found by Autogen then the amount thereof, together with interest at the Base Rate from the proper date for payment, must be paid within 7 days of demand therefor to Autogen.

4.9 Cost of audit

Autogen must bear the cost of any such examination unless a discrepancy of 5% or more in the amount of any royalty payment is detected, in which event Lipha must bear the reasonable expense of the examination.

4.10 Advance royalty

Where any advance royalty has been paid by Lipha to Autogen, then until such time as such advance royalty has been fully recouped from royalties due to Autogen, Lipha will be obliged to calculate and report but not pay the royalties otherwise due to Autogen under this agreement.

5. SUB-LICENSING

5.1 Scope of sub-licence provisions

Lipha acknowledges and agrees that the provisions of this agreement dealing with sub-licences apply equally to licences by Lipha of Stage 2 Patents, to the extent that any licence by Lipha of a Stage 2 Patent will be subject to the same restrictions and requirements, including royalty entitlements, as if they were Licensed Patents owned by Autogen.

5.2 Right to sub-Licence

Except as required under this agreement, Lipha may grant sub-licences of Project Patents upon such terms and conditions as it may arrange.

5.3 Sub-licenses to Affiliates

Lipha has the right to grant sub-licences to an Affiliate in respect of a particular country or group of countries in respect of the Product provided that the sub-licence complies with the following:

(a) the Affiliate being granted the sub-licence has the commercial capacity to promote and exploit the relevant Product with due diligence and probity and has at least sufficient skills and resources to comply with the obligations placed upon Lipha in relation to that Product in the relevant country or countries;

(b) the sub-licence is wholly consistent with the terms of this Licence and in particular:

(i) such sub-licence does not purport to extend or continue in any circumstances where this Licence may be terminated, and

(ii) the sub-licensee acknowledges that Autogen owns or is the valid licensee of the Rights;

(c) the sub-licence prohibits the sub-licensee from taking any action or allowing any action to be taken which detracts from the ownership of the Rights by Autogen or conflicts with the provisions contained in this Licence in relation to prosecuting or defending the Project Patents or defending any allegation of infringement of the Rights;

(d) the sub-licence is in the English language, executed by the sub-licensee and giving its place of business;

(e) the sub-licence requires the sub-licensee to maintain all books, records and accounts necessary to enable verification of Net Sales Value and royalties and other income required to be paid by Lipha to Autogen and permits inspection by Autogen on terms essentially identical to **clauses 4.6** and **4.7**;

(f) the sub-licence limits the duration of the sub-licence in respect of any Product for the term of this agreement and further provides for the sub-licence to terminate automatically upon the termination of this agreement, or upon an Insolvency Event occurring in relation to the sub-licensee;

(g) the sub-licence prohibits the sub-licensee without the consent of Autogen from assigning, transferring, mortgaging or parting with any of its rights under the sub-licence;

(h) the sub-licence provides that the sub-licence will terminate in the event that the relevant company ceases to be an Affiliate of Lipha;

(i) the sub-licence obliges the sub-licensee to maintain the insurances referred to in **clause 10** or Lipha does so itself in respect of the Products that may be sold in the sub-licence territory; and

(j) the sub-licence provides that all the terms and conditions of the sub-licence may be enforced by Autogen against the sub-licensee notwithstanding that Autogen is not a party to the sub-licence or any rule of law or equity to the contrary.

If the sub-licence to be granted by Lipha is in favour of an Affiliate, and complies in all material respects with the above requirements, it is not necessary for Lipha to seek the consent of Autogen to the granting of such sub-licence, however, Lipha is obliged within 3 months of the entering into of such sub-licence to notify Autogen of the granting of the licence and is further obliged to provide Autogen with general details of the sub-licensee, including information as to its financial affairs and resources and a copy of the executed sub-licence.

5.4 Sub-licences - non-Affiliate

Lipha may not grant any sub-licence to a non-Affiliate without the prior written consent of Autogen, such consent not to be withheld unless Autogen reasonably believes and can objectively justify its view that:

(a) any proposed sub-licensee will not properly perform and discharge all of the obligations of Lipha under this agreement in respect of the relevant sub-licensed Territory;

(b) that the proposed sub-licensee is not financially sound or will be unable to pay royalties and other amounts payable under the relevant sub-licence as and when they fall due;

(c) there are reasonable grounds to believe that the proposed sub-licensee is likely to conduct itself in a manner likely to endanger or cause injury to Autogen's reputation, or the reputation, quality, image or character of the Product, in this regard Lipha must provide to Autogen full information detailing any products manufactured, distributed or sold by the proposed sub-licensee in the proposed sub-licence territory which are competitive with the Product;

(d) the proposed sub-licence is not wholly consistent with the terms of this licence and in particular complies with **clauses 5.3 (a), (b) (c), (d), (e), (f), (g), (i)** and **(j)**; and

(e) the proposed sub-licensee or any of its Affiliates is engaged in litigation with Autogen or its Affiliates.

Lipha must provide full and adequate information to Autogen on the above matters. Autogen undertakes to give its consent within a period not exceeding one month of receipt from Lipha of all information reasonably required to make a determination under this clause, including written confirmation by Lipha that the proposed licence agreement is in compliance with this clause. If no response is given in that period, Autogen will be deemed to have consented to the sub-licence.

5.5 Calculation of royalty for all Sub-licensees

Where any Product is Exploited by a Sub-licensee, the Net Sales Value of any Products sold by such Sub-licensee to a person or persons who is not a Sub-licensee is to be

included in Net Sales Value pursuant to **clause 3.1** and bear royalty payable by Lipha in accordance with **clauses 3** and **4** as if it was Net Sales Value of Product sold by Lipha, not as a proportion of the royalties or other receipts which may be paid by such Sub-licensee to Lipha pursuant to any sub-licence granted by Lipha.

5.6 Royalty reporting

Any payments due to Autogen under this **clause 5** must be included with Lipha's reports and payments to be made under the provisions of **clause 4** for the Royalty Period in which any such amounts become due and payable to Lipha.

5.7 Enforcement of Sub-licences

Lipha must, if so directed by Autogen, take all commercially and legally reasonable steps to enforce the terms of any Sub-licence.

6. COMMERCIALISATION

6.1 General reporting

Lipha will at all times during Stage 2 Research and subsequent steps, including commercialisation, keep Autogen timely and fully informed of:

(a) the progress of development and commercialisation, including internal milestones and approvals;

(b) broad details of any competing products being marketed by Lipha or its Affiliates;

(c) any decision to suspend the continuation of the development or commercialisation of the Products.

6.2 Decision-making

Where Lipha intends to make a decision which may result in the suspension or termination of Stage 2 Research or the further development and commercialisation of Products or which is otherwise materially adverse to such activities then:

(a) it will give Autogen advance notice of such decision making and the reasons why such decision may be made; and

(b) it will give Autogen an opportunity to submit material to and make a presentation to the Lipha decision makers in respect of such decision prior to such decision being made,

it being acknowledged that having followed the above procedures, Lipha's decision will be in Lipha's entire discretion and will not be fettered or reviewable in any way by Autogen.

6.3 Registration of Product

After completion of the relevant Stage 2 Research program Lipha must use reasonable endeavours to promptly complete Phase III clinical trials, and to apply for and gain Registration in its own name in respect of one or more Products. The cost of undertaking all such trials and further development and making and prosecuting such applications is to be borne by Lipha.

6.4 Ceasing to pursue registration

If, following the process of **clause 6.2**, Lipha in its reasonable opinion decides not to continue to pursue Registration of any Product on the basis of efficacy, safety or medical reasons, concerns about the validity of Project Patents or a substantial change in economic factors, then it must promptly advise Autogen in writing, together with written reasons for such decision. In such a case this licence will terminate and Autogen may request a licence in respect of Stage 2 Know-How and Stage 2 Patents, in which case the Parties will negotiate in good faith the terms of a licence (which may be exclusive or non-exclusive and limited to the discontinued Novel Gene Product and necessary related technology being part of Stage 2 Know-How and Stage 2 Patents) for the commercialisation of such Know-How and Patents.

6.5 Refusal of Registration

If an application by Lipha for Registration is refused, Lipha is obliged to re-apply for Registration when so required by Autogen but such requirement must only be imposed if Autogen is of the reasonable belief, following discussions with Lipha, that the re-application will be approved. The cost of making and prosecuting any such re-application will be borne by Lipha.

6.6 Maintenance of Registrations

Lipha agrees to do all things necessary to ensure that all product registrations and approvals in respect of the Products are maintained and to provide Autogen with any and all documentation and information concerning any variations to such product registrations or approvals. Such product registrations and approvals include without limitation any registration concerning the packaging or labelling of the Products.

6.7 Marketing of Products

Following Registration of the Product, Lipha must use its best endeavours, at the expense of Lipha, to:

(a) promote, distribute and sell the Products in the Territory in order to obtain the optimum market potential for the Products;

(b) provide and maintain such suitable places of business for the storage, handling and sale of the Products at such locations throughout the Territories as Lipha thinks suitable;

(c) provide and maintain such marketing, sales and office staff to promote and sell the Products in accordance with this agreement, such personnel to be deemed the agents, representatives or employees of Lipha and not those of Autogen;

(d) maintain in each country in the Territory sufficient stocks of the Products to meet the market demand for the Products;

(e) where Lipha or its Affiliates or sub-licensees are marketing Competing Products, provide information about the comparative efforts being made;

(f) no later than 2 months prior to the commencement of each year during the Term prepare sales and marketing plans in respect of the Product in the Territories for discussion with Autogen; and

(g) provide to Autogen yearly reports of Lipha's market intelligence and proposed marketing strategy and performance goals other than where there is a material change in the market intelligence, proposed marketing strategy or performance goals, in which case Lipha will promptly provide to Autogen a report of those material changes.

6.8 Commencement of Marketing

If Marketing by Lipha has not commenced in any country in the Territories within 6 months of Lipha obtaining Registration or within such other time as agreed by the parties and such failure to so commence Marketing is not attributable to any failure by Autogen to comply with its obligations under this agreement, Autogen may by notice in writing to Lipha convert the licence to a non exclusive licence, in respect of that country.

6.9 General reports

Lipha must within one month of the relevant dates advise Autogen, at Lipha's cost, in respect of each country in the Territory of:

(a) the making of an application for Registration and the gaining of Registration of any Product; and

(b) details of the date of commencement of Marketing and details of the establishment of or change to any facilities referred to in **clause 6.7(b)**.

6.10 Marketing reports

Lipha must every year provide to Autogen a written report detailing its proposed Marketing activities in relation to the Products in the coming year. The initial marketing plan is to be provided no later than one month prior to the commencement of Marketing in the relevant country and subsequent Marketing plans are to be provided at least three months prior to each anniversary of such initial date. The marketing plan will specify objectives and strategies in respect to the following and any related matters necessary to ensure optimum market penetration in the relevant country:

(a) pricing and margin structure;

(b) distribution channels;

(c) sales and distribution targets;

(d) accumulation of market data including assessment of total market size and segmentation in units and dollars;

(e) overview of trading for the current year and objectives and strategies for the following year;

(f) assessment of competition;

(g) advertising and promotional expenses;

(h) overall advertising and promotional strategy.

Lipha will allow Autogen to provide comment on the marketing plan (if any) and will consider such comments in good faith.

6.11 Restriction on clinical trials

Lipha must not conduct or knowingly supply Product to any person who intends to conduct any clinical trials or scientific study concerning or utilising Products (other than where such trial or study is to involve less than 15 human subjects and does not require any prior Regulatory Authority approval) unless such trial or study has first been discussed at and approved by the Scientific Advisory Board established by the parties.

7. CONFIDENTIAL INFORMATION

7.1 Obligations to Autogen

Subject to **clauses 7.3** and **7.6**, Lipha covenants with Autogen as follows:

(a) to keep all Know-How belonging to Autogen or supplied to it by Autogen, including the existence of such Know-How, strictly secret and confidential (including from all its employees, servants and agents), exercising at least the same degree of care as it uses to maintain its own Know-How;

(b) to provide proper and secure storage for such Know-How within its possession or control;

(c) to use such Know-How only for the purposes of this agreement and not for any other activity or purpose whatsoever without the prior written approval of Autogen; and

(d) to not copy or reduce to writing or any other medium any part of such Know-How except as may be reasonably necessary for the purposes of this agreement.

7.2 Obligations to Lipha

Subject to **clauses 7.3** and **7.6**, Autogen covenants with Lipha as follows:

(a) to keep all Know-How belonging to Lipha or supplied to it by Lipha, including the existence of such Know-How, strictly secret and confidential (including from all

its employees, servants and agents), exercising at least the same degree of care as it uses to maintain its own Know-How;

(b) to provide proper and secure storage for such Know-How within its possession or control;

(c) to use such Know-How only for the purposes of this agreement and not for any other activity or purpose whatsoever without the prior written approval of Lipha; and

(d) to not copy or reduce to writing or any other medium any part of such Know-How except as may be reasonably necessary for the purposes of this agreement.

7.3 Exceptions to obligations

The obligations of confidence set out in **clauses 7.1** and **7.2** do not extend to Know-How which:

(a) at the time of disclosure to a party is in the public domain;

(b) after disclosure to a party becomes part of the public domain otherwise than as a result of the wrongful act of that party or one of that party's disclosees;

(c) a party can show was in its possession at the time of disclosure and was not acquired directly or indirectly from the other party; or

(d) is received from a third party provided that it was not acquired directly or indirectly by that third party from a party to this agreement or under an obligation of confidence;

(e) is required by compulsion of law to be disclosed,

provided that:

(f) the onus is on the party alleging the same to prove that one of the above exceptions has application; and

(g) in any case of uncertainty as to whether the obligations in **clauses 7.1** or **7.2** have application to any information, such information must be treated as subject to the obligations until advised otherwise by the party to whom the obligations are owed.

7.4 Rights in Know-How

Each party acknowledges and agrees that each other party has made a substantial investment in that party's Know-How and has a legitimate right to protect itself against wrongful disclosure or use of such Know-How.

7.5 Term of obligation

The obligations in this **clause** 7 survive the expiry or termination of this agreement for whatever reason and continue for a period of 10 years, subject always to the exceptions included in **clause 7.3**.

7.6 **Permitted disclosures**

Each party ("the first party") is permitted to disclose Know-How belonging to another party or supplied to it by another party ("the other party") to such of the first party's Representatives as require access to such information for the purposes of this agreement, provided that:

(a) only such Know-How as needs to be disclosed to a person for the purposes of this agreement will be disclosed to that person; and

(b) the first party must:

(i) have obtained from each such person undertakings in favour of the other party substantially in the form of the relevant obligations and undertakings in this **clause 7** (but not this **clause 7.6**);

(ii) be responsible for the performance of its Representatives' undertakings referred to in **clause 7.6(b)(i)**; and

(iii) take whatever steps are reasonably necessary, including the institution of legal proceedings, to ensure that each of its Representatives is bound by and observes the terms of the undertakings referred to in **clause 7.6(b)(i)**.

7.7 **Delivery-up of Know-How**

All of a party's Know-How and all materials containing or embodying such Know-How and all copies of or extracts from or notes on the same in the possession, power or control of another party or any of its employees, servants or agents together with all forms and other materials relating to practices and procedures in relation to the Know-How to the extent possible must:

(a) in the event of the expiration or sooner termination of this agreement, be delivered up by the other party to the first party at the expense of the other party; and

(b) in the event of any demand made by the first party be delivered up by the other party to the first party at the expense of the first party.

7.8 **Terms of this Agreement**

Lipha and Autogen shall not disclose any terms or conditions of this agreement to any third party without the prior consent of the other party, except as required by applicable law or to a third party with whom Autogen or Lipha has entered into or proposes to enter into a business relationship, provided that such third party shall enter into a confidentiality agreement with, or otherwise owe a duty or confidentiality to Lipha or Autogen, as applicable.

7.9 **Public Announcement**

Except as required by law, order or regulation of a governmental agency or a court of competent jurisdiction, no other announcement, public release or notice of any kind may be issued without the express written consent of both parties, which consent shall not be unreasonably withheld, provided, however, the parties shall prepare a joint press release

announcing the transaction set forth in this agreement to be issued promptly upon execution of this agreement.

7.10 Continuous disclosure obligations

Autogen is a subsidiary of Australia Wide Industries Limited ("AWI") ACN 000 248 304, which is listed on the Australian Stock Exchange ("ASX"). As such Autogen is subject to the continuous disclosure requirements of the ASX. The obligations of Autogen under this agreement will not restrict it or AWI from making whatever disclosures are necessary for the purposes of fulfilling the requirements applicable to AWI as a company listed on the ASX, and neither Autogen or AWI is under any obligation to delay the public release of any required announcement pending the provision of any consent or approval from Lipha. The above provision will also apply with such adaptations as are necessary to disclosure obligations imposed upon Lipha as a subsidiary of its listed parent Merck KGaA.

8. LIABILITY

8.1 Responsibility for Products

Lipha must ensure at all times during the Term that Products are tested, manufactured, used and sold strictly in accordance with all relevant applicable requirements and standards of relevant jurisdictions and Lipha will be responsible for conducting its own independent examination and verification of the accuracy and suitability of Licensed Patents and Licensed Technology and for ensuring the same are suitable for the purposes for which they are provided.

8.2 Autogen not liable

Except as provided in **clauses 9.2** and **13.2**, Autogen is not liable (in contract or tort or otherwise) to compensate Lipha for any loss howsoever arising suffered by Lipha arising directly or indirectly from the use of the Licensed Patents or Licensed Technology or the sale of Products.

9. INDEMNITIES

9.1 Indemnity by Lipha

Lipha agrees to indemnify Autogen against and hold Autogen harmless from any and all Losses arising from or in connection with:

(a) a breach by Lipha of any of its warranties or obligations under this agreement;

(b) the manufacture of the Products by Lipha or any Sub-licensee;

(c) the storage, use, sale, shipping and Marketing of the Product by Lipha or any Sub-licensee;

(d) any representations, express, implied or statutory made by Lipha or any Sub-licensee as to the efficacy or safety or use to be made by any purchaser of the

Product including, without limitation, representations made by reference to the labelling or packaging or the Product; and

(e) it must be a term of any Sub-licence granted by Lipha that the Sub-licensee agrees to the same extent and in the same terms as the indemnities contained in **clauses 9.1 (b), (c)** and **(d)** to indemnify Autogen and the Sub-licensee specifically agrees that it will not challenge the standing of Autogen in the event of Autogen seeking to rely upon such indemnification;

provided that neither Lipha nor any sub-licensee is required to indemnify Autogen for any Losses, to the extent they result from Autogen's or its Representatives negligence or breach of any of Autogen's warranties or obligations under this agreement.

9.2 Indemnity by Autogen

Autogen agrees to indemnify Lipha and hold Lipha all harmless from any and all Losses, arising from or in connection with a breach by Autogen of any of its warranties or obligations under this agreement provided that Autogen is not required to indemnify Lipha for any Losses, to the extent they result from Lipha's or its Representatives negligence or breach of any of Lipha's warranties or obligations under this agreement.

9.3 Notification regarding indemnity

Each party must promptly notify the other of any claims or suits for which the first party may assert indemnification from the other party and the first party will permit the other party and its insurer at the other party's expense to assume or participate in the defence of any such claims or suits and the first party will co-operate with the other party or its insurers in such defence when reasonably requested to do so.

10. INSURANCE

Each party must have and must maintain for the Term the relevant Required Insurance. The Required Insurance must be with a reputable insurer and name the other party as an additional insured. Each party will at the others request provide to that party a certificate from a reputable insurance broker confirming that the insurance required by this clause in currently in effect.

11. TERM AND TERMINATION

11.1 Term

Subject to the further provision of this **clause 11**, the term of this agreement and the rights granted to Lipha under this agreement is for so long as any Product is still Covered By a Project Patent.

11.2 Termination for breach

If one party breaches any term, provision or obligation of this agreement (the "Defaulting Party") and the Defaulting Party fails to:

(a) remedy such breach within 60 days after receipt of notice from the other party requiring remedy of the breach; or

(b) if the breach cannot be remedied within the said 60 day period, commence action within the said 60 day period to remedy the breach and undertake in writing to the other party to complete remedy of the breach as soon as practicable thereafter,

the other party has the right to terminate this agreement immediately upon the expiration of the said period of 60 days by written notice to the Defaulting Party.

11.3 Termination in default of payment

This agreement may be forthwith terminated by a party by giving notice to the other party if that other party defaults in the payment of any money due by that other party to the first party under this agreement and such default continues for a period of 30 days after notice has been given to the other party demanding the payment of such money.

11.4 Grounds for immediate termination

Subject to **clause 11.5** this agreement may be terminated by a party giving notice to the other party upon the happening of any of the following events in respect of that other party:

(a) an Insolvency Event; or

(b) if the other party is in breach of an undertaking given pursuant to **clause 11.2(b)**.

11.5 Reconstruction exception

A winding up or liquidation for the purposes of reconstruction or amalgamation by the other party is not an event permitting or giving rise to termination if after that reconstruction or amalgamation the resulting corporation becomes bound by the terms of this agreement by way of assignment or novation.

11.6 Termination by Autogen

Autogen may terminate this agreement upon notice to Lipha if:

(a) there is a change of greater than 50% in the control of the issued voting capital of Lipha or a holding company (if any) of Lipha other than for the purpose of internal re-construction;

(b) a person or persons not previously in Control of Lipha obtain Control of Lipha or a holding company (if any) of Lipha; or

(c) if Lipha or any of its Affiliates or any Sub-licensee or any of its Affiliates challenges or seeks or causes to be challenged the validity of the Project Patents, provided that in respect of a Sub-licensee not being an Affiliate, termination will be limited to the country or countries to which such Sub-licence relates.

11.7 Termination by Lipha

Lipha may terminate this agreement upon notice to Autogen if there is a change of greater than 50% in the control of the issued voting capital of Autogen or a holding company (if any) of Autogen other than for the purpose of internal re-construction.

11.8 Termination to be without prejudice

Any termination of this agreement is without prejudice to the rights which a party has against the other in respect of anything done or omitted to be done hereunder prior to such termination or in respect of any sums or other claims outstanding at the time of termination.

12. OBLIGATIONS AND RIGHTS ON TERMINATION

12.1 Obligations of Lipha

Immediately upon termination or expiration of this agreement, but subject to **clause 12.3**, Lipha must:

(a) pay all outstanding balances with respect to the Product within the terms of this agreement;

(b) remove all signs, advertising displays, labels and the like identifying Lipha as a licensee of the Product and thereafter Lipha will not use such signs and displays in connection with any business conducted by it and will not in any way refer to its previous association with the Product for any commercial purpose whatsoever; and

(c) not conduct its business so as to falsely reflect discredit on Autogen or the Product.

12.2 Obligations of Autogen

Immediately upon termination or expiration of this agreement, Autogen must:

(a) as soon as conveniently possible reconcile all accounts relating to Lipha; and

(b) accept all outstanding balances within existing terms of settlement within the terms of this agreement.

12.3 Limitation of Lipha's rights

Lipha is not in any circumstances entitled to compensation for goodwill which may have accrued to the marketing of the Product in the Territory.

13. WARRANTIES

13.1 General warranties

Each party represents and warrants to the other that:

(a) it has all powers and authorisations necessary to enter into this agreement and observe its obligations hereunder and allow this agreement to be enforced against it; and

(b) all necessary consents, approvals and authorisations of all governmental authorities required to be obtained by that party in connection with this agreement have been obtained; and

(c) the execution and delivery of this agreement does not contravene any law, regulation or official directive or any obligations or undertakings, contractual or otherwise, by which it or any of its assets are bound or cause a limitation on its powers to be exceeded; and

(d) the performance of the party's obligations under this agreement:

(i) do not and will not conflict with or violate any requirement of applicable laws or regulations; and

(ii) do not and will not conflict with, or constitute a default under any contractual obligation of that party; and

(e) there does not presently exist any event which would either now or with the effluxion of time entitle the other party to terminate this agreement pursuant to **clause 11**; and

(f) it is not a party to any pending or threatened action or proceeding affecting it or any of its assets before a court, governmental agency, commission or arbitrator where an adverse outcome could reasonably be expected to adversely impact upon the performance of its obligations under this agreement; and

(g) it has no immunity from the jurisdiction of a court or from legal process (whether through service of notice, attachment prior to judgment, attachment in aid of execution, execution or otherwise).

13.2 Specific warranty re Licensed Patents

Autogen warrants to Lipha that:

(a) as at the date of this agreement it has disclosed to Lipha details of all prior art sighted by Autogen by way of international search in relation to the Licensed Patents; and

(b) at the date of this agreement it is unaware of any other Patent which has not been disclosed to Lipha and which may be infringed by Lipha exercising the Licensed Patents in accordance with the terms of this agreement.

13.3 Warranties by Lipha

Lipha warrants to Autogen that:

(a) it will obtain or has obtained from its Representatives who have access to the Licensed Technology written obligations to treat such information as confidential strictly in accordance with this agreement; and

(b) that it has made its own enquiries into the validity and enforceability of the Licensed Patents and satisfied itself that the usage by Lipha, its Affiliates or sub-licensees of the Licensed Patents and the Licensed Technology do not and will not infringe the intellectual property rights of any third party.

14. PROTECTION OF LICENSED PATENTS

14.1 Maintenance of Licensed Patents

Autogen is responsible for the cost of preparing, filing, prosecuting and maintaining the Autogen Patents but nothing expressed or implied herein necessarily obliges Autogen to institute legal proceedings to protect same. The party responsible for the cost of preparing, filing, prosecuting and maintaining the Stage 1 Patents will be determined in accordance with the Research Agreement. Lipha is responsible for the cost of preparing, filing, prosecuting and maintaining the Stage 2 Patents. Nothing expressed or implied herein necessarily obliges Lipha to institute legal proceedings to protect Stage 1 Patents or Stage 2 Patents.

14.2 Reporting infringements

A party must promptly report to the other in writing particulars of any action or activity of which the first party becomes aware which might reasonably amount to infringement of or challenge to any of the Rights.

14.3 Conduct of proceedings regarding Rights

Lipha has the first right to take control of and conduct any infringement proceedings in respect of the Rights where such infringement is within the Licensed Field. Should Lipha undertake such proceedings Autogen must fully co-operate with Lipha in relation to such action including the lending of Autogen's name to the action and assistance by personnel of Autogen. The costs and expenses of any such action will be borne by Lipha, and the proceeds of such action after payment of Lipha's reasonable external costs will be divided between Autogen and Lipha on the basis that Autogen gets 50% and Lipha the balance. In the event Lipha does not wish to undertake the conduct of such proceedings on its own, Autogen and Lipha must discuss whether they will undertake joint proceedings and if so on what basis. If no such agreement can be reached Autogen is entitled to bring an action in its own name, and Lipha must provide Autogen with all reasonable assistance including lending Lipha's name to such action. Autogen must bear all the costs of such an action, and the proceeds of any such action belongs to Autogen absolutely.

14.4 Royalties

Lipha is not entitled to withhold or deduct any amount from any royalty payable to Autogen on account of any proceeding as referred to in **clause 14.3**.

15. INFRINGEMENT OF OTHERS RIGHTS

15.1 Notification of action

In the event that legal action is threatened or commenced against Lipha or any Sub-licensee arising out of Lipha's use of Autogen Patents or Autogen Know-How, Lipha must not make any admissions or enter into any substantive steps in connection therewith but must promptly notify Autogen.

15.2 Autogen action

If such legal action against Lipha or a Sub-licensee arises out of the use of the Autogen Patents or Autogen Know-How in accordance with the terms and conditions of this agreement in relation to Products, then Autogen must defend and/or assist in the defence of such litigation, and must bear the reasonable costs and expenses of such defence. If any damages or awards are assessed against Lipha, then provided that Lipha has at all times followed the instructions of, or otherwise obtained the consent of, Autogen in respect of the defence of such claims, then such damages or awards must, as well as any and all reasonable costs incurred by Lipha, be satisfied and paid by Autogen.

15.3 Lipha action

If such legal action against Lipha related to the use by Lipha, Lipha Affiliates or Sub-licensees of the Autogen Patents or Autogen Know-How other than in accordance with the terms and conditions of this agreement or use of Stage 1 Patents, Stage 1 Know-How or Stage 2 Patents or Stage 2 Know-How Lipha must promptly notify Autogen of the commencement of legal action. Lipha must bear all its own costs and expenses and must be responsible for awards against it and Autogen, as well as any and all reasonable costs incurred by Autogen, to the extent that indemnification, warranties and other claims may not be available against Autogen. If any amounts are recovered by or awarded or paid to Lipha from or by a third party as a result of any such action or litigation, Lipha must from such amounts reimburse Autogen for all costs and amounts paid by Autogen in connection with such action or litigation and must, after deducting the legal costs incurred by it in taking such legal or other action, pay to Autogen from any compensation recovered thereby, Autogen's part thereof determined in accordance with the respective interests of the parties in such compensation.

16. CONSTRUCTION OF PATENTS

If in any proceedings in which the validity infringement or priority of any claim of any patent or patent application included in Licensed Patents is in issue a Final Judgment is obtained the construction placed upon any such claim by such a Final Judgment must be thereafter followed not only as to such claim but as to all claims to which such construction applies with respect to acts occurring thereafter.

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17. FORCE MAJEURE

17.1 Party not liable

Where a party is required under this agreement to perform an obligation or do any act or thing by a designated time or date (other than an obligation to make payment) ("**Obligation**"), the part is not be liable for any delay in performing or for failure to perform an Obligation where the delay or failure arises from Force Majeure and that party has complied with this clause.

17.2 Notice of Force Majeure

A party who claims Force Majeure must:

(a) give the other party prompt notice of the Force Majeure with reasonably full particulars and an estimate of the extent and duration of its delay in performance, or inability to perform; and

(b) use all possible diligence to remove the Force Majeure as quickly as possible provided that this will not oblige the party to settle on terms unsatisfactory to that party any strike, lockout or other labour difficulty, or any investigation or proceeding by any governmental authority or any litigation by any third party.

17.3 Termination in case of Force Majeure

If the delay continues beyond 30 Business Days, after the notice given under **clause 17.2**, the parties must meet to discuss in good faith a mutually satisfactory resolution of the problem and, if unable to achieve such a resolution within a further 30 Business Days, either party may elect to terminate this agreement by 5 Business Days prior written notice to the other.

18. ARBITRATION

In case of any disputes arising between the parties or arising out of the performance or non-performance of the obligations of either party hereunder, or the termination of this agreement, the parties will endeavour to settle such disputes amicably between themselves. If the parties fail to resolve such disputes, then such disputes shall be finally resolved by arbitration in accordance with the Rules of Conciliation and Arbitration of the International Chamber of Commerce (ICC) by one or more arbitrators appointed in accordance with the said rules.

Any such arbitration will be held in English language and take place in Paris - FRANCE.

19. NOTICES

19.1 Form of Notice

Any notice, approval, consent or other communication ("notice") from one party to another ("Recipient") must be in writing and be signed by a person duly authorised by the person giving the notice.

19.2 Manner of Service

A notice must be served by:

(a) leaving it at the Recipient's address;

(b) sending it by ordinary pre-paid post (airmail if being sent from or to a place outside of Australia) to the Recipient's address; or

(c) sending it by facsimile to the facsimile number of the Recipient.

19.3 Address for Service

Until other details are specified by a Party as its address or facsimile number for service the following apply:

Autogen

Address : 210 Kings Way, South Melbourne, Victoria, Australia

Facsimile : 61 3 9234 1190

Attention : Company Secretary

Lipha

Address : 37 rue Saint Romain, 69379 Lyon, CEDEX 08, France

Facsimile : 33-4-78-75-39-05

Attention : Head of Legal Department

19.4 Time of Service

A letter or facsimile will be taken to be served:

(a) in the case of a delivered letter, on the day of delivery, unless delivery is made on a non Business Day or after 4:30 p.m. (local time in the place of receipt) on a Business Day, in which case it will be taken to be served on the next Business Day;

(b) in the case of a posted letter, on the third (or seventh in the case of airmail) Business Day after posting; and

(c) in the case of a facsimile, on receipt by the party giving the notice of a transmission confirmation report, unless within one Business Day of receipt the Recipient has informed the party giving the notice that the transmission was incomplete or garbled, provided that in any case if transmission is completed after 4:30 p.m. (local time in the place of receipt) or is received on a non Business Day, the notice will be taken to be served on the next Business Day.

20. MISCELLANEOUS

20.1 Time of essence

Time will be of the essence of the obligations of each party to each other under this agreement.

20.2 Severance

This agreement is severable and is deemed to apply separately as to each country comprising the Territory. A material breach of this agreement in respect of one or more countries in the Territory will not affect the validity or enforceability of this agreement as to the other countries comprising the Territory. If any provision is held invalid or unenforceable, in whole or in part in any jurisdiction, then such invalidity or unenforceability will only affect such provision or part thereof in such jurisdiction, and will not in any manner affect the provision in this agreement in any other jurisdiction. To the extent legally permissible an arrangement which reflects the original intent of the parties must be substituted for such invalid or unenforceable provision.

20.3 Waiver

The failure, delay, relaxation or indulgence by any party in exercising any power or right given to that party under this agreement will not operate as a waiver of that power or right, nor will any single exercise of a power or right preclude any other or further exercise of it or the exercise of any other power or right under this agreement. A power or right may only be waived in writing, signed by the party to be bound by the waiver.

20.4 Relationship of parties

Nothing contained in this agreement is to be construed so as to place any party in the relationship of principal, employee, agent, partner, joint venturer or legal representative of any other party. The parties expressly agree and acknowledge that each of the parties is an independent contracting party and does not, unless expressly provided, have the authority or power for or on behalf of any other party to enter into any contract, to incur debts, to accept money, to assume any obligations or to make any warranties or representations.

20.5 Injunctive relief

If there is any conduct or threatened conduct which is or may be a breach of this agreement, both parties acknowledge that damages may be inadequate compensation for such a breach and that the other party is entitled to apply to any court of competent jurisdiction for interim or permanent injunctive relief or both restraining the other party from committing any breach or threatened breach of this agreement without showing or proving any actual damage sustained by it. Such rights and remedies will be cumulative and in addition to any other rights or remedies which that party may be entitled to at law or in equity.

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20.6 Proper law

This agreement must be construed in accordance with and governed by the laws of the United Kingdom and its form, execution, validity, construction and effect is to be determined in accordance with the laws of the United Kingdom.

20.7 Rule of construction

No rule of construction applies to this agreement to the disadvantage of a party because that party was responsible for the preparation of this agreement or any part of it.

20.8 Variation

Any modification, alteration, change or variation of any term or condition of this agreement must be in writing, executed by all parties.

20.9 Assignment

This agreement is personal to the respective parties and neither is entitled to assign in whole or in part without the prior written consent of the other party.

20.10 Further documents

Each party agrees that it will forthwith upon the request of the other party execute and deliver all such instruments and agreements and will take all such other actions as the other party may reasonably request from time to time in order to give effect to the provisions and purposes of this agreement.

20.11 Affiliates' actions

Each party will ensure that none of its Affiliates takes any action which is inconsistent with that party's obligations under this agreement, or which if it was done or not done under this agreement by that party would amount to a breach of this agreement by that party.

20.12 Costs and Taxes

Each party must pay its own costs and expenses in relation to the negotiation, preparation, execution, delivery, stamping and registration, completion, variation and discharge of this agreement and Lipha must pay any Tax in respect of the execution, delivery, performance, release, discharge, amendment, enforcement or attempted enforcement or otherwise of any of the following:

(a) this agreement;

(b) any agreement or document entered into or signed under this agreement;

(c) any transaction contemplated under this agreement; and

(d) any payment made or received in respect of this agreement,

except in any case to the extent to which such Tax is payable in Australia or on or in respect of the income of Autogen.

20.13 Interest on overdue amounts

If any amount due under this agreement is not paid when due, then the party obliged to make payment must pay to the other party interest at the Base Rate on the amount due and payable, accruing from day to day and to be computed from the date for payment of the amount until payment of the amount in full.

20.14 Withholding taxes

If Lipha is legally obliged to deduct or withhold any tax from any payment, in particular any royalty payment, to be made to Autogen hereunder, then if such payment is made from its country of domicile (for tax purposes) Lipha must on request provide Autogen with receipts and any other evidence from relevant revenue authorities which may be required by Autogen for its own tax affairs, provided that in no circumstances may the amount withheld be more than the minimum amount required to be withheld under the double tax treaty between France and Australia and to the extent the withholding is greater than the minimum amount, Lipha is obliged to gross up such payment so that the net payment actually received by Autogen is not less than the full payment less the minimum amount.

20.15 Counterparts

This agreement may be executed in counterparts, and by the parties on separate or the same counterparts, each of which is deemed an original, but all of which constitute one and the same instrument.

20.16 Registration of agreement

If this agreement or any associated transaction is required by the law of any country, except Australia, to be either approved or registered in any country or with any governmental agency, Lipha is responsible for obtaining such approval or registration including without limiting the generality of the foregoing, causing this agreement to be stamped, recorded and registered at its cost in such country. Autogen agrees to co-operate in any such application or registration procedure. Lipha must furnish proof of compliance with the foregoing to Autogen when and if Autogen so requires.

20.17 Not obliged to act contrary to law

No party is obliged to carry out or perform any of the terms of this agreement where doing so would constitute a violation of any treaty, law, code or regulation of any governmental authority whether local, national or supranational. In any event the other terms of this agreement nevertheless continue and the parties must use all reasonable endeavours to re-negotiate and amend this agreement so that the performance of this agreement as so amended will not involve any such violation.

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20.18 Statutory rights not limited

The powers, remedies and rights conferred upon the parties by or under any statute are (except to the extent inconsistent with the terms and provisions expressed in this agreement) be in addition to the powers, remedies and rights conferred by this agreement.

20.19 Consents

Unless this agreement provides otherwise and to the extent permitted by law, a party may, in its absolute discretion, conditionally or unconditionally give or withhold any approval or consent permitted or required to be given by it pursuant to this agreement.

20.20 Entire agreement

This agreement constitutes the entire agreement between the parties in relation to the subject matter of this agreement. Any prior arrangements, agreements, representations or undertakings are superseded and, except as expressly provided, each party acknowledges that it has not relied on any arrangement, agreement, representation or understanding which is not expressly set out in this agreement.



SCHEDULE 1

Autogen Patents

(Referred to in **clause 1.1**, definition of "Autogen Patents")

International Patent Application No. PCT/AU 98/00902 based on Australian Provisional Patent Application Nos PP0117/97 and PP0323/97 "A novel gene and uses therefor", filed on 31 October, 1997 and 11 November, 1997 respectively, in the names of International Diabetes Institute and Deakin University.

Both applications have a Priority Date of 31 October 1997.

SCHEDULE 2

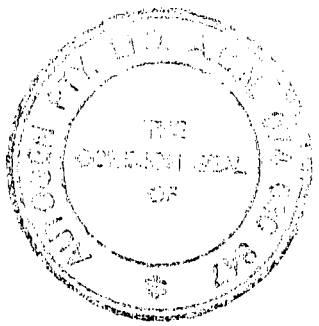
Stage I Patents

Nil

EXECUTED as an agreement

The common seal of **Autogen Pty Ltd** is affixed in accordance with its articles of association in the presence of:

)
)
)
)



J.I Gutnick

Director

JOSEPH ISAAC GUTNICK

(name printed)

P Lee

Director/Secretary

PETER JAMES LEE

(name printed)

The common seal of **Lipha S.A.** is affixed in accordance with its articles of association in the presence of:

)
)
)
)

J.N. TREILLES

~~Director~~ CHAIRMAN OF THE BOARD

(name printed)

~~Director/Secretary~~

~~*(name printed)*~~

MANAGING DIRECTOR

YVES BONHOMME

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DATE FEBRUARY 11TH, 2002

AUTOGEN Research Pty Ltd

and

LIPHA S.A.

RESEARCH AND LICENCE AGREEMENT
(Strategic Alliance in Human Gene)

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THIS AGREEMENT is made on 2001

BETWEEN

Autogen Research Pty Ltd
of 210 Kings Way, South Melbourne, Victoria, Australia

("**Autogen**")

AND

Lipha S.A.
of 37 rue Saint Romain, 69379 Lyon, CEDEX 08, France

("**Lipha**")

RECITALS:

A. Lipha has for many years, been strongly involved in the research, development, manufacturing and commercialisation of pharmaceuticals addressing metabolic diseases and has invented, developed, manufactured and marketed pharmaceutical products containing metformin, one of the leading oral anti-diabetic products throughout the world.

B. Lipha has agreed to provide research support to the International Diabetes Institute (IDI) research program for the discovery of novel genes involved in obesity and diabetes, the product of these genes being able to be used as therapeutic agents or as a target for drug discovery as well as providing in house facilities including combinatorial chemistry to advance subsequent drug development in that field.

C. Lipha and Autogen have entered into a "Letter of Understanding" dated November 9th, 1999, under which Autogen has agreed to carry out research above mentioned.

D. Lipha and Autogen have agreed to enter into this research and license agreement related to human genome project.

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OPERATIVE PROVISIONS:

1. INTERPRETATION

1.1 Definitions

In this agreement the following expressions have the following meanings:

"**Affiliate**" means with respect to a Party, any person which directly or indirectly Controls, or is Controlled by, or is under common Control with, such Party.

"**Autogen Know-How**" means Know-How owned by or licensed to Autogen in relation to the Autogen Patents, or of relevance or use in relation to the Licensed Field or the conduct of Stage 1 Research or Stage 2 Research but excludes Stage 1 Know-How.

"**Autogen Patents**" means the patents and patent applications owned by or licensed to Autogen related to the Licensed Field including but not limited to those referred to in **Schedule 1** and including:

(i) any re-issue, renewal or extension of such a patent or patent application (whether in whole or in part) and any patent of addition thereto; and

(ii) any supplementary protection certificate or other form of extension based on or arising from such patents or patent applications.

"**Base Rate**" means EURIBOR rate applicable on January first (1st), 2000 and published as such by the European Federation of Banks (Federation Européenne de Banque (FEB)) plus in either case the amount of one point five per cent (1.5%) per annum.

"**Business Day**" means a day on which the trading banks are open for general banking business in both Melbourne, Australia and Lyon, France.

"**Commencement Date**" means the date of execution of this agreement by the Party last signing it.

"**Commercialisation Licence**" means a licence in respect of Patents and Know-How in the form of the agreement contained in **Schedule 3**.

"**Complementary Agreement**" means a detailed agreement, if any, entered into towards the end of Stage 2 Research, including all the terms of the Commercialisation Licence, unless the Parties agree to amend the same, and otherwise taking account of the terms of any Joint Venture Agreement.

"**Control**" means the possession, directly or indirectly, of the power to direct or cause the direction of the management of policies of a person.

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"**Direct Program**" means a Stage 2 Research Program based on a Novel Gene Product to investigate its direct use as a drug or for other gene therapies.

"**Dollars**" or "**USD**" means US dollars.

"**Europe**" means those countries specified in **Schedule 2.**

"**EUR**" means the new European currency called EURO officially replacing FRF from December 31st 2001.

"**FFR**" means French Francs.

"**Force Majeure**" means any cause which is not within the reasonable control of the party affected by it including, but not limited to, acts of God, industrial disputes of any kind, war declared or undeclared, civil disturbance, acts or omissions of Government or other competent authority, fire, lightning, explosion or flood.

"**Further Development**" means the program of further research and development in relation to a Product or potential Product undertaken after completion of Stage 2 Research.

"**IDI**" means International Diabetes Institute, a company established in Victoria, Australia.

"**Indirect Program**" means a Stage 2 Research Program which uses the Novel Gene Product as the basis for the discovery of other chemicals or biological compounds or other gene therapies or otherwise in ways not contemplated by Direct Programs.

"**Insolvency Event**" means any event of insolvency, bankruptcy or liquidation of the relevant party, including any voluntary or involuntary judicial liquidation or re-organisation proceedings.

"**Joint Venture Agreement**" means a joint venture in respect of certain specified Patents and Know-How, containing the definitions and provisions contained in this agreement as specified in **Schedule 4**, and dealing with such other matters as are specified in that schedule.

"**Know-How**" means technical, commercial and other information, data, know-how, drawings, specifications and/or designs, animal or other models, methodologies and biological materials embodied in some Material Form, and without prejudice to the generality of the foregoing includes:

(i) all experimental, manufacturing, process, analytical, packaging, product, warehousing, quality control and quality assurance and marketing specifications, standards, procedures, processes, methods, instructions and techniques, samples, prototypes, formulae, writings of any kind, opinions or otherwise unwritten data or in the form of computer software or computer programs or any part thereof in any code; and

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(ii) all other information and other material supplied to or received by a party or its Representatives from another party or Representatives on a confidential basis pursuant to this agreement.

"**Licence**" means the right and licence granted by Autogen to Lipha pursuant to this agreement.

"**Licensed Field**" means the field of human therapeutic applications for the treatment or prevention of:

(i) obesity;

(ii) diabetes and its complications; and

(iii) insulin resistance syndrome (excluding hypertension).

For clarity it is noted that this does not include diagnostics or veterinary applications.

"**Lipha Research License**" means the Research License granted to Lipha pursuant to Clause **2.9**.

"**Loss**" means any loss, damage, cost, interest, expense, fee, penalty, fine, forfeiture, assessment, demand, action, suit, claim, proceeding, cause of action, liability or damages incurred by a person, and includes:

(i) the cost of any action taken by the person to protect itself against any loss or to preserve any right it has under this agreement; and

(ii) where applicable reasonable legal costs.

"**Material Form**" in relation to Information includes any form (whether visible or not) of storage from which Information can be reproduced, and any form in which Information is embodied or encoded.

"**Month**" means calendar month.

"**Novel Gene Product**" means any new gene, novel protein or novel antigen, and any product arising from the transcription of these genes.

"**Option Period**" means the Research Term and the 24 month period following the Research Term within which Lipha has the option to decide whether it wishes to progress some part of Stage 1 Research to Stage 2 Research.

"**Party**" means Autogen or Lipha and their respective successors and permitted assigns and "Parties" means both of them.

"**Patent**" means any patent or patent application as defined in the *Patents Act 1952* (C'th) and any similar international, national or regional patent or patent application and includes any and all extensions, renewals, continuations, patent-of-addition and/or supplementary protection certificates to any of the foregoing and includes any corresponding patent or patent application taken out or applied for in any country in the Territory which is fairly based upon or derived from any of the aforesaid patents.

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"**Pre-Stage 2 Results**" means the Autogen Patents, Autogen Know-How, Stage 1 Patents and Stage 1 Know-How.

"**Products**" means any products produced or arising out of use of the results of Stage 1 Research or Stage 2 Research or arising out of all and any further development by Lipha pursuant to Stage 1 Research or Stage 2 Research or both.

"**Project Patents**" means the Autogen Patents, the Stage 1 Patents and/or the Stage 2 Patents.

"**Project Research**" means the research in the area of obesity and diabetes of novel genes involved in obesity and diabetes and the research arising therefrom, consisting of the Stage 1 Research and the Stage 2 Research.

"**Representatives**" of a party means that party's directors, officers, employees or agents.

"**Required Insurance**" means:

(i) public liability insurance in respect of Losses up to a limit of **USD** 5,000,000 covering property damage and personal injury as may be relevant to the performance of each party's obligations under this agreement to the other, including (without limitation) liability, loss or damage due to negligent or malicious damage, data corruption or loss, fire, theft, electrical and water damage; and

(ii) if the relevant party sells a Product, product liability insurance in respect of Losses up to a limit of **USD** 20,000,000 covering any liability associated with use or misuse of the Product including, personal injury and consequential loss.

"**Research Agreement**" means the Research Agreement dated 14 January 1998 between Autogen and IDI to carry out research in the field of, amongst other things, the License Field.

"**Research Term**" means the period which commences on 1 January 2000 and expires on 31 December 2005, unless otherwise extended pursuant to clause **2.4**.

"**Scientific Board**" means the board established under clause **4.1**.

"**Stage 1 Know-How**" means the Know-How relating to or arising out of Stage 1 Research.

"**Stage 1 Patents**" means Patents relating to or arising out of Stage 1 Research.

"**Stage 1 Research**" means discovery of Novel Gene Products, characterisation and studies of such Novel Gene Products in animal models and human gene expression studies as resulting from such Stage 1 Research performed according to this agreement as described in **Schedule 5**.

"**Stage 1 Results**" means the Stage 1 Know-How and the Stage 1 Patents.

"**Stage 2 Know-How**" means in the context of a Stage 2 Research Program, the Know-How relating to or arising out of that Stage 2 Research Program.

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"**Stage 2 Patents**" means in the context of a Stage 2 Research Program, Patents relating to or arising out of that Stage 2 Research Program.

"**Stage 2 Research**" means a program of research and development directed at developing relevant Novel Gene Products within the Licensed Field and discovering Target Compounds for use within the Licensed Field and includes antibody production, large scale protein production, structural analysis, screening of compounds affecting such Novel Gene Product, combinatorial chemistry, toxiological studies and first clinical studies in target patient groups and completion of dose efficiency relationship studies in those patients (clinical Phase 2), the undertaking of relevant human clinical trials on Target Compounds, but does not include the generation of relevant scientific and clinical data which is uniquely required by the regulatory authorities of Europe or the United States.

"**Stage 2 Research Program**" means a program of Stage 2 Research in respect of a Novel Gene Product.

"**Stage 2 Results**" means in the context of a Stage 2 Research Program, the Stage 2 Know-How and the Stage 2 Patents for that Stage 2 Research Program.

"**Target Compound**" means a compound or small molecule, or group of the same, identified in the course of Project Research, being a compound which it is expected will be Covered By a Project Patent.

"**Term**" means the period this agreement is in force pursuant to clause **12.**

1.2 Construction

In this agreement unless the context otherwise requires:

(a) **Business Day**. If any day appointed or specified by this agreement for the payment of any money or the doing of any act or thing falls on a day that is not a Business Day, the day so appointed or specified is deemed to be the next day which is a Business Day.

(b) **Collective references.** Reference to any thing (including, without limitation, any amount) is a reference to the whole or any part of it and a reference to a group of things or persons is a reference to any one or more of them.

(c) **Defined expressions**. If a word or phrase is defined, cognate words and phrases have corresponding definitions.

(d) **Gender**. Words importing any gender include the other genders.

(e) **Headings**. Headings must be ignored in construing this document.

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(f) **Joint liability**. An obligation of two or more Parties binds them jointly and severally.

(g) **Joint obligations**. An obligation incurred in favour of two or more Parties is enforceable by them jointly and severally.

(h) **Month**. Means a calendar month.

(i) **Numbers**. Words importing the singular include the plural and vice versa.

(j) **Parts of agreement**. References to this agreement include its recitals, schedules and annexures.

(k) **Persons**. References to persons include corporations and bodies politic.

(l) **Reconstituted bodies**. References to a body which has ceased to exist or has been reconstituted, amalgamated, reconstructed or merged, or the functions of which have become exercisable by any other person or body in its place, is taken to refer to the person or body established or constituted in its place or the person or body by which its functions have become exercisable.

(m) **Representatives and assigns**. References to a person include the legal personal representatives, successors and permitted assigns of that person.

(n) **Statutory amendments**. A reference to a statute, ordinance, code or other law includes regulations and other statutory instruments under it and consolidations, amendments, re-enactments or replacements of any of them (whether of the same or any other legislative authority having jurisdiction).

(o) **Variation**. References to this or any other document include the document as varied or replaced, and notwithstanding any change in the identity of the Parties.

(p) **Writing**. References to writing include any mode of representing or reproducing words in tangible and permanently visible form, and include telex and facsimile transmissions.

2. STAGE 1 RESEARCH

2.1 Undertaking of Stage 1 Research

Autogen has been carrying out and must continue to carry out through arrangement with IDI under the Research Agreement Stage 1 Research for the period of the Research Term. The currently agreed program for Stage 1 Research is as set out in **Schedule 5**. The general objective of Stage 1 Research is to identify Novel Gene Products that may be of utility in the Licensed Field.

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2.2 Initial contribution

Lipha has already paid the sum of two (2) million US dollars (USD 2,000,000) in respect of years 2000 and 2001 of the Research Term as referred herebelow.

2.3 Payment for Stage 1 Research

Taking into account initial contribution above mentioned Lipha will pay to Autogen in respect of Stage 1 Research for each year during the Research Term the sum of one million US dollars (USD 1,000,000) per annum, such amount to be paid in equal quarterly instalments in advance, the first such payment being due on January 1st, 2000.

2.4 Extension of Stage 1 Research

(a) If Stage 1 Research is not completed during the Research Term Lipha shall have the right to require Autogen to continue Stage 1 Research, and at the same time extend the Research Term, for successive periods of one (1) year, by giving written notice to Autogen not less than three (3) months prior to the expiry of the current Research Term.

(b) Where Lipha does extend the Research Term then:

(i) Lipha shall pay to Autogen for each renewal period the amount of one million US dollars (USD 1,000,000) in equal quarterly instalments as contribution to the research being funded by Autogen under the Research Agreement in the Licensed Field; and

(ii) Autogen will then continue to carry out through arrangement with IDI the Stage 1 Research for the extended period of the Research Term.

(c) Following the giving by Lipha of notice under clause **2.4(a)**, the Parties will liaise in relation to the content of the Stage 1 Research for the following year, which will, unless otherwise agreed, be conducted under the Research Agreement. Initially this liaison will take place through the Scientific Board, who will prepare a draft research plan which is to be finally agreed between the Parties.

(d) The research being undertaken under the Research Agreement may include more than just Stage 1 Research, and Autogen is solely responsible for funding this.

(e) If Lipha elects not to extend the Research Term, then without in any way limiting Lipha's discretion in relation to such decision, Lipha will give Autogen written reasons why it has elected not to do so.

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2.5 Transition to Stage 2 Research

From time to time throughout the Stage 1 Research including Option Period it is expected that Novel Gene Products may be found. When this occurs there may be a Direct Program and one or more Indirect Programs. The Parties will first determine whether to pursue a Direct Program in accordance with the provisions of clause **2.6** herebelow. The Parties will then investigate whether the Novel Gene Product could be used for the discovery of chemical or biological compounds or in other gene therapies (Indirect Program). This process will be covered by the provisions of clause **2.7** herebelow.

Lipha will make every endeavours to exercise and to conduct the Stage 2 Research.

2.6 Direct Programs

In respect of each Novel Gene Product and in accordance with elements given in schema as described in Schedule 6 (including the respective funding obligations of the parties) if:

(a) The Parties both agrees to pursue a Direct Program, then the provisions of clause **2.8** will apply,

(b) neither Party wishes to pursue a Direct Program, then there will be no Direct Program in respect of the Novel Gene Product unless the Parties otherwise later agree,

(c) Autogen wishes to pursue a Direct Program but Lipha does not, then the Direct Program may commence subject that:

(i) Autogen will be wholly responsible for the initial funding of the Direct Program,

(ii) Lipha will have a period of six (6) months to determine if it wishes to participate,

(iii) If it determines that it does, then it must reimburse Autogen for one third (1/3) of the costs incurred by Autogen up to that date and thereafter the provisions of clause **2.8** will apply,

(iv) If Lipha determines that it does not wish to participate, or makes no election within that period of six (6) months, then Lipha will have no further rights in the Direct Program, and Autogen must fully fund it. Further Autogen will be free to offer the Direct Program in respect of the Novel Gene Product to third parties on such terms as it considers appropriate. In doing so Autogen may grant to third parties a licence in respect of the Autogen Patents and the Stage 1 Patents to the extent that such a licence is necessary to conduct the Direct Program and exploit the Novel Gene Product and such licence will not be a breach of any licence granted by Autogen in the Licensed Field to Lipha, the scope of any licence in favour of Lipha being commensurately reduced, such reduction being limited to reduction in respect of such Novel Gene Product and its use as a Direct Program.

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d) Lipha wishes to pursue a Direct Program but Autogen does not, then the Direct Program may commence and the provisions of clause **2.8** will apply subject that:

(i) Lipha will be wholly responsible for the initial funding of the Direct Program,

(ii) Autogen will have a period of six (6) months to determine if it wishes to participate,

(iii) If it determines that it does, then it must reimburse Lipha for two third (2/3) of the costs incurred by Lipha up to that date,

(iv) If Autogen determines that it does not wish to participate, or makes no election within that period of six (6) months, then Autogen will have no further rights in the Direct Program and Lipha must fully fund it. Further Lipha will be free to offer the Direct Program in respect of the Novel Gene Product to third parties on such terms as it considers appropriate

2.7 Indirect Programs

There may be multiple Indirect Programs based upon Novel Gene Products and there could be Indirect Programs where there may or may not exist a Direct Program. In respect of each Novel Gene Product and in accordance with elements given in schema as described in **Schedule 6** the Parties will seek to identify Indirect Programs which they would wish to undertake in respect of that Novel Gene Product. These Indirect Programs may be generated jointly or independently. In respect of each of these it is agreed as follows:

(a) if Lipha wishes to pursue an Indirect Program, then the provisions of clause **2.8** will apply,

(b) if neither Party wishes to pursue an Indirect Program, then the proposed Indirect Program will not proceed,

(c) if only Autogen wishes to pursue an Indirect Program but Lipha does not, then the Indirect Program may not commence. In such a case Lipha will have a period during which it can preclude the commencement of the proposed Indirect Program and preserve its potential position in respect of that program. That period will be:

(i) in the event Lipha is funding and continuing to fund another Indirect Program based on Novel Gene Products, until the end of the Option Period as referred to in Article **1.1**,

(ii) in any other case two (2) years from the date of identification of the Novel Gene Product or the cessation of funding of another Indirect Program based on the same Novel Gene Product, whichever is the later.

If Lipha does not by the end of the relevant period, agree to proceed under clause **2.7**, then Lipha will have no further rights in the Indirect Program and Autogen may fully fund it. In doing so Autogen may grant to third parties a licence in respect of the Autogen Patents and the Stage 1 Patents to the extent that such a licence is necessary to conduct the Indirect Program and exploit the Novel Gene Product and such licence will not be a breach of any licence granted by Autogen in the Licensed Field to Lipha, the scope of any Licence in favour of Lipha being commensurately reduced and such reduction being limited to reduction in respect of such Novel Gene Product and its use as contemplated in the Indirect Program.

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2.8 Stage 2 Research Payment

Referring to the first commencement of a Direct Program or Indirect Program in respect of a Novel Gene Product:

(a) Lipha must only pay to Autogen the sum of five million french francs (FRF 5,000,000) such amount to be paid within thirty (30) Business Days of the commencement of the first Direct Program or Indirect Program, it being acknowledged that Lipha will not have to pay such sums for transition of further Novel Gene Products to Stage 2 Research following such first transition; and

(b) the Parties will execute a Commercialisation Licence in respect of such Novel Gene Product which will reflect the respective funding contributions of the parties to the relevant Stage 2 Research. This right for Lipha may be separately exercised by Lipha in respect of separate Novel Gene Products, and each decision to enter into Stage 2 Research will lead to additional Commercialisation Licences and Stage 2 Research Programs.

2.9 Autogen and Stage 1 Research Rights

Subject to the terms of this agreement and any other licence granted by Autogen in favour of Lipha, Autogen will own and have an unfettered right to use and exploit all Stage 1 Patents and Stage 1 Know-How in any and all fields.

2.10 Lipha Research Licence

Whilst Lipha is continuing Stage 1 Research, Stage 2 Research, Further Development or paying royalties to Autogen under any Commercialisation Licence, Lipha has a non-exclusive royalty free right to use the Pre-Stage 2 Results for the purposes of its own internal research for human therapeutic purposes. This research licence extends to Affiliates of Lipha.

2.11 Stage 1 Patents

(a) Where either party in the course of Stage 1 Research makes or discovers any patentable invention then it must forthwith advise the other party in writing together with full details. Lipha will have the first option to patent such invention at its own cost, and if it elects not to do so then Autogen may do so at its cost. Any such patent application in respect of Stage 1 Research will be in the name of Autogen.

(b) If Autogen has patented an invention under clause **2.11(a)** and paid the costs of such patenting, and Lipha elects to participate in Stage 2 Research in respect of the Stage 1 Research to which the invention relates, Lipha will then reimburse to Autogen the reasonable external costs incurred by Autogen in respect of each patent.

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(c) In the case where Lipha patents an invention pursuant to clause **2.11(a)** where the invention also has application in areas outside the Licensed Fields, Autogen may:

(i) require Lipha to patent the invention in such a manner as to include the application of the invention in those areas outside the Licensed Fields (and if this involves any additional external cost to Lipha, Autogen will reimburse to Lipha the reasonable additional external costs); or

(ii) patent the invention itself in so far as the invention has application outside the Licensed Fields and, in this case, Autogen can require Lipha to amend or limit the patent lodged by Lipha so that the patent only covers the Licensed Fields.

2.12 Continuing Research Agreement

Where Lipha has ceased to provide support for research being conducted under the Research Agreement as contemplated by clause **2.4**, Lipha acknowledges it will have no rights in respect of any new or further Know-How or Patents arising under such Research Agreement.

3. STAGE 2 RESEARCH

3.1 Multiple Stage 2 Research Programs

The Parties acknowledge that there may be multiple Stage 2 Research Programs with varying obligations and rights in respect of funding, control and ownership of results as determined in relevant commercialisation licence, each of which will be based on or around different Novel Gene Products, and will generate their own Know-How and Patents.

3.2 Undertaking Stage 2 Research

(a) Where Lipha has exercised its rights regarding Indirect Programs as provided in clause **2.7** and **Schedule 6** in respect of a Novel Gene Product, Lipha will have sole carriage of all research and development in respect of that Novel Gene Product until completion of the Stage 2 Research Program in respect of that Novel Gene Product. Each Stage 2 Research Program will be conducted and funded by Lipha until completion of that Stage 2 Research Program. Each Stage 2 Research Program must be directed at developing Novel Gene Products within the Licensed Field and discovering Target Compounds for use within the Licensed Field.

(b) Where Autogen is solely funding regarding Indirect Programs as provided in clause **2.7** and **Schedule 6** in respect of a Novel Gene Product, Autogen will have sole carriage of all research and development in respect of that Novel Gene Product until completion of the Stage 2 Research Program in respect of that Novel Gene Product. Each Stage 2 Research Program will be conducted and solely funded by Autogen until completion of that Stage 2 Research Program. Each Stage 2 Research Program must be directed at developing Novel Gene Products within the Licensed Field and discovering Target Compounds for use within the Licensed Field.

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(c) Where Lipha and Autogen desires to share in a Direct Program as provided in clause **2.6** and **Schedule 6** in respect of a Novel Gene Product, Lipha and Autogen will share pursuant to provisions of clause **2.6** all research and development in respect of that Novel Gene Product until completion of the Stage 2 Research in respect of that Novel Gene Product.

(d) Where Autogen desires to develop and exploit Novel Gene Products outside of the Licensed Field through a third party, then Autogen will at first instance engage in discussions with Lipha with a view to looking at opportunities for the Parties to work together on such development and exploitation.

3.3 Licence to Lipha

Where Lipha is solely undertaking a Stage 2 Research Program ("Lipha Program") then:

(a) all Stage 2 Know-How or Stage 2 Patents in respect of that Stage 2 Research Program will belong solely to Lipha, subject to the remainder of this clause and clauses **3.6, 3.8** and **3.9**, and Lipha will be solely responsible for the cost of obtaining and maintaining any patent or other protection, provided that:

(i) Lipha may not assign any Stage 2 Results to a third party without the prior written consent of Autogen which consent will not be unreasonably withheld provided the assignee agrees to similar conditions in respect of such Stage 2 Results as are applicable under this agreement and the relevant Commercialisation Licence and in a manner which makes those conditions enforceable against the assignee by Autogen; and

(ii) if Lipha seeks to patent an invention from the Stage 2 Research which has application exclusively outside the Licensed Field, then Lipha must notify Autogen of such invention prior to lodgment of the application for the patent and Autogen can require Lipha to extend the patent in respect of claims or other matters outside of the Licensed Field;

(b) Autogen grants to Lipha a licence in respect of the Pre-Stage 2 Results within the Licensed Field to the extent necessary to undertake the Stage 2 Research Program, but not to undertake commercialisation (which must be subject to the Commercialisation Licence or a Complementary Agreement), such licence to be exclusive in the Licensed field, royalty free and extending to Affiliates of Lipha.

3.4 Autogen Stage 2 Research assistance

Autogen agrees upon Lipha's request to cooperate with Lipha for Stage 2 Research and both Parties may agree on specific studies to be included in a Stage 2 Research Program which are to be performed by Autogen or through Autogen and paid by Lipha, provided Lipha has previously given Lipha's written approval on the costs of such studies. Lipha agrees that it will not in respect of any Stage 2 Research contract directly with IDI without the prior written consent of Autogen, it being the expectation that any research conducted by those Parties will be contracted through Autogen.

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3.5 Obligations of Lipha

Lipha will use its best endeavours to progress each Stage 2 Research Program in a timely and diligent fashion and with a substantial dedication of resources. Where activities forming part of a Stage 2 Research Program could properly and effectively be undertaken at Autogen, then Lipha will consider the possible performance of those activities at those institutions, subject to clause **3.4**, and will not conduct such activities through other third Parties without first offering them to Autogen as appropriate.

3.6 Rights of Autogen

Where Lipha is undertaking a Lipha Program the following applies:

(a) Lipha grants to Autogen and its Affiliates, with a right to sublicencee to IDI, a non-exclusive royalty free right to use for the purposes of their own internal research the Stage 2 Results of all Stage 2 Research Programs.

(b) If such internal research leads to an invention which can be commercialised within the Licensed Fields, then Lipha will have the first option to commercialise such invention within the Licensed Fields, and the Parties will negotiate in good faith in this regard. If agreement cannot be reached within 90 days of the making of a formal offer by Autogen, then Autogen will be free to offer the commercialisation opportunity to third Parties, but on no better terms than those offered to Lipha, unless it first offers such better terms to Lipha, which will have 14 days to either accept or reject such terms.

(c) If the internal research conducted under clause **3.6(a)** leads to the commercialisation of the results of such internal research outside the Licensed Fields by Autogen, either on its own account, or acting as licensee on behalf of IDI then the Parties agree to negotiate in good faith for the grant by Lipha of a royalty bearing licence in respect of the ongoing use of the Stage 2 Results in such commercialisation. The Parties acknowledge that the natural outcome of such discussions may be that Lipha takes on the role of commercialisation of the results of such internal research.

3.7 Rights of Parties

(a) Notwithstanding any other provision of this agreement, each of the Parties shall have control of a Stage 2 Research Program and associated matters where it is providing a majority of the funding in relation to that program.

(b) Notwithstanding any other provision to this agreement ownership of any intellectual property, know how or like right or interest resulting from a Stage 2 Research Program shall vest in or reside with the Parties in proportion to their funding contributions to that program.

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3.8 Discontinuation of Stage 2 Research

In the case of a Lipha Program Lipha has the right at its own option and without any liability to Autogen to stop a Stage 2 Research Program if further development is not justifiable due to Lipha's reasonable determination that for efficacy, safety or medical reasons, the validity of the Patents covering such Novel Gene Product, a substantial change of economic factors or otherwise, such development should be terminated. If Lipha does cease such development it must promptly advise Autogen and provide written reasons as to why Lipha has ceased such development, but Lipha's determination will prevail. Lipha must endeavour to consult with the Scientific Board prior to ceasing development.

3.9 Unwanted rights Stage 2 Results

Where in accordance with clauses 3.7 or 6.2 Lipha ceases a Stage 2 Research Program, Lipha retains the exclusive ownership of the relevant Stage 2 Results generated up to the date of the cessation of that Stage 2 Research Program, provided that Autogen may request a commercial and research licence of such Stage 2 Results, in which case the Parties will negotiate in good faith the terms of a licence (which may be exclusive or non-exclusive) for development and commercialisation of such Stage 2 Results, and unless the negotiated licence otherwise provides, Autogen must not assign the rights licensed from Lipha to a third party without the prior written consent of Lipha, which consent must not be unreasonably withheld.

3.10 Commercialisation Licences required

In the event Lipha wishes to in any way use, commercialise, licence, or assign Stage 2 Results, then, unless it does so pursuant to a Complementary Agreement, it must enter into a Commercialisation Licence in respect of those Stage 2 Results, to the intent and with the effect that amongst other things Autogen will receive "royalties" in respect of such use, commercialisation, licensing or assignment.

4. RESEARCH GENERALLY

4.1 Scientific Board

The Parties agree to establish a scientific board comprised of both Parties' representatives. The Scientific Board may consist of two (2) representatives of Autogen and two (2) representatives of Lipha.

4.2 Meetings of the Scientific Board

Scientific Board meetings will be held every three (3) months, or as otherwise agreed by the Parties and each party may have any of its employees participate in said meeting if the party considers it necessary. Such meeting shall take place alternating at each party's place of business or at any other place subject to prior agreement by the Parties, and be chaired by a representative of the party who hosts the meeting. The chairman of the meeting must circulate the agenda for the meeting at least two (2) weeks prior to each meeting and will issue the formal minutes of the meeting.

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The Parties agree that Scientific Board meetings are only a place to report and discuss:

(a) the progress of each party's research and development work related to Stage 1 Research; and

(b) the progress of research and development work related to each Stage 2 Research Program,

but the Scientific Board does not have capacity to make decisions on important matters to bind either party, unless otherwise agreed.

4.3 Reports

(a) Autogen agrees that it will prepare and submit reports to Lipha every three (3) months during Stage 1 Research and any stage research in progress and it shall promptly give to Lipha at the end of Stage 1 Research and such stage research in progress a final and detailed report.

(b) Lipha agrees that it will prepare and submit reports to Autogen every three (3) months during each Stage 2 Research Program and it shall promptly give to Autogen at the end of each Stage 2 Research Program a final and detailed report on such completion of Stage 2 Research.

(c) The reports provided above must in each case set out in reasonable and informative detail the activities undertaken in the period to which the report relates, and the activities planned for the next reporting period, if any.

5. OPTION FOR FURTHER AGREEMENT

5.1 Multiple Complementary Agreements

If, and each time, Lipha participates in Direct Programs or Indirect Programs under clause **2.6** or **2.7** then the Parties agree, if it is necessary, to enter into a Complementary Agreement which will take effect no later than six (6) months prior to completion by Lipha of relevant Stage 2 Research Program. A Complementary Agreement may not be required if Lipha does not elect to proceed with a Joint Venture Agreement.

5.2 Licence milestones

Within 30 days after the commencement of Phase III clinical trials in respect of a Product the subject of a Stage 2 Research Program Lipha must pay to Autogen a milestone payment of:

(a) in case the protein could be directly useable as a drug or other gene therapies (Direct Program) if Lipha elects to proceed with a Joint Venture Agreement, FRF 5,000,000 for Lipha's exclusive European rights (less any amount already paid under clause **2.8**) which is non refundable and will not be credited against future royalty payments, if any, payable to Autogen,

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Lipha will have exclusive further development and marketing rights throughout Europe Autogen having the rights to develop and market such Autogen invention in the rest of the world; or

(b) in case gene and/or protein could be used for discovery of chemical or biological compounds or other gene therapies (Indirect Program), FRF 20,000,000 for Lipha's worldwild exclusive rights (less any amount paid in respect of the first transition of a Novel Gene Product to Stage 2 Research under clause **2.8**) provided that FRF 10,000,000 of such milestone payment will be treated as an advance royalty and be credited against future royalty payments, if any, payable to Autogen.

Lipha will fund the whole further development.

(c) In case gene and/or protein could be used for discovery of chemical or biological compounds (Indirect Program), FRF 5,000,000 for Lipha's exclusive European rights (less any amount paid in respect of the first transition of a Novel Gene Product to Stage 2 Research under clause **2.8**).

Lipha will fund a third (1/3) of the further common development expenses, the J.V. funding the other two third (2/3).

6. COMMERCIALISATION LICENCE

6.1 Requirement for such a licence

Upon the first commencement of a Direct Program or Indirect Program, the Commercialisation Licence for the Stage 2 Research Program (in the case of Lipha Programs or a Stage 2 Research Program funded by both Autogen and Lipha) will be deemed to be in force, and Lipha and Autogen must promptly execute a Commercialisation Licence.

6.2 Failure to sign Commercialisation Licence

In the event that the Commercialisation Licence in respect of a Stage 2 Research Program is not executed in accordance with clause **6.1**, then:

(a) the relevant Stage 2 Research Program must cease; and

(b) the provisions of clause **3.8** will apply.

6.3 Commercialisation

The obligations of each of the Parties in respect of commercialisation will be as contained in the relevant Commercialisation Licence or Complementary Agreement (if any).

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7. INDUSTRIAL AND INTELLECTUAL PROPERTY RIGHTS

7.1 Autogen Patents, Autogen Know-How and Stage 1 Results

The Autogen Patents, Autogen Know-How and Stage 1 Results (as per clause **2.9**) are owned by Autogen, or exclusively licensed by it from IDI and are freely exploitable by it, subject to:

(a) a research licence in favour of Lipha and its Affiliates within the Licensed Field (as per clause **2.10**);

(b) an exclusive licence in favour of Lipha within the Licensed Field for commercialisation in terms of the relevant Commercialisation Licence (if any); and

(c) if appropriate, the rights granted under the Joint Venture Agreement.

7.2 Scope of any exclusive licence

Any grant of an exclusive licence in a given limited field in respect of Patents or Know-How, does not preclude the licensing of the same Patents or Know-How for use or exploitation in some other field.

7.3 Stage 2 Results

As provided in clause **3.3(a)** Stage 2 Results in respect of each Lipha Program are owned by Lipha and are freely exploitable by it, subject to:

(a) a research licence in favour of Autogen and its Affiliates and IDI for the purpose of their own internal research, as provided in clause **3.6**;

(b) a right for Autogen to seek a licence in certain circumstances as provided in clause **3.8**;

(c) the use of, including the licensing of such Stage 2 Results, being subject to the same restrictions as are applicable to Pre-Stage 2 Results, under a Commercialisation Licence, save for the Licensed Field restriction, but including, amongst other things:

(i) the obligation to pay "royalties" to Autogen for the use or exploitation of the Stage 2 Results; and

(ii) the requirements in relation to the grant of licences of the Stage 2 Results,

to the intent that Stage 2 Results will be accorded the same treatment and generate for Autogen the same benefits and entitlements as Pre-Stage 2 Results, even though their legal ownership is different.

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7.4 Use outside of Licensed Field

While Stage 2 Results from a Lipha Program are freely exploitable by Lipha outside of the Licensed Field (subject to clause **7.3**), this does not imply any licence to use Pre-Stage 2 Results outside of the Licensed Field, and Lipha will need to seek a licence from Autogen in relation to the same, if such exploitation uses Pre-Stage 2 Results, or would amount to an infringement of Stage 1 Patents or Autogen Patents.

8. CONFIDENTIAL INFORMATION

8.1 Obligations to Autogen

Subject to clauses **8.3** and **8.6**, Lipha covenants with Autogen as follows:

(a) to keep all Know-How belonging to Autogen or supplied to it by Autogen, including the existence of such Know-How, strictly secret and confidential (including from all its employees, servants and agents), exercising at least the same degree of care as it uses to maintain its own Know-How;

(b) to provide proper and secure storage for such Know-How within its possession or control;

(c) to use such Know-How only for the purposes of this agreement and not for any other activity or purpose whatsoever without the prior written approval of Autogen; and

(d) to not copy or reduce to writing or any other medium any part of such Know-How except as may be reasonably necessary for the purposes of this agreement.

8.2 Obligations to Lipha

Subject to clauses **8.3** and **8.6**, Autogen covenants with Lipha as follows:

(a) to keep all Know-How belonging to Lipha or supplied to it by Lipha, including the existence of such Know-How, strictly secret and confidential (including from all its employees, servants and agents), exercising at least the same degree of care as it uses to maintain its own Know-How;

(b) to provide proper and secure storage for such Know-How within its possession or control;

(c) to use such Know-How only for the purposes of this agreement and not for any other activity or purpose whatsoever without the prior written approval of Lipha; and

(d) to not copy or reduce to writing or any other medium any part of such Know-How except as may be reasonably necessary for the purposes of this agreement.

8.3 Exceptions to obligations

The obligations of confidence set out in clauses **8.1** and **8.2** do not extend to Know-How which:

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(a) at the time of disclosure to a party is in the public domain;

(b) after disclosure to a party becomes part of the public domain otherwise than as a result of the wrongful act of that party or one of that party's disclosees;

(c) a party can show was in its possession at the time of disclosure and was not acquired directly or indirectly from the other party; or

(d) is received from a third party provided that it was not acquired directly or indirectly by that third party from a party to this agreement or under an obligation of confidence;

(e) is required by compulsion of law to be disclosed,

provided that:

(f) the onus is on the party alleging the same to prove that one of the above exceptions has application; and

(g) in any case of uncertainty as to whether the obligations in clauses **8.1** or **8.2** have application to any information, such information must be treated as subject to the obligations until advised otherwise by the party to whom the obligations are owed.

8.4 Rights in Know-How

Each party acknowledges and agrees that each other party has made a substantial investment in that party's Know-How and has a legitimate right to protect itself against wrongful disclosure or use of such Know-How.

8.5 Term of obligation

The obligations in this clause **8** survive the expiry or termination of this agreement for whatever reason and continue for a period of 10 years, subject always to the exceptions included in clause **8.3**.

8.6 Permitted disclosures

Each party ("the first party") is permitted to disclose Know-How belonging to another party or supplied to it by another party ("the other party") to such of the first party's Representatives as require access to such information for the purposes of this agreement, provided that:

(a) only such Know-How as needs to be disclosed to a person for the purposes of this agreement will be disclosed to that person; and

(b) the first party must:

(i) have obtained from each such person undertakings in favour of the other party substantially in the form of the relevant obligations and undertakings in this clause **8** (but not this clause **8.6**);

(ii) be responsible for the performance of its Representatives' undertakings referred to in clause **8.6(b)(i)**; and

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(ii) take whatever steps are reasonably necessary, including the institution of legal proceedings, to ensure that each of its Representatives is bound by and observes the terms of the undertakings referred to in clause **8.6(b)(i)**.

8.7 Delivery-up of Know-How

All of a party's Know-How and all materials containing or embodying such Know-How and all copies of or extracts from or notes on the same in the possession, power or control of another party or any of its employees, servants or agents together with all forms and other materials relating to practices and procedures in relation to the Know-How to the extent possible must:

(a) in the event of the expiration or sooner termination of this agreement, be delivered up by the other party to the first party at the expense of the other party; and

(b) in the event of any demand made by the first party be delivered up by the other party to the first party at the expense of the first party.

8.8 Terms of this Agreement

Lipha and Autogen shall not disclose any terms or conditions of this agreement to any third party without the prior consent of the other party, except as required by applicable law or local regulations or to a third party with whom Autogen or Lipha has entered into or proposes to enter into a business relationship, provided that such third party shall enter into a confidentiality agreement with, or otherwise owe a duty or confidentiality to Lipha or Autogen, as applicable.

8.9 Public Announcement

Except as required by law, order or regulation of a governmental agency or a court of competent jurisdiction, no other announcement, public release or notice of any kind may be issued without the express written consent of both Parties, which consent shall not be unreasonably withheld, provided, however, the Parties shall prepare a joint press release announcing the transaction set forth in this agreement to be issued promptly upon execution of this agreement.

8.10 Continuous disclosure obligations

Autogen is a subsidiary of Autogen Limited which is listed on the Australian Stock Exchange ("ASX"). As such Autogen is subject to the continuous disclosure requirements of the ASX. The obligations of Autogen under this agreement will not restrict it or AWI from making whatever disclosures are necessary for the purposes of fulfilling the requirements applicable to AWI as a company listed on the ASX, and neither Autogen or AWI is under any obligation to delay the public release of any required announcement pending the provision of any consent or approval from Lipha. The above provision will also apply with such adaptations as are necessary to disclosure obligations imposed upon Lipha as a subsidiary of its listed parent Merck KGaA.

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9. LIABILITY

9.1 Responsibility for Products

Lipha must ensure at all times that Stage 2 Research is conducted and Products are developed, manufactured, tested and used strictly in accordance with all relevant applicable requirements and standards of relevant jurisdictions and Lipha will be responsible for conducting its own independent examination and verification of the accuracy and suitability of Pre-Stage 2 Results and for ensuring the same are suitable for the purposes for which the same are used.

9.2 Autogen not liable

Except as provided in clauses **10.2** and **16.2**, Autogen is not liable (in contract or tort or otherwise) to compensate Lipha for any loss howsoever arising suffered by Lipha arising directly or indirectly from the use by Lipha of Pre-Stage 2 Results or the sale of Products.

10. INDEMNITIES

10.1 Indemnity by Lipha

Lipha agrees to indemnify Autogen against and hold Autogen harmless from any and all Losses arising from or in connection with:

(a) a breach by Lipha of any of its warranties or obligations under this agreement;

(b) the conduct of a Lipha Program,

provided that Lipha is not required to indemnify Autogen for any Losses to the extent they result from Autogen's or its Representatives negligence or breach of any of Autogen's warranties or obligations under this agreement.

10.2 Indemnity by Autogen

Autogen agrees to indemnify Lipha and hold Lipha harmless from any and all Losses, arising from or in connection with:

(a) a breach by Autogen of any of its warranties or obligations under this agreement;

(b) the negligent performance by Autogen or IDI of the Stage 1 Research; and

(c) the termination of the Research Agreement as a result of the failure of Autogen to provide research funding under this agreement (other than as a result of any act or omission of Lipha or its Representatives),

provided that Autogen is not required to indemnify Lipha for any Losses to the extent they result from Lipha's or its Representatives' negligence or breach of any of Lipha's warranties or obligations under this agreement.

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10.3 Notification regarding indemnity

Each party must promptly notify the other of any claims or suits for which the first party may assert indemnification from the other party and the first party will permit the other party and its insurer at the other party's expense to assume or participate in the defence of any such claims or suits and the first party will co-operate with the other party or its insurers in such defence when reasonably requested to do so.

11. INSURANCE

Each party must have and must maintain for the Term the relevant Required Insurance. The Required Insurance must be with a reputable insurer and name the other party as an additional insured. Each party will at the others request provide to that party a certificate from a reputable insurance broker confirming that the insurance required by this clause in currently in effect.

12. TERM AND TERMINATION

12.1 Term

Subject to making of the payment contemplated by clause **2.4(b)**, or earlier termination pursuant to the further provisions of this clause **12**, the initial term of this agreement will expire on 31st December 2005, subject to extension pursuant to clause **2.4**. In the event that Lipha exercises its option in relation to undertaking Stage 2 Research, then this agreement will be extended and continue to apply whilst and so long as any Stage 2 Research Program continues, it being acknowledged that in such circumstances Lipha is not obliged to extend the Research Term (and comply with clause **2.4(b)**) unless it wishes to extend Stage 1 Research in respect of some other Novel Gene Product.

12.2 Termination for breach

If one party breaches any term, provision or obligation of this agreement (the "Defaulting Party") and the Defaulting Party fails to:

(a) remedy such breach within 60 days after receipt of notice from the other party requiring remedy of the breach; or

(b) if the breach cannot be remedied within the said 60 day period, commence action within the said 60 day period to remedy the breach and undertake in writing to the other party to complete remedy of the breach as soon as practicable thereafter,

the other party has the right to terminate this agreement immediately upon the expiration of the said period of 60 days by written notice to the Defaulting Party.

12.3 Termination in default of payment

This agreement may be forthwith terminated by a party by giving notice to the other party if that other party defaults in the payment of any money due by that other party to the first party under this agreement and such default continues for a period of 30 days after notice has been given to the other party demanding the payment of such money.

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12.4 Grounds for Immediate Termination

Subject to clause **12.5**, this agreement may be terminated by a party giving notice to the other party upon the happening of any of the following events in respect of that other party:

(a) an Insolvency Event; or

(b) if the other party is in breach of an undertaking given pursuant to clause **12.2(b)**.

12.5 Reconstruction exception

A winding up or liquidation for the purposes of reconstruction or amalgamation by the other party is not an event permitting or giving rise to termination if after that reconstruction or amalgamation the resulting corporation becomes bound by the terms of this agreement by way of assignment or novation.

12.6 Termination by Autogen

Autogen may terminate this agreement upon notice to Lipha if:

(a) there is a change of greater than 50% in the control of the issued voting capital of Lipha or a holding company (if any) of Lipha other than for the purpose of internal re-construction;

(b) a person or persons not previously in Control of Lipha obtain Control of Lipha or a holding company (if any) of Lipha; or

(c) if Lipha or any of its affiliates challenges or seeks or causes to be challenged the validity of the Project Patents.

12.7 Termination by Lipha

Lipha may terminate this agreement upon notice to Autogen if there is a change of greater than 50% in the control of the issued voting capital of Autogen or a holding company (if any) of Autogen other than for the purpose of internal re-construction.

12.8 Termination to be without prejudice

Any termination of this agreement is without prejudice to the rights which a party has against the other in respect of anything done or omitted to be done hereunder prior to such termination or in respect of any sums or other claims outstanding at the time of termination.

12.9 Survival of provisions

The provisions of clauses **1, 2.9, 2.10, 3.3, 3.6, 3.8, 3.9, 3.10, 7.3, 7.4, 8, 9, 10, 11, 12.8, 12.9, 14.1, 16, 18, 19, 20** will survive termination of this agreement.

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13. OBLIGATIONS AND RIGHTS ON TERMINATION

Immediately upon termination or expiration of this agreement, each party must return or destroy all copies of Know-How owned or supplied by the other party, except for the retention of a copy as necessary for that party to be able to exploit any continuing licenses.

14. WARRANTIES

14.1 General warranties

Each party represents and warrants to the other that:

(a) it has all necessary powers and authorisations necessary to enter into this agreement and observe its obligations hereunder and allow this agreement to be enforced against it; and

(b) all necessary consents, approvals and authorisations of all governmental authorities required to be obtained by that party in connection with this agreement have been obtained; and

(c) the execution and delivery of this agreement does not contravene any law, regulation or official directive or any obligations or undertakings, contractual or otherwise, by which it or any of its assets are bound or cause a limitation on its powers to be exceeded; and

(d) the performance of the party's obligations under this agreement:

(i) do not and will not conflict with or violate any requirement of applicable laws or regulations; and

(ii) do not and will not conflict with, or constitute a default under any contractual obligation of that party; and

(e) there does not presently exist any event which would either now or with the effluxion of time entitle the other party to terminate this agreement pursuant to clause 12; and

(f) it is not a party to any pending or threatened action or proceeding affecting it or any of its assets before a court, governmental agency, commission or arbitrator where an adverse outcome could reasonably be expected to adversely impact upon the performance of its obligations under this agreement; and

(g) it has no immunity from the jurisdiction of a court or from legal process (whether through service of notice, attachment prior to judgment, attachment in aid of execution, execution or otherwise).

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14.2 Specific warranty for Autogen Patents

Autogen warrants to Lipha that:

(a) as at the date of this agreement it has disclosed to Lipha details of all prior art sighted by Autogen by way of international search in relation to the Autogen Patents, but does not warrant that it has undertaken a thorough or exhaustive search of prior art; and

(b) at the date of this agreement it is unaware of any other Patent which has not been disclosed to Lipha and which may be infringed by Lipha using the Autogen Patents in accordance with the terms of this agreement.

14.3 Warranties by Lipha

Lipha warrants to Autogen that:

(a) it will obtain or has obtained from its Representatives who have access to the Autogen Know-How and Stage 1 Know-How written obligations to treat such information as confidential strictly in accordance with this agreement.

(b) that it has made its own enquiries into the validity and enforceability of the Autogen Patents and satisfied itself that the usage by Lipha, its Affiliates or sub-licensees of the Autogen Patents and the Confidential Information do not and will not infringe the intellectual property rights of any third party.

15. PROTECTION OF PATENTS

15.1 Maintenance of Patents

Autogen is responsible for the cost of preparing filing prosecuting and maintaining the Autogen Patents but nothing expressed or implied herein necessarily obligates Autogen to institute legal proceedings to protect same. The party responsible for the cost of preparing, filing, prosecuting and maintaining the Stage 1 Patents will initially be determined in accordance with clause **2.11**, provided that as from the date that a Commercialisation Licence in respect of Stage 1 Patents is entered into between the Parties, Lipha will assume full responsibility for the full cost of preparing, filing, prosecuting and maintaining such Stage 1 Patents. Lipha is responsible for the cost of preparing, filing, prosecuting and maintaining the Stage 2 Patents. Nothing expressed or implied herein necessarily obligates Lipha to institute legal proceedings to protect Stage 1 Patents or Stage 2 Patents.

15.2 Reporting infringements

Other than in the case of a Direct Program or Indirect Program solely funded by Autogen, a party must promptly report to the other in writing particulars of any action or activity of which the first party becomes aware which might reasonably amount to infringement of or challenge to any of the Pre-Stage 2 Results or Stage 2 Results.

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15.3 Conduct of proceedings regarding Pre-Stage 2 Results

Lipha has the first right to take control of and conduct any infringement proceedings in respect of the Pre-Stage 2 Results from a Lipha Program where such infringement is within the Licensed Field. Should Lipha undertake such proceedings Autogen must fully co-operate with Lipha in relation to such action including the lending of Autogen's name to the action and assistance by personnel of Autogen. The costs and expenses of any such action will be borne by Lipha, and the proceeds of such action after payment of Lipha's reasonable external costs will be divided between Autogen and Lipha on the basis that Autogen gets 50% and Lipha the balance. In the event Lipha does not wish to undertake the conduct of such proceedings on its own, Autogen and Lipha must discuss whether they will undertake joint proceedings and if so on what basis. If no such agreement can be reached Autogen is entitled to bring an action in its own name, and Lipha must provide Autogen with all reasonable assistance including lending Lipha's name to such action. Autogen must bear all the costs of such an action, and the proceeds of any such action belong to Autogen absolutely.

16. INFRINGEMENT OF OTHERS RIGHTS

16.1 Notification of action

In the event that legal action is threatened or commenced against Lipha arising out of Lipha's use of Autogen Patents or Autogen Know-How, Lipha must not make any admissions or enter into any substantive steps in connection therewith but must promptly notify Autogen.

16.2 Autogen action

If such legal action against Lipha arises out of the use of the Autogen Patents or Autogen Know-How in accordance with the terms and conditions of this agreement in relation to Products, then Autogen must defend and/or assist in the defence of such litigation, and must bear the reasonable costs and expenses of such defence. If as a result of such proceedings any damages or awards are assessed against Lipha, then provided that Lipha has at all times followed the instructions of, or otherwise obtained the consent of, Autogen in respect of the defence of such claims, then such damages or awards, as well as any and all reasonable costs incurred by Lipha, must be satisfied and paid by Autogen.

16.3 Lipha action

If such legal action against Lipha related to the use by Lipha, Lipha Affiliates or sub-licensees of the Autogen Patents or Autogen Know-How or use of Stage 1 Patents, Stage 1 Know-How or Stage 2 Patents or Stage 2 Know-How other than in accordance with the terms and conditions of this agreement Lipha must promptly notify Autogen of the commencement of legal action. Autogen must (at the expense of Lipha) assist Lipha's efforts to settle and/or defend such claims. Lipha must bear all its own costs and expenses and must be responsible for awards against it and Autogen, as well as any and all reasonable costs incurred by Autogen, to the extent that indemnification, warranties and other claims may not be available against Autogen.

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If any amounts are recovered by or awarded or paid to Lipha from or by a third party as a result of any such action or litigation, Lipha must from such amounts reimburse Autogen for all costs and amounts paid by Autogen in connection with such action or litigation and must, after deducting the legal costs incurred by it in taking such legal or other action, pay to Autogen from any compensation recovered thereby, Autogen's part thereof determined in accordance with the respective interests of the Parties in such compensation.

17. FORCE MAJEURE

17.1 Party not liable

Where a party is required under this agreement to perform an obligation or do any act or thing by a designated time or date (other than an obligation to make payment) ("Obligation"), the party is not to be liable for any delay in performing or for failure to perform an Obligation where the delay or failure arises from Force Majeure and that party has complied with this clause.

17.2 Notice of Force Majeure

A party who claims Force Majeure must:

(a) give the other party prompt notice of the Force Majeure with reasonably full particulars and an estimate of the extent and duration of its delay in performance, or inability to perform; and

(b) use all possible diligence to remove the Force Majeure as quickly as possible provided that this will not oblige the party to settle on terms unsatisfactory to that party any strike, lockout or other labour difficulty, or any investigation or proceeding by any governmental authority or any litigation by any third party.

17.3 Termination in case of Force Majeure

If the delay continues beyond 30 Business Days, after the notice given under clause 17.2, the Parties must meet to discuss in good faith a mutually satisfactory resolution of the problem and, if unable to achieve such a resolution within a further 30 Business Days, either party may elect to terminate this agreement by five (5) Business Days prior written notice to the other.

18. ARBITRATION

In case of any disputes arising between the Parties or arising out of the performance or non-performance of the obligations of either party hereunder, or the termination of this agreement, the Parties will endeavour to settle such disputes amicably between themselves. If the Parties fail to resolve such disputes, then such disputes shall be finally resolved by arbitration in accordance with the Rules of Conciliation and Arbitration of the International Chamber of Commerce (ICC) by one or more arbitrators appointed in accordance with the said rules.

Any such arbitration will be held in English language and take place in Paris - FRANCE.

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19. NOTICES

19.1 Form of Notice

Any notice, approval, consent or other communication ("notice") from one party to another ("Recipient") must be in writing and be signed by a person duly authorised by the person giving the notice.

19.2 Manner of Service

A notice must be served by:

(a) leaving it at the Recipient's address;

(b) sending it by ordinary pre-paid post (airmail if being sent from or to a place outside of Australia) to the Recipient's address; or

(c) sending it by facsimile to the facsimile number of the Recipient.

19.3 Address for Service

Until other details are specified by a Party as its address or facsimile number for service the following apply:

Autogen

Address : 210 Kings Way, South Melbourne, Victoria, Australia

Facsimile : 61 3 9234 1190

Attention : Company Secretary

Lipha

Address : 37 rue Saint Romain, 69379 Lyon, CEDEX 08, France

Facsimile : 33-4-78-75-39-05

Attention : Head of Legal Department

19.4 Time of Service

A letter or facsimile will be taken to be served:

(a) in the case of a delivered letter, on the day of delivery, unless delivery is made on a non Business Day or after 4:30 p.m. (local time in the place of receipt) on a Business Day, in which case it will be taken to be served on the next Business Day;

(b) in the case of a posted letter, on the third (or seventh in the case of airmail) Business Day after posting; and

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(c) in the case of a facsimile, on receipt by the party giving the notice of a transmission confirmation report, unless within one Business Day of receipt the Recipient has informed the party giving the notice that the transmission was incomplete or garbled, provided that in any case if transmission is completed after 4:30 p.m. (local time in the place of receipt) or is received on a non Business Day, the notice will be taken to be served on the next Business Day.

20. MISCELLANEOUS

20.1 Severance

If any provision is held invalid or unenforceable, in whole or in part in any jurisdiction, then such invalidity or unenforceability will only affect such provision or part thereof in such jurisdiction, and will not in any manner affect the provision in this agreement in any other jurisdiction. To the extent legally permissible an arrangement which reflects the original intent of the Parties must be substituted for such invalid or unenforceable provision.

20.2 Waiver

The failure, delay, relaxation or indulgence by any party in exercising any power or right given to that party under this agreement will not operate as a waiver of that power or right, nor will any single exercise of a power or right preclude any other or further exercise of it or the exercise of any other power or right under this agreement. A power or right may only be waived in writing, signed by the party to be bound by the waiver.

20.3 Relationship of Parties

Nothing contained in this agreement is to be construed so as to place any Party in the relationship of principal, employee, agent, partner, joint venturer or legal representative of any other Party. The Parties expressly agree and acknowledge that each of the Parties is an independent contracting Party and does not, unless expressly provided, have the authority or power for or on behalf of any other Party to enter into any contract, to incur debts, to accept money, to assume any obligations or to make any warranties or representations.

20.4 Injunctive relief

If there is any conduct or threatened conduct which is or may be a breach of this agreement, both Parties acknowledge that damages may be inadequate compensation for such a breach and that the other Party is entitled to apply to any court of competent jurisdiction for interim or permanent injunctive relief or both restraining the other Party from committing any breach or threatened breach of this agreement without showing or proving any actual damage sustained by it. Such rights and remedies will be cumulative and in addition to any other rights or remedies which that party may be entitled to at law or in equity.

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20.5 Proper law

This agreement must be construed in accordance with and governed by the laws of the United Kingdom and its form, execution, validity, construction and effect is to be determined in accordance with the laws of the United Kingdom.

20.6 Rule of construction

No rule of construction applies to this agreement to the disadvantage of a Party because that Party was responsible for the preparation of this agreement or any part of it.

20.7 Variation

Any modification, alteration, change or variation of any term or condition of this agreement must be in writing, executed by all Parties.

20.8 Assignment

This agreement is personal to the respective Parties and neither is entitled to assign in whole or in part without the prior written consent of the other Party.

20.9 Further documents

Each Party agrees that it will forthwith upon the request of the other Party execute and deliver all such instruments and agreements and will take all such other actions as the other Party may reasonably request from time to time in order to give effect to the provisions and purposes of this agreement.

20.10 Affiliates' actions

Each Party will ensure that none of its Affiliates takes any action which is inconsistent with that Party's obligations under this agreement, or which if it was done or not done under this agreement by that Party would amount to a breach of this agreement by that Party.

20.11 Costs and Taxes

Each party must pay its own costs and expenses in relation to the negotiation, preparation, execution, delivery, stamping and registration, completion, variation and discharge of this agreement and Lipha must pay any Tax in respect of the execution, delivery, performance, release, discharge, amendment, enforcement or attempted enforcement or otherwise of any of the following:

(a) this agreement;

(b) any agreement or document entered into or signed under this agreement;

(c) any transaction contemplated under this agreement; and

(d) any payment made or received in respect of this agreement,

except in any case to the extent to which such Tax is payable in Australia or on or in respect of the income of Autogen.

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20.12 Interest on overdue amounts

If any amount due under this agreement is not paid when due, then the Party obliged to make payment must pay to the other Party interest at the Base Rate on the amount due and payable, accruing from day to day and to be computed from the date for payment of the amount until payment of the amount in full.

20.13 Counterparts

This agreement may be executed in counterparts, and by the Parties on separate or the same counterparts, each of which is deemed an original, but all of which constitute one and the same instrument.

20.14 Registration of agreement

If this agreement or any associated transaction is required by the law of any country, other than Australia, to be either approved or registered in any country or with any governmental agency, Lipha is responsible for obtaining such approval or registration including without limiting the generality of the foregoing, causing this agreement to be stamped, recorded and registered at its cost in such country. Autogen agrees to co-operate in any such application or registration procedure. Lipha must furnish proof of compliance with the foregoing to Autogen when and if Autogen so requires.

20.15 Not obliged to act contrary to law

No Party is obliged to carry out or perform any of the terms of this agreement where doing so would constitute a violation of any treaty, law, code or regulation of any governmental authority whether local, national or supranational. In any event the other terms of this agreement nevertheless continue and the Parties must use all reasonable endeavours to re-negotiate and amend this agreement so that the performance of this agreement as so amended will not involve any such violation.

20.16 Statutory rights not limited

The powers, remedies and rights conferred upon the Parties by or under any statute are (except to the extent inconsistent with the terms and provisions expressed in this agreement) be in addition to the powers, remedies and rights conferred by this agreement.

20.17 Consents

Unless this agreement provides otherwise and to the extent permitted by law, a Party may, in its absolute discretion, conditionally or unconditionally give or withhold any approval or consent permitted or required to be given by it pursuant to this agreement.

20.18 Entire agreement

This agreement constitutes the entire agreement between the Parties in relation to the subject matter of this agreement. Any prior arrangements, agreements, representations or undertakings are superseded and, except as expressly provided, each party acknowledges that it has not relied on any arrangement, agreement, representation or understanding which is not expressly set out in this agreement.

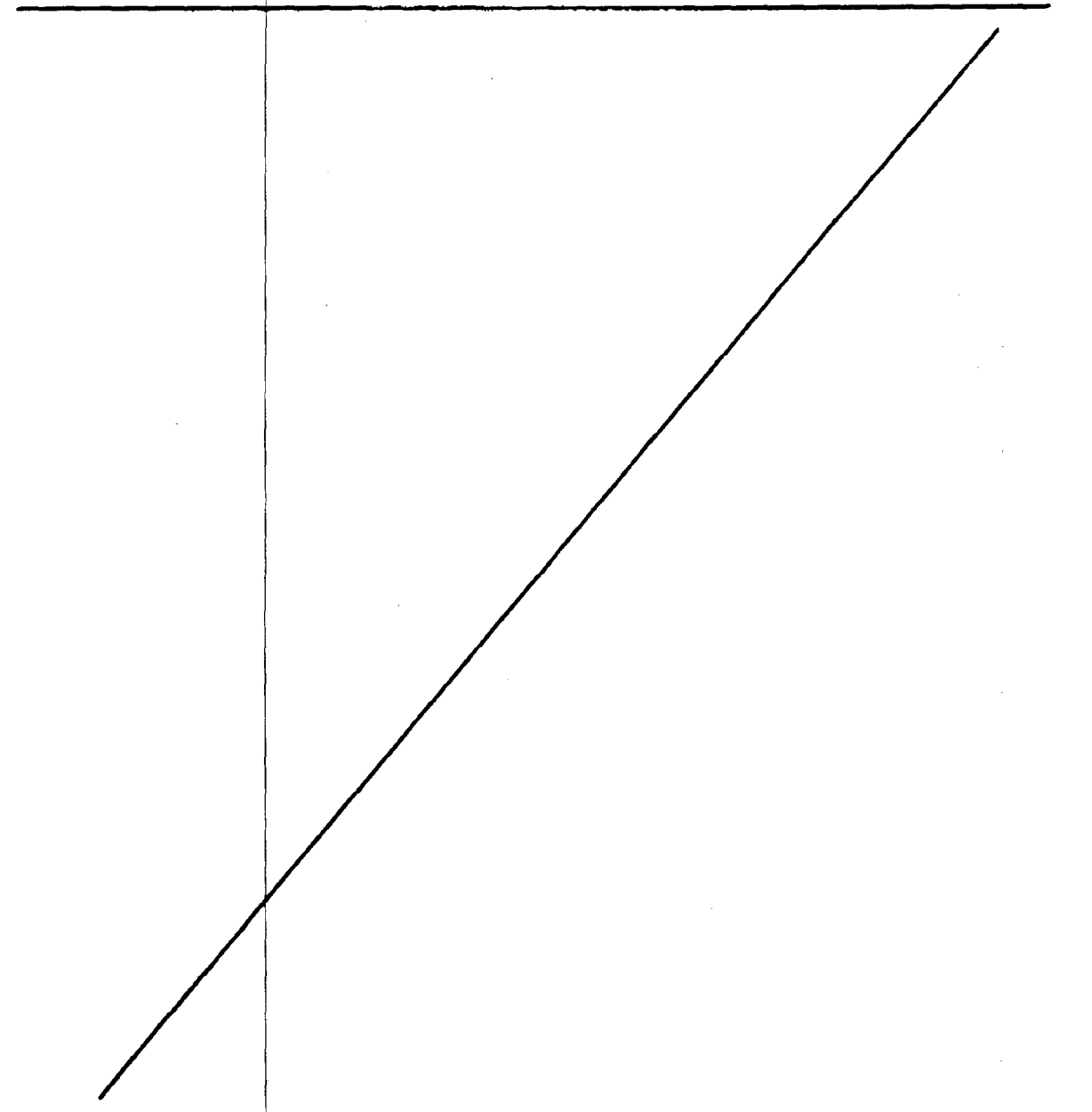
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SCHEDULE 1

Autogen Patents

(Referred to in clause **1.1**, definition of "Autogen Patents")



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SCHEDULE 2

Europe

Albania
Austria
Belgium
Belarus
Bosnia-Herzegovina
Bulgaria
Croatia
Cyprus
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Iceland
Ireland
Italy
Latvia
Liechtenstein
Lithunia
Luxembourg
Macedonia
Malta
Moldavia
Netherlands
Norway
Poland
Portugal
Romania
Russia
San Marino
Slovak Republic
Slovenia
Spain
Sweden
Switzerland
Turkey
Ukraine
United Kingdom
Yugoslav Federal Republic (Serbia-Montenegro)

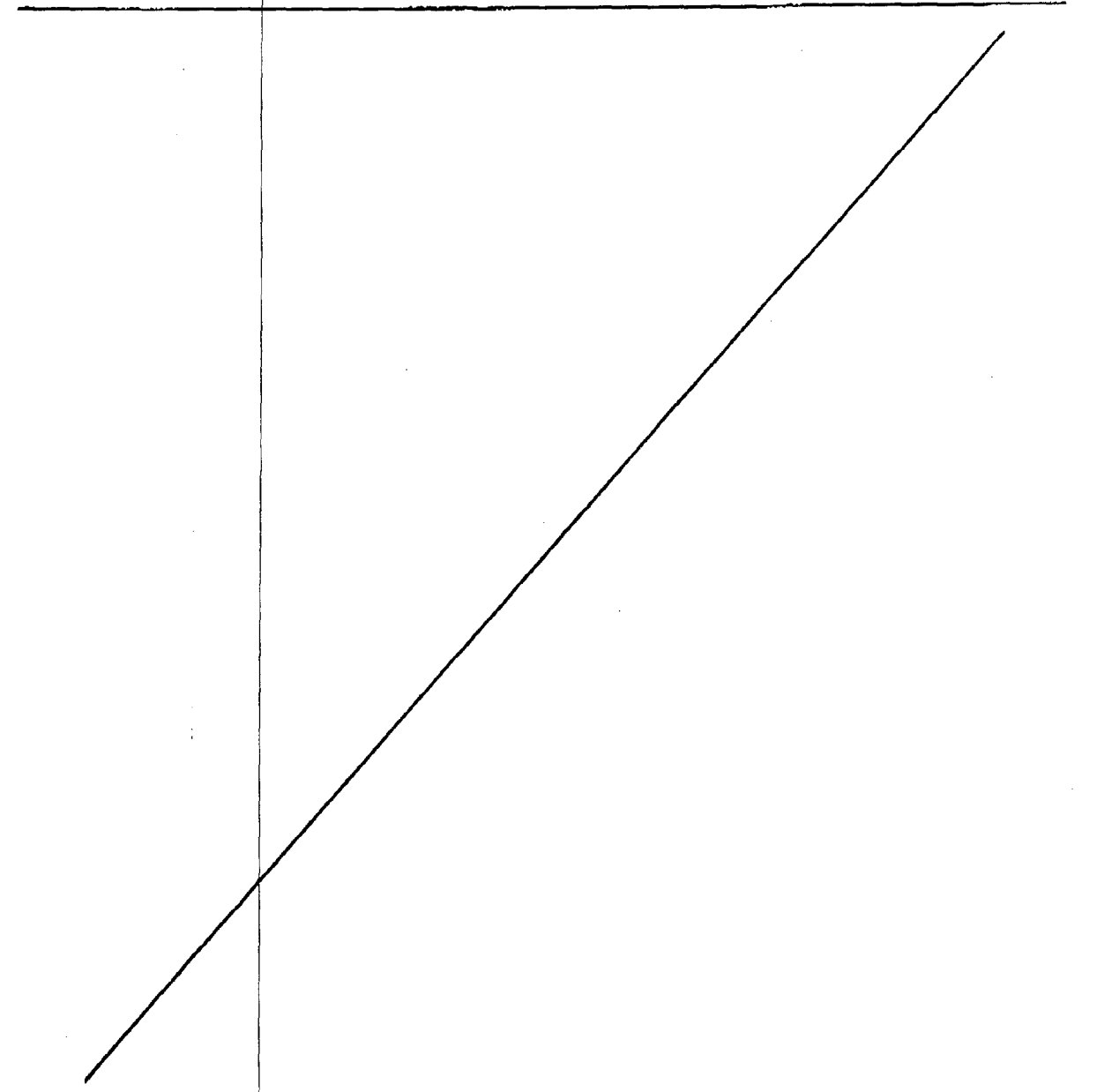
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SCHEDULE 3

Proforma Commercialisation Licence

FORTY (40) FOLLOWING PAGES



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SCHEDULE 4

Joint Venture Agreement

1. Suggested Equity of Autogen 50%, Lipha 50%

2. Joint Venture would be conducted through a jointly owned company ("JVCO") to be located in an agreed country.

3. JVCO would hold, either directly, or by way of exclusive "free" licence all relevant intellectual property rights, including Pre-Stage 2 Results and Stage 2 Results. the licence would be restricted to the Licensed Field and only apply to countries outside Europe.

4. An exclusive research and development and commercialization agreement ("Joint Venture") on the Research relating to all countries outside Europe provided that each Party equally shares all costs and revenues of such research and development costs. Any sales made outside Europe by this joint venture shall not be subject to royalty payments.

5. In case any study is necessary for development both in Europe and outside Europe, both Parties shall agree on which of Lipha or JVCO will conduct such study, and the cost of such study shall be shared by Lipha and JVCO according to the part of the world in which such study may be used, considering of the world for Europe, for North and Latin America and for Japan, the other parts of the world not being considered in such sharing.

6. Both Parties are to contribute all relevant patents and technology (including core registration data and other material relevant to registration and approval) necessary or useful to commercialise products or processes in the relevant Licensed Field, which they already have, or subsequently separately create or generate at or prior to the date of commencement of JVCO at the end of Stage 2, such contribution to be without cost or royalty entitlements, unless the same are due to non-Affiliates.

7. This free contribution does not extend to manufactured product which, subject to the price being cost competitive with third Parties on a contract or toll manufacturing basis, will be supplied exclusively by Lipha at a price to be agreed.

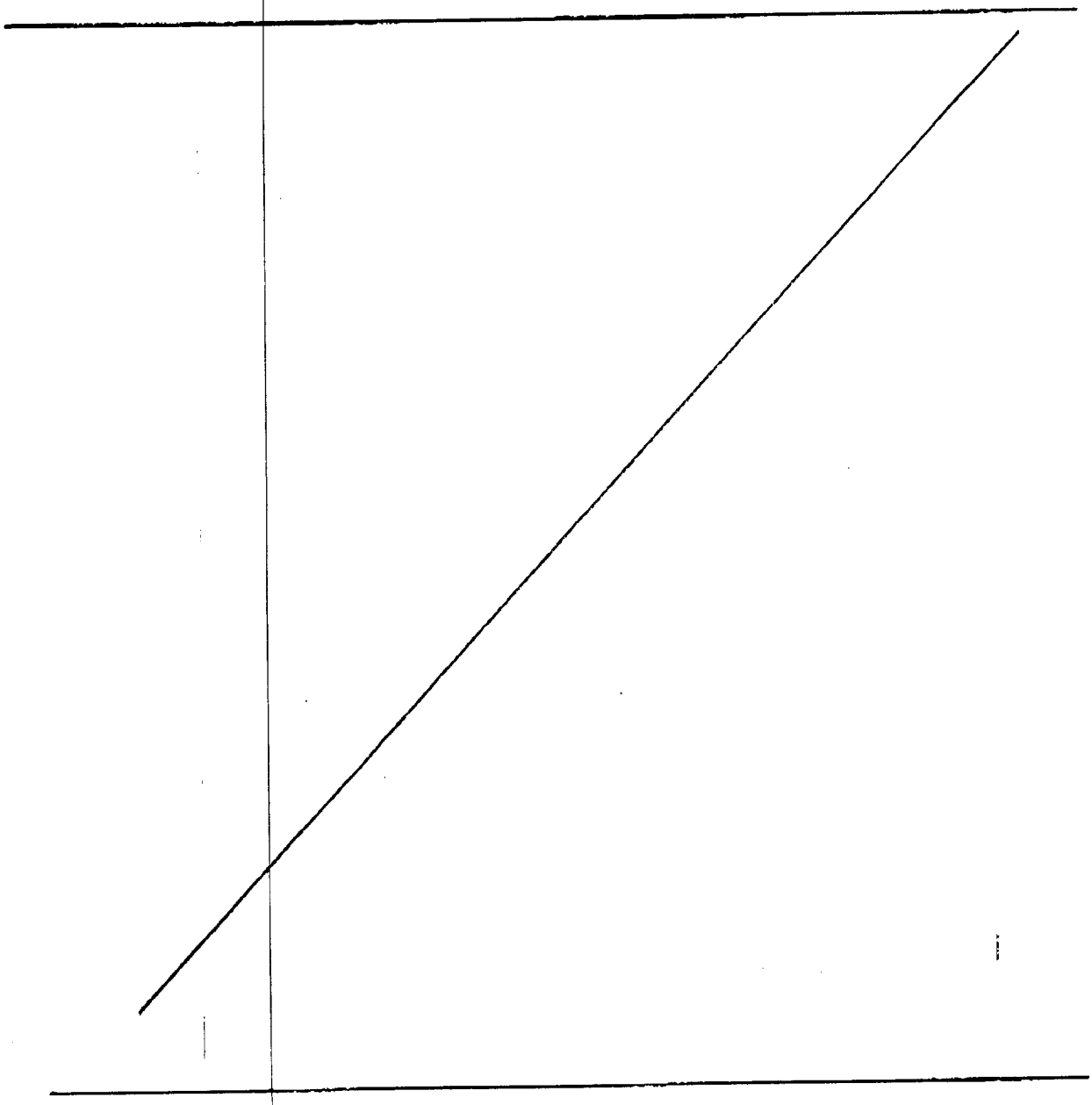
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SCHEDULE 5

Stage 1 Research

TWENTY (20) FOLLOWING PAGES

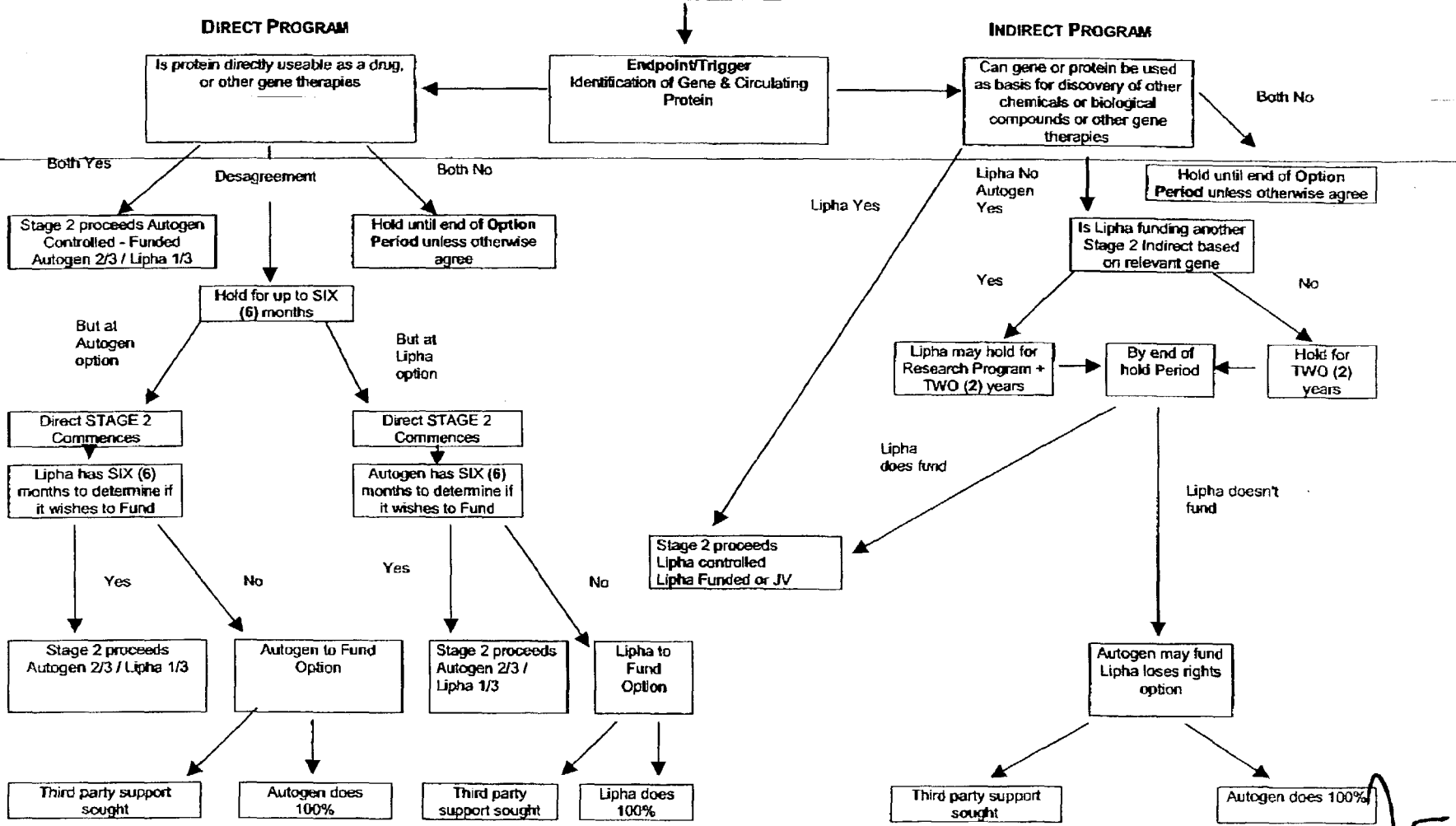


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SCHEDULE 6

STAGE1



- Please note references to "2/3" and "1/3" mean the funding proportions to be borne by the parties

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EXECUTED as an agreement

The common seal of **Autogen Research Pty Ltd** is affixed in accordance with its articles of association in the presence of:))))

AUTOGEN RESEARCH PTY LTD A.C.N. 074 636 647 — The Common Seal of

Director — JOSEPH ISAAC GUTNICK (name printed)

Director/Secretary — PETER JAMES LEE (name printed)

The common seal of **Lipha S.A.** is affixed in accordance with its articles of association in the presence of:))))

CHAIRMAN OF THE BOARD — Jean-Noël TREILLES (name printed)

MANAGING DIRECTOR — Yves BONHOMME (name printed)

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CONFIDENTIAL

SERVICE AGREEMENT

This **SERVICE AGREEMENT** (this "Agreement"), entered into as of the last signature below (the "Effective Date"), is made by and between Sequenom, Inc. ("Sequenom"), located at 3595 John Hopkins Court, San Diego, CA 92121, and the Autogen Limited ("Autogen"), located at 210 Kings Way, South Melbourne 3205 Australia.

BACKGROUND

WHEREAS, Sequenom is a genomics and pharmaceutical company engaged in genomics research and development, such as the discovery and characterization of genes associated with disease using its intellectual property, know how, information, and equipment including hardware, software and consumables pertaining to the MassARRAY™ Technology and has certain intellectual property related thereto; and

WHEREAS, Autogen is a genomics company engaged in research and development (R&D) and utilizes its eXpress technology platform in all phases of R&D for purposes such as new target discovery, target validation, and functional genomics to support the development of genetic targets and therapeutics for its partners; and

WHEREAS, Sequenom desires to engage Autogen in a service based relationship utilizing Autogen's eXpress technology platform, expertise and resources for the purpose of validating and functionally characterizing Sequenom's proprietary genetic targets.

NOW THEREFORE, in consideration of the above premises and of the mutual covenants and conditions hereinafter set forth, the Parties hereby agree as follows:

1. DEFINITIONS.

1.1 "Claim" means any claim, liability, cost, expense, damage, deficiency, loss or obligation, of any kind or nature (including without limitation, reasonable attorneys' fees).

1.2 "Party" means either Autogen or Sequenom, and "Parties" means both Autogen and Sequenom.

1.3 "Patent Rights" means all foreign and domestic patent applications (including, without limitation, all provisional, divisional, substitution, continuation and continuation in-part applications, and all foreign counterparts thereof) and all foreign and domestic patents (including, without limitation, extensions, reissues, reexaminations, renewals, supplementary protection certificates and foreign counterparts thereof).

1.4 "Proprietary Rights" means all intellectual property rights, including without limitation: (i) all rights, title and interest in and to all inventions including all Patent Rights (ii) all rights, title and interest in and to all trade secrets and trade secret rights arising under the common law, state law, federal law and laws of foreign countries; (iii) all copyrights, and all other literary property and author rights whether or not copyrightable; and all rights, title and interest in and to all copyrights and copyrighted interests throughout the world.

1.5 "Research Materials" means Sequenom's gene targets in tangible or intangible (for example, written or electronic) form and any Confidential Information (as set forth in Section 5.1(a)) related to Sequenom's gene targets, provided by Sequenom under this Agreement.

1.6 "Research Program" has the meaning set forth in Section 2.1.

1.7 "Research Program Results" has the meaning set forth in Section 6.1.

1.8 "Term" has the meaning set forth in Section 12.1.

1.9 "Third Party" or "Third Parties" means any individual, partnership, joint venture, corporation, trust, estate, unincorporated organization, government or any department or agency thereof, or any other entity, other than the Parties, and other than Authorized Persons as defined in Section 2.2.

2. OVERVIEW OF THE COLLABORATION.

2.1 Objective. Sequenom desires to have Autogen apply Autogen's eXpress technology platform, resources and expertise to validate and functionally characterize for Sequenom, a number of selected genetic targets (Research Material) provided by Sequenom. The activities conducted in the course of such work are collectively referred to (hereinafter, the "Research Program.")

2.2 Resource Contributions by Autogen. Autogen will commit four and one-half (4.5) full time equivalents (FTEs), equipment and resources to accomplish the objectives of the Research Program. Such FTEs will be employees of Autogen (and not consultants, agents, affiliates, or independent contractors of Autogen unless a written agreement is in place, in the form as set forth in Exhibit A attached hereto, between Autogen and each particular consultant, agent, affiliate, or independent contractor providing that such person(s) shall abide by the terms of this Agreement (including but not limited to terms of confidentiality, restrictions on use of Research Materials and Research Program Results, and assignment of Research Program Results and Proprietary Rights to Sequenom) all in the same manner as if such consultant, affiliate, agent, or contractor were Autogen or an employee of Autogen) and will be scientific or engineering personnel assigned to execute and manage the Research Program, and will not include executive management or other non-scientific personnel. Such persons are collectively referred to hereafter as "Authorized Persons." Autogen will provide and pay for all personnel, facilities and equipment needed to perform its duties hereunder. All matters of compensation, benefits and other terms of engagement of any nature for any personnel used by Autogen to discharge its obligations under this Agreement shall be solely a matter between Autogen and such individuals. For purposes of this Agreement, Autogen and Sequenom are independent contractors. Each is solely responsible to select, engage and discharge its Authorized Persons, to determine and pay their compensation and benefits, and otherwise to direct and control their services and determine all matters.

2.3 Joint Research Committee. The Research Program will be overseen by the following individuals Michael Shi, M.D., Ph.D., Senior Director, Biotherapeutics, Stefan Kammerer, Ph.D., Principal Scientist, and Dana Hosseini, Director, Business Development for and on behalf of Sequenom and Prof. Greg Collier, Dr. Ken Walder, and Dr. Victoria Foletta, for and on behalf of Autogen (collectively the "JRC").Each Party may appoint substitute or

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replacement members of the JRC to serve as its representatives at any time, however Sequenom must agree to changes in the representation by Autogen. It shall be the JRC's responsibility to:

(a) draft and approve a written research plan which will include detailed objectives for the twelve (12) month duration of this agreement and which the Parties agree will substantially address the Research Program objectives defined in Section 2.1;

(b) manage, monitor, control and evaluate the progress of the Research Program and, as the members of the JRC shall deem appropriate, recommend modifications to the Research Program as necessary, but not more than quarterly, to achieve the Parties' objectives under this Agreement;

(c) evaluate the data and results of the Research Program; and

(d) terminate the Research Program.

(a) The JRC (or appropriate substitutes) shall meet on a regular basis during the Term, with frequencies no less than stated below, whereby such meetings shall be organized in the following manner: weekly telephonic meetings;

(b) monthly video conference meetings and;

(c) quarterly face-to-face meetings.

All decisions made by the JRC, must be unanimous. Any decisions that are unable to be unanimously decided by the JRC, will be referred to the EVP, Business Development of Sequenom and General Manager Corporate & Company Secretary of Autogen.

2.4 Modifications to the Research Program. The Research Program shall not exceed the scope of work as set forth in Sections 2.1 and 2.2, except as agreed to by the JRC.

3. TRANSFER OF MATERIALS.

3.1 No Warranties. All Research Materials are experimental in nature and shall be used with prudence and appropriate caution, because not all of their characteristics are known. ALL RESEARCH MATERIALS ARE PROVIDED WITHOUT WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED.

3.2 Legal Title. Legal title to or ownership of any Research Materials transferred hereunder shall remain with Sequenom and be unaffected by this Agreement or the transfer made hereunder.

3.3 Limited Use of Research Materials. Autogen shall use the Research Materials only in work done in the course of the Research Program, by Authorized Persons under the immediate and direct control of Autogen. Autogen acknowledges that the Research Materials are trade secrets of Sequenom, of significant value to Sequenom, and within the definition of Proprietary Rights of Sequenom. The Research Materials shall not be disclosed or transferred by Autogen to any Third Party. Research Materials transferred under this Agreement are

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provided only for use *in vitro* or in animals. RESEARCH MATERIALS TRANSFERRED UNDER THIS AGREEMENT WILL NOT BE USED IN HUMANS, FOR ANY PURPOSE INCLUDING FOR PURPOSES OF DIAGNOSTIC TESTING. For the avoidance of doubt, any use of Research Materials by Autogen in violation of this Agreement, or any use other than in accordance with this Section 3.3, shall be considered a material breach of this Agreement.

4. PAYMENT TERMS.

4.1 Payment Terms. Sequenom agrees to pay to Autogen a fee of five hundred fifty thousand (550,000USD) United States dollars in consideration of Autogen's work under the Research Program. The payment to Autogen shall be made in advance of completion of Autogen's responsibilities set forth herein, and shall be due in full on March 18, 2002 and paid by way of wire transfer to Autogen's bank account.

4.2 Taxes. Any sales, use or other taxes, customs, tariffs, duties, or governmental charges incident to the provision of services by Autogen under this Agreement shall be the sole responsibility of Autogen.

5. CONFIDENTIALITY.

5.1 Confidential Information. The Parties acknowledge that, each Party may have access to Confidential Information of the other Party, in order to perform its obligations under this Agreement; and

(a) for the purpose of this Agreement, Confidential Information means all information, data, and material, including but not limited to Research Materials and information related thereto, provided by SEQUENOM or created under the Research Program (including Research Program Results), disclosed by one Party to the other. For the avoidance of doubt, Research Program Results are considered the Confidential Information of Sequenom. It is the Parties' intent to provide each other Confidential Information only for the specific purpose of performing under this Agreement. Each Party may use the other Party's Confidential Information only for the purpose of performing under this Agreement. All Confidential Information remains the sole property of the disclosing Party. Upon termination or expiration of this Agreement, all materials and all copies of all materials containing Confidential Information, including but not limited to papers, books, logs, correspondence and records, in any form, whether written, typed, electronic, videotape, audiotape, etc., shall be returned to the disclosing Party within 30 days of the termination or expiration of this Agreement; and

(b) except as expressly provided for herein, for a period of ten (10) years following the expiration or termination of this Agreement, SEQUENOM and AUTOGEN Authorized Persons (a) shall hold in strict confidence all Confidential Information from the other Party or any of its employees or Authorized Persons, and (b) shall not distribute, disclose or disseminate such confidential information to any Third Party without the prior written approval of the other Party (that is, the original disclosing Party); and

(c) each Party hereby acknowledges and agrees that in the event of any breach of this Agreement, including, without limitation, the actual or threatened disclosure or transfer of the other Party's Confidential Information or misappropriation of trade secrets of either party (for example, Sequenom's Research Materials or Autogen's eXpress technology

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platform), without the prior express written consent of such other Party, such other Party may suffer an irreparable injury, such that no remedy at law will afford it adequate protection against, or appropriate compensation for, such injury. Accordingly, each Party hereby agrees that the other Party may be entitled to specific performance of the obligations under this Agreement, as well as such further injunctive relief as may be granted by a court of competent jurisdiction.

6. INTELLECTUAL PROPERTY.

6.1 Ownership of Intellectual Property. All data, reports or other works of authorship, information, inventions, discoveries and results generated under this Agreement in respect of the Research Materials ("Research Program Results"), and all rights, title and interests therein of any type or nature, including but not limited to Proprietary Rights in the Research Program Results, shall be the exclusive and sole property of Sequenom and may be used by Sequenom for any purpose without further obligation or liability to Autogen. All Research Program Results shall be transmitted to Sequenom by magnetic media or other mutually agreed upon method. All Research Program Results and all rights, title and interests therein of any type or nature, including but not limited to Proprietary Rights in the Research Program Results, are hereby assigned to Sequenom, wholly and exclusively. If requested by Sequenom, Autogen and all Authorized Persons shall execute any and all assignments or other instruments which Sequenom shall deem necessary to pursue protection of such rights and interests or perfect such assignment in Sequenom's name and to otherwise fully vest and protect the interests of Sequenom therein. For the avoidance of doubt, nothing in this agreement gives ownership to Sequenom of any Proprietary Rights of Autogen (including in respect of the eXpress technology platform) as existing from time to time.

Any and all inventions and discoveries and works of authorship, whether or not patentable or subject to copyright protection, which may be conceived, made, reduced to practice or discovered or created by Autogen in the performance of this Agreement shall be promptly disclosed to Sequenom within ten (10) business days of their conception, reduction to practice, discovery, or creation.

6.2 Assistance in Prosecution and Maintenance; Execution of Documents. Autogen shall reasonably assist Sequenom in the filing, prosecution and maintenance of applications (including but not limited to patent applications and copyright applications) claiming any Proprietary Rights in or related to the Research Program Results, including, without limitation, executing any necessary powers of attorney, assignments and declarations of inventorship or authorship. Autogen shall promptly execute any documents or instruments in connection with any assignment of its right, title and interest as provided for under this Agreement. Sequenom will have the sole right and responsibility to apply for, prosecute and maintain all Proprietary Rights in or related to the Research Program Results.

7. LICENSE RIGHTS.

7.1 Except as expressly stated in this Agreement, nothing in this Agreement shall be deemed to grant or convey any rights to Autogen in, or affect the legal title to, any technology, Confidential Information, or Proprietary Rights provided or developed under this Agreement.

7.2 Except as expressly stated in this Agreement nothing in this Agreement shall be deemed to grant or convey any rights to Sequenom in, or affect the legal title to, any

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technology, Confidential Information, or Proprietary Rights of Autogen.

8. PUBLICATION.

Each Party agrees that it will not disclose the terms of this Agreement or use the other Party's name in any advertising, promotional materials, or publicity without the prior written approval of the other Party, which consent shall not be unreasonably withheld. The terms of this Agreement shall be deemed Confidential Information under this Agreement, except that the Parties shall mutually agree upon a press release to be released promptly after the Effective Date.

9. INDEMNIFICATION.

9.1 Each Party is responsible and liable to the other Party only for its own acts and omissions, and the acts and omissions of its directors, officers, and employees and Authorized Persons relating to the Research Program or to its own Research Materials. Sequenom agrees to indemnify, defend with counsel acceptable to Autogen, and hold Autogen and its respective directors, officers, and employees and Authorized Persons harmless from, and Autogen agrees to indemnify, defend with counsel acceptable to Sequenom, and hold Sequenom and its directors, officers, and employees harmless from, any Claim resulting from the indemnitor's acts or omissions, or those of its directors, officers, or employees or Authorized Persons under, arising out of or otherwise related to this Agreement, the Research Program, or the Research Materials transferred in connection with the Research Program, except to the extent such Claim arises out of the gross negligence or intentional wrongdoing of the Party seeking indemnification or that of its directors, officers, or employees or Authorized Persons.

9.2 Despite anything else contained in this Agreement, the indemnities in clause 9.1 apply to any Claims made against any Party (and its directors, officers and employees and Authorized Persons) by a Third Party as a result of the other Party's infringement of that Third Party's Patent or other Proprietary Right.

10. COMPLIANCE WITH LAWS AND REGULATIONS.

All research done in connection with the Research Program, including all use of Research Materials transferred hereunder, will be done in compliance with all applicable laws, governmental regulations and guidelines.

11. REPRESENTATIONS, WARRANTIES AND COVENANTS

11.1 Mutual Representations and Warranties. Each Party hereby represents and warrants:

(a) Such Party is duly organized and validly existing under the laws of the state or country of its incorporation and has full corporate power and authority to enter into this Agreement and to carry out the provisions hereof.

(b) Such Party is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder.

(c) This Agreement is a legal and valid obligation binding upon it and enforceable in accordance with its terms. The execution, delivery and performance of this Agreement by such Party does not, to the best of such Party's knowledge after reasonable

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inquiry, conflict with any agreement, instrument or understanding, oral or written, to which it is a Party or by which it may be bound, nor violate any law or regulation of any court, governmental body or administrative or other agency having jurisdiction over it.

(d) That all of Autogen's Authorized Persons acting on Autogen's behalf pursuant to this Agreement are and shall be obligated under a binding written agreement to assign to Sequenom all inventions (whether or not patentable) or discoveries created, made, conceived, developed, or reduced to practice, and all works of authorship by such Authorized Persons and any other interest such Authorized Persons may have in any intellectual property or Research Program Results created or developed under this Agreement.

11.2 Disclaimer of Warranties. MATERIALS, TECHNOLOGY AND INFORMATION PROVIDED UNDER THIS AGREEMENT ARE PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING (SUBJECT TO CLAUSE 9.2) WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF ANY PATENT OR OTHER PROPRIETARY RIGHT.

12. TERM, TERMINATION AND EXPIRATION.

12.1 Term. This Agreement shall commence upon the Effective Date and, unless otherwise earlier terminated as provided herein, it shall expire one (1) year from the commencement of date that Autogen commences work on the Research Program, not to exceed thirty (30) days from the Effective Date of this Agreement.

12.2 Termination. Failure by a Party to comply with any of its material obligations contained herein shall entitle the Party not in default to give the defaulting Party notice specifying the nature of the default, requiring the defaulting Party to cure such default. If such default is not cured within thirty (30) days after the receipt of notice (or, in a case where such default cannot be cured within such thirty (30)-day period, if the defaulting Party does not commence and diligently continue action to cure such default), the Party not in default shall be entitled, in addition to any other remedies available to it in law or in equity, to terminate the Agreement. The right of a Party to terminate this Agreement shall not be affected in any way by its waiver or failure to take action with respect to any prior default.

12.3 Consequences of Termination. Upon termination or expiration of this Agreement, Research Materials and any Confidential Information received pursuant to this Agreement and all copies thereof, shall, be returned to the disclosing Party.

12.4 Survival. The rights and obligations of the Parties pursuant to Articles 1, 3.2, 4.2, 5, 6, 7, 8, 9, 12.3, 12.4, 13.1, and 13.4 shall survive any termination of this Agreement.

12.5 Accrued Rights and Obligations. Termination or expiration of this Agreement shall not affect any accrued rights or obligations of either Party.

13. MISCELLANEOUS PROVISIONS.

13.1 Governing Law; Dispute Resolution. This Agreement shall be governed by and construed in accordance with the laws of the State of California, United States of America, without reference to its choice-of-law doctrines. Any litigation, arbitration, or other dispute resolution between the Parties relating to this Agreement shall take place in San Diego

County, California, and the Parties consent to the personal jurisdiction of and venue in the state and federal courts within San Diego County, California.

13.2 Independent Parties. Neither Party, nor its respective employees and Authorized Persons will be considered employees, partners or agents of the other Party. Neither Party may make any representations or commitments on behalf of the other Party.

13.3 Severability. If any one or more of the provisions of this Agreement shall be held to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions of this Agreement shall not in any way be affected or impaired thereby.

13.4 Notices. Any notice or communication provided for in this Agreement to be made by either of the Parties to the other shall be in writing, in English, and shall be made by prepaid registered or certified mail with return receipt or by express overnight courier addressed to the other at its address set forth below. Any such notice or communication may also be delivered by hand or by confirmed facsimile (with copy by mail) to the appropriate addressee. Notices shall be sent:

If to Autogen, to:
Autogen Limited
Attention: Chief Operating Officer
210 Kings Way
South Melbourne, Victoria 3205
Australia
Fax: +613 92341344

with a copy to:
Autogen Limited
Attention: Company Secretary
210 Kings Way
South Melbourne, Victoria 3205
Australia
Fax: +613 92341255

If to Sequenom, to:
Sequenom, Inc.
Attention: EVP Business Development
3595 John Hopkins Court
San Diego, CA 92121-1121
Fax: (858) 202-9205

with a copy to:
Sequenom, Inc.
Attention: Legal Department
3595 John Hopkins Court
San Diego, CA 92121-1121
Fax: (858) 202-9205

13.5 Assignment. This Agreement may not be assigned by either Party without the prior written consent of the other Party, which consent shall not be unreasonably withheld. Any assignment in violation of this provision shall be void and without effect. Notwithstanding the above, this agreement may be assigned, without the prior written consent of the other Party, in the case of a merger, acquisition or change in control in which all or substantially all of the assets related to this Agreement have been merged or acquired.

13.6 Waiver. The failure of either Party to require performance by the other Party of any provision hereof shall not affect the full right to require such performance at any time thereafter; nor shall the waiver by either Party of a breach of any provision hereof be taken or held to be a waiver of the provision itself.

13.7 Headings. The Section headings used in this Agreement are included only as a matter of convenience and in no way define, limit, construe or describe the scope or extent of such Section or in any way affect such Section.

13.8 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same instrument.

13.9 Entire Agreement. This Agreement constitutes the entire agreement, both written and oral, with respect to the subject matter hereof, and supersedes all prior or contemporaneous understandings or agreements, whether written or oral, with respect to such subject matter. No amendment, alteration or modification of this Agreement shall be valid unless in writing and signed by the Parties hereto.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be duly executed and delivered in duplicate originals as of the last date below.

SEQUENOM, INC.		AUTOGEN LIMITED	
By:		By:	
Name:	Jay B. Lichter	Name:	JOSEPH ISAAC GUTNICK
Title:	EVP, Business Development	Title:	DIRECTOR
Date:	21 December 2001	Date:	21 December 2001

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Autogen Limited

Autogen Limited
ABN 79 000 248 304

Registered Office:
210 Kings Way, South Melbourne
Victoria 3205 Australia
Telephone: +613 9234 1188
Facsimile: +613 9234 1198
Email: agt@axisc.com.au

CONFIDENTIAL

EXHIBIT A

[Date]

[Name]
[Address]
[Address]

Dear [Name]

Research being undertaken by Autogen Limited for Sequenom Inc.

As you are aware, Autogen is undertaking research for Sequenom utilizing the facilities at Deakin University at Geelong.

As part of the contractual arrangements with Sequenom, Autogen is required to advise each person working on this research of (i) the condidentiality arrangements; (ii) that no person working on this research has any proprietary rights to any intellectual property arising from the research; (iii) restrictions on use of research materials and research program results; and (iv) assignment of research materials and research program results. Autogen is further required to secure written agreement in this regard from each person working on the research.

Set out below are certain key definitions (1.2 – 1.7, 1.9) from the agreement with Sequenom.

1.2 "Party" means either Autogen or Sequenom, and "Parties" means both Autogen and Sequenom.

1.3 "Patent Rights" means all foreign and domestic patent applications (including, without limitation, all provisional, divisional, substitution, continuation and continuation in-part applications, and all foreign counterparts thereof) and all foreign and domestic patents (including, without limitation, extensions, reissues, reexaminations, renewals, supplementary protection certificates and foreign counterparts thereof).

1.4 "Proprietary Rights" means all intellectual property rights, including without limitation: (i) all rights, title and interest in and to all inventions including all Patent Rights (ii) all rights, title and interest in and to all trade secrets and trade secret rights arising under the common law, state law, federal law and laws of foreign countries; (iii) all copyrights, and all other literary property and author rights whether or not copyrightable; and all rights, title and interest in and to all copyrights and copyrighted interests throughout the world.

1.5 "Research Materials" means Sequenom's gene targets in tangible or intangible (for example, written or electronic) form and any Confidential Information (as set forth in Section 5.1(a)) related to Sequenom's gene targets, provided by Sequenom under this Agreement.

1.6 "Research Program" has the meaning set forth in Section 2.1.

1.7 "Research Program Results" has the meaning set forth in Section 6.1.

1.9 "Third Party" or "Third Parties" means any individual, partnership, joint venture, corporation, trust, estate, unincorporated organization, government or any department or agency thereof, or any other entity, other than the Parties, and other than Authorized Persons as defined in Section 2.2.

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Set out below are certain key clauses (2.1, 3.2, 3.3, 5.1, 6.1, and 11.1(d))from the agreement with Sequenom.

2.1 Objective. Sequenom desires to have Autogen apply Autogen's eXpress technology platform, resources and expertise to validate and functionally characterize for Sequenom, a number of selected genetic targets (Research Material) provided by Sequenom. The activities conducted in the course of such work are collectively referred to (hereinafter, the "Research Program.")

3.2 Legal Title. Legal title to or ownership of any Research Materials transferred hereunder shall remain with Sequenom and be unaffected by this Agreement or the transfer made hereunder.

3.3 Limited Use of Research Materials. Autogen shall use the Research Materials only in work done in the course of the Research Program, by Authorized Persons under the immediate and direct control of Autogen. Autogen acknowledges that the Research Materials are trade secrets of Sequenom, of significant value to Sequenom, and within the definition of Proprietary Rights of Sequenom. The Research Materials shall not be disclosed or transferred by Autogen to any Third Party. Research Materials transferred under this Agreement are provided only for use *in vitro* or in animals. RESEARCH MATERIALS TRANSFERRED UNDER THIS AGREEMENT WILL NOT BE USED IN HUMANS, FOR ANY PURPOSE INCLUDING FOR PURPOSES OF DIAGNOSTIC TESTING. For the avoidance of doubt, any use of Research Materials by Autogen in violation of this Agreement, or any use other than in accordance with this Section 3.3, shall be considered a material breach of this Agreement.

5.1 Confidential Information. The Parties acknowledge that, each Party may have access to Confidential Information of the other Party, in order to perform its obligations under this Agreement; and

(d) for the purpose of this Agreement, Confidential Information means all information, data, and material, including but not limited to Research Materials and information related thereto, provided by SEQUENOM or created under the Research Program (including Research Program Results), disclosed by one Party to the other. For the avoidance of doubt, Research Program Results are considered the Confidential Information of Sequenom. It is the Parties' intent to provide each other Confidential Information only for the specific purpose of performing under this Agreement. Each Party may use the other Party's Confidential Information only for the purpose of performing under this Agreement. All Confidential Information remains the sole property of the disclosing Party. Upon termination or expiration of this Agreement, all materials and all copies of all materials containing Confidential Information, including but not limited to papers, books, logs, correspondence and records, in any form, whether written, typed, electronic, videotape, audiotape, etc., shall be returned to the disclosing Party within 30 days of the termination or expiration of this Agreement; and

(e) except as expressly provided for herein, for a period of ten (10) years following the expiration or termination of this Agreement, SEQUENOM and AUTOGEN Authorized Persons (a) shall hold in strict confidence all Confidential Information from the other Party or any of its employees or Authorized Persons, and (b) shall not distribute, disclose or disseminate such confidential information to any Third Party without the prior written approval of the other Party (that is, the original disclosing Party); and

(f) each Party hereby acknowledges and agrees that in the event of any breach of this Agreement, including, without limitation, the actual or threatened disclosure or transfer of the other Party's Confidential Information or misappropriation of trade secrets of either party (for example, Sequenom's Research Materials or Autogen's eXpress technology platform), without the

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prior express written consent of such other Party, such other Party may suffer an irreparable injury, such that no remedy at law will afford it adequate protection against, or appropriate compensation for, such injury. Accordingly, each Party hereby agrees that the other Party may be entitled to specific performance of the obligations under this Agreement, as well as such further injunctive relief as may be granted by a court of competent jurisdiction.

6.1 Ownership of Intellectual Property. All data, reports or other works of authorship, information, inventions, discoveries and results generated under this Agreement in respect of the Research Materials ("Research Program Results"), and all rights, title and interests therein of any type or nature, including but not limited to Proprietary Rights in the Research Program Results, shall be the exclusive and sole property of Sequenom and may be used by Sequenom for any purpose without further obligation or liability to Autogen. All Research Program Results shall be transmitted to Sequenom by magnetic media or other mutually agreed upon method. All Research Program Results and all rights, title and interests therein of any type or nature, including but not limited to Proprietary Rights in the Research Program Results, are hereby assigned to Sequenom, wholly and exclusively. If requested by Sequenom, Autogen and all Authorized Persons shall execute any and all assignments or other instruments which Sequenom shall deem necessary to pursue protection of such rights and interests or perfect such assignment in Sequenom's name and to otherwise fully vest and protect the interests of Sequenom therein. For the avoidance of doubt, nothing in this agreement gives ownership to Sequenom of any Proprietary Rights of Autogen (including in respect of the eXpress technology platform) as existing from time to time.

11.1 Mutual Representations and Warranties. Each Party hereby represents and warrants:

(d) That all of Autogen's Authorized Persons acting on Autogen's behalf pursuant to this Agreement are and shall be obligated under a binding written agreement to assign to Sequenom all inventions (whether or not patentable) or discoveries created, made, conceived, developed, or reduced to practice, and all works of authorship by such Authorized Persons and any other interest such Authorized Persons may have in any intellectual property or Research Program Results created or developed under this Agreement.

For the purpose of the Agreement with Sequenom, each of you will be considered an Authorized Person of Autogen.

You are requested to sign the bottom of this letter as confirmation that you will comply with the terms of this letter and the Agreement between Sequenom and Autogen particularly as set out above. Please return the original signed copy of this letter to me. Please do not hesitate to contact me should you have any questions.

Yours sincerely

PETER LEE
General Manager Corporate
& Company Secretary

I UNDERSTAND AND AGREE TO THE TERMS SET FORTH IN THIS LETTER:

AUTOGEN AUTHORIZED PERSON

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____

Research Agreement

Date:

AUTOGEN PTY LTD, ACN 074 636 847
("Autogen")

DEAKIN UNIVERSITY
("Deakin University")

INTERNATIONAL DIABETES INSTITUTE ACN 007 342 412
("IDI")

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THIS AGREEMENT is made the 28th day of February, 1997.

BETWEEN:

AUTOGEN PTY LTD ACN 074 636 847 of 8th Floor, 580 St Kilda Road, Melbourne, Victoria, 3004 ("**Autogen**")

DEAKIN UNIVERSITY a body corporate and politic established pursuant to Deakin University Act 1974 through its School of Nutrition and Public Health, Geelong Campus of Pigdons Road, Geelong, Victoria, 3217 ("**Deakin University**")

AND

INTERNATIONAL DIABETES INSTITUTE ACN 007 342 412 of 260 Kooyong Road, Caulfield, Victoria, 3162 ("**IDI**")

WHEREAS:

A. Autogen proposes to engage in research in the fields of diabetes, obesity, allergy, asthma and autoimmunity ("the Research Fields").

B. Deakin University through its School of Nutrition and Public Health has expertise in one or more areas of the Research Fields ("the Research Expertise"), and owns or has an exclusive licence of the Pre-existing Intellectual Property. Deakin University and IDI have been collaborating for several years using the Research Expertise. The Patent has been licensed exclusively to Deakin University by the Patent Applicants for use in the Project.

C. Autogen desires to collaborate with Deakin University and to provide the Funding for the Project using the Research Expertise in return for the joint ownership and a licence of all Intellectual Property in the result of the Project on the terms set out in this Agreement.

D. The parties wish to ensure that the Research Expertise is applied to the Project and that the results of the Project are, if appropriate, commercialised by Autogen.

E. IDI is the owner of a Sand Rat colony based at Deakin University and has agreed to make the Sand Rats available to Deakin University for the purposes of the Project.

F. Autogen is a subsidiary of AWI, which is listed on the Stock Exchange. IDI and Deakin University are aware that the Corporations Law prohibits insider trading and shall use their best endeavours to ensure that their employees and contractors are also made aware of such prohibition. IDI and Deakin University are aware of the continuous disclosure requirements applicable to companies listed on the Stock Exchange and shall use their best endeavours to ensure that their employees and contractors are also aware of such requirements and shall advise Autogen in writing of any material advancements or developments as they occur.

NOW THIS AGREEMENT WITNESSES as follows:

1. DEFINITIONS AND INTERPRETATION

1.1 Definitions

In this Agreement the following words and expressions shall have the meanings ascribed thereto as follows (unless the context otherwise requires):

"**AWI**" means Australia Wide Industries Limited ACN 000 248 304.

"**Budgets and Workplans**" means the detailed budgets and time plans and schedules for work to be carried out under the R&D Program and attached in Schedule 3 as may be amended from time to time by agreement between Autogen and Deakin University.

"**Commencement Date**" means the date specified in Item 3 of Schedule 1.

"**Confidential Information**" means in relation to Autogen, information that:

(a) is by its nature confidential;

(b) is designated by Autogen as confidential; or

(c) Deakin University and/or IDI knows or ought to know is confidential;

and includes -

(d) information comprised in or relating to any Intellectual Property rights of Autogen;

(e) information relating to the financial position of Autogen and in particular includes information relating to the assets or liabilities of Autogen and any other matter that does or may affect the financial position or reputation of Autogen;

(f) information relating to the internal management and structure of Autogen, or the personnel, policies and strategies of Autogen;

(g) information of Autogen to which Deakin University and/or IDI has access other than information referred to in paragraphs (d), (e) and (f) that has any actual or potential commercial value to Autogen or to the person or corporation which supplied that information;

(h) information in the possession of Deakin University and/or IDI relating to Autogen's clients or suppliers, and like information;

(i) information of Autogen disclosed to Deakin University and/or IDI before or after the Commencement Date.

"**Dr Collier**" means Dr Gregory Royce Collier of 22 Kestral Place, Ocean Grove, Victoria, 3226 Principal Investigator at Deakin University.

"Funding" means:

(a) in respect of the Initial Term the amount specified in Item 1 of Schedule 1; and

(b) in respect of any period after the Initial Term, the amount agreed in writing by the parties to be paid by Autogen for that Period.

"**Initial Term**" means the period of one year from the Commencement Date.

"**Intellectual Property**" includes intellectual and industrial property or rights of any nature throughout the world and all reversionary interests therein, including inventions, rights to or arising from inventions, letters patent, applications for letters patent, utility models, copyright in works of any nature, industrial designs, registered designs, rights to or arising from any industrial design, computer programs of any nature, Confidential Information, trade secrets, "know how", technical or commercial expertise or knowledge and any ideas or information of a commercial or valuable nature.

"**Net Sales Revenue**" means the revenue in Australian dollars received by Autogen or any Related Body Corporate from all sales of the Products or licence fees or royalties derived from licensing of the Intellectual Property to produce, market and sell the Products, after the deduction of all trade discounts, returns of sales, foreign exchange charges, withholding tax, sales tax or similar tax such as consumption tax, goods or services tax or value added tax and insurance and freight costs under a cost insurance and freight arrangement before the deduction of administrative, marketing and manufacturing costs and corporate income tax.

"**Patent**" means the Australian Patent Application in the names of the Patent Applicants specified in Schedule 4 and any patent applications in Australia or elsewhere based thereon.

"**Patent Applicants**" means the applicants for the Patent specified in Schedule 4.

"**Pre-existing Intellectual Property**" means the Intellectual Property developed before the Commencement Date, owned solely by Deakin University and specified in Schedule 4 to be made available for use in the Project or owned by the Patent Applicants, licenced to Deakin University and specified in Schedule 4 to be made available by Deakin University with the consent of the Patent Applicants for use in the Project..

"**Products**" means the products and results of the Project.

"**Project**" means scientific research using the Research Expertise into the role of potential pharmaceutical agents on food intake, body weight control and parameters of insulin resistance and diabetes as examined in studies into therapeutic regulators of food intake and appetite conducted by Deakin University pursuant to this Agreement.

"**Project Location**" means the School of Nutrition and Public Health, Deakin University, Pigdons Road, Geelong, Victoria, 3217.

"**Research Expertise**" means the fields of expertise of Deakin University specified in Item 2 of Schedule 1.

"**Research Fields**" means the fields of diabetes, obesity, allergy, asthma and autoimmunity and such other fields as Autogen may include from time to time.

"**Research Proposal**" means the proposal developed by Dr Collier and IDI and attached in Schedule 2 of this Agreement.

"**R&D Program**" means the program of research and development work to be carried out by or on behalf of Deakin University pursuant to this Agreement in relation to the Project.

"**Sand rats**" means Psammomys obesus.

"**Stock Exchange**" means Australian Stock Exchange Limited.

"**Term**" means the Initial Term of this Agreement and any agreed extension in accordance with clause 3.

1.2 **Interpretation**

Where the context so permits, words importing the masculine gender shall include the feminine and neuter genders and vice versa and words importing persons shall include corporations and vice versa and words importing the singular number shall include the plural and vice versa (unless repugnant or inconsistent to the context in which they are used).

Any table of contents to this Agreement and any headings and marginal notations in this Agreement have been inserted for convenience only and shall not in any way limit or govern the construction of the terms of this Agreement.

2. APPOINTMENT OF DEAKIN UNIVERSITY

2.1 Autogen hereby appoints, and Deakin University accepts the appointment of, Deakin University to conduct the Project in accordance with the Research Proposal such appointment to take effect on and from the Commencement Date.

2.2 Deakin University shall provide the services of Dr Collier as the principal scientist to conduct the Project and supervise and direct the scientific staff engaged in the conduct of the Project.

2.3 The Project shall be carried out at the Project Location or as Dr Collier shall direct from to time.

2.4 Dr Collier shall select and Deakin University shall employ or engage, on contract, such scientific staff as shall be necessary to conduct the Project.

2.5 Deakin University may, subject to the prior written consent of Autogen, sub-contract the performance of any part or parts of the work for the Project provided that in so

doing the sub-contractor first enters into a confidentiality agreement on terms reasonably acceptable to Autogen including:

- a covenant not to infringe any Intellectual Property rights of Autogen, Deakin University and IDI;

- an acknowledgement that all Intellectual Property Rights arising from the carrying out of the sub-contracted work shall belong to Autogen Deakin University and IDI in accordance with this Agreement.

2.6 Deakin University shall at all times use its best endeavours to ensure that completion of the respective stages of the Project is achieved substantially in accordance with the timetable set out in the Project and in the Budgets and Workplans.

2.7 Deakin University shall at all times indemnify, hold harmless and defend Autogen and its respective officers, employees and agents (in this clause 2.7 referred to as "those indemnified") from and against any loss (including reasonable legal costs and expenses) or liability reasonably incurred or suffered by any of those indemnified arising from any suit, action or proceeding by any person against any of those indemnified where such loss or liability was caused by any wilful, unlawful or negligent act or omission of Deakin University, its employees, agents or sub-contractors in connection with this Agreement or by any Products infringing any person's Intellectual Property rights where such infringement was caused by any wilful, unlawful or negligent act or omission of Deakin University.

2.8 IDI shall make available to Deakin University, for the Project, Sand Rats owned by IDI.

3. TERM

This Agreement shall commence on the Commencement Date and shall continue (subject to the provisions as to termination hereunder) for the Initial Term. Not less than three months prior to the expiration of the Initial Term the parties shall determine whether this Agreement is to continue by mutual agreement. If no agreement is reached between the parties by the end of the Initial Term, this Agreement shall terminate at the end of the Initial Term. If agreement is reached between the parties prior to the end of the Initial Term, this Agreement shall continue to apply for the further term agreed by the parties subject to any written variations to this Agreement agreed by the parties.

4. FUNDING OF THE PROJECT

4.1 Subject to this Agreement, Autogen shall provide the Funding to finance the Project over the Term, in accordance with the payment program in Item 1 of Schedule 1.

4.2 Subject to this Agreement, Autogen shall provide the Funding for the Initial Term however Deakin University shall be required to achieve the milestones set in the Budgets and Workplans to an appropriate standard as specified in this Agreement.

4.3 Subject to sub-clauses 4.4 and 4.5, the Funding shall be used to pay for salaries of staff engaged in the conduct of the Project (save and except for Dr Collier whose salary shall continue to be paid by Deakin University).

4.4 Subject to sub-clauses 4.3 and 4.5, Deakin University shall ensure that no more than twenty per centum (20%) of the Funding shall be used for administration and infrastructure costs and that the balance of the Funding is properly applied directly to the Project.

4.5 Subject to sub-clauses 4.3 and 4.4, Deakin University shall use the Funding for the Project in accordance with the Budgets and Workplans or for such other research in the Research Fields as shall be agreed in writing by the parties.

4.6 Any equipment or materials purchased for use in the Project by Deakin University using the Funding and not incorporating any of the Intellectual Property shall become the property of Deakin University upon purchase, except where this Agreement is terminated pursuant to clause 10.1(a) hereof in which case such equipment and materials shall be the sole property of Autogen.

5. PERFORMANCE REVIEW

5.1 The parties shall review the progress of the Project every three (3) months.

5.2 The purpose of the reviews shall be to ascertain whether the stages targeted and milestones set in the Budgets and Workplans are being met at the appropriate times and to an appropriate standard.

5.3 Dr Collier shall three (3) months after the date of this Agreement, and every three months thereafter, provide Autogen and Deakin University with a written report for the purposes of the review setting out adequate details of the following:

(a) the progress of the Project work during the preceding 3 months, and whether all milestones which ought to have been reached during that period have been reached and best professional standards maintained;

(b) any material advances or developments;

(c) any material delays or unforeseen problems in the conduct of the Project;

(d) any recommendations on changes to the Project or associated Budgets and Workplans, including changes in direction of the Project;

(e) any other relevant information relating to or affecting the Project.

The report from Dr Collier shall be provided to the parties within fourteen (14) days of the end of the relevant three (3) month period.

5.4 Within fourteen (14) days after receipt of a report from Dr Collier pursuant to clause 5.3, Autogen may request, in writing to Deakin University, that any stage or part of the Project be varied, suspended or declared completed.

5.5 In addition to the reports under clause 5.3, Dr Collier on behalf of Deakin University will immediately advise Autogen in writing of any material advancements or developments as they occur.

5.6 Any dispute between the parties concerning a request made under clause 5.4 hereof, shall be determined under the provisions of clause 13 hereof.

5.7 If so requested by Autogen, the parties shall meet to consider the report from Dr Collier pursuant to clause 5.3, and to discuss the progress of the Project and any variation or suspension of the R&D Program.

5.8 Subject to clause 4.2, if Autogen after consulting with the parties is, in Autogen's sole and absolute discretion, satisfied as to the progress of the Project after each review pursuant to this clause 5, and the R&D Program has not been suspended or declared completed pursuant to clause 5.4, Autogen shall make the Funding payment specified in Item 1 of Schedule 1.

6. OWNERSHIP OF INTELLECTUAL PROPERTY

6.1 The parties acknowledge and agree that all Intellectual Property developed acquired or created either directly or ancillary to the Project shall belong to and be the property of Autogen as to 90%, Deakin University as to 5% and IDI as to 5%.

6.2 The parties acknowledge and agree that all Pre-existing Intellectual Property is owned by Deakin University except the Patent which is owned by the Patent Applicants and has been exclusively licensed to Deakin University. Deakin University shall make available all Pre-existing Intellectual Property including, with the consent of the Patent Applicants, the Patent free of charge for use in the Project. Deakin University warrants the written consent of the Patent Applicants has been obtained for the purposes stated.

6.3 All discoveries inventions secret processes designs or improvements in procedure or methods made or discovered by any party during the currency of this Agreement arising from the Project, shall belong to Autogen, Deakin University and IDI in the proportions specified in clause 6.1.

6.4 Autogen, Deakin University and IDI may jointly take out and maintain appropriate protection for all new discoveries and developments made under the Project and the parties shall assist each other in applying for letters patent, or other Intellectual Property protection in Australia or in any other part of the world for all such discoveries and developments and execute all instruments and do all things necessary for vesting the said letters patent or other Intellectual Property protection and rights when obtained and all right and title to and interest in the same in Autogen, Deakin University and IDI. Autogen, Deakin University and IDI shall bear the costs of taking out and maintaining appropriate protection for all new discoveries and developments made under the R&D Program in the proportions specified in clause 6.1.

6.5 Deakin University and IDI hereby grant to Autogen for a term of twenty-five (25) years, from the Commencement Date, an exclusive, worldwide licence of the Pre-Existing Intellectual Property and the Intellectual Property and Autogen shall have the right to sub-licence its rights and to decide in its absolute discretion as to how the Intellectual Property and the Products are to be commercially exploited.

6.6 If the Products are successfully commercialised, Autogen shall pay to Deakin University an annual royalty based on one percent 1% of the Net Sales Revenue.

6.7 If the Products are successfully commercialised, Autogen shall pay to IDI an annual royalty based on one percent 1% of the Net Sales Revenue.

6.8 Autogen shall solely decide upon whether and, if so, the terms and conditions upon which, to develop and commercially exploit the Intellectual Property and the Products whether by licensing or otherwise, throughout the world. All income and royalties derived from the development and commercialisation of the Intellectual Property and the Products shall, subject to clauses 6.6 and 6.7, belong to Autogen solely.

7. CONFIDENTIALITY

7.1 All information relating to the Project which is supplied by or on behalf of Autogen, or which relates to or arises from the Project, shall be treated by Deakin University, IDI and Dr Collier as confidential and shall be used solely during the Term of and in accordance with this Agreement to enable Deakin University and its sub-contractors to carry out the Project.

7.2 Prior to disclosing any of the Confidential Information to any of Deakin University's or IDI's employees or subsidiaries or related companies or sub-contractors Deakin University or IDI (as the case may be) will procure the execution by the party in question of a Deed as set out in Schedule 5 or otherwise in the form and substance satisfactory to Autogen whereby the person to whom it is intended to disclose any of the Confidential Information undertakes to maintain the same in confidence and acknowledges Autogen's interest therein.

7.3 Deakin University and IDI hereby undertake and agree that, except for such disclosure as is prudent and reasonably necessary for the purposes of this Agreement, no part of the Confidential Information given to it pursuant to this Agreement shall be disclosed to anyone who is not an employee or sub-contractor of Deakin University and/or IDI except with Autogen's prior written approval which if given shall be on the basis that the recipient of any part of the Confidential Information shall first be bound to Deakin University and Autogen or IDI and Autogen as the case may be by contract to maintain the same in confidence. Without prejudice to the foregoing Deakin University and/or IDI shall use its best endeavours to take all reasonably necessary steps to prevent the Confidential Information from passing into the public domain.

7.4 Nothing stated herein shall be construed as restricting or creating any liability for the disclosure or communication of Confidential Information which:

(a) is now or becomes publicly known through no wrongful act of Deakin University and/or IDI as the case may be;

(b) is received from a third party without restriction and without breach of this Agreement;

(c) is now or comes to be contained in any published patent or published or otherwise generally known to the trade through no wrongful act of Deakin University and/or IDI as the case may be; or

(d) is disclosed pursuant to governmental legislative or judicial requirement, including disclosure by AWI pursuant to its obligations under the Corporations Law or the Stock Exchange listing rules.

7.5 The obligations set out in this clause 7 shall remain in full force and effect, and shall continue to bind each of the parties, notwithstanding that this Agreement may have been terminated, or one of the parties may have ceased to be a party to this Agreement, for any reason.

8. LIABILITY AND OBLIGATIONS

8.1 Each party agrees during the period of this Agreement and at all times thereafter to indemnify and hold harmless the other parties against any and all actions, suits, proceedings, claims, demands, costs, penalties, expenses (legal or otherwise) or losses whatsoever which may arise out of or in respect of or in any way connected with the conduct of the Project in that party's laboratories or which any tests or trials that may be carried out in connection therewith or as a result of any act or omission of any servant or agent or sub-contractor of that party in respect of the foregoing.

8.2 Each party covenants and undertakes that the work under the Project including the carrying out of all tests and trials will at all times be conducted to the highest possible professional standards and in accordance with all applicable rules, regulations and conditions and in particular will procure that no actions suits or proceedings will be made against the other parties in respect of or in connection with the conduct of the work under the Project.

8.3 Deakin University shall be responsible for obtaining necessary regulatory approval (if any), by any and all government agencies, for conducting research and development work in the field of the Project in Australia. Deakin University shall deliver copies of all such approvals (if any) to Autogen within seven (7) days of receipt of such approvals by Deakin University. Deakin University may pay from the Funding the costs of any infrastructure required in order to obtain regulatory approval provided that the limitation for use of the Funding in clause 4.4 shall not be exceeded.

8.4 Autogen is a subsidiary of AWI, which is listed on the Stock Exchange. IDI and Deakin University are aware that the Corporations Law prohibits insider trading and shall use their best endeavours to ensure that their employees and contractors are also made aware of such prohibition. IDI and Deakin University are aware of the continuous disclosure requirements applicable to companies listed on the Stock Exchange and shall use their best endeavours to ensure that their employees and contractors are also aware of such requirements and shall advise Autogen in writing of any material advancements or developments as they occur.

9. PUBLICATION

9.1 Neither Deakin University nor IDI shall (and shall procure that Dr Collier shall not), without the prior written approval of Autogen, publish in academic or scientific publications the results of any part of the Project. Autogen may withhold its approval if in its opinion that, having regard to commercial considerations, publication would not be appropriate in the circumstances.

9.2 Prior to submission for publication of any proposed paper, the party proposing to publish the same shall forward a copy of the paper to Autogen, at the same time as requesting approval for publication.

9.3 Each such request for approval for publication shall be made in sufficient time to allow for the filing (on behalf of Autogen, Deakin University and IDI) of provisional patent applications, if considered appropriate.

9.4 The publishing party shall make appropriate acknowledgement in the publication, of Autogen's involvement and interest in the subject matter of the publication.

9.5 If Autogen has not developed and commercially exploited the Intellectual Property and the Products within eighteen (18) months of the expiration of this Agreement, Deakin University may seek approval in writing from Autogen to publish in academic or scientific publications the results of any part of the Project. Autogen shall solely decide if such approval shall be granted. If such approval is granted, it may be on such conditions as Autogen may, in its absolute discretion, specify.

10. TERMINATION

10.1 For the purposes of this clause, a ground of termination shall occur under this Agreement:

(a) if Deakin University fails to commence work on the Project within thirty (30) days of the date of this Agreement; or

(b) if Deakin University fails to achieve the milestones set out in the Budgets and Workplans or maintain the best professional standards; or

(c) the Project is not, in the opinion of Autogen, producing or likely to produce results from the Project which can be commercialised by Autogen; or

(d) Deakin University does not utilise Dr Collier or such other researchers as Autogen in its absolute discretion deems appropriate to work on the Project; or

(e) if the parties do not agree by the end of the Initial Term to continue this Agreement as required by clause 3.

10.2 In the event of Deakin University being in default under this Agreement as specified in clause 10.1, Autogen may, by notice in writing to Deakin University and IDI immediately terminate this Agreement in whole or in part without prejudice to any right of action or remedy which has accrued or which may accrue in favour of either party.

10.3 In the event of termination under this clause 10, Autogen may, by notice in writing to Deakin University, require Deakin University to make available to Autogen all information relating to the Project and to assign any Intellectual Property relating to the Project not already owned by Autogen to Autogen by the date specified in the notice.

10.4 If Autogen ceases to provide the Funding pursuant to clause 5.8 hereof, Deakin University and/or IDI may give thirty (30) days written notice to Autogen of the intention of Deakin University and/or IDI to terminate this Agreement and unless

Autogen resumes payment of the Funding within the 30 day period, this Agreement shall terminate at the expiration of the thirty (30) day period.

11. CO-OPERATION AND ASSISTANCE

11.1 Deakin University shall, and shall use reasonable efforts to ensure that all persons employed or contracted by Deakin University working on the Project shall, co-operate fully with Autogen both during the Term of this Agreement and after the termination of this Agreement to provide Autogen with such information concerning the Project as Autogen may require from time to time and such assistance as Autogen may require in applying for Intellectual Property rights throughout the world.

11.2 Deakin University shall, and shall use reasonable efforts to ensure that all persons employed or contracted by Deakin University working on the Project shall, ensure that all information concerning the Project is promptly communicated to Autogen and that Autogen is provided with all necessary technical explanations and data to ensure that Autogen is fully informed as to the progress and status of the Project.

11.3 Deakin University shall, and shall use reasonable efforts to ensure that all persons employed or contracted by Deakin University working on the Project shall, provide such assistance to Autogen as may be required by Autogen both during the term of this Agreement and thereafter during the commercialisation period in the commercialisation of the results of the Project.

11.4 After the expiration or earlier termination of this Agreement, none of IDI, Dr Collier or Deakin University shall be engaged in any research project similar to the Project using the Research Expertise for a period of six months thereafter throughout Australia.

12. GENERAL

12.1 This Agreement shall be governed by, and construed in accordance with the laws of the State of Victoria, Australia, and the parties hereto submit to the non-exclusive jurisdiction of the courts of such State. All disputes arising between the parties out of or in connection with this Agreement in any way, shall also be resolved or determined according to the laws of the State of Victoria, or if those laws are inapplicable, then the laws of the Commonwealth of Australia.

12.2 If it is held by a court of competent jurisdiction that:

(a) any part of this Agreement is void voidable illegal or unenforceable; or

(b) this Agreement would be void voidable illegal or unenforceable unless any part of this Agreement was severed from this Agreement,

that part shall be severable from and shall not affect the continued operation of the rest of this Agreement

13. ARBITRATION

13.1 The parties agree that in the event of any dispute arising under or in connection with this Agreement, such dispute shall be referred for determination by an arbitrator, appointed by the President of the Institute of Arbitrators Australia.

13.2 In determining any dispute arising under or in connection with this Agreement, the arbitrator appointed pursuant to clause 13.1 hereof shall be required to restrict himself to deciding which of the views of the parties in dispute is correct, and shall make a determination in accordance with that decision.

13.3 Subject to clause 13.2 any arbitration carried out hereunder shall be in accordance with the provisions of the Commercial Arbitration Act 1984, and the parties agree that they shall have the right to be legally represented before the arbitrator.

13.4 The arbitrator's decision shall be accepted by the parties as a final determination of the matter in dispute and binding upon them.

13.5 A party may commence court proceedings relating to any dispute arising from this Agreement at any time where that party seeks urgent interlocutory relief.

14. NOTICES

14.1 Any notice (which expression shall also include a demand, request, consent or instrument required or authorised to be given to or served on any party under this Agreement)

(a) shall be in writing and signed by or in the case of a facsimile transmission shall be a true copy of an original signed by (in the case of a notice by Autogen) any director or the secretary of Autogen; (in the case of a notice by Deakin University), the Vice Chancellor or any Deputy or Assistant Vice Chancellor of Deakin University or (in the case of a notice by IDI) by the Chief Executive Officer of IDI;

(b) shall be given either:

(i) by being delivered by hand to (in the case of a notice to Autogen) its above mentioned address, attention: Company Secretary; or (in the case of a notice to Deakin University) its abovementioned address, attention: Vice Chancellor; or (in the case of a notice to IDI) its abovementioned address, attention: Chief Executive Officer; or

(ii) by facsimile transmission to (in the case of Autogen) 95102248, attention: Company Secretary; or (in the case of Deakin University) 52278500 attention: Vice Chancellor; or (in the case of IDI) 92585090 attention: Chief Executive Officer;

and a notice given by facsimile transmission shall be deemed to have been given upon the issue to the transmitter of a satisfactory transmission control report indicating due transmission without error.

14.2 The undermentioned signatories hereby acknowledge that they have not received notice of the revocation of the authorisation under which they have respectively executed this Agreement.

15. CONTINUING OBLIGATIONS

The provisions of clauses 2.7, 4.2, 6, 7, 8.1, 9 and 11 shall remain in full force and effect, and shall continue to bind each of the parties, notwithstanding that this Agreement may have been terminated, or one of the parties may have ceased to be a party to this Agreement for any reason.

IN WITNESS WHEREOF this Agreement has been duly executed by the parties hereto on the day and year first hereinbefore written.

THE COMMON SEAL of **AUTOGEN PTY LTD ACN 074 636 847** was affixed by the authority of the Board of Directors in the presence of:

.....	.....
(Signature of Secretary/Director)	(Signature of Director)
JOSEPH HAYDEN BARRY	EDUARD ESHUYS
.....	.....
(Name of Secretary/Director in Full)	(Name of Director in Full)

SIGNED by the authorised representatives for DEAKIN UNIVERSITY

.....	.....
Signatory	Signatory
Professor Geoff Wilson	Russell Elliott
.....	.....
Print Name of Signatory	Print Name of Signatory
Vice-Chancellor	Vice-President (Administration)
.....	.....
Position of Signatory	Position of Signatory

By executing this Agreement the signatories warrant that they are duly authorised to execute this Agreement on behalf of DEAKIN UNIVERSITY.

THE COMMON SEAL of **INTERNATIONAL DIABETES INSTITUTE ACN 007 342 412** was affixed by the authority of the Board of Directors in the presence of:

.....	.....
(Signature of Secretary)	(Signature of Director)
ARTHUR LESLIE WALMSLEY	NOEL STEWARD
.....	.....
(Name of Secretary in Full)	(Name of Director in Full)

SCHEDULE 1

Item 1 Funding: $250,000 per annum.

Payable by Autogen to Deakin University as follows:

$50,000 upon signing this Agreement

$50,000 upon commencement of the R&D Program

$50,000 upon satisfactory completion of 3 month review

$50,000 upon satisfactory completion of 6 month review

$50,000 upon satisfactory completion of 9 month review

Commencement of the R&D Program shall be notified to Autogen in writing by Deakin University and Dr Collier following the commencement of the work required by the Budgets and Workplans. Upon receipt of such written notice Autogen shall pay to Deakin University the payment due upon the commencement of the R&D Program.

Funding: If this Agreement is extended beyond the Initial Term pursuant to clause 3, the parties shall agree in writing the Funding for the Term. Payments shall be upon receipt by Autogen of further three monthly reports as required pursuant to clause 5.3.

Item 2 Research Expertise: The fields of obesity and diabetes.

Item 3 Commencement Date: 14 February 1997.

SCHEDULE 2

Research Proposal

LAY DESCRIPTION OF THE PROJECT

Novel therapies for the treatment of obesity

The primary aim of this research program is to discover novel genes that will be integral to the development of new therapeutic approaches directed at the treatment and prevention of obesity.

The unique feature of this program is the availability of the Israeli Sand Rat colony at Deakin University. The Israeli Sand Rat is the only animal model which develops a broad spectrum of defects in food intake, body fat and diabetes comparable to similar defects measured in humans. For example, it is possible in the Israeli Sand rat to find 2 offspring from the same parents, one will remain lean and free from diabetes, while the other overeats and subsequently develops obesity. Both of these animals have exactly the same environmental influences - **Why does one overeat??**

By utilising the latest techniques available in molecular biology (gene fingerprinting) we will be able to determine the different genes being expressed in obese animals - isolate these genes and determine their role in obesity development. Novel genes uncovered will be patented and their metabolic potential determined. Over 50 studies have been published this year utilising this new and powerful technique. These publications have covered a wide range of disciplines including cancer, botany, respiratory disease, muscular dystrophy, osteoporosis and obesity and have resulted in the description of a number of novel genes.

Another separate, but complimentary component of this program will be the testing in the Israeli Sand Rat of new therapeutic approaches to obesity control. The unique feature of the Israeli Sand Rat also makes it the animal of choice when determining the potential of new drug therapies.

We currently have a number of developmental drugs to be tested. One example is our research interest in nicotine analogues. We have interesting preliminary data linking smoking with increased sensitivity to a potential satiety signal (leptin) in humans. Our data supports the notion that nicotine withdrawal after cessation of smoking may result in increased appetite and subsequent weight gain. This opens therapeutic avenues to explore nicotine analogues (without the detrimental side effects of nicotine) to be tested in the Israeli Sand rat. We have a patent application covering this developmental research and in collaboration with chemists at the Institute for Diabetes Discovery in CT, USA a variety of nicotine analogues will be prepared and tested for therapeutic potential in the Israeli Sand rat.

In summary, the availability of first class animal research facilities at Deakin University coupled with new molecular biology techniques and the unique features of the Israeli Sand rat makes this an exciting prospect for major new discoveries.

PROJECT OUTLINE

Introduction

A major feature of this research program is the availability of a unique animal model for the study of obesity and diabetes, the Israeli Sand rat (*Psammomys obesus*). At Deakin University we breed one of only 3 research colonies of this animal in the world. The Israeli Sand rat is an excellent animal model for the study of obesity and NIDDM as it appears to mimic the development of obesity and diabetes in susceptible human populations. In the wild state, animals remain lean and free from diabetes, however, in the laboratory with food available *ad libitum*, a broad spectrum of hyperglycaemia, hyperinsulinemia, impaired glucose tolerance, and obesity develops. Over the past five years we have established a colony of sand rats at Deakin University and during the last three years further characterised the metabolic defects that appear in this animal model.

Despite our extensive studies characterising the defects that occur in sand rats, the underlying reason why some animals develop obesity and diabetes while others remain lean and healthy is unclear. These animals display characteristics similar to predisposed human populations at increased risk of developing obesity and NIDDM, and both could carry the "thrifty gene". In this research program we have the opportunity to combine physiological and molecular biology techniques to discover novel genes involved in the heterogeneous development of diabetes and obesity in this colony.

Explanation of Commercial Potential

The discovery of new genes related to the development of diabetes and obesity will have far-reaching implications for prevention and treatment of these major western diseases. In addition the animal model because of its characterised features similar to human obesity and NIDDM make it the animal of choice when testing potential new therapies aimed at either prevention or treatment of these conditions.

Overall Research Plan

The overall research plan will span a 5 year period, but can be broadly divided into 2 major stages:

Stage 1:

This stage will aim to uncover new genes involved in the development of NIDDM and obesity. The genes discovered will be sequenced and if novel will be patented and their protein products expressed.

Stage 2:

This stage will involve investigating the physiological role of newly discovered peptides from stage 1. In addition, intervention and prevention studies will be performed in the Israeli Sand rat using potential new therapies.

Stage 1 of the proposal will be ongoing for the duration of the program. The experiments involved are labour intensive and will uncover many differentially expressed genes in obese or diabetic tissues. The ability to discover new genes is exciting and potentially very rewarding. Stage 2 will not only investigate the new gene products discovered in Stage 1,

but will immediately begin with the testing of a number of existing new therapies as outlined below.

The final outcome of this 5 year research program will be the discovery of new potential therapies tested physiologically in the best animal model available for obesity and NIDDM and ready for progression to the next stage of development.

Brief Research Outline

Israeli Sand Rat Colony:

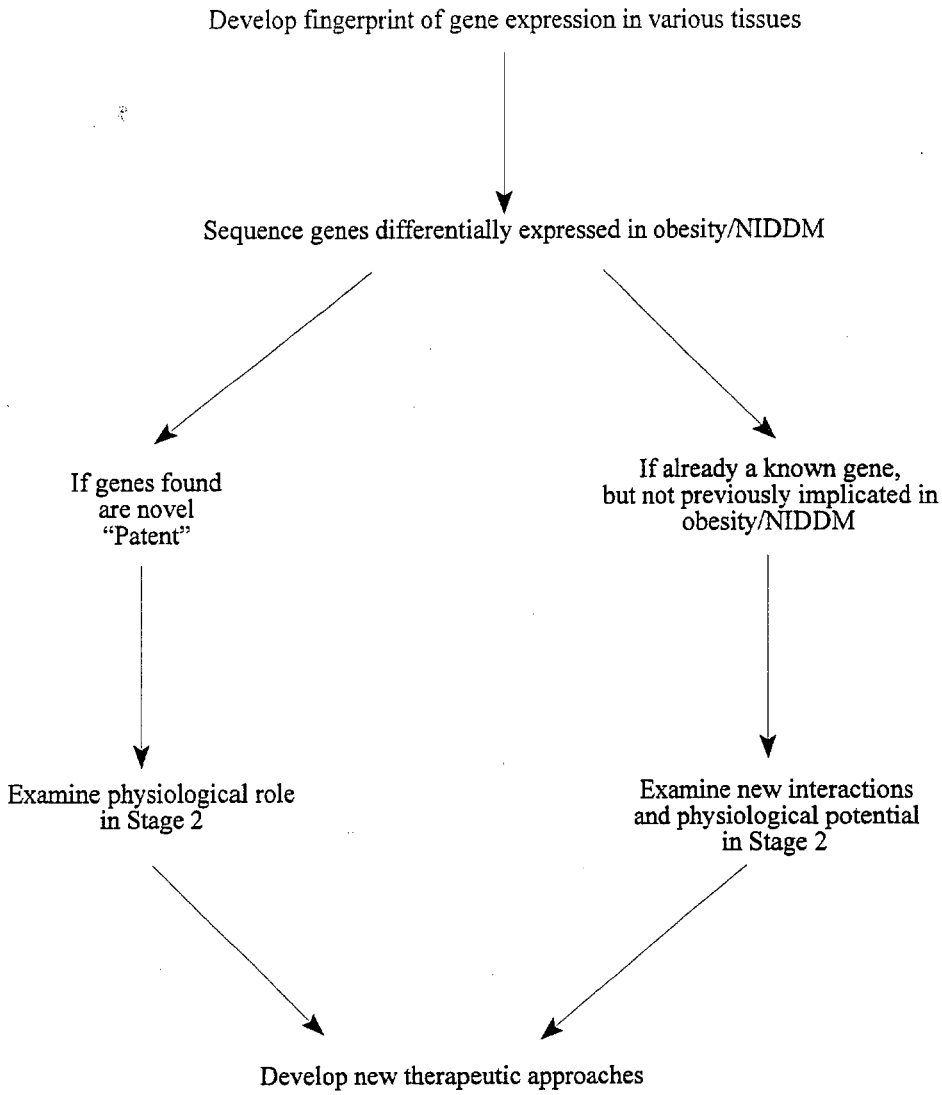
The success of this project is dependent on a healthy and viable colony of Israeli Sand rats. The colony at Deakin University will be expanded to facilitate the planned experiments over the 5 year period. The animal housing facility, both breeding and experimental housing at the university are first class and will not provide excellent infrastructure for the program. To expand the colony and maintenance of the ongoing animal demands and the continual care and health of the colony will require recruitment of suitably trained staff. In addition, initial infrastructure costs for the expansion of the colony, including caging and racks will be needed in the first year.

Stage 1:

As described above this part of the research will continue for the 5 years of the program.

Why do some animals develop these physiological defects and proceed through obesity to diabetics, while other animals (even in the same family) remain lean and non-diabetic? The specific aim of this project will be to utilise the new and exciting technique of differential display polymerase chain reaction (ddPCR) to uncover differences in tissue gene expression in sand rats that naturally develop obesity and diabetes compared with lean non-diabetic animals. ddPCR is a powerful procedure for detection of differentially expressed genes. It permits the simultaneous identification of genes that are up or down regulated under different conditions.

Two recent publications have highlighted the effectiveness of this technique. A recent report in Nature, identified that melanin concentrating hormone (MCH) was differentially expressed in *ob/ob* mice and when purified and injected into the brain of *ob/ob* mice dramatically increased food intake. Previously MCH had no known physiological function! In another recent publication a new gene product was discovered expressed in the adipose tissue of obese mice and called ADIPOQ. In the current research program, various tissues including brain, liver and skeletal muscle will be isolated from lean, non-diabetic and obese sand rats and ddPCR will be performed to examine all differentially expressed genes. This technique has been established in our laboratory over the past 12 months. By linking defects exposed by this technique with physiological defects in animals, we will be able to pursue metabolic pathways not previously linked with development of diabetes and obesity.



As discussed above this is a large ongoing project and will require the appointment of 2-3 key experienced researchers. This will increase the productivity and allow the systematic examination of very large numbers of tedious but potentially rewarding experiments. There will also be an initial outlay for infrastructure costs to increase the productivity of the current research laboratory to ensure that the numbers of experiments can be carried out during the program maximising the change of success.

Stage 2:

The Israeli Sand rat has already been used successfully in our laboratory in a number of intervention and treatment experiments. In intervention studies the effects of fatty acid oxidation inhibition have been examined with daily intraperitoneal injections of a specific inhibitor, Etomoxir. These studies demonstrated the ability of this treatment to improve glucose metabolism and insulin sensitivity in diabetic animals. In addition, exercise interventions and energy restriction experiments have highlighted the reversible nature of the defects in energy balance and glucose metabolism. We have also performed prevention

studies, limiting the food intake of animals from weaning. These experiments clearly demonstrated the prevention of diabetes development with the restriction of energy intake. These studies highlight the suitability of this animal model for experiments testing the efficacy and mode of action of new potential drug therapies.

This stage will involve investigation of the physiological role of new peptides found in Stage 1 described above and the immediate testing of a number of possible therapeutic agents to treat diabetes, obesity and cardiovascular disease.

Obesity

Structurally altered nicotine based agents will be tested for their therapeutic potential. We have applied for provisional patents. The structural chemistry can be performed in collaboration with a company with structural chemistry expertise and we will perform the physiological experiments at Deakin University.

Important factors essential for a successful research program

1. First class facilities.
2. Top quality research scientists.
3. Unique research plan.
4. Constant interaction with leading international research groups.
5. Continual international peer review of research findings.

SCHEDULE 3

Budgets and Workplans

STAGE

Equipment	10,000 2,000 15,000 13,000 3,000	thermal cycler power supplies ddPCR apparatus -85° freezer -20° freezer, fridges, etc
Administration	10,000	computers, journals, etc.
Maintenance	13,000 15,000 4,000	ddPCR, radiochemicals and consumables physiological experiments, assays, and consumables animal colony maintenance
Staff	45,000 45,000 25,000	post-doctoral scientist (+on-cost) graduate research scientist (+on-costs) part-time animal technician support (+on-cost)
University infrastructure costs	50,000	10% University, 5% Faculty, 5% School
TOTAL BUDGET	**$250,000**	

STAGE 1: NOVEL THERAPIES FOR THE TREATMENT OF OBESITY
MILESTONES FOR OCTOBER 1996 - SEPTEMBER 1997

1. OCTOBER - DECEMBER 1996

The first three months of the project will involve recruitment of new staff and purchasing of new equipment necessary for the project. The equipment to purchase and the staff necessary are outlined in Stage 1 of the research proposal. The specific milestones to be reached in the first three months are outlined below.

(a) New equipment purchased and established in laboratory.

(b) Appointment of a key post-doctoral position (3 years) to begin as early as possible (January 1997).

(c) Appointment of an animal technician to maintain the Israeli Sand Rat (*Psammomys obesus*) colony; continue to increase breeding pair numbers to accommodate the new projects.

(d) Begin preliminary studies investigating the effectiveness of nicotinic acid in regulating energy balance and body weight control in *Psammomys obesus*.

2. JANUARY - MARCH 1997

(a) Appointment of second full-time position - dedicated to the discovery of new genes expressed in obesity using the ddPCR technique.

(b) Establish the reproducibility and reliability of the ddPCR technique. At this stage, ddPCR should be a routine technique in our laboratories.

(c) Finish preliminary studies of the effectiveness of nicotinic acid in energy balance and body weight control. At this stage, the future of these studies should be decided.

3. APRIL - JUNE 1997

(a) Initial comparisons of differentially expressed genes in hypothalamus and adipose tissue of lean and obese animals. This stage will involve a large number of experiments attempting to amplify via PCR large numbers of differentially expressed genes in obese and lean animals.

(b) Further physiological studies on nicotinic acid or derivatives.

4. JULY - SEPTEMBER 1997

During this stage the initial genes of interest will be identified by comparing lean and obese gene expression. Preliminary screening will be undertaken to eliminate false positives or spurious bands. Based on the appearance of differentially expressed genes in obese animals, bands will be cloned and sequenced. At this stage, is expected that a number of key genes will be identified for future studies.

SCHEDULE 4

Pre-existing Intellectual Property

The Patent

Australian Provisional Patent Application No. PO 1085/96 (annexed hereto) entitled "Treatment of Obesity" filed on 18 July 1996.

The Patent Applicants

IDI, Paul Zev Zimmet of 24 Linlithgow Road Toorak Victoria 3142, Roderick Alan Westerman of care of 260 Kooyong Road Caulfield Victoria 3162 and Dr Collier

Licence Agreement

Between the Patent Applicants and Deakin University dated the 20th day of February 1997 (annexed hereto).

agree178

THIS LICENCE AGREEMENT made at Melbourne on 20 February 1997.

BETWEEN

PAUL ZEV ZIMMET of 24 Linlithgow Road, Toorak 3142

RODERICK ALAN WESTERMAN, of 260 Kooyong Road
Caulfield 3162

GREGORY ROYCE COLLIER of 22 Kestrel Avenue
Ocean Grove 3226
(jointly "the Patentors")

- and -

DEAKIN UNIVERSITY a body politic and corporate established pursuant to the *Deakin University Act 1974* of Geelong 3217 in the State of Victoria (hereinafter called "Deakin")

RECITALS

A. The Patentors are the beneficial owners of Australian Provisional Patent Application No PO 1085/96 entitled "Treatment of Obesity" ('the Patent").

B. Deakin, having research expertise in the field of obesity, proposes to enter into a Research Agreement ("the Principal Agreement") with Autogen Pty Ltd ACN 074 636 847 of 8th Floor, 580 St Kilda Road, Melbourne 3004, and International Diabetes Institute ACN 007 342 412 of 260 Kooyong Road, Caulfield, 3162 to which this Licence annexed.

C. The Patentors have licensed the Patent exclusively to Deakin to enable it to better perform its obligations pursuant to the Research Agreement.

THE PARTIES AGREE:

1. This Agreement shall commence on 31 January 1997 and shall continue for the duration of the Principal Agreement and any extensions thereof.

2. The Patentors hereby grant to Deakin a licence with a right to grant sub-licences to use the intellectual property contained in the Patent for the purposes and to the extent required by Deakin's responsibilities under the Principal Agreement.

3. The Patentors represent, warrant and undertake to Deakin that:

(a) neither the execution of this Agreement nor the performance by the Patentors of their obligations will cause the Patentors to be in breach of any agreement to which they are a party or are subject:

(b) the Patent is presently subsisting and the particulars as set out in this Agreement are true and correct;

(c) the Patentors have the full right and title to the Patent and the invention the subject of the Patent;

(d) the Patent Application (comprised in the Patent) has been made in the prescribed form and the prescribed manner;

(e) the Patentors have not granted any licences or other user rights to any person in relation to any right, title or interest in the Patent or the invention the subject of the Patent;

(e) the Patentors have not granted any licences or other user rights to any person in relation to any right, title or interest in the Patent or the invention the subject of the Patent;

(f) the Patentors have not entered into any agreement or arrangement involving the sale, mortgage, pledge, granting of options or any other rights over the Patentors' right, title and interest in the Patent or the invention the subject of the Patent;

(g) the use by Deakin and any sub-licensee of Deakin of the Patent or the invention the subject of the Patent will not infringe any patent, trade mark, registered design, copyright or similar or other industrial commercial property right of any person nor give rise to payment by Deakin or any sub-licensee of Deakin of any royalty to any third party or any liability to pay compensation;

(h) the Patentors are not aware of any fact by which the Patent may be declared invalid or any claim by which the Patent should be amended; and

(i) the Patentors shall use their best endeavours to obtain a grant of letters patent in respect of the invention the subject of the Patent.

4. The Patentors will provide the intellectual property contained in the Patent together with any know how and trade secrets to Deakin for the purposes of this Agreement.

5. Deakin will pay to the Patentors a one-off licence fee of One Dollar ($1.00), receipt of which is hereby acknowledged.

6. If any dispute arises between the parties hereto pursuant to this Agreement, it shall:

(j) upon mutual agreement of the parties, be referred to mediation: or

(k) at either party's option or by mutual agreement, be referred to arbitration in accordance with the *Commercial Arbitration Act 1984 (Vic)*, and each party may be represented by a qualified legal practitioner or by the representative of their choice.

7. Each party may terminate this Agreement at any time upon written notice of the other if the other party defaults by failing to perform any substantial obligation on its party. The termination will become effective thirty days after receipt of written notice unless during the relevant period of thirty days the defaulting party has remedied the default or (if the default is not capable of remedy within thirty days) is diligently proceeding to cure the default by taking active, effective and continuing steps to do so and the default is in fact cured within a reasonable period of time after receipt of the relevant notice.

8. Variations of this Agreement shall be made in writing and signed for and on behalf of the parties to this Agreement.

SIGNED as an agreement.

SIGNED by **PAUL ZEV ZIMMETT**)
in the presence of:) (Signature)

(Signature of Witness)

ARTHUR LESLIE WILKINSON
(Name of Witness in Full)

SIGNED by **RODERICK ALAN**)
WESTERMAN in the presence of:) (Signature)

(Signature of Witness)

ARTHUR L WILKINSON
(Name of Witness in Full)

SIGNED by **GREGORY ROYCE COLLIER** in the presence of:

(Signature)

(Signature of Witness)

Z.J HICKS

(Name of Witness in Full)

SIGNED for and on behalf of **DEAKIN UNIVERSITY** by its duly authorised officers in the presence of:

Vice-Chancellor

Vice-President (Administration)

By executing this Agreement the signatories warrant that they are duly authorised to execute this Agreement on behalf of DEAKIN UNIVERSITY.

International Diabetes Institute
AND
Paul Zev Zimmet
AND
Roderick Alan Westerman
AND
Gregory Collier

A U S T R A L I A
Patents Act 1990

PROVISIONAL SPECIFICATION
for the invention entitled:

"Treatment of Obesity"

The invention is described in the following statement:

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TREATMENT OF OBESITY

Field of the Invention:

The invention relates to the treatment of obesity in all subjects, whether diabetic or nondiabetic, with or without concomitant other therapies, and in particular it relates to a novel method of treatment using nicotinic mechanisms and compounds active at nicotinic binding sites and affecting other relevant sites such as leptin, neuropeptide Y (NPY), galanin, serotonin or dopamine receptors in nerve cells to increase the sensitivity of brain responsiveness to leptin.

Background of the Invention:

The positional cloning of the obese (*ob*) gene (1) and the subsequent preparation of its encoded product, leptin (2,3), have provided powerful fresh impetus for research relating to the aetiology and control of obesity. Friedman and his coworkers have suggested that leptin, a 16 kilodalton protein, may be involved in a feedback loop as a sensing hormone ie. "lipostat", from adipose tissue to a leptin receptor in the hypothalamus (2), responding to the size of adipose tissue mass. Recently, leptin receptors have been located in the hypothalamus of the diabetic (*db*) mouse (4) providing further support for the feedback hypothesis that was generated over 20 years ago by Coleman et al from parabiosis experiments in obese (*ob/ob*) and diabetic (*db/db*) mice (5).

The present invention provides a method for the treatment of obesity, or for the prevention of obesity in persons pre-disposed to obesity, in which the sensitivity of hypothalamic leptin or other receptors, such as NPY etc, is modified so that leptin synthesis is modulated and as a consequence body weight is controlled.

Summary of the Invention:

In one aspect, the present invention relates to a method for the treatment of obesity in a patient, which comprises administration to the patient of an effective amount of nicotine or a nicotine analogue.

In another aspect, the present invention relates to a method for the prevention of obesity in a patient pre-disposed to obesity, which comprises administration to the patient of an effective amount of nicotine or a nicotine analogue.

Preferably, the patient is a human patient, and the methods of the present invention extend to treatment or prevention of obesity in both diabetic and non-diabetic patients.

Nicotine is of course a well known substance. It is to be understood, however, that the present invention also extends to the use of nicotinic analogues such as ABT 418, (+)-2-methylpiperidine, and other agonists or antagonists of nicotine shown to alter the brain and hypothalamic responsiveness to leptin. Various nicotine analogues which are agonists or antagonists of nicotine are disclosed by Williams M *et al* (1994) Drug News and Perspectives, Vol. 7, No. 4, 205-223, the contents of which are incorporated herein by reference. The present invention extends to the use of these nicotine analogues, particularly those which are selective for the hypothalamic leptin receptors in humans.

In view of the ethical dilemma of the use of nicotine, the active nicotine component in tobacco smoke, for any therapeutic or prophylactic purpose, the use of nicotine analogues as discussed above, such as ABT 418, and (+)-2-methylpiperidine, in the method of this invention may be preferable. Such nicotine analogues may also have fewer side effects, and may be tailored to the specific hypothalamic nicotine acetylcholine receptor (nAchR) epitope which may be involved in the modulation of leptin receptor sensitivity, either directly or indirectly.

It will be understood that the present invention extends to combination therapy in which more than one active component is used in the therapeutic and prophylactic methods of treatment of obesity. Thus, combinations of nicotine and nicotine analogues may be used in such combination therapy, including a combination such as an agonist together with an antagonist which may be particularly useful in modulating leptin sensitivity and weight gain.

In addition, the use of nicotine and nicotine analogues in accordance with the present invention may be combined with the use of leptin in an synergistic treatment of obesity in order to improve the sensitivity to leptin and to achieve the same therapeutic or prophylatic effect in treating obesity at lower doses and cost. Such a synergistic treatment may involve either co-administration or separate administration of leptin with the active component(s) of the present invention.

Conveniently, in both therapeutic or prophylactic use in treatment of obesity, the nicotine or nicotine analogue will be administered in the form of a pharmaceutical composition. The formulation of such pharmaceutical compositions is well known to persons skilled in this field. Suitable pharmaceutically acceptable carriers and/or diluents include any and all conventional solvents, dispersion media, fillers, solid carriers, aqueous solutions, coatings, antibacterial and antifungal agents, isotonic and absorption delaying agents, and the like. The use of such media and agents for pharmaceutically active substances is well known in the art, and it is described, by way of example, in *Remington's Pharmaceutical Sciences*, 18th Edition, Mack Publishing Company, Pennsylvania, USA. Except insofar as any conventional media or agent is incompatible with the active ingredient, use thereof in the pharmaceutical compositions of the present invention is contemplated. Supplementary active ingredients can also be incorporated into the compositions.

It is especially advantageous to formulate compositions in dosage unit form for ease of administration and uniformity of dosage. Dosage unit form as used herein refers to physically discrete units suited as unitary dosages for the human subjects to be treated; each unit containing a predetermined quantity of active ingredient calculated to produce the desired

therapeutic effect in association with the required pharmaceutical carrier and/or diluent. The specifications for the novel dosage unit forms of the invention are dictated by and directly dependent on (a) the unique characteristics of the active ingredient and the particular therapeutic effect to be achieved, and (b) the limitations inherent in the art of compounding such an active ingredient for the particular treatment.

A variety of administration routes are available. The particular mode selected will depend, of course, upon the particular condition being treated and the dosage required for therapeutic efficacy. The methods of this invention, generally speaking, may be practised using any mode of administration that is medically acceptable, meaning any mode that produces therapeutic levels of the active component of the invention without causing clinically unacceptable adverse effects. Such modes of administration include oral, topical, transmucosal, transdermal, rectal, nasal or parenteral (e.g. subcutaneous, intramuscular and intravenous) routes. Continuous transdermal administration by means of a skin patch or the like is a known, medically acceptable method of administration of nicotine and may be used in the therapeutic and prophylatic methods of the present invention.

The compositions may conveniently be prepared by any of the methods well known in the art of pharmacy. Compositions of the present invention suitable for oral administration may be presented as discrete units such as capsules, cachets, tablets or lozenges, each containing a predetermined amount of the active component, in liposomes or as a suspension in an aqueous liquor or non-aqueous liquid such as a syrup, an elixir, or an emulsion. Alternatively, the active component may be formulated as a chewing gum for intermittent oral administration.

Other delivery systems can include sustained or slow release delivery systems. Preferred sustained or slow release delivery systems are those which can provide for release of the active component of the invention in sustained or slow release lozenges, tablets, pellets or capsules. Many types of sustained release delivery systems are available. These include, but are not limited to: (a) erosional systems in which the active component is contained within a matrix,

and (b) diffusional systems in which the active component permeates at a controlled rate through a polymer.

Oral administration for many conditions will be preferred because of the convenience to the patient, although topical and localised sustained or slow delivery may be even more desirable for certain treatment regimens.

The active component is administered in an effective amount. Reference herein to an effective amount means that amount necessary at least partly to attain the desired effect, or to delay the onset of, inhibit the progression of, or halt altogether, the onset or progression of the particular condition being treated. Such amounts will depend, of course, on the particular condition being treated, the severity of the condition and individual patient parameters including age, physical condition, size, weight and concurrent treatment. These factors are well known to those of ordinary skill in the art and can be addressed with no more than routine experimentation. It is preferred generally that a maximum dose be used, that is, the highest safe dose according to sound medical judgement. It will be understood by those of ordinary skill in the art, however, that a lower dose or tolerable dose may be administered for medical reasons, psychological reasons or for virtually any other reasons.

Preferably, the effective amount will be selected so that administration of the active component will be free of adverse or undesired side effects.

Generally, daily oral doses of active component will be from about 0.01 mg/kg per day to 10 mg/kg per day. Small doses (0.01-1 mg/kg per day) may be administered initially, followed by increasing doses up to about 5-10 mg/kg per day. In the event that the response in a subject is insufficient at such doses, even higher doses (or effective higher doses by a different, more localised delivery route) may be employed to the extent patient tolerance and side effects permits. Multiple doses per day are contemplated to achieve appropriate systemic levels of compounds. In the treatment of obesity in morbidly obese individuals, daily doses of 2-20 mg of active component may be required.

Throughout this specification, unless the context requires otherwise, the word "comprise", or variations such as "comprises" or "comprising", will be understood to imply the inclusion of a stated integer or group of integers but not the exclusion of any other integer or group of integers.

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Detailed Description of the Invention:

Section A: EPIDEMIOLOGY, OBESITY, NON-INSULIN DIABETES MELLITUS AND LEPTIN

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Leptin: Importance in diabetes.

Unlike the *ob/ob* mouse (1), there is no current evidence for a major role of *ob* gene mutations and leptin deficiency in human obesity (6,7). Hyperleptinaemia has been demonstrated in 15 animal models such as Psammomys obesus (8) normal mice made obese by a high fat diet (9) and human obese subjects (10,11) suggesting that leptin receptors in the central nervous system are either downregulated or defective, if one assumes the brain is the location of the apparent resistance to leptin. A defect in the feedback mechanism has been demonstrated in the (*db/db*) mouse (12), and a similar scenario could lead to human obesity, or some forms of it. The 20 human *ob* gene is normal in obese humans (13, 14) and in these subjects there is over- rather than under-expression , with increased amounts of *ob* messenger RNA produced (15,16) which correlated with body weight and fat mass. However, leptin receptors and hypothalamic feedback mechanisms in humans have not yet been defined.

25 An alternative hypothesis is proposed by Schwartz et al (17) who measured leptin levels in both the cerebrospinal fluid and plasma. They demonstrated that the CSF:plasma leptin ratio was lower among those in the highest as compared with the lowest plasma leptin quintile - a 5.4 fold difference! They explained this disparity in terms of a saturable mechanism which mediates the CSF leptin transport, and that a reduced efficiency of brain leptin delivery among 30 obese individuals with high plasma leptin levels results in apparent leptin resistance (17). Thus

the answer to the question is leptin important in diabetes lies at least partly in the manifold unsatisfactory methods attempting to treat obesity in diabetes (18).

Evidence for a Leptin role in body weight regulation.

Animal studies published so far suggest that leptin may have a role in appetite regulation, energy expenditure and possibly modulation of insulin sensitivity (2,3). A major question is whether these observations apply to humans, or whether the leptin concentration in human blood is solely a reflection of the amount of adipose tissue. To examine the importance of leptin in human obesity and non-insulin dependent diabetes mellitus (NIDDM), population based studies serve as a useful tool. In the South Pacific island, Western Samoa, the prevalence of obesity and NIDDM prevalence have escalated as a consequence of modernisation of lifestyle during the latter half of the 20th century (19-21).

Epidemiology of leptin levels.

A recent study by Zimmet et al (22) reports the first epidemiological associations between leptin concentrations in humans and anthropometric, demographic, behavioural and metabolic risk factors in a Western Samoan population, using data collected in 1991 (20,21). Among these relatively obese individuals, leptin was strongly correlated with measures of obesity in both men and women. These data agree with other recent reports (10,11) and are consistent with leptin concentration being directly related to the adipose tissue mass. However, there appears to be considerable variability in the absolute level of leptin between individuals with similar degrees of obesity in this and other studies (10,11). This observation indicates the potential importance of other variables that may regulate blood leptin concentration, including physical activity, nutritional factors, genotype, fat distribution and insulin or other hormones. The independent effects of body mass index (BMI) and waist circumference on leptin levels suggest that the distribution of body fat may also be an important determinant of leptin concentration.

Animal models suggest *ob* RNA levels are higher in adipose tissue from central fat deposits than other regional adipose sites (23). Zimmet et al's finding that waist circumference was, independently of BMI, associated with leptin is consistent with this observation. The weaker association of WHR with leptin, and its lack of association independent of BMI may reflect the fact that WHR does not measure the absolute amount of intraabdominal fat.

Gender differences in leptin concentrations.

Leptin levels were found to be significantly higher in women than in men at all BMI levels. However, it has been shown that these differences disappeared when leptin was compared across similar body fat percentages (10,11). This is consistent with a higher body fat content of women at any BMI. Women also had higher concentrations of leptin than men for the same waist circumference, which may reflect the overall different patterns of fat distribution between the sexes. At any level of waist women would be expected to have a greater overall body fat content contributing to leptin production.

Rural:urban differences in leptin concentration.

Zimmet et al. have already reported on the rural-urban differences in obesity in Western Samoa with lower BMI in rural Polynesians (21). The present results suggest that this factor explains to a large extent, the trend for leptin to be lower in rural subjects.

Physical activity and leptin.

Increased energy or fat intake and reduced physical activity in urban, as compared with rural subjects, may contribute to increased obesity and hence indirectly to higher leptin levels. Certainly there was no effect of physical activity independent of obesity, on leptin levels in Polynesians. A more direct effect of physical activity on leptin levels could be postulated, either by activity reducing leptin resistance as is the case with insulin resistance, or via improvements in insulin sensitivity brought about by physical activity (24). Leptin and fasting

insulin were strongly correlated in Western Samoans and studies in animals suggest that insulin may directly affect leptin levels (25-27), or even *vice versa*, that leptin reduces insulin levels (28).

Physical activity is difficult to measure accurately in epidemiological studies (29) and, especially among the Samoan women, there was only a narrow range of activity levels with 79% having an activity score of 4. Perhaps with a better estimate of activity level, an independent association with leptin could be found.

Insulin and leptin concentration.

While there appears to be no association between glucose tolerance status and serum leptin amongst the Samoan subjects, there is clearly an association between insulin and leptin levels, even after correcting for obesity. Previously it has been shown in animal models that *ob* gene expression is increased by insulin (27) and reduced when insulin deficiency is induced by streptozotocin (25). Other studies have also highlighted the association between insulin and leptin (2,27,28,30). In the study of Considine et al. (11), however, the relationship between insulin and leptin in humans was not independent of body fat percentage. It seems unlikely that this inconsistency is explained by the use of body fat percentage rather than the less direct measures of BMI or waist circumference as used in Samoa. The correlation of BMI with serum leptin levels in Samoans was as strong as the correlation of body fat percentage with leptin reported by Considine et al. (11). It is possible that the range of fasting insulin concentrations in our study was wider allowing the detection of statistically significant associations between insulin and leptin.

The leptin/insulin relationship held even in subjects with diabetes, supporting the decision to combine data from diabetic and non-diabetic individuals. The duration of diabetes was nevertheless relatively short. Among the 17 subjects known to have diabetes, only 5 had an established duration longer than 3 years. In subjects with longer duration of NIDDM and impaired insulin secretion, the linear relationship between insulin and leptin may be

weakened. Nevertheless, insulin has been shown to have an important effect on leptin production in adipocytes (31).

Ethnic differences in leptin levels?

Leptin levels previously reported in humans appear to be high relative to the concentrations observed in Western Samoans. Considine et al.(11) report mean levels of 31.4 ng/ml in obese subjects, and 7.5 ng/ml in normal-weight subjects with men and women combined (11). Using a similar BMI criterion for obesity, geometric mean leptin levels in Samoans were 15.0 ng/ml and 2.1 ng/ml in obese and normal-weight subjects respectively. However, our population contained approximately equal proportions of men and women (48:52), whereas the subjects studied by Considine et al. (11) were predominantly women (71% of obese subjects). Given that women have consistently been observed to have higher leptin levels than men of the same BMI (11,12), this bias towards women could increase mean leptin levels. Although not specified, it is likely that these subjects were also mainly Caucasian. Swinburn et al. (32) have suggested that Polynesians have a lower body fat percentage than Caucasians at any BMI, based on bioimpedance measures. If this finding is confirmed it could explain the low leptin levels in Polynesians relative to Caucasians with a similar BMI.

In conclusion, the data reported here showing large differences between leptin levels in normal weight and obese subjects, a progressive increase in leptin with increasing BMI, and significant independent correlations of leptin with BMI, waist circumference and fasting insulin, strongly support an important role for leptin in human metabolism and obesity. Since the publication of evidence against a mutation in leptin, or a leptin deficiency in obese humans (6), subsequent authors have reported consistently elevated leptin (10,11) or *ob* mRNA (14,15) in obese subjects. However, apart from one study where Pima Indians and other Americans were compared (10), ethnicity has not been specified. Otherwise, no ethnic differences in leptin levels have been demonstrated, and by confirming previous results in a very different population, specifically one with a high prevalence of obesity and NIDDM, the

Zimmet et al. study (22) also provides important evidence against a form of human obesity analogous to the *ob/ob* mouse model, ie. with leptin deficiency.

Are leptin and insulin sensitivity related?.

Zimmet and Alberti speculate that the leptin receptor may be synonymous with Neel's thrifty gene and lead to Syndrome X (18). Possible mechanisms by which leptin may affect insulin sensitivity are only speculative, but include: (a) Downregulation of hypothalamic leptin receptors leads to increased leptin levels. This causes further leptin synthesis and release with further downregulation of hypothalamic receptors and this vicious cycle results in hyperinsulinaemia, adiposity and dyslipidaemia, precursors to NIDDM; (b) Leptin itself could cause insulin resistance or increased food-energy intake, leading to increased adipocyte mass and decreased insulin sensitivity. This primary increase in central adipose tissue mass in NIDDM increases leptin production, loss of appetite control, weight gain, and further insulin resistance and hyperleptinaemia.

Thus by virtue of the relationship of leptin to insulin suggested by Zimmet et al (22) and de Courten et al (33) the nicotine analogues will be useful as insulin sensitisers in the therapy of all insulin resistant states such as diabetes.

SECTION B: SMOKING AND BODY WEIGHT

An important deterent to quitting smoking is the well recognised subsequent weight gain (34), the explanation of which has yet to be determined. Equally recognised is the negative relationship between cigarette smoking and body weight which has been confirmed in a large epidemiological study (NHANES II) by Klesges and Klesges(35). Carboxyhaemoglobin measurements, rather than self report, were used to quantify smoking exposure among the subjects. Willliamson et al (36) related weight changes to changes in smoking status in American adults examined in NHANES I (1971-76) and the Follow-UP Study (1982-84). After adjusting for other factors the mean weight gain attributable to smoking cessation was

2.8 kg in men and 3.8 kg in women. This weight gain discourages many smokers from trying to quit and is a reason why many resume (34). It appears that increased energy intake is the major cause of the weight gain, although there is also evidence that nicotine increases metabolic rate (34,37). It has been suggested that the inverse relationship between nicotine and body weight may be mediated to some extent by reduced insulin levels as seen in animal models (38).

Thus smokers have lower weights than non-smokers (39) , because of a smoking-related increase in basal metabolism (40) or energy expenditure (41) or because of an effect of smoking on caloric intake (40,42). Data from the Collaborative Perinatal Project indicate lower interpregnancy weight gains for smokers than for non-smokers for both black women and white women(43). National Health Interview Survey and NHANES data (34) indicate that among women who smoke, blacks are more likely than whites to be light smokers (less than 10 or 15 cigarettes per day) (44, 45). Although the dose-response effects of smoking on weight are not well specified (46,47), it is possible that lower cigarette use by black women smokers influences their weight status upward.

Evidence that these effects of smoking on body weight are likely to be nicotine-mediated is the report of Hajek et al (48) who showed a significantly lower body weight in users of nicotine chewing gum than non-users. Furthermore, after smoking cessation with consequent nicotine withdrawal, Curtsiter (49) has reported significant weight gain. Epidemiological data (50) from populations in Nauru, Mauritius and Western Samoa have shown a significant association between smoking and leptin levels, matched for weight, body mass index (BMI) and within gender groups. The mechanisms of nicotine action may be central, as already proposed, or peripheral involving nicotinic ACh receptors on adipocytes because alterations of lipolysis and lipoprotein lipase have been demonstrated in chronically nicotine-treated rats (51). In support of the proposed actions of nicotine on leptin and body weight are the tabulated data from these three populations described by Hodge et al (50) incorporated as Tables 1 and 2 below, and in Figure 1.

SECTION C: NICOTINIC MECHANISMS IN THE CENTRAL NERVOUS SYSTEM

Receptor classification

Acetylcholine (Ach) receptors in the mammalian central nervous system (CNS) have been divided into muscarinic (mAChR) and nicotinic (nAChR) subtypes, based on the relative agonist activities of the natural alkaloids muscarine and nicotine (52).

Muscarinic agonists

ACh replacement strategies with choline precursors, cholinesterase inhibitors like tacrine and velnacrine, Ach-releasing agents like linopirdine, and directly acting Ach receptor agonists have all been used to replace or potentiate the actions of ACh at the synaptic cleft. These have predominantly targeted agonists active at mAChRs but the majority of mAChR ligands tested to date have been disappointing in terms of the goal of centrally active agents devoid of peripheral side effects (52).

Nicotinic receptor subtypes and agonists

This trend has now changed, with recent preclinical and clinical studies indicating that nAChRs play a significant role in mediating the molecular events related to cognitive performance, affect modulation, and enhancement of brain function. So far, at least 7 putative neuronal nAChR subtypes have been identified in transfected oocyte preparations (53,54). The wide distribution of the a2, a3,a4 and b2 transcripts in human brain indicates that neuronal nAChRs are a major neurotransmitter receptor superfamily, structurally related to the other ligand-gated ion channel families that include $GABA_A$, N-methyl-D-aspartate(NMDA) and glycine (55,56). However, apart from the classic agonist nicotine, pharmacological tools for the characterization of nAChRs are only just emerging.

The subtypes of nAChRs are presently characterised by radioligand binding techniques: those that have a high affinity (0.5-5nM) for [^{3}H]-acetylcholine (57), [^{3}H]-nicotine (58), [^{3}H]-cytisine (59) and [^{3}H]-methylcarbamylcholine (60); those that recognise a-BgT with high affinity (0.5nM) (58) and a population of nAChRs that display marked selectivity for n-BgT (61).

Another alkaloid, dihydro-b- erythroidine (DHbE) also has nanomolar affinity for neuronal nAChRs and a regional distribution similar to that seen with [^{3}H]-nicotine (62).

Two additional sites distinct from those that bind [^{3}H]-nicotine or the snake toxins have been identified. The noncompetitive antagonist mecamylamine does not bind at the same site as nicotine (63). Similarly, [^{3}H]-pempidine does not label a nicotine sensitive site in mammalian brain.

Finally, another site located on the a-subunit of both nicotine-sensitive and a-BgT-sensitive nAChRs is labelled by [^{3}H]-1-methyl-physostigmine (63), displaced by physostigmine, benzoquinonium and galanthium but not displaced by competitive neuronal nAChR antagonists.

Modulation of nAChR complex protein structure

In muscle nAChRs, transitions may occur between states that have distinct binding ion channel opening characteristics (64). nAChR function can also be modulated in a more persistent manner by phosphorylation of receptor proteins (65). At least four protein kinases - a cAMP-dependent kinase, PKA_s, protein kinase C, a tyrosine kinase and a Ca++ - calmodulin kinase differentially phosphorylate muscle, neuronal and Torpedo nAChR subunits. This provides potential for the indirect modulation of nAChR equilibrium transitional states by neuropeptides (66).

Ligand binding sites on the nAChR

The combination of neuronal nAChR subunits present will determine the nAChR pharmacological and functional properties. The ACh binding site has been localised at the interfaces between the a- and b- subunits and the a- and g- subunits (67).

Alternative channel activator sites (64) are distinct from the sites at which Ach and nicotine bind, and include cholinesterase inhibitors physostigmine and galanthium (64). (+)-2-Methyl-piperidine enhances receptor interactions with the endogenous ligand, Ach, facilitating only ongoing or evoked cholinergic neurotransmission, thereby limiting the potential for side-effect liability (68). This type of compound resembles glycine antagonists acting at NMDA receptors or the various allosteric modulators of the GABA/benzodiazepine receptor complex (55,56).

Non-competitive blockers(NCBs)

Alternative allosteric ligand binding sites exist. Many diverse molecules such as histrionicotoxin, chlorpromazine, phencyclidine(PCP), MK-801, local anaesthetics, lipophilic agents, such as detergents, fatty acids, barbiturates, volatile anaesthetics and n-alcohols can modify the properties of the nAChRs without acting at the Ach binding site or affecting directly the binding of Ach (66,69). These NCBs are an important class of compounds affecting nAChRs.

Steroid binding sites

Steroids can allosterically desensitize the nAChR by occupying their binding sites on neuronal nAChRs. In vitro progesterone, testosterone, dexamethasone, hydrocortisone and prednisolone can act as noncompetitive inhibitors of nAChRs (67). In vivo there is an association between circulating corticosteroids, [^{125}I]-a-BgT binding proteins and behavioural

sensitivity to nicotine (71). At high micromolar concentrations corticosterone inhibited binding of [^{125}I]-a-BgT to rat brain membranes and reduced the affinity of nicotine for this site, consistent with a negative allosteric interaction.

Dihydro-pyridine (DHP) binding site

Low micromolar concentrations of DHPs like nimodipine interact with neuronal nAChR at clinically relevant concentrations (72) and may limit vasoconstrictor effects of excess circulating catecholamines (evoked by increased sympathetic outflow). Findings suggest that chromaffin neuronal nAChRs contain a DHP site whose occupation blocks ligand-gated Na+ entry through the ionophore, limiting the ensuing membrane depolarization, firing of APs, recruitment of Ca++ channels, Ca++ entry.

Direct binding of Ca++ and other divalent cations to sites within the nAChR channel can decrease the single-channel conductance in a voltage-dependent way and enhance the desensitization of muscle nAChRs. By contrast, extracellular Ca++ affects some neuronal nAChRs in the opposite direction, with Ca++ potentiating the response to agonists at both positive and negative membrane potentials at sites located outside of the ion channel (67). In the habenula nucleus Ca++ in physiological concentrations increases the frequency but not the duration of channel opening (73).

Neuronal nicotine pharmacology

Nicotine modulates brain function by enhancing ion flux and neuronal transmitter release, leading to a facilitation or gating of a number of neuronal systems, and thus eliciting a number of behavioural states (74). The only proven site of nicotinic AChR neurotransmission is the motor neuron-Renshaw cell synapse in spinal cord (75). However, nicotine responses can also be observed in retina, spinal cord, hippocampus, brainstem respiratory nuclei, cerebral and cerebellar cortex, thalamus, hypothalamus, interpeduncular nucleus, septal nucleus, substantia nigra, striatum and locus coeruleus (76). In general, activation of

presynaptic nAChRs leads to facilitation of the release of Ach, dopamine, noradrenaline, serotonin, GABA, and glutamate (76,77).

A number of CNS functions are regulated via the basal forebrain cholinergic system, including aspects of attention (78) cognitive performance (79), cerebral blood flow (80), cerebral glucose utilization (69), and neocortical electrical activity (81). Nicotinic agonists augment these activities, and they are reduced by mecamylamine (82), age-related decrements of the basal forebrain cholinergic system, or abolished by excitotoxin-evoked destruction of the system (69).

Therapeutic potential of nicotine

Surgically induced and age-associated deficits in central acetylcholinergic systems can produce an impairment of performance in various models of cognitive function (83, 84,85,86) .This raises the possibility of a beneficial effect in Alzheimer's disease and nicotine has been shown to improve cognitive performance in animal (87,88) and human studies (82). Again, it would be of interest to have epidemiological studies to determine whether there is an inverse relationship between a history of smoking and the development of Alzheimer's disease, and prospective studies are in progress to determine whether nicotine analogues are of therapeutic value.

The lower prevalence of ulcerative colitis and Parkinson's disease in smokers suggests that a component of tobacco smoke has a prophylactic effect (89) and this hypothesis has the scientific appeal of being testable by prospective studies. Nicotine does appear to be of benefit in preliminary clinical studies on patients with ulcerative colitis (89) and in animal models of Parkinson's disease (90).

In Tourette's syndrome, the beneficial effect of nicotine in ameliorating the manifestations were rapid and dramatic (91).

Regulation of gene expression by nicotinic cholinergic ligands :

This has been less extensively studied in neural tissue than at neuromuscular junction and motor endplate (92). The main evidence for a contribution of nicotinic receptors in the regulation of the number of surface receptor molecules is the up-regulation of the nicotine, acetylcholine, and cytisine binding sites (93). in rodent brain after chronic systemic administration of nicotine (92,93,94) or in human brain after tobacco smoking (95). However, the enhanced nicotine binding in mouse brain is not accompanied by changed levels of RNA encoding a-2,-3, -4, -5, nor the b-2 subunits (96) suggesting that the regulation of receptor number takes place at a post-transcriptional level.

Another effect of membrane depolarization by nicotinic agonists is rapid transient stimulation of transcription of the *c-fos* proto-oncogenes and actin genes . In addition to immediate early genes, nicotinic receptors appear to regulate the late onset genes, and nicotine stimulates late transcription of proencephlin A and tyrosine hydroxylase genes in bovine chromaffin cells (97).

Furthermore, there are sustained effects of chronic nicotine administration on dopamine synthesis in hippocampus (98). The competitive antagonist a-BgT binds to interneurons from CA1 and CA3 regions and increases mRNA levels for brain-derived neurotrophic factor (BDNF) and nerve growth factor (NGF) in CA3 and dentate neurons by 2-20 fold (99), suggesting that regulation of gene expression by nicotinic agents might be either positive or negative.

SUMMARY

Altogether, the large diversity of neuronalnicotinic receptors is consonant with the multiple actions mediated by cholinergic ligands in the nervous system . Besides its strong addictive effects (76), nicotine has been described as a cognitive enhancer, increasing attention and improving learning and memory, and also having neuroprotective effects (100). Nicotinic nAChR binding sites are present in spinal cord and cerebral cortex on capsaicin- sensitive

neurons (101) many of which are involved in nociception and consonant with nicotine having analgetic and anxiolytic actions(100). Chronic nicotine does not upregulate nAChR binding in spinal cord but does, in a dose-dependent manner in cerebral cortex (102,103) emphasizing the regional and even site-specificity of its actions. Its potential therapeutic uses have been mentioned in a short section above, and are further discussed in a review by Levin and Rosecrans (88). Nicotine and its analogues have been administered by mouth eg as chewing gum, applied as transdermal patches (104) in attempts to assist smoking cessation. Combined therapy using the antagonist meca,ylamine together with the agonist nicotine has proven very helpful. Novel nicotinic cholinergic ligands with ion-channel-selective enhancing or blocking properties are now being examined for their therapeutic efficacy in various state (105). Although this field is now extremely active, no specific actions on hypothalamic leptin receptors have been proposed or foreshadowed apart from the proposals by Hodge et al (50).

Table 1 Characteristics of male smokers and non-smokers in three populations.

	Non-smokers	Smokers	p
NAURU 1987			
n	106	135	
Age (years)	37.1 (11.3)*	35.5 (10.2)	0.284
Body mass index (kg/m^2)	35.3 (7.6)	33.7 (6.0)	0.059
Waist girth (cm)	101.9 (14.0)	98.2 (11.3)	0.024
Waist/hip ratio	0.91 (0.05)	0.90 (0.05)	0.261
Diabetes (%)	24.5	23.4	0.850
Physically active	34.0	36.1	0.732
MAURITIUS 1987			
n	146	170	
Age (years)	45.1 (12.4)	45.9 (11.8)	0.579
Body mass index (kg/m^2)	25.3 (3.3)	23.8 (3.6)	<0.001
Waist girth (cm)	83.1 (7.8)	81.1 (8.3)	0.028
Waist/hip ratio	0.91 (0.05)	0.91 (0.06)	0.413
Diabetes (%)	NONE	NONE	
Physically active	49.3	51.2	0.741
WESTERN SAMOA 1991			
n	54	60	
Age (years)	45.7 (12.3)	44.0 (11.8)	0.475
Body mass index (kg/m^2)	31.7 (6.5)	30.1 (7.0)	0.198
Waist girth (cm)	102.1 (16.1)	97.6 (16.7)	0.145
Waist/hip ratio	0.92 (0.06)	0.91 (0.06)	0.444
Diabetes (%)	27.8	21.7	0.449
Physically active	50.0	56.7	0.476

* Standard deviations.

Table 2 Geometric means of leptin and fasting insulin, unadjusted and adjusted for body mass index (BMI), in male smokers and non-smokers from three populations.

	Unadjusted			Adjusted for BMI		
	Non-smokers	Smokers	p	Non-smokers	Smokers	p
NAURU 1987						
Leptin (ng/ml)	9.83	7.38	<0.001	9.27	7.87	0.005
Fasting insulin (μU/ml)	28.9	28.6	0.875	28.4	29.0	0.748
MAURITIUS 1987						
Leptin (ng/ml)	5.46	4.29	<0.001	5.10	4.62	0.020
Fasting insulin (μU/ml)	8.08	5.78	<0.001	7.21	6.44	0.147
Western SAMOA 1991						
Leptin (ng/ml)	4.56	2.31	<0.001	4.00	2.63	0.007
Fasting insulin (μU/ml)	10.69	7.10	0.031	9.98	7.62	0.085

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Dated this 18th day of July, 1996.

International Diabetes Institute
AND
Paul Zev Zimmet
AND
Roderick Alan Westerman
AND
Gregory Collier

By their Patent Attorneys

Davies Collison Cave

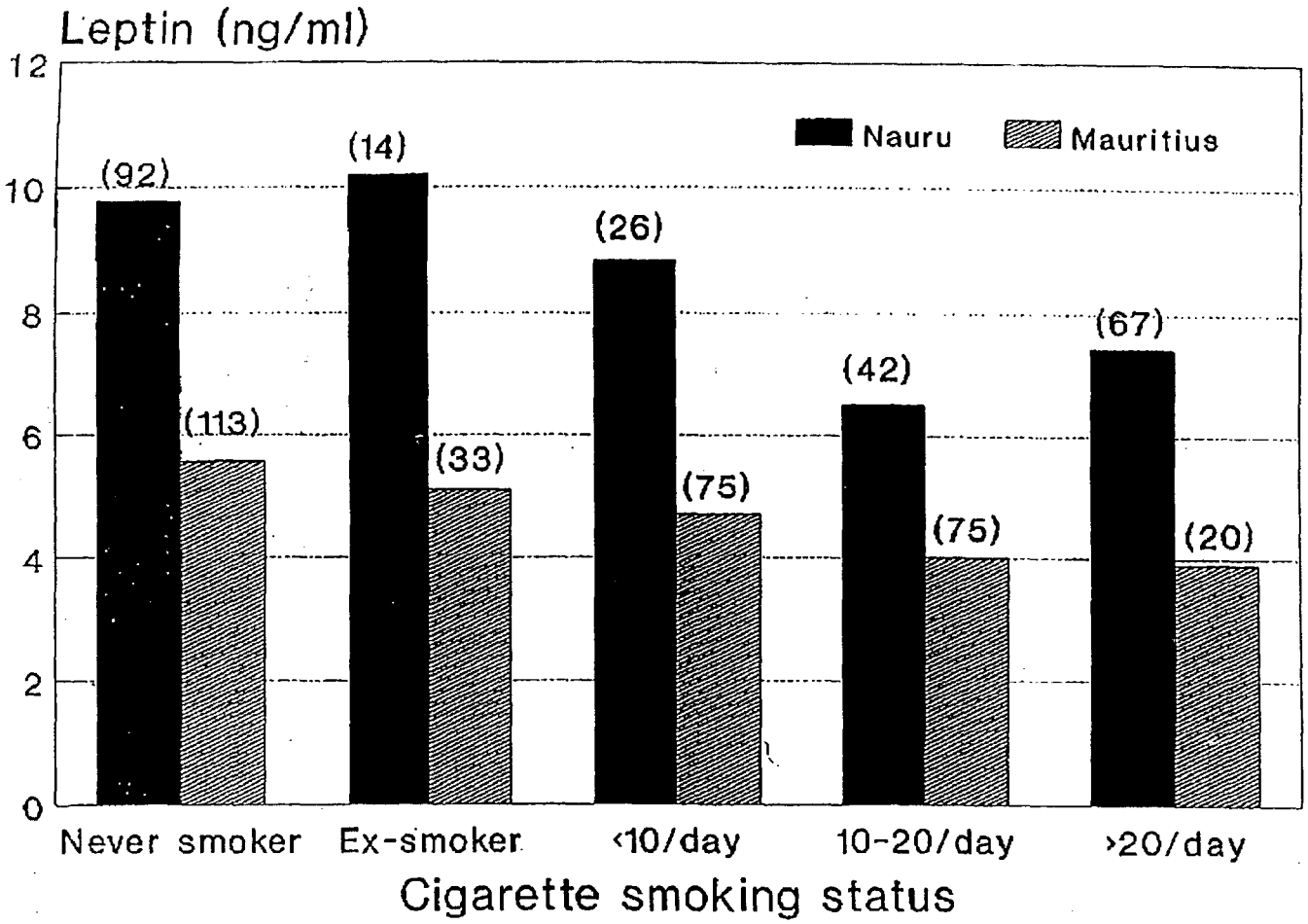

Leptin (ng/ml)
12
10
8
6
4
2
0
Nauru
Mauritius
(92)
(113)
(14)
(33)
(26)
(75)
(42)
(75)
(67)
(20)
Never smoker
Ex-smoker
<10/day
10-20/day
>20/day
Cigarette smoking status

FIGURE 1

SCHEDULE 5

DEED OF CONFIDENTIALITY

THIS DEED is made on the date set out in Item 1 of Schedule 1.

BETWEEN: THE COMPANY OR ENTITY WHOSE NAME AND ADDRESS IS SET OUT IN ITEM 2 OF SCHEDULE 1 ("Discloser")

AND: THE PERSON OR COMPANY WHOSE NAME AND ADDRESS IS SET OUT IN ITEM 3 OF SCHEDULE 1 ("Recipient")

RECITALS

A. The Discloser has or may acquire certain Confidential Information.

B. The Recipient wishes to have disclosed to it the Confidential Information and the Discloser is prepared to disclose the Confidential Information to the Recipient subject to various terms set out in this Agreement.

C. In consideration of the Discloser agreeing to disclose the Confidential Information to the Recipient, the Recipient has agreed to accept confidentiality obligations on the terms set out in this Agreement.

NOW THIS DEED WITNESSES AS FOLLOWS:

1. DEFINITIONS AND INTERPRETATION

1.1 The following definitions apply in this Deed unless otherwise indicated:

"**Autogen**" means Autogen Pty Ltd ACN 074 636 847.

"**Confidential Information**" includes:

(a) all of the terms of this Deed; and

(b) Confidential Information as defined in the Research, Licence and Commercialisation Agreement between Autogen, Deakin University and International Diabetes Institute ACN 007 342 412 dated the day of 1997.

"**Acknowledgement of Obligation of Confidentiality**" means the document set out in Schedule 2.

1.2 In this Deed unless otherwise indicated:

(a) any right or obligation which affects more than one person shall affect those persons jointly and severally;

(b) headings are used for convenience only and shall have no binding effect;

(c) use of the singular shall, where necessary, include the plural and vice versa; and

(d) "person" includes a firm, body corporate, unincorporated association, or authority and such reference shall include that person's successors and assigns.

2. OBLIGATION OF CONFIDENTIALITY

2.1 The Recipient:

(a) acknowledges that the Confidential Information has been disclosed to the Recipient in circumstances of confidence;

(b) shall maintain such confidence and, subject to this Deed, refrain from disclosing or causing to be disclosed the Confidential Information to any person; and

(c) shall only make use of the Confidential Information for the purpose, and to the extent, expressly authorised in writing by the Discloser.

2.2 The Recipient may disclose Confidential Information to any of its officers, employees, agents or advisers only after taking the following steps:

(a) informing the Discloser as to all persons who will be receiving the Confidential Information;

(b) making available a copy of this Deed to such person or persons;

(c) ensuring that such person or persons sign an Acknowledgement of Obligation of Confidentiality; and

(d) ensuring that the signed Acknowledgement of Obligation of Confidentiality is delivered to the Discloser.

2.3 The obligations of confidentiality owed by the Recipient pursuant to this Deed shall be enforceable by Autogen in accordance with this Deed as if Autogen were named as the Discloser in this Deed.

3. QUALITY OF INFORMATION AND RELEASE

3.1 The Discloser makes no warranty or representation whatsoever as to the quality or accuracy of any Confidential Information which is the subject of this Deed. The Discloser hereby excludes, to the full extent allowed by law, any condition or warranty that the Confidential Information has been prepared using reasonable care.

3.2 To the extent that the Recipient will rely on any Confidential Information the subject of this Deed, the Recipient will only do so after receiving independent advice, from an appropriately qualified person, that it is appropriate to do so. The Recipient releases the Discloser from all claims, actions, damages, remedies arising from a failure to act on this independent advice.

4. INDEMNITY

4.1 The Recipient acknowledges the interest of Autogen in the Confidential Information and that Autogen may suffer harm or loss or incur a liability if the Recipient breaches this Deed.

4.2 The Recipient acknowledges that the Discloser may suffer harm or loss or incur a liability if the Recipient breaches this Deed.

4.3 Accordingly, the Recipient undertakes to indemnify Autogen and the Discloser from all such loss, harm or liability which may flow, directly or indirectly, from a breach of this Deed by the Recipient.

5. BREACH AND COMPULSORY DISCLOSURE

5.1 As soon as the Recipient becomes aware of any actual or threatened breach of this Deed, it must immediately notify the Discloser. Furthermore, the Recipient is obliged to do everything reasonably within its power to prevent or stop any actual or threatened breach of this Deed.

5.2 If the Recipient is required by a law or court of competent jurisdiction to disclose any Confidential Information to any unauthorised person, it must, without delay:

(a) inform the Discloser in writing;

(b) follow the Discloser's lawful direction in opposing or restricting such disclosure; and

(c) as far as possible, only disclose the Confidential Information on terms which will maintain its confidentiality.

6. CONFIDENTIAL INFORMATION NO LONGER REQUIRED

6.1 Except as otherwise provided in any other contract in writing signed by the parties, the Discloser may request in writing the delivery up of Confidential Information. Following such request, the Recipient must immediately furnish such Confidential Information to the Discloser, in each and every form in which it is held.

7. COMMUNICATIONS WITH THE DISCLOSER

7.1 All communications to the Discloser relating to this Deed shall be directed to the address of the Discloser appearing in this Deed or such other address as may be notified to the Recipient from time to time. All such communications shall be:

(a) in writing; and

(b) marked to the attention of the Managing Director.

8. INTELLECTUAL PROPERTY

The Recipient assigns to the Discloser, or to such other person as the Discloser nominates, all present and future intellectual property rights in all subject matter created pursuant to the Recipient's use of the Confidential Information.

9. GENERAL

9.1 All rights and obligations under this Deed are cumulative and shall not affect or be affected by any other rights, obligations or remedies available at law.

9.2 No right under this Deed shall be deemed to be waived except by notice in writing signed by both the Discloser and the Recipient. Any such waiver will not prejudice that party's rights in respect of any subsequent breach of this Deed.

9.3 The obligations of confidentiality under this Deed survive the termination of this Deed.



9.4 Remedies available to the Discloser for any breach or threatened breach by the Recipient of this Deed include, at the option of the Discloser, damages, specific performance, or injunction and any other remedies available to the Discloser at law.

9.5 If any provision in this Deed is held invalid, unenforceable or illegal for any reason, this Deed shall remain otherwise in force apart from such provision, which shall be deemed deleted.

9.6 This Deed will be governed and construed according to the laws in force in the state of Victoria, Commonwealth of Australia and the parties agree to submit to Courts and Tribunals of that jurisdiction.

EXECUTED as a Deed.

SIGNED SEALED AND DELIVERED for)
and on behalf of **THE DISCLOSER** by)
in the presence of:)
)

..... (Signature)

..... (Signature of Witness)

..... (Name of Witness in Full)

SIGNED SEALED AND DELIVERED for)
and on behalf of **THE RECIPIENT** by)
in the presence of:)
)

..... (Signature)

..... (Signature of Witness)

..... (Name of Witness in Full)

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DEED OF CONFIDENTIALITY

SCHEDULE 1

1. Date of this Deed

2. The Discloser

Name:

Address:

Telephone No:

Facsimile No:

Contact Person:

3. The Recipient

Name:

Address:

Telephone No:

Facsimile No:

Contact Person:

DEED OF CONFIDENTIALITY

SCHEDULE 2

ACKNOWLEDGEMENT OF OBLIGATION OF CONFIDENTIALITY

Date:

[The Discloser]

Dear Sir

Pursuant to the Deed of Confidentiality made between [ ] (the "**Discloser**") and [ ] (the "**Recipient**") [insert date of Deed], the Recipient proposes to disclose Confidential Information the subject of the said Deed of Confidentiality to me/us. Accordingly, I/we undertake as follows:

1. I/We acknowledge that I am/we are aware of and understand the obligations on the Recipient under the said Deed of Confidentiality.

2. I/We will take all steps necessary to ensure that the Confidential Information remains confidential.

3. I/We will not disclose any of the Confidential Information to any unauthorised person or persons.

4. I/We acknowledge that remedies available to the Discloser for any breach or threatened breach by me/us of this Acknowledgement include, at the option of the Discloser, damages, specific performance, or injunction and any other remedies available to the Discloser at law.

5. Except as otherwise provided in any written agreement between the Discloser and Recipient, the Discloser may request in writing the delivery up of Confidential Information. Following such request, I/we undertake to immediately furnish to you such Confidential Information, in each and every form in which it is held.

6. I/We further agree to observe the terms of the Deed of Confidentiality in favour of the Discloser to the same extent as if I/each of us had been named as the Recipient under the Deed of Confidentiality.

7. I/We acknowledge that the terms of this undertaking survive the termination of the Deed of Confidentiality.

8. Any expressions used in this Acknowledgement shall have same meaning as in the Deed of Confidentiality.

Name	Capacity	Signature
.....	.....	.....
.....	.....	.....

DEED dated 18 January 1999

BETWEEN:

AUTOGEN PTY LIMITED ACN 074 636 847 of 210 Kings Way, South Melbourne, Victoria 3205 ("**Autogen**");

AND

DEAKIN UNIVERSITY a body politic and corporate established pursuant to the *Deakin University Act 1974* of Geelong, Victoria 3217 ("**Deakin**");

AND

INTERNATIONAL DIABETES INSTITUTE ACN 007 342 412 of 260 Kooyong Road, Caulfield, Victoria 3162 ("**IDI**")

RECITALS

A. On 28 February 1997 the parties entered into an agreement ("**Research Agreement**") setting out the terms and conditions for research to be carried out with the participation of the parties.

B. Effective as of 1 October 1997 the Research Agreement was varied by the parties by:

- substituting new provisions as to funding payable by Autogen under the Research Agreement;
- amending (for the purposes of the Research Agreement) the description of the project; and
- extending the term of the Research Agreement to expire on 30 September 1998.

C. The parties now agree to further extend and vary the agreement subject to the terms and conditions of this deed.

AGREEMENT

1. EXTENSION OF TERM

With effect on and from 1 October 1998 the parties agree that the term of the Research Agreement is extended until 30 June 2000 ("**Extended Term**") (unless the Research Agreement is earlier terminated in accordance with its terms). During the Extended Term the terms and conditions of the Research Agreement will continue to apply except to the extent to which they are inconsistent with anything set out in this deed, in which case the provisions of this deed will prevail to the extent of the inconsistency.

2. PAYMENT AND RESEARCH PROPOSAL DURING EXTENDED TERM

During the Extended Term:

(a) the payment program set out in Schedule 1 to this deed will be substituted for any payment program previously applying under the Research Agreement; and

(b) the research proposal set out in Schedule 2 to this deed will be substituted for any research proposal previously applying under the Research Agreement.

3. NEW CLAUSE 6.5

Clause 6.5 of the Research Agreement is deleted and replaced with the following:

" 6.5 Deakin University and IDI hereby grant to Autogen an exclusive, worldwide licence of the Pre-Existing Intellectual Property and the Intellectual Property and Autogen shall have the right to sub-licence its rights and to decide in its absolute discretion as to how the Intellectual Property and the Products are to be commercially exploited. The term of the licence which is granted to Autogen under this clause 6.5 commences on the Commencement Date and ends:

(a) in the case of Pre-Existing Intellectual Property or Intellectual Property which is subject to the Patent or to any other patent application, patent or other form of intellectual property protection in Australia or in any other part of the world – upon the expiry of the relevant Patent, patent application, patent or other form of intellectual property protection; and

(b) in any other case – 25 years after the Commencement Date. "

EXECUTED AS A DEED

THE COMMON SEAL of **AUTOGEN PTY LIMITED ACN 074 636 847** was hereunto affixed in accordance with its Articles of Association in the presence of:

AUTOGEN PTY. LTD. A.C.N. 074 636 847 THE COMMON SEAL OF

.....
Director/Secretary

.....
Director

THE COMMON SEAL of **DEAKIN UNIVERSITY** was hereto affixed on the 8th day of October 1998 by direction of the Vice-Chancellor in the presence of:

Vice-Chancellor

Vice-President (Administration)

THE COMMON SEAL of **INTERNATIONAL DIABETES INSTITUTE ACN 007 342 412** was affixed by the authority of the Board of Directors in the presence of:

INTERNATIONAL DIABETES INSTITUTE ACN 007 342 412
Common Seal

Director/Secretary

Director

SCHEDULE 1

Funding 1 October 1998 to 30 June 2000:

Payable by Autogen to Deakin University as follows:

$250,000 - upon the satisfactory completion of each of the performance reviews required under clause 5 of the Research Agreement, those performance reviews (for the avoidance of doubt) to be completed by the following dates:

31 December 1998;

31 March 1999;

30 June 1999;

30 September 1999;

31 December 1999;

31 March 2000;

30 June 2000.

Payment of funding by Autogen during each of the periods after 31 December 1999 is subject to a review by Autogen of its funding commitments to be carried out after 31 March 1999, and the amounts payable by Autogen after 31 December 1999 may be varied by Autogen in its sole discretion as a result of the outcome of its funding commitment review.

SCHEDULE 2

Research Proposal

The discovery of novel genes involved in the development of obesity and type 2 diabetes.

Introduction

The overall aim of this research project is to discover novel genes involved in the development of obesity and diabetes, determine their functions and eventually, develop new approaches to treatment of these metabolic conditions.

The project capitalizes on the availability of a unique animal model for the study of obesity and diabetes, *Psammomys obesus*, and the availability of the latest molecular biology technologies. We have one of only two active research colonies of *Psammomys obesus* in the world. This animal develops metabolic defects in a manner very similar to humans, with a broad spectrum of glucose intolerance, insulin resistance, and obesity, providing an ideal model system to uncover new genes and pathways involved in obesity and diabetes development. No other animal model has this pattern of obesity and diabetes development, as most available models are either single gene mutation models, or chemically created by damage to the pancreas or CNS.

The observation that one breeding pair of *Psammomys obesus* can have a litter with some animals remaining obesity and diabetes-free, while other develop all the characteristics common in human type 2 diabetes, despite living in exactly the same environmental conditions, makes the model perfect to explore underlying genetic causes.

In this research proposal, key tissues involved in the development of obesity and diabetes, including brain, pancreas, liver, and muscle, will be removed and RNA extracted. Using molecular techniques routine in our laboratories including differential gene expression, we will determine which genes are up- or down-regulated in diabetic and non-diabetic animals. This powerful technique will highlight novel genes linked with obesity and diabetes development and further functional studies will provide lead compounds for therapeutic development. The major expected outcomes will be identification of novel gene sequences linked with obesity and diabetes, new proteins involved in obesity and diabetes development, and the patenting of potential new lead compounds for treatment.

Research Plan

This research project covers a large range of research and development areas from basic discovery using gene technologies, gene expression, protein production and testing of protein function in cell systems and animal models.

The research and development plan can be easily subdivided into a number of sections.

1. Gene Discovery

In this section we will be isolating RNA from *Psammomys obesus* with and without obesity and diabetes. RNA samples collected from brain, liver, muscle, and pancreas will be examined to determine which genes are over- or under-expressed in the disease states, using differential gene expression. This technique has the advantage that you do not require prior knowledge of the disease process and it allows you to identify novel genes not previously linked with the disease process.

2. Gene Sequencing

Following identification of a novel gene sequence linked with obesity and/or diabetes, the entire gene sequence will be determined and its novel characteristics confirmed with available bioinformatic software. A number of sequencing techniques are employed to identify the entire gene sequence.

3. Gene Expression

Following identification of the entire novel gene sequence, gene expression will be determined in a number of tissues including brain, liver, pancreas, and muscle. In addition, gene expression under a variety of metabolic disturbances including obesity, fasting, over-feeding and severe diabetes will be determined. The pattern of gene expression will then be examined to identify leads for future experiments aimed at identifying the function of the novel gene. A major advance in technology in the area of gene expression is 'real-time PCR' which is now routinely available in our laboratory and allows accurate and rapid determination of gene expression. Following detailed animal experiments in *Psammomys obesus* and to confirm the importance of the identified gene in human metabolism, human RNA blots are used to examine gene expression in a variety of human tissues.

4. Protein Production

The next stage of research and development involves the introduction of the newly identified gene sequence into appropriate bacterial vectors for protein production. Once the appropriate bacterial vector has been identified, protein production and purification will provide the protein product of the novel gene discovered for functional analysis.

5. Functional Studies

To determine the function of novel proteins, we will utilize both in vivo and in vitro models. In both cases the research involves two major approaches; firstly, administration of purified protein at varying doses and times of treatment, secondly, administration of an antisense oligonucleotide directed at the novel gene sequence to block expression of the protein product. Subsequently, a variety of metabolic parameters will be measured and gene expression of key enzyme pathways determined. The availability of real-time PCR

technology in our laboratories allows us to quickly and confidently quantitate changes in expression in tissue samples following protein treatment.

Each of the phases of the research program will be running simultaneously and different genes identified will be at various stages of development throughout the program.

At the end of the research and development program, we will have identified a number of new genes involved in obesity and diabetes development; we will have produced their protein products and further developed this research by determining the basic function of the novel protein in tissue culture systems and in whole animal studies. The result will be key lead compounds for further development with major pharmaceutical partners. These pharmaceutical partners will provide the necessary capital to develop our new discovery into a new therapeutic approach to obesity and diabetes.

We currently have identified eight novel genes and these genes will proceed through various stages of the above research plan during 1998/1999.

The development and progress achieved with each of these previously identified novel genes and new genes uncovered will be reported to the Autogen Scientific Advisory Board under the following Milestones:

1. Identification of gene sequences up- or down-regulated in diabetic, non-diabetic, lean and obese animals.

2. Identification of full-gene sequence and confirmation of novel character.

3. Production of protein product by bacterial expression of novel genes.

4. Confirmation of tissue differential gene expression and regulation of expression of the novel gene in various metabolic conditions.

5. Effects of gene product on carbohydrate and fat metabolism.

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RESEARCH AGREEMENT

BETWEEN THE

INTERNATIONAL DIABETES INSTITUTE

AND THE

MENZIES RESEARCH UNIT

AND

AUTOGEN RESEARCH PTY LTD

2001

RESEARCH AGREEMENT

THIS AGREEMENT is made on the 7th day of February 2002.

PARTIES:

The International Diabetes Institute ACN 007 342 412 of Kooyong Road, Caulfield, Victoria (**"IDI"**);

Menzies Research Unit ABN 30 764 374 782 of 17 Liverpool Street, Hobart, Tasmania (**"Menzies"**); and

Autogen Research Pty Ltd ABN 84 074 636 847 of 210 Kings Way, South Melbourne, Victoria (**"Autogen"**).

RECITALS:

A On 19 May 1998, IDI and The University of Tasmania through Menzies entered into a Research Agreement ("1998 Research Agreement")

B Autogen has provided the funding for the activities to be conducted under the 1998 Research Agreement.

C Autogen engages in research in the fields of diabetes, obesity, metabolic syndrome, CNS disorders and other common diseases ("the Research Fields")

D IDI has been conducting research in the fields of diabetes, obesity and the metabolic syndrome ("Research Expertise")

E Menzies has expertise in epidemiology and population health.

F Menzies holds a store of biological material suitable for genetic analysis and a diabetes registry.

G IDI has requested Menzies, and Menzies has agreed to conduct specified research, and to provide access to the expertise of the Menzies and its employees.

H Autogen has engaged IDI to conduct research in the field of diabetes, obesity, and the metabolic syndrome.

I The parties propose to renew the agreement to conduct research on the terms and conditions contained in this Agreement.

J The parties wish to ensure that the Research Expertise is applied to the project and that the results of the Project are, if appropriate, commercialised by Autogen.

IT IS AGREED:

1. DEFINITIONS AND INTERPRETATION

1.1 Definitions

1.1.1 "Budgets and Workplans" means the detailed budgets and time plans and schedules for work to be carried out under the Project and attached in Schedule 2;

1.1.2 "Commencement Date" means the date specified in Item 1 of Schedule 1.

1.1.3 "Confidential Information" means information that:

(i) is by nature confidential; or

(ii) is designated by a party bound by this Agreement as confidential and includes:-

(a) information comprised in or relating to any Intellectual Property rights or any pre existing Intellectual Property rights of any party;

(b) information relating to the financial position of any party:

(c) information relating to the internal management and structure of any party, or the personnel, policies and strategies of any party;

(d) information of a party to which another party or parties has access other than information referred to in paragraphs (a), (b) and (c) that has any actual or potential value to the first party or to the person or corporation which supplied that information;

(e) information in the possession of another party of parties relating to the first party's clients or suppliers, and like information;

(f) information of a party disclosed to another party or parties before or after the Commencement Date.

but does not include information that:

(a) is in the public domain or subsequently enters the public domain without the fault of the party;

(b) at the date of disclosure is known (and is declared as known within 10 days of disclosure with supporting written evidence of such knowledge) by the recipient party unless the parties agree that it should be deemed Confidential Information;

(c) is mutually agreed not to be confidential; or

(d) at any time received in good faith by any party from a third party which is lawfully in possession of the information and had the right to disclose it.

1.1.4 "Database" shall mean the Tasmanian pedigree and genealogy data held by and managed by Menzies.

1.1.5 "Product" shall mean a gene or genes and a protein encoded thereby specific for diabetes, dyslipidaemia, obesity and other components of the Metabolic Syndrome isolated by IDI from or as a result of the conduct of the Project.

1.1.6 "Project" shall mean a project for the identification of a gene or genes specific for diabetes, dyslipidaemia, obesity and other components of the Metabolic Syndrome, by the analysis of biological samples provided exclusively to IDI from the Menzies obtained from selected families or individuals having or thought to have an hereditary disposition to the aforementioned conditions.

1.1.7 "Project Management Team" shall mean the team assembled to oversee all aspects of the Project, and shall consist of equal representation from Autogen, IDI and Menzies.

1.1.8 "Sum" shall mean the payment made to Menzies by Autogen as detailed in Item 2 of Schedule 1.

1.1.9 "Term" shall mean the Term of one (1) year commencing on the date of this Agreement and yearly thereafter unless otherwise terminated by either party giving the other notice of no later than two months prior to the end of each year term.

1.2 In the Agreement unless otherwise expressly provided:

(i) reference to a person includes any other entity recognised by law and vice versa

(ii) words importing the singular number include the plural number and vice versa

(iii) words importing one gender include every gender.

2. APPOINTMENT OF IDI AND MENZIES

2.1 Autogen appoints IDI and Menzies to carry out and conduct the Project on the terms of this Agreement.

3. TERM

3.1 This Agreement shall commence on the Commencement Date and shall continue (subject to the provisions as to termination hereunder) for the Initial Term. Not less than three months prior to the expiration of the Term the parties shall determine whether this Agreement is to continue by mutual agreement. If no agreement is reached between the parties by the end of the

Term, this Agreement shall terminate at the end of the Term. If agreement is reached between the parties prior to the end of the Term, this Agreement shall continue to apply for the further term agreed by the parties subject to any written variations to this Agreement agreed by the parties.

4. FUNDING OF THE PROJECT

4.1 Subject to Clause 10.2, as consideration for IDI and Menzies carrying out the Project in accordance with this agreement, Autogen will:

4.1.1 Pay to Menzies the Sum in accordance with Item 2 of Schedule 1.

4.1.2 If at the end of the Term (whether through completion or earlier termination) not all of the Sum for that year has been expended or committed to be expended any unexpended portion of the Sum in the control of Menzies if requested by Autogen must be returned to Autogen otherwise that unexpended portion may be carried forward for use in the next year of the Term.

5 MENZIES OBLIGATIONS

5.1 In carrying out the Project, Menzies will:

5.1.1 use the Sum solely in the performance of the Project in accordance with this Agreement or as otherwise agreed in writing by Autogen;

5.1.2 conduct the Project in a safe, efficient and professional manner with all reasonable skill and care, and in compliance with all material laws and the requirements of any relevant Governmental Agency and in accordance with good laboratory and clinical practice;

5.1.3 employ in its own name sufficient employees and agents as are reasonably required to conduct the Project:

5.1.4 conduct the Project in Australia (including an external territory of Australia);

5.1.5 not conduct any clinical trials on humans without the prior consent of Autogen; and

5.1.6 use its best endeavours to ensure that completion of each stage of the Project is achieved in accordance with this Agreement.

5.2 Menzies hereby warrants that it has in its name and will keep in force, insurances with respect to the Project in the manner and to the extent which a business enterprise holding similar property and engaged in a business at a similar locality, would prudently insure against, including, without limitation, industrial special works, product liability, professional indemnity and public liability insurance. Menzies will supply Certificates of Currency for the said insurances to Autogen at Autogen's request.

5.3 Subject to clauses 5.5 and 7, all research, discoveries, inventions, secret processes, designs, improvements in procedure or methods and other results from the Project will be the absolute property of Autogen, and Menzies and IDI will provide all reasonable assistance to Autogen in relation to any

applications for registration or other statutory protection or related to the research results of the Project and will execute all documents and do all other things as are reasonably required Autogen to vest title of the results in Autogen.

5.4 Menzies will supply Autogen and IDI with all information known to it which is necessary or desirable to enable or facilitate the successful completion of the Project.

5.5 For the avoidance of doubt the parties acknowledge that ownership of information relating to genealogy, pedigree or clinical profile of patients from whom blood samples are taken for the purpose of the Project will be retained by Menzies.

5.6 Menzies will establish as soon as is practicable after the Commencement Date the Project Management Team to oversee ethics approval for any subsequent projects.

6. PERFORMANCE REVIEW

6.1 The Project Management Team shall review the progress of the Project every three (3) months.

6.2 The purpose of the reviews referred to in clause 6.1 shall be to ascertain whether the stages targeted and milestones set in the Budgets and Workplans are being met at the appropriate times and to an appropriate standard.

6.3 The Director of Menzies shall three (3) months after the Commencement Date, and every three (3) months thereafter, provide IDI with a written report for the purposes of the review referred to in clause 6.1 setting out adequate details of the following, and in accordance with the Budgets and Work Plans detailed in Schedule 2;

(a) the progress of the Project work during the preceding three (3) months, and whether all milestones which ought to have been reached during that period have been reached and best professional standards maintained;

(b) any material advances or developments;

(c) any material delays or unforseen problems in the conduct of the Project;

(d) any recommendations on changes to the Project or associated Budgets and Workplans, including changes in direction of the Project:

(e) any other relevant information relating to or affection the Project.

The report from the Director of Menzies shall be provided to Autogen and IDI within fourteen (14) days of the end of the relevant three (3) month period.

6.4 Notwithstanding the obligations in clause 6.3, both IDI and Menzies acknowledge that they are aware that Autogen is a subsidiary of Autogen Limited and Autogen Limited is bound by the Continuous Disclosure

obligations of the Corporations Act 2001 and Listing Rule 3.1 of the Australian Stock Exchange listing rules. IDI and Menzies agree to immediately advise Autogen of any significant findings from the research being undertaken pursuant to this Agreement so that Autogen Limited can comply with its continuous disclosure obligations.

7. OWNERSHIP OF INTELLECTUAL PROPERTY

7.1 The parties acknowledge and agree that all pre-existing Intellectual Property prior to 1 June 1998, which is contributed to the Project shall belong to the party with which it originated and all Intellectual Property relating to the Project since that time shall belong to Autogen.

7.2 All forthcoming Intellectual Property relating to the Project shall belong to Autogen and IDI and Menzies shall not claim any share of the commercial licensing of any product arising from the Project other than as provided in clause 7.3.

7.3 All revenue due to IDI through the commercialisation of any product derived from the Project shall be shared equally between IDI and Menzies, provided however that this clause 7.3 will not operate to grant any intellectual property rights to IDI or Menzies except as expressly provided elsewhere in this Agreement.

7.4 Autogen shall solely decide upon whether and, if so, the terms and conditions upon which, to develop and commercially exploit the Intellectual Property and the Products whether licensing or otherwise, throughout the world. All income and royalties derived from the development and commercialisation of the Intellectual Property and the products shall, subject to clause 7.3, belong to Autogen solely.

8. CONFIDENTIALITY & PUBLICATIONS

8.1 All parties will ensure that each person to whom Confidential Information is disclosed is made aware of the confidential nature of the Confidential Information and complies with the obligations of the parties under this clause.

8.2 All parties will treat Confidential Information as secret and confidential, and as the property solely of the party which disclosed the Confidential Information, and will not use Confidential Information for any purpose other than the Project or in any manner which may be to the detriment of the disclosing party.

8.3 All parties agree as soon as is practicable to develop and implement a coding system that protects that confidentiality of the identity of the person to whom information in the Database relates.

8.4 All parties acknowledge that any information supplied by the other party and its employees in respect of the Project is confidential information and all parties undertake to use best endeavours to ensure such information is not disclosed to any third party, beyond those reasonably involved in the Project.

8.5 All parties shall have the right to make scientific publications and presentations relating to the results of the Project provided always that the party seeking to publish (the "publishing party") shall provide copies of such

publications and presentations to the other party (the "non publishing party") at least four (4) weeks before the intended submission for publication or presentation. The non publishing party shall, with a period of four (4) weeks of receipt of such publications or presentations advise the publishing party:

(a) that the paper prepared or proposed presentation is approved for publication or presentation; or

(b) that commercial interests may be prejudiced by the publication or presentation in which case the publishing party shall delay publication or presentation for a period specified by the non publishing party which must not exceed six (6) months after submission by the publishing party for publication or presentation and furthermore within this time period, the non publishing party which must not exceed six (6) months after submission by the publishing party for publishing party will have the right to require such amendments to the publication or presentation as are reasonably necessary in order to protect its commercial and/or patent interests; or

(c) if the non publishing party has not responded within the designated time period under this Clause 8.5 the proposed paper or presentation shall be deemed to have been approved by the non publishing party.

8.6 The obligations set out in this clause 8 remain in full force and effect and will continue to bind each of the parties notwithstanding that this Agreement may have been terminated.

9. LIABILITY AND OBLIGATIONS

9.1 Each party agrees during the period of this Agreement and at all time thereafter to indemnify and hold harmless the other parties against any and all actions, suits, proceedings, claims, demands, costs, penalties (legal and otherwise) or losses whatsoever to the extent that they arise out of or in respect of:

(a) the negligence of the indemnifying party or its employees, agents or sub-contractors; or

(b) any breach by the indemnifying party, its employees, agents or sub-contractors of the terms of this Agreement.

9.2 The indemnity in this clause 9.1 extends to personal injury and property damage but does not extend to loss of profits, loss of business opportunities or any other indirect loss however caused.

10. TERMINATION AND CONSEQUENCES

10.1 Either party may terminate this Agreement upon breach of a material term of this Agreement by the other.

10.2 In the event that the funding for the Project is not received by Menzies from Autogen, Menzies may terminate this Agreement.

10.3 Termination before completion of the Project is by written notification and all services rendered and costs committed to the Project by Menzies will be paid

to Menzies at the date of termination except where the termination arises from a breach of this Agreement by Menzies.

10.4 For the purposed of clause 10.3, "costs committed" include all salary and oncosts in relation to appointments approved by the Project Management Team.

10.5 If this Agreement is terminated at the request of Autogen, Menzies will deliver to Autogen all information known to it which is necessary or desirable to enable or facilitate the completion of the Project, with the exception of pre-existing Intellectual Property.

10.6 Termination of this Agreement, other than termination by Menzies under clause 10.1, does not affect the operation of clause 7.3, and IDI will continue to pay Menzies 50% of revenue due to IDI through commercialisation of any product derived from the Project as required under clause 7.3.

11. ASSIGNABILITY

11.1 This Agreement shall not be assigned by any parties without the written consent of the other party.

12 LAW OF AGREEMENT

12.1 This Agreement will be governed by and constructed in accordance with the laws of the State of Victoria, Australia, and the parties hereto submit to the non-exclusive jurisdiction of the courts of such State. All disputes arising between the parties out of or in connection with this Agreement in any way, shall also be resolved or determined according to the laws of the State of Victoria, or if those laws are inapplicable, then the laws of the Commonwealth of Australia.

Schedule 1

Item 1. Commencement Date: 1 October, 2001

Item 2.

Diabetes 2002

Staff	Classification	Fraction	Oct - Dec 2001	Jan - Oct 2002	Total
Manager, Diabetes Research Unit	HEO 6.2	100%	$ 12,200	$ 38,000	$ 50,200
Research Nurse	HEO 5.5	35%	$ 4,500	$ 12,900	$ 17,400
Annette	HEO 4.3	20%	-	-	$ -
Tim	HEO 7.5	5%	-	-	$ -
rector GE Unit	Level B.6	2%	-	-	$ -
			$ 16,700	$ 50,900	$ 67,600
Consumables			$ 450	$ 1,350	$ 1,800
Travel		3x500km		$ 600	$ 600
			$ 450	$ 1,950	$ 2,400
Access fee and infrastructure 30%			$ 30,000		$ 30,000
TOTAL			**$ 47,150**	**$ 52,850**	**$ 100,000**

*funded from Access fee/infrastructure

Payment Dates

25% on signing of Agreement
25% 31 March 2002
25% 30 June 2002
25% 30 September 2002

Schedule 2

THE TASMANIAN DIABETES AND HEART HEALTH FAMILY STUDY – PHASE 2
Oct 2001– Oct 2002

RESEARCH PLAN AND MILESTONES

Michèle Sale	Menzies Centre for Population Health Research
Jeremy Jowett	International Diabetes Institute

Introduction:
The ability to identify predisposing genes for complex diseases is strongly confounded by extensive genetic heterogeneity. Studying large family pedigrees where the number of contributing quantitative trait loci (QTLs) is likely to be reduced can simplify this genetic complexity. Additionally the increased number of meiotic events in large families increases the statistical power to link genomic regions with the disease under consideration. Collection of these families from isolated populations may also reduce the level of genetic heterogeneity of putative disease loci between families from the same geographic area.

Status and aims:
This research project proposes to investigate the size, structure and availability of large family pedigrees (not ascertained on any phenotype) residing in Tasmania that may be suited for the investigation of genetic susceptibility to components of the metabolic syndrome. The study will collect information about family sizes and structures, location of members and likely willingness to participate. This information will be used to assess the feasibility of undertaking a large-scale family collection that may be suitable for a genome wide scan. This research plan outlines the measures that will be taken to attain this objective.

1. **New project preparation**
   All phenotypic protocols need to be clearly defined before we can move forward with ethics approval and recruitment. This is essential in order to fully inform potential participants what later full participation in the study will involve.

   All protocols and questionnaires used for the Tasmanian Diabetes Family Study will be reviewed for accuracy, ambiguity and consistency, and modified where necessary. A new questionnaire requesting information on extended family members, their age, residence, and likely participation status will be developed.

   Continuous measures of atherosclerosis will need to be investigated and costs per participant calculated. It is possible that equipment will need to be purchased or leased.

   Phenotypic QTL measures will use the revised TDFS protocols, together with additional atherosclerosis measures.

   New information sheets and consent forms will need to be developed, and these modifications submitted to the University of Tasmania's Human Research Ethics Committee for approval.

2. **Recruitment drive to identify extended pedigrees with at least 8 willing participants residing in Tasmania**

Selection criteria for ***all*** participants will be:

- Aged >16 years
- Resident in Tasmania or metropolitan Victoria

(For individuals aged 16-18 years, we will need to obtain both participant and parental/guardian consent.)

The selection criteria used in advertising to identify extended pedigrees will be:

- Proband 30-60 years (health/disease status unimportant)
- Both parents alive, resident in Tasmania or metropolitan Victoria, and *likely* to participate
- A minimum of **5** other living first-degree relatives (siblings and/or children >16 years) resident in Tasmania or metropolitan Victoria *likely* to participate

This strategy will initially identify families with a minimum of 8 individuals, including 7 first-degree relatives of the proband.

The following steps will be used to identify families:

- Television, radio and print media advertising
- Community talks
- Family history societies and researchers
- Service clubs, if willing to be involved
- "Word of mouth" through Centre employees
- Any other avenues

3. **Researching families**

We will contact all first-degree family members identified by the proband in the recruitment drive process. At this time information will be gathered from family members in these selected families about 2nd and 3rd degree relatives (eg grandparents, nieces, nephews, aunts, uncles, cousins, offspring of cousins) >16 years old, and resident in Tasmania or metropolitan Victoria.

We will inform families that phenotypic assessment may not take place for at least another 12 months, and ask that the nominated family contact forward any changes of contact details to us. Where possible, we will inform families that have not met the criteria (eg if their relatives have refused to participate) early in the process that we will not require their later participation.

The family information will be entered into a suitable database for full review scheduled in July 2002. An assessment of the collection will be made at this time as to which families may be suitable for participation in phenotyping.

MILESTONES

Nov 2001-Feb 2002

- Review protocols and questionnaires used for the Tasmanian Diabetes Family Study, and modify if necessary
- Develop a new questionnaire to obtain information on extended family members
- Investigate continuous measures of atherosclerosis and costs per participant
- Investigate purchase of any equipment required
- Determine exact protocols for recruitment and phenotypic assessment
- Prepare new information sheets and consent forms
- Send modifications to the University of Tasmania's Human Research Ethics Committee (HREC)
- Receive ethics approval from University of Tasmania HREC.

Mar-Jul 2002

- Purchase required equipment
- Identify willing families through:
  - Television, radio and print media advertising
  - Community talks
  - Family history societies and researchers
  - Service clubs, if willing to be involved
  - "Word of mouth" through Centre employees
  - Any other avenues
- Send questionnaires to individuals that volunteer to participate
- Follow-up non-responders by telephone.

Aug-Oct 2002

- Continue follow-up of remaining family members
- Review families to select those for further targeting
- Gather information on 2nd and 3rd degree relatives of selected families
- Collate data and review families for final selection for phenotypic phase.

EXECUTED AS AN AGREEMENT

Signed for and on behalf of the **Menzies Research Unit** by .....

In the presence of: .....
Signature

Dixie Prentice
Name

Date: 21.12.01

Signed for and on behalf of the **International Diabetes Institute** by: .....

In the presence of: .....
Signature

Arthur Walmsley
Name

Date: 16/1/02

The common seal of **AUTOGEN RESEARCH PTY LTD ABN 84 074 636 847** was hereto affixed in accordance with its Constitution in the presence of:

AUTOGEN RESEARCH PTY LTD A.C.N. 074 636 847 The Common Seal of

.....

.....
Signature

.....
Name

Date: 7/02/02

Research, Licence and Commercialisation Agreement –

Gene Discovery in Depression

Dated 16th August 2000

AUTOGEN RESEARCH PTY LTD ACN 074 636 847
("Autogen Research")

DEAKIN UNIVERSITY
("Deakin University")

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RESEARCH, LICENCE AND COMMERCIALISATION AGREEMENT - GENE DISCOVERY IN DEPRESSION

AGREEMENT dated 11th August 2000

BETWEEN

AUTOGEN RESEARCH PTY LTD ACN 074 636 847 of 210 Kings Way, South Melbourne, Victoria, 3205 ("**Autogen Research**")

AND

DEAKIN UNIVERSITY a body corporate and politic established pursuant to the *Deakin University Act 1974* of Geelong, Victoria, 3217 ("**Deakin University**")

RECITALS

A. Autogen Research currently engages in, or proposes to engage in, research in the fields of diabetes, obesity, respiratory diseases, allergy, asthma, depression and autoimmunity.

B. Deakin University has the Research Expertise.

C. Autogen Research desires to collaborate with Deakin University to provide the Funding for the R&D Program using the Research Expertise in return for sole ownership by Autogen Research of all intellectual property created by the R&D Program on the terms set out in this Agreement.

D. The parties wish to ensure that the Research Expertise is applied to the R&D Program and that the results of the R&D Program are, if appropriate, commercialised.

E. Autogen Research is a subsidiary of Autogen Limited, which is listed on the Stock Exchange. Deakin University is aware that the Corporations Law prohibits insider trading and shall use their best endeavours to ensure that their employees and contractors are also made aware of such prohibition. Deakin University is aware of the continuous disclosure requirements applicable to companies listed on the Stock Exchange and shall use their best endeavours to ensure that their employees and contractors are also aware of such requirements and shall advise Autogen Research in writing of any material advancements or developments as they occur.

AGREEMENT

1. DEFINITIONS AND INTERPRETATION

1.1 Definitions

In this Agreement the following words and expressions shall have the meanings ascribed thereto as follows (unless the context otherwise requires):

"**Agreement**" means this agreement and includes the recitals, schedules and annexures (if any) thereto.

"**Autogen Limited**" means Autogen Limited ACN 000 248 304.

"**Budgets and Workplans**" means the detailed budgets and time plans and schedules for work to be carried out under the R&D Program and attached in Schedule 3 as may be amended from time to time by agreement between the parties.

"**Commencement Date**" means the date specified in Item 3 of Schedule 1.

"**Confidential Information**" means:

information that:

(a) is by its nature confidential; or

(b) is reasonably designated by a party as confidential,

and includes -

(c) information comprised in or relating to any Intellectual Property rights of any party;

(d) information relating to the financial position of any party and in particular includes information relating to the assets or liabilities of any party and any other matter that does or may affect the financial position or reputation of any party;

(e) information relating to the internal management and structure of any party, or the personnel, policies and strategies of any party;

(f) information of a party to which another party or parties has access other than ¹information referred to in paragraphs (iii), (iv) and (v) that has any actual or potential commercial value to the first party or to the person or corporation which supplied that information;

(g) information in the possession of another party or parties relating to the first party's clients or suppliers, and like information; and

(h) information of a party disclosed to another party or parties before or after the Commencement Date,

but does not include information that:

(i) is in the public domain or subsequently enters the public domain without the fault of a party;

(j) at the date of disclosure is known (and is declared as known within 10 days of disclosure with supporting written evidence of such knowledge) by the recipient party unless the parties agree that it should be deemed Confidential Information;

(k) is mutually agreed not to be confidential; or

(l) at any time is received in good faith by any party from a third party which is lawfully in possession of the information and had the right to disclose it.

"**Funding**" means:

(a) in respect of the Initial Term the amount specified in Item 1 of Schedule 1; and

(a) in respect of any period after the Initial Term, the amount agreed in writing by the parties to be paid by Autogen Research for that period in accordance with the terms of Schedule 1.

"**GST**" means any goods and services tax which is levied on the value of goods and services supplied.

"**Initial Term**" means the period of one year from the Commencement Date.

"**Intellectual Property**" means all intellectual and industrial property or rights of any nature throughout the world and reversionary interests therein, including inventions, rights to or arising from inventions, letters patent, applications for letters patent, utility models, copyright in works of any nature, industrial designs, registered designs, rights to or arising from any industrial design, computer programs of any nature, Confidential Information, trade secrets, "know how", technical or commercial expertise or knowledge and any ideas or information of a commercial or valuable nature developed or created on or after the Commencement Date pursuant to the R&D Program.

"**Net Sales Revenue**" means:

(a) the revenue in Australian dollars received by Autogen Research or any Related Body Corporate of Autogen Research from all sales of the Products or licence fees or royalties derived from licensing of the Intellectual Property to produce, market and sell the Products; and

(b) the cash value of any non-cash consideration received by Autogen Research or a Related Body Corporate of Autogen Research from sales of Products, and from licensing of the Intellectual Property to produce, market and sell the Products, which is in settlement of monies owing or which would otherwise be owing to Autogen Research or a Related Body Corporate for sales of Products or licensing of Intellectual Property, (provided that the accumulated cash value of such non-cash consideration shall not be taken into account in determining net sales revenue until Autogen Research has received sufficient revenue pursuant to paragraph (a) above to meet the payment of any royalties payable pursuant to this Agreement),

after the deduction of all trade discounts, returns of sales, foreign exchange charges, withholding tax, sales tax or similar tax such as consumption tax, goods or services tax or value added tax and insurance and freight costs under a cost insurance and freight

arrangement, but before the deduction of administrative, marketing and manufacturing costs and corporate income tax.

"**Pre-existing Intellectual Property**" means the intellectual and industrial property developed before the Commencement Date, owned by Deakin University and described in Schedule 4, to be made available by Deakin University exclusively for use in the R&D Program.

"**Principal Scientist**" means the person appointed as such, or any replacement for that person, appointed in each case as provided for in clause 2.2.

"**Products**" means the products and results of the R&D Program.

"**Project Location**" means the Metabolic Research Unit of Deakin University at Geelong, Victoria.

"**Related Body Corporate**" has the meaning stated in Section 9 of the Corporations Law.

"**Research Expertise**" means the fields of expertise of Deakin University specified in Item 2 of Schedule 1.

"**Research Proposal**" means the proposal attached in Schedule 2 of this Agreement involving scientific research using the Research Expertise into the area of gene discovery in depression.

"**R&D Program**" means the program of research and development work to be carried out by or on behalf of Deakin University pursuant to this Agreement in relation to the Research Proposal.

"**Stock Exchange**" means Australian Stock Exchange Limited.

"**Term**" means the Initial Term of this Agreement and any agreed extension in accordance with clause 3.

1.2 Interpretation

Where the context so permits, words importing the masculine gender shall include the feminine and neuter genders and vice versa and words importing persons shall include corporations and vice versa and words importing the singular number shall include the plural and vice versa (unless repugnant or inconsistent to the context in which they are used).

Any table of contents to this Agreement and any headings and marginal notations in this Agreement have been inserted for convenience only and shall not in any way limit or govern the construction of the terms of this Agreement.

2. APPOINTMENT OF DEAKIN UNIVERSITY

2.1 Autogen Research hereby appoints, and Deakin University accepts the appointment of, Deakin University to conduct the R&D Program in accordance with the Research Proposal, such appointment to take effect on and from the Commencement Date.

2.2 Deakin University shall provide the services of a suitably qualified and experienced person, approved of by Autogen Research, as the principal scientist to conduct the R&D Program and supervise and direct the scientific staff engaged in the conduct of the R&D Program. If at any time during the Term Deakin University is not able to provide the services of that person as the Principal Scientist, the parties shall meet to discuss a suitable replacement and then, subject to the written consent of Autogen Research, which consent shall not be unreasonably withheld, Deakin University shall provide the services of another suitably qualified and experienced person as the Principal Scientist.

2.3 The R&D Program shall be carried out at the Project Location or at such other location as Deakin University and Autogen Research may agree from time to time.

2.4 Deakin University shall employ or engage, on contract, such scientific staff as shall be necessary and in accordance with the Funding and the Budgets and Workplans to conduct the R&D Program.

2.5 Deakin University may, subject to the prior written consent of Autogen Research, sub-contract the performance of any part or parts of the work for the R&D Program provided that in so doing the sub-contractor first enters into a suitable confidentiality agreement on terms reasonably acceptable to Autogen Research including:

- a covenant not to infringe any Intellectual Property rights of Deakin University or Autogen Research;
- an acknowledgement that all Intellectual Property rights arising from the carrying out of the sub-contracted work shall belong to Autogen Research and Deakin University in accordance with this Agreement.

Deakin University agrees that it is liable in respect of the performance of any work for the R&D Program by its sub-contractors as if Deakin University itself had performed that work.

2.6 Deakin University shall at all times use its best endeavours to ensure that completion of the respective stages of the R&D Program is achieved substantially in accordance with the timetable set out in the R&D Program and in the Budgets and Workplans.

2.7 Deakin University hereby warrants:

(a) it has the Research Expertise to conduct the R&D Program in accordance with the Research Proposal and the Budgets and Workplans;

(b) it has the facilities at the Project Location to conduct the R&D Program in accordance with the Research Proposal and the Budgets and Workplans;

(c) at the Commencement Date the Principal Scientist is employed by Deakin University as principal scientist to conduct the R&D Program and supervise and direct the scientific staff engaged in the conduct of the R&D Program;

(d) it shall employ or engage on contract suitably qualified scientific staff to conduct the R&D Program in accordance with the Research Proposal;

(e) it will make available for the Term the Pre-existing Intellectual Property for the conduct of the R&D Program;

(f) it will not sub-contract the performance of any part or parts of the R&D Program without the prior written consent of Autogen Research;

(g) it will not knowingly do, permit to be done or cause to be done any action which may infringe any person's intellectual property rights; and

(h) to the best of its knowledge, the Intellectual Property and the Products will not infringe any person's intellectual property rights.

2.8 Deakin University shall at all times indemnify and hold harmless each of Autogen Research and its respective officers, employees and agents (in this clause 2.8 referred to as "those indemnified") from and against any loss (including reasonable legal costs and expenses) or liability reasonably incurred or suffered by any of those indemnified arising from any suit, action or proceeding by any person against any of those indemnified where such loss or liability was caused by any breach of warranty or wilful, unlawful or negligent act or omission of Deakin University, its employees, agents or sub-contractors in connection with this Agreement.

3. TERM

This Agreement shall commence on the Commencement Date and shall continue (subject to the provisions as to termination hereunder) for the Initial Term. Not less than three months prior to the expiration of the Initial Term the parties shall determine whether this Agreement is to continue by mutual agreement. If no agreement is reached between the parties by the end of the Initial Term, this Agreement shall terminate at the end of the Initial Term. If agreement is reached between the parties prior to the end of the Initial Term, this Agreement shall continue to apply for the further term agreed by the parties subject to any written variations to this Agreement agreed by the parties.

4. FUNDING OF THE PROJECT

4.1 Subject to this Agreement, Autogen Research shall provide the Funding to finance the R&D Program over the Term, in accordance with the payment program in Item 1 of Schedule 1.

4.2 Subject to this Agreement, Autogen Research shall provide the Funding for the Initial Term. Deakin University shall be required to achieve the milestones set out in the Budgets and Workplans to an appropriate standard as specified in this Agreement. Although Autogen Research may terminate this Agreement pursuant to clause 10.1, Autogen Research shall provide the Funding for the Initial Term irrespective of such termination except where termination is pursuant to clause 10.1(a) in which case the Funding shall not be provided by Autogen Research.

4.3 Subject to sub-clauses 4.4 and 4.5, the Funding shall be used to pay for salaries of staff engaged in the conduct of the R&D Program (save and except for the Principal Scientist's salary which shall continue to be paid by Deakin University).

4.4 Deakin University shall ensure that no more than twenty per centum (20%) of the Funding shall be used for administration and infrastructure costs and that the balance of the Funding is applied directly to the R&D Program.

4.5 Deakin University shall use the Funding for the R&D Program in accordance with the Budgets and Workplans or for such other research within the Research Expertise as shall be agreed in writing by the parties.

4.6 Deakin University acknowledges that Autogen Research may from time to time seek funding from public or private sector third parties ("third party funding") in respect of the R&D program and that any third party funding so obtained (whether in the sole name of Autogen Research or of Deakin University or any combination thereof) in respect of the R&D Program shall for the purposes of this Agreement be deemed to meet (in part or whole as the case may be and on a dollar for dollar basis) any obligation of Autogen Research to provide the Funding then outstanding or which may be incurred by Autogen Research pursuant to this Agreement.

4.7 Deakin University shall use best endeavours to assist Autogen Research in making applications or submissions either in the sole name of Autogen Research or of Deakin University or any combination thereof as Autogen Research may reasonably require for third party funding for the R&D Program including the provision of scientific information required for the preparation of the applications or submissions. Deakin University shall not make application or submission for third party funding for the R&D Program without the prior written consent of Autogen Research even if such applications or submissions are to be solely in the name of Deakin University. This clause 4.7 does not require Deakin University to agree to any changes to this Agreement.

5. PERFORMANCE REVIEW

5.1 The parties shall review the progress of the R&D Program every three (3) months.

5.2 The purpose of the reviews shall be to ascertain whether the stages targeted and milestones set in the Budgets and Workplans are being met at the appropriate times and to an appropriate standard.

5.3 The Principal Scientist shall three (3) months after the Commencement Date, and every three (3) months thereafter, provide the parties with a written report for the purposes of the review setting out adequate details of the following:

(a) the progress of the R&D Program work during the preceding 3 months, and whether all milestones which ought to have been reached during that period have been reached and best professional standards maintained;

(b) any material advances or developments;

(c) any material delays or unforeseen problems in the conduct of the R&D Program;

(d) any recommendations on changes to the R&D Program or associated Budgets and Workplans, including changes in direction of the R&D Program;

(e) any other relevant information relating to or affecting the R&D Program.

The report from the Principal Scientist shall be provided to the parties within fourteen (14) days of the end of the relevant three (3) month period.

5.4 Within fourteen (14) days after receipt of a report from the Principal Scientist and pursuant to clause 5.3, Autogen Research may request, in writing to Deakin University, that any stage or part of the R&D Program be varied, suspended or declared completed, but the R&D Program will not be terminated other than in accordance with clause 10.

5.5 In addition to the reports under clause 5.3, the Principal Scientist on behalf of Deakin University will immediately advise Autogen Research in writing of any material advancements or developments as they occur.

5.6 The parties shall meet to consider the report from the Principal Scientist pursuant to clause 5.3, and to discuss the progress of the R&D Program and any variation or suspension of the R&D Program.

5.7 If Autogen Research is, in Autogen Research's sole and absolute discretion, satisfied as to the progress of the R&D Program after each review pursuant to this clause 5, and the R&D Program has not been suspended or declared completed pursuant to clause 5.4, Autogen Research shall make the Funding payment specified in Item 1 of Schedule 1. This clause 5.7 shall not apply during the Initial Term.

6. OWNERSHIP OF INTELLECTUAL PROPERTY

6.1 The parties acknowledge and agree that, subject to this Agreement, all Intellectual Property shall belong to and be the sole property, legally and beneficially, of Autogen Research.

6.2 Deakin University warrants that it shall make available for the purposes of the Research Proposal and use in the R&D Program, and any commercialisation of the results of the R&D Program, all Pre-existing Intellectual Property.

6.3 All discoveries inventions secret processes designs or improvements in procedure or methods made or discovered by any party during the currency of this Agreement arising from the R&D Program shall be the sole property, legally and beneficially, of Autogen Research.

6.4 (a) Autogen Research may take out and maintain appropriate protection for all new discoveries and developments made under the R&D Program and Deakin University shall assist Autogen Research in applying for letters patent, or other intellectual property protection in Australia or in any other part of the world for any such discoveries and developments and execute all instruments and do all things necessary for vesting the said letters patent or other intellectual property protection and rights when obtained and all right and title to and interest in the same in Autogen Research. Autogen Research shall bear the costs of taking out and maintaining appropriate protection for all new discoveries and developments made under the R&D Program.

(b) Autogen Research hereby grants to Deakin University a non-exclusive, non-transferable and non-delegable fee-free and royalty-free licence within the state of Victoria to use the Intellectual Property for the sole purpose of carrying out Deakin's own internal, not-for-profit research.

6.5 Autogen Research shall pay to Deakin University:

(a) if Autogen Research commercialises the Products, a royalty equal to one percent (1%) of the Net Sales Revenue

(b) if Autogen Research licenses one or more third parties to commercialise the Products, a royalty equal to one percent (1%) of the Net Sales Revenue.

6.6 Autogen Research shall diligently pursue commercial exploitation of the Intellectual Property and the Products, but Autogen Research shall solely decide whether and, if so, the terms and conditions upon which to develop and commercially exploit the Intellectual Property and the Products, whether by licensing or otherwise, throughout the world. All income and royalties derived from the development and commercialisation of the Intellectual Property and the Products shall subject to clause 6.5 belong to Autogen Research solely.

6.7 If Autogen Research has not developed and commercially exploited the Intellectual Property and the Products, or licensed one or more third parties to do so, within one (1) year of the expiration of the Term, Deakin University may seek approval in writing from Autogen Research to develop and commercially exploit the Intellectual Property and the Products. Autogen Research shall solely decide if such approval shall be granted but shall not unreasonably withhold such approval. If such approval is granted to Deakin University, Deakin University shall pay to Autogen Research an annual royalty equal to two percent (2%) of the Net Sales Revenue.

6.8 Autogen Research shall keep proper financial records and books of account in relation to the commercial exploitation of the Intellectual Property and the Products so that royalty payments may be verified. Deakin University or its authorized representative shall be entitled to inspect the financial records and books of account but only in respect of the development and commercialisation of the Intellectual Property and the Products and only once in each year. Inspection shall take place at the principal office of Autogen Research during normal business hours at a mutually agreed time and shall be at the cost of Deakin University. If Deakin University commercially exploits the Intellectual Property and the Products pursuant to clause 6.8 of this Agreement, the provisions of this clause shall apply mutatis mutandis.

7. CONFIDENTIALITY

7.1 All Confidential Information, which shall include any information relating to the Research Proposal and R&D Program which is supplied by or on behalf of any party, or which relates to or arises from the R&D Program, shall be treated by both parties as confidential and shall be used solely during the Term and in accordance with this Agreement to enable Deakin University and its sub-contractors to carry out the R&D program, or to enable the commercialisation of the Intellectual Property and the Products in accordance with this Agreement.

7.2 Prior to disclosing any of the Confidential Information to any employees or subsidiaries or related companies or sub-contractors or third parties from whom funding is sought, the relevant party will procure the execution by the person in question of a Deed as set out in Schedule 5 or otherwise in a form and substance satisfactory to all parties or otherwise procure that the person to whom it is intended to disclose any of the Confidential Information undertakes to maintain the same in confidence and acknowledges the interest therein of the party whose Confidential Information is disclosed.

7.3 Both parties hereby undertake and agree that, except for such disclosure as is prudent and reasonably necessary for the purposes of this Agreement, no part of the Confidential Information given to them or any of them pursuant to this Agreement shall be disclosed to anyone who is not an employee or sub-contractor of a party except with the prior written approval of the party whose Confidential Information is disclosed which consent, if given, shall be on the basis that the recipient of any part of the Confidential Information shall be bound to Deakin University and Autogen Research by contract to maintain the same in confidence. Without prejudice to the foregoing each party shall use its best endeavours to take all reasonably necessary steps to prevent the Confidential Information from passing into the public domain.

7.4 Nothing stated herein shall be construed as restricting or creating any liability for the disclosure or communication of Confidential Information which:

(a) is now or becomes publicly known through no wrongful act of any party;

(b) is received from a third party without restriction and without breach of this Agreement;

(c) is now or comes to be contained in any published patent or published or otherwise generally known to the trade through no wrongful act of any party; or

(d) is disclosed pursuant to governmental, legislative or judicial requirement including disclosure by Autogen Limited pursuant to its obligations under the Corporations Law or the Stock Exchange listing rules.

7.5 The obligations set out in this clause 7 shall remain in full force and effect, and shall continue to bind each of the parties, notwithstanding that this Agreement may have been terminated, or one of the parties may have ceased to be a party to this Agreement, for any reason.

8. LIABILITY AND OBLIGATIONS

8.1 Each party agrees during the period of this Agreement and at all times thereafter to indemnify and hold harmless the other party against any and all actions, suits, proceedings, claims, demands, costs, penalties, expenses (legal or otherwise) or losses whatsoever which may arise out of or in respect of the conduct of the R&D Program by that party or as a result of any unlawful or negligent act or omission of any servant or agent or sub-contractor of that party in respect of the foregoing.

8.2 Each party covenants and undertakes that the work under the R&D Program including the carrying out of all tests and trials will at all times be conducted to the highest possible professional standards and in accordance with all applicable rules, regulations and conditions.

8.3 Deakin University shall be responsible for obtaining necessary regulatory approval (if any), required by any and all government agencies, for conducting research and development work in the field of the Research Proposal and R&D Program in Australia. Deakin University shall deliver copies of all such approvals (if any) to Autogen Research within seven (7) days of receipt of such approvals by Deakin University.

8.4 Autogen Research is a subsidiary of Autogen Limited, which is listed on the Stock Exchange. Deakin University is aware that the Corporations Law prohibits insider trading and shall use its best endeavours to ensure that its employees and contractors are also made aware of such prohibition. Deakin University is aware of the continuous disclosure requirements applicable to companies listed on the Stock Exchange and shall use its best endeavours to ensure that its employees and contractors are also aware of such requirements and shall advise Autogen Research in writing of any material advancements or developments as they occur.

8A. INSURANCE

8A.1 At all times during the Term Deakin University must, at its own expense, establish and keep current the insurance policies of standard form, and subject to exclusions and sub-limits appropriate for this Agreement, and otherwise as specified in clauses 8A.2 and 8A.3.

8A.2 The policies of insurance required under clause 8A.1 are as follows:

(a) public liability insurance with a limit of liability of not less than $20 million for any one occurrence;

(b) product liability insurance with a limit of liability of not less than $20 million for any one occurrence and in the annual aggregate;

(c) workers' compensation insurance in accordance with the laws in force in Victoria; and

(d) professional indemnity insurance with a limit of liability of not less than $15 million for any one claim made. Professional indemnity cover is to be maintained throughout the Term and until 7 years after the end of the Term.

8A.3 Each policy of insurance referred to in this clause 8A must:

(a) be made available for inspection upon reasonable request by Autogen Research at any time during the Term, together with certificates evidencing those policies, the payment of premiums and other reasonable documentation which confirms that the policies are valid, current and meet the requirements of this Agreement;

(b) name Autogen Research as co-insured so that the policy will respond as if

there is a separate contract of insurance between each co-insured person and the insurer;

(c) include a clause enabling one insured person to claim against the insurer where another insured person would have been entitled to claim against the insurer but is precluded from doing so for any reason including, but not limited to, a breach of the policy by that other insured person; and

(d) include a cross-liability clause enabling one insured person to claim against the insurer even if the person making the claim against that insured person is also insured under the policy.

8A.4 If Deakin University fails to effect or keep in force any of the insurances which it is required by this Agreement to effect and maintain, Autogen Research may, but shall not be obliged to:

(a) effect and keep in force any such insurance and pay such premiums and other moneys as may be necessary for that purpose and may recover as a debt due from Deakin University on demand the amount so paid plus an administrative charge of 10%; or

(b) refuse to perform its obligations under this Agreement until the insurance policies and a receipt for the payment of premiums are made available by Deakin University for inspection.

Notwithstanding that Autogen Research may effect such insurances, Deakin University will be deemed to have indemnified Autogen Research against all claims, demands, proceedings, costs, charges and expenses which may arise as a result of Deakin University's failure to so insure.

9. PUBLICATION

9.1 Deakin University shall not (and shall procure that no person who is or who has been the Principal Scientist shall), without the prior written approval of Autogen Research, during the term of this Agreement and any extension or renewal thereof and for a period of twelve (12) months after termination of this Agreement or any extension or renewal thereof publish in academic or scientific publications the results of any part of the R&D Program. Autogen Research may withhold its approval if in its reasonable opinion, having regard to commercial considerations, publication would not be appropriate in the circumstances.

9.2 Prior to submission for publication of any proposed paper, the party proposing to publish the same shall forward a copy of the paper to Autogen Research, at the same time as requesting approval for publication. Autogen Research shall use reasonable endeavours to respond to the request for approval for publication within thirty (30) days of receipt of the request and the paper but if Autogen Research has not responded within thirty (30) days, Autogen Research is deemed to have refused approval for publication. Such refusal does not preclude reassessment by Autogen Research and the later granting of approval. The party proposing to publish may resubmit the request for approval for publication at any time.

9.3 Each such request for approval for publication shall be made in sufficient time to allow for the filing (on behalf of Autogen Research and Deakin University) of provisional patent applications, if considered appropriate.

9.4 The publishing party shall make appropriate acknowledgement in the publication, of Autogen Research's involvement and interest in the subject matter of the publication.

9.5 Autogen Research recognises the desire of Deakin University to publish in academic or scientific publications the results of part or all of the R&D Program and may have regard to such desire when deciding whether or not to grant its approval to publish when so requested.

9.6 Subject to the continuous disclosure obligations of Autogen Limited, Autogen Research shall, prior to publication, use its reasonable endeavours to submit by facsimile to Deakin University for comment, the text of any publicity statement, press release or other statement intended to be made to the public which includes reference to the scientific progress or the results of the R&D Program, or uses the name of Deakin University, provided that Autogen Research shall not be restricted in making whatever disclosures are necessary for the purposes of fulfilling the requirements applicable to Autogen Limited as a company listed on the Stock Exchange and Autogen Research shall be under no obligation to delay the public release of the text. Without limiting Autogen Research's rights hereunder, Autogen Research shall use reasonable endeavours to allow Deakin University at least twelve hours to respond to any text submitted to it. Deakin University shall use its reasonable endeavours to respond to Autogen Research promptly when any text is submitted to Deakin University for comment pursuant to this clause 9.6.

10. TERMINATION AND CONSEQUENCES

10.1 For the purposes of this clause, a ground of termination shall occur under this Agreement:

(a) if Deakin University fails to commence work on the R&D Program within thirty (30) days of the Commencement Date; or

(b) if Deakin University fails to achieve the milestones set out in the Budgets and Workplans or maintain the best professional standards appropriate to the nature of the R&D Program; or

(c) the R&D Program is not, in the opinion of Autogen Research, producing or likely to produce results from the R&D Program which can be commercialised by Autogen Research; or

(d) if, subject to clause 2.2, Deakin University does not utilise the Principal Scientist or such other researchers as Autogen Research may approve pursuant to clause 2.2 to work on the R&D Program; or

(e) if within 30 days of the first meeting of representatives under clause 4.2(a) in the event of introduction of a GST or any change in a GST, Autogen Research and Deakin University have not been able to agree on the Funding which will apply to the performance of the R&D Program; or

(f) if the parties do not agree by the end of the Initial Term to continue this Agreement as required by clause 3.

10.2 In the event that a ground of termination shall occur under this Agreement as specified in clause 10.1, Autogen Research may give thirty (30) days written notice to Deakin University of the intention of Autogen Research to terminate this Agreement without prejudice to any right of action or remedy which has accrued or which may accrue in favour of any party, and this Agreement shall terminate at the expiration of the thirty (30) day period.

10.3 Except in the event of termination under clause 10.4, Autogen Research may, by notice in writing to Deakin University, require Deakin University to make available to Autogen Research all information relating to the R&D Program and Deakin University shall supply to Autogen Research such information within thirty (30) days of the date of the notice.

10.4 If Autogen Research fails to provide the Funding at all or does not provide all the Funding for the Initial Term or ceases to provide the Funding pursuant to clause 5.7 hereof, Deakin University may give thirty (30) days written notice to Autogen Research of the intention of Deakin University to terminate this Agreement and unless Autogen Research resumes payment of the Funding within the thirty (30) day period, this Agreement shall terminate at the expiration of the thirty (30) day period.

10.5 In the event of termination under clause 10.1(a) Autogen Research is hereby released from any obligations to provide the Funding in the Initial Term or otherwise.

10.6 In the event of termination under clauses 10.1(b), (c), (d), (e) or (f):

10.6.1 Autogen Research shall:

(a) provide the Funding for the Initial Term;

(b) retain its ownership in the Intellectual Property as specified in clause 6.1; and

(c) comply with its obligations pursuant to clause 6.5 to pay the royalties to Deakin University.

10.6.2 Deakin University shall:

(a) maintain its licence from Autogen Research to use the Intellectual Property pursuant to clause 6.4(b); and

(b) comply with its obligations pursuant to clause 6.7 to pay royalties.

10.7 In the event of termination under clause 10.4:

10.7.1 if Autogen Research has not made any payment of the Funding at all or has not made all payments of the Funding for the Initial Term then:

(a) Autogen Research is hereby released from any obligations to provide the Funding in the Initial Term or otherwise; and

(b) all parties are released from any obligations to pay royalties pursuant to clauses 6.5 and 6.7.

10.7.2 if Autogen Research has made all payments of the Funding for the Initial Term then the provisions of clauses 10.6.1 and 10.6.2 shall apply.

10.8 Subject to clause 6.4(b), in the event of termination under clause 10.1(c), Autogen Research shall enter into good faith discussions with Deakin University with a view to reaching agreement on a basis for permitting the academic staff of Deakin University to continue research using the Pre-existing Intellectual Property and the Intellectual Property whether such research is pursuant to the R&D program or any similar research program.

10.9 If this Agreement is terminated under clause 10.4 and clause 10.7.1 applies, Deakin University shall no longer be bound by clauses 9.1, 9.2 and 9.3 of this Agreement. In the event of termination under clause 10.1, or if clause 10.7.2 applies to a termination under clause 10.4, the parties shall enter into good faith discussions as to whether clause 9 shall continue to operate, provided that Autogen Research is not required to agree that clause 9 shall cease to operate.

11. CO-OPERATION AND ASSISTANCE

11.1 Deakin University shall, and shall use all reasonable efforts to ensure that all persons employed or contracted by Deakin University working on the R&D Program shall, co-operate fully with Autogen Research both during the Term and after the expiration or earlier termination of this Agreement to provide Autogen Research with such information concerning the R&D Program as Autogen Research may reasonably require from time to time and such assistance as Autogen Research may reasonably require in applying for Intellectual Property rights throughout the world.

11.2 Deakin University shall use all reasonable efforts to ensure that all persons employed or contracted by Deakin University working on the R&D Program shall, ensure that all information concerning the R&D Program is promptly communicated to Autogen Research and that Autogen Research is provided with all necessary technical explanations and data to ensure that Autogen Research is fully informed as to the progress and status of the R&D Program.

11.3 Deakin University shall use all reasonable efforts to ensure that all persons employed or contracted by Deakin University working on the R&D Program (in this clause called "the Researchers") shall, provide reasonable assistance to Autogen Research both during the Term and thereafter in the commercialisation of the results of the R&D Program. The assistance referred to in this clause 11.3 shall include, but is not limited to:

(a) assistance in the preparation and prosecution of patent applications and other applications for Intellectual Property including signing all necessary documentation;

(b) assistance in all aspects of the commercialisation process; and

(c) the provision of consultancy services to Autogen Research to problem solve and advise.

Where it is, in the reasonable opinion of Autogen Research, appropriate to do so, Autogen Research may enter into commercial arrangements with the Researchers to provide the assistance and consultancy services referred to in clauses 11.3(b) and 11.3(c) and Autogen Research shall reimburse the Researchers for any reasonable costs incurred by the Researchers in providing the assistance and consultancy services referred to in this clause 11.3.

11.4 After the expiration or earlier termination of this Agreement, and subject to the rights of Deakin University pursuant to clause 6.4(b), Deakin University shall not be engaged in any research project similar to or which is the same as the R&D Program using the Research Expertise for a period of six months thereafter throughout Australia.

12. GENERAL

12.1 This Agreement shall be governed by, and construed in accordance with the laws of the State of Victoria, Australia, and the parties hereto submit to the non-exclusive jurisdiction of the courts of such State. All disputes arising between the parties out of or in connection with this Agreement in any way, shall also be resolved or determined according to the laws of the State of Victoria, or if those laws are inapplicable, then the laws of the Commonwealth of Australia.

12.2 If it is held by a court of competent jurisdiction that:

(a) any part of this Agreement is void voidable illegal or unenforceable; or

(b) this Agreement would be void voidable illegal or unenforceable unless any part of this Agreement was severed from this Agreement,

that part shall be severable from and shall not affect the continued operation of the rest of this Agreement

13. ARBITRATION

13.1 The parties agree that in the event of any dispute arising under or in connection with this Agreement, such dispute shall be referred for determination by an arbitrator, appointed by the President of the Australasian Dispute Centre.

13.2 In determining any dispute arising under or in connection with this Agreement, the arbitrator appointed pursuant to clause 13.1 hereof shall be required to restrict himself to deciding which of the views of the parties in dispute is correct, and shall make a determination in accordance with that decision.

13.3 Subject to clause 13.2 any arbitration carried out hereunder shall be in accordance with the provisions of the Commercial Arbitration Act 1984, and the parties agree that they shall have the right to be legally represented before the arbitrator.

13.4 The arbitrator's decision shall be accepted by the parties as a final determination of the matter in dispute and binding upon them.

13.5 A party may commence court proceedings relating to any dispute arising from this Agreement at any time where that party seeks urgent interlocutory relief.

14. NOTICES

14.1 Any notice (which expression shall also include a demand, request, consent or instrument required or authorised to be given to or served on any party under this Agreement):

(a) shall be in writing and signed by or in the case of a facsimile transmission shall be a true copy of an original signed by (in the case of a notice by Autogen Research) any director or the secretary of Autogen Research or authorised delegate for the purpose of this Agreement; (in the case of a notice by Deakin University), Vice-Chancellor of Deakin University or authorised delegate for the purpose of this Agreement;

(b) shall be given either:

(i) by being delivered by hand to (in the case of a notice to Autogen Research) its above mentioned address, attention: Company Secretary; or (in the case of a notice to Deakin University) its abovementioned address, attention: Vice-Chancellor; or

(ii) by facsimile transmission to (in the case of Autogen Research) 9234 1255, attention: Company Secretary; or (in the case of Deakin University) 5227 8500 attention: Vice-Chancellor,

and a notice given by facsimile transmission shall be deemed to have been given upon the issue to the transmitter of a satisfactory transmission control report indicating due transmission without error.

14.2 The undermentioned signatories hereby acknowledge that they have not received notice of the revocation of the authorisation under which they have respectively executed this Agreement.

15. CONTINUING OBLIGATIONS

The provisions of clauses 2.7, 4.2, 6, 7, 8.1, 9 and 11 shall remain in full force and effect, and shall continue to bind each of the parties, notwithstanding that this Agreement may have been terminated, or one of the parties may have ceased to be a party to this Agreement for any reason.

16. GOODS AND SERVICES TAX

If at any time during the Term there is any new GST introduced in Australia, or if there is any change to any GST then in force or the method of its imposition, then the following provisions will apply:

(a) representatives of Deakin University and Autogen Research will meet to renegotiate the Funding and the royalty amounts (if any) payable under clauses 6.6 and 6.8;

(b) the terms of this Agreement (including, but not limited to, the Funding and the royalty amounts payable under clauses 6.6 and 6.8) will continue to apply until the renegotiation is completed and the parties agree in writing to any amendment of those terms; and

(c) in any renegotiation which occurs pursuant to paragraph (a), the parties will apply the following objectives:

(i) Deakin University should recover from Autogen Research amounts equal to:

(1) any liability to remit GST incurred by Deakin University because of the conduct of the R&D Program by Deakin University;

(2) any liability to remit GST incurred by Deakin University because of the payment of royalties by Autogen Research to Deakin University; and

(3) any reduction in the cost to Autogen Research of paying royalties to Deakin University where such reduction is a result of the GST or of the associated abolition or change in rate or method of imposition of any other tax, excise, duty or impost;

(ii) Autogen Research should recover from Deakin University amounts equal to:

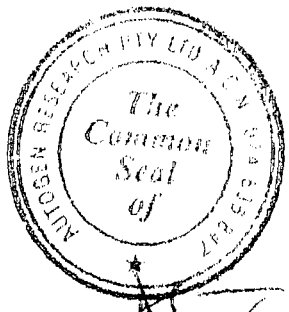
(1) any liability to remit GST incurred by Autogen Research because of the payment of royalties by Deakin University to Autogen Research;

(2) any reduction in the cost to Deakin University of conducting the R&D Program where such reduction is a result of the GST or of the associated abolition or change in rate or method of imposition of any other tax, excise, duty or impost; and

(3) any reduction in the cost to Deakin University of paying royalties to Autogen Research where such reduction is a result of the GST or of the associated abolition or change in rate or method of imposition of any other tax, excise, duty or impost.

EXECUTED as an agreement

THE COMMON SEAL of AUTOGEN RESEARCH PTY LTD ACN 074 636 847 was affixed in accordance with its Constitution in the presence of:



.....
(Signature of Secretary/Director)

.....
(Signature of Director)

PETER JAMES LEE
(Name of Secretary/Director in Full)

DAVID STUART TYRWHITT
(Name of Director in Full)

THE COMMON SEAL of **DEAKIN UNIVERSITY** was hereunto affixed on the 28th day of June by direction of the Vice-Chancellor in the presence of:

.....
Vice-Chancellor.

.....
Vice-President (Administration)

SCHEDULE 1

General

Item 1 – Funding

For the Initial Term: Payable by Autogen Research to Deakin University as follows:

$48,645.50 upon commencement of the R&D Program or execution of this Agreement, whichever is later

$48,645.50 upon receipt by Autogen Research of the 3 month review report referred to in clause 5.3

$48,645.50 upon receipt by Autogen Research of the 6 month review report referred to in clause 5.3

$48,645.50 upon receipt by Autogen Research of the 9 month review report referred to in clause 5.3.

Commencement of the R&D Program shall be notified to Autogen Research in writing by Deakin University following the commencement of the work required by the Budgets and Workplans. Upon receipt of such written notice Autogen Research shall pay to Deakin University the payment due upon the commencement of the R&D Program.

For any Further Term: If this Agreement is extended beyond the Initial Term pursuant to clause 3, the parties shall agree in writing the Funding for the Term. Payments shall be upon receipt by Autogen Research of further three monthly reports as required pursuant to clause 5.3.

Item 2 Research Expertise: Gene discovery in depression and anxiety

Item 3 Commencement Date: 1 April 2000

SCHEDULE 2

Research Proposal

Refer to the following 5 pages.

NEW PROJECT: DEPRESSION IN PSAMMOMYS OBESUS

Market Overview

Worldwide pharmaceutical sales continue to climb steadily, at a rate of 7-8% per year, and exceeded $300 billion per annum in 1998. Central nervous system drugs represent the third largest category of pharmaceutical sales (after cardiovascular and alimentary/metabolism), approximately 14% of the total market or $23.4 billion. Sales of CNS products increased by 12% in both 1997 and 1998. Antidepressants ranked as the world's highest selling drug class, showing a growth rate of 19.6% in the 12 months to June 1998 compared with the same period in the previous year. According to Scrip's Complete Guide to CNS Disorders (1999, PJB Publications, Surrey), antidepressants account for 47% of the worldwide psychiatric-related drug sales. This was approximately $9.4 billion in 1998, and will increase to $15 billion in 2002. Established therapeutic approaches include tricyclic antidepressants and selective serotonin reuptake inhibitors, as well as a number of newer compounds acting on monoamine oxidase, noradrenaline reuptake, the dopaminergic system and various other pathways.

Depression

Stress-related disorders have become increasingly common throughout the latter half of the previous century. Noticeably, the prevalence rates of psychiatric diseases such as anxiety and depression have steadily increased in recent decades. Depression refers to a variety of human behavioural states related to feelings of sadness, apathy, futility and despair. As with most psychological states, the definition of clinical depression is complicated by a variety of factors. Depression is a complex disorder with both genetic and environmental contributing factors, which are not well defined. It is generally accepted that depression can be broadly classified into two forms:

1) individuals who exhibit symptoms of depression and anxiety
2) those who exhibit symptoms of depression and schizophrenia.

Although the term depression will be used extensively here, it should be remembered that anxiety and depression probably represent a continuum of mood disorders

resulting from particular stresses in susceptible individuals. For the purposes of this study, we are assuming that the neurobiological processes underlying these mood disorders may be common to both.

The American Psychiatric Association characterizes depression as a dysphoric mood or loss of interest in activities that would normally be enjoyed, plus at least four of the following eight symptoms:

1) psychomotor retardation
2) feelings of worthlessness, self-reproach or inappropriate guilt
3) thoughts of suicide
4) decreased ability to concentrate
5) loss of energy
6) decreased sex drive
7) sleep disturbance
8) appetite disturbance.

The evaluation of animal models of depression has been based on three criteria. Face validity refers to the degree of symptomatic resemblance between the model and the clinical condition; predictive validity concerns the extent to which the model responds appropriately to drugs that are clinically effective and those that are not; construct validity addresses the theoretical rationale of the model.

A number of approaches have been used to generate animal models of depression, with varying degrees of success. These include:

1) Non-simulations:
    a) Reserpine reversal
    b) Amphetamine potentiation
    c) Waiting behavior models
    d) Circadian rhythm models
2) Stress models:
    a) Learned helplessness
    b) Behavioural despair
    c) Failure to adapt to stress
    d) Chronic unpredictable stress

e) Chronic mild stress

f) Amphetamine withdrawal

3) Separation models:

a) Non-human primate models

b) Distress calling in isolated chicks

c) Separation in pair-bonded hamsters

d) Social isolation in rats

4) Brain damage models:

a) Olfactory bulbectomy

5) Genetic model:

a) Flinders Sensitive Line rats

Each of these animal models has both positive and negative aspects when evaluated using the above criteria (reviewed by Willner 1990; Overstreet et al. 1995). We have chosen to use *Psammomys obesus* as a separation model of depression, based on our previous observations over a number of years. The animals are normally housed 2-3 to a cage, but are separated into individual cages for all experiments where food intake is to be measured. This usually occurs at the age of 16 weeks. We have consistently found that immediately after separation the animals are anorexic for several days and tend to lose a small amount of body weight (up to about 5%). For these reasons, all such studies are prefaced by a two-week run-in period, after which time the animals have usually restored appetitive function sufficiently to regain their original body weight.

Separation models have been extensively used to investigate aspects of depression. Studies in monkeys, hamsters, chickens and rats have identified a range of atypical behaviors including decreased motor activity, appetite and sleep disturbances. Separation models, especially when conducted in non-human primates, have been accepted as having face validity and construct validity, while the predictive validity of these models has not been well studied. Several authors have noted that peer-peer separation is a more reliable and predictable animal model of depression than infant-mother separation (Lewis et al. 1976; Jesberger and Richardson 1985).

RESEARCH PROPOSAL

We will utilize the separation model to investigate genes involved in behavioural traits consistent with depression in *Psammomys obesus*.

Experimental animals

Both male and female animals will be used in this study. The animals will be weaned at 4 weeks of age into cages containing two same-sex siblings. The animals will have ad libitum access to food and water, and will be maintained in a temperature (22±1°C) and humidity controlled environment. At 16 weeks of age, the animals will be separated into individual cages in a different room, and sacrificed after 0, 4, 8 or 24 h and 2, 4, 6 or 14 days (n=8 in each group). Phenotypic behavior in response to separation will be assessed including: food and water consumption, body weight changes, body temperature, metabolic rate, total energy expenditure and physical activity (both total and ambulatory). Information obtained will account for four of the eight symptoms listed above as characteristic of depression: psychomotor retardation, loss of energy, sleep disturbance and appetite disturbance. The control animals for all timepoints in the experiment will be animals sacrificed without being separated into individual cages. Immediately after sacrifice, the hypothalamus of each animal will be removed and snap frozen in liquid nitrogen, then stored at -80°C.

Gene expression

Analysis of global gene expression will be conducted using microarray technology. A cDNA library from the hypothalamus of *Psammomys obesus* will be constructed by Life Technologies Inc. (Maryland, USA). 20,000 clones from this library will be spotted onto glass substrates using an automated microarray apparatus. Pooled RNA samples from the hypothalamus of separated animals will be labeled with a fluorescent dye (Cy3), while RNA from control animals will be labeled with Cy5. These two-labeled samples will be competitively hybridized to the glass substrates, and the results analyzed by scanning laser microscopy.

Using this protocol, the expression of up to 20,000 genes (a mixture of known and unknown) can be assessed in the control and separated hypothalamic samples to investigate genes which are differentially regulated in response to the stress of separation. When this is conducted for each of the timepoints detailed above, a time course of gene expression changes in response to separation will be obtained. The data will be analyzed using bioinformatics software to identify potential targets for the treatment of stress-related behavioural disorders.

We expect to find a number of genes which are initially up- or down-regulated as the animals become depressed. Some of these genes are expected to revert back to normal expression levels over time, as the depression phenotype disappears.

It is expected that these experiments will generate powerful data allowing us to identify gene expression changes associated with the development of depression, as well as compensatory changes as the animals adapt over time and respond to the isolation stress.

SCHEDULE 3

Budgets and Workplans

Refer to the following 3 pages.

BUDGET FOR PREPARATION AND USE OF 100 MICROARRAY SLIDES: APRIL 1, 2000 – APRIL 1, 2001.

Breeding of animals (n=300 @ $50 each)	$15,000
Animal characterisation (n=300 @ $20 each)	$6,000
Sacrifice/RNA extraction (n=300 @ $20 each)	$6,000
cDNA library synthesis[1]	$18,000
Colony plating	$120
Colony picking	$1,900
Microarray gene preparation (20,000 genes)[2]	$41,920
Microarray substrate preparation[3]	$1,500
Slide arraying/fixing	$2,500
Experimental sample preparation (100 @ $200 each)	$20,000
Hybridisation	$2,000
Personnel: Research Assistant Full-Time (+ on-costs)[4]	$41,212
SUBTOTAL	$162,152
20% Infrastructure costs	$32,430
TOTAL	$194,582

Budget Justification

[1]cDNA library synthesis costs are for the preparation of an amplified library from minimal starting material. The procedure used produces at least 3 x 10^6 cfu, with an average insert size of >1 kb.

[2]Microarray gene preparation consists of a number of steps necessary to amplify and purify 20,000 cDNAs for arraying. Steps and costs involved include colony growing (culture media, 96-well deep-well plates - $0.30/clone), lysis of colonies (lysis reagent – $0.20/clone), PCR (384-well plates, dNTPs, modified primers, Taq polymerase enzyme, tips for PCR robot - $1.50/clone), agarose gel electrophoresis (96-well plates, agarose, buffer, size markers, loading dye – $0.08/clone), and alcohol precipitation and resuspension (ethanol, sodium acetate - $0.025/clone).

[3]The costs listed for microarray substrate preparation, arraying and fixing are for 100 slides. The principal cost is in the purchase of aldehyde-modified slides for microarraying.

[4] Mary Malakellis has been employed to fill this position, her contract started on April 1, 2000 and is for 1 year.

Timeline

April - June 2000

- install arrayer and scanner
- purchase consumables required to construct arrays
- training in use of arrayer and scanner
- synthesis of a cDNA library
- animal collection (separation, sacrifice, tissue harvest)

July - September 2000

- install colony picker/training
- construct test array
- animal collection (separation, sacrifice, tissue harvest)
- pick 20,000 colonies

Oct - Dec 2000

- prepare clones for arraying (PCR, clean-up, AGE)
- array 100 slides
- fix slides
- RNA extraction and hybridisation
- animal collection (separation, sacrifice, tissue harvest)

Jan - Mar 2001

- scan slides
- data analysis
- confirmation of differential expression of primary targets
- report

SCHEDULE 4

Pre-existing Intellectual Property

NOT APPLICABLE

SCHEDULE 5

Deed Of Confidentiality

THIS DEED is made on the date set out in Item 1 of Schedule 1

BETWEEN: THE COMPANY OR ENTITY WHOSE NAME AND ADDRESS IS SET OUT IN ITEM 2 OF SCHEDULE 1 ("Discloser")

AND: THE PERSON OR COMPANY WHOSE NAME AND ADDRESS IS SET OUT IN ITEM 3 OF SCHEDULE 1 ("Recipient")

RECITALS

A. The Discloser has or may acquire certain Confidential Information.

B. The Recipient wishes to have disclosed to it the Confidential Information and the Discloser is prepared to disclose the Confidential Information to the Recipient subject to various terms set out in this Agreement.

C. In consideration of the Discloser agreeing to disclose the Confidential Information to the Recipient, the Recipient has agreed to accept confidentiality obligations on the terms set out in this Agreement.

NOW THIS DEED WITNESSES AS FOLLOWS:

1. DEFINITIONS AND INTERPRETATION

1.1 The following definitions apply in this Deed unless otherwise indicated:

"**Autogen Research**" means Autogen Research Pty Ltd ACN 074 636 847.

"**Confidential Information**" includes:

(a) all of the terms of this Deed; and

(b) Confidential Information as defined in the Research, Licence and Commercialisation Agreement between Autogen Research and Deakin University dated the day of 2000.

"**Acknowledgement of Obligation of Confidentiality**" means the document set out in Schedule 2.

1.2 In this Deed unless otherwise indicated:

(a) any right or obligation which affects more than one person shall affect those persons jointly and severally;

(b) headings are used for convenience only and shall have no binding effect;

(c) use of the singular shall, where necessary, include the plural and vice versa; and

(d) "person" includes a firm, body corporate, unincorporated association, or authority and such reference shall include that person's successors and assigns.

2. OBLIGATION OF CONFIDENTIALITY

2.1 The Recipient:

(a) acknowledges that the Confidential Information has been disclosed to the Recipient in circumstances of confidence;

(b) shall maintain such confidence and, subject to this Deed, refrain from disclosing or causing to be disclosed the Confidential Information to any person; and

(c) shall only make use of the Confidential Information for the purpose, and to the extent, expressly authorised in writing by the Discloser.

2.2 The Recipient may disclose Confidential Information to any of its officers, employees, agents or advisers only after taking the following steps:

(a) informing the Discloser as to all persons who will be receiving the Confidential Information;

(b) making available a copy of this Deed to such person or persons;

(c) ensuring that such person or persons sign an Acknowledgement of Obligation of Confidentiality; and

(d) ensuring that the signed Acknowledgement of Obligation of Confidentiality is delivered to the Discloser.

2.3 The obligations of confidentiality owed by the Recipient pursuant to this Deed shall be enforceable by Autogen Research in accordance with this Deed as if Autogen Research were named as the Discloser in this Deed.

3. QUALITY OF INFORMATION AND RELEASE

3.1 The Discloser makes no warranty or representation whatsoever as to the quality or accuracy of any Confidential Information which is the subject of this Deed. The Discloser hereby excludes, to the full extent allowed by law, any condition or warranty that the Confidential Information has been prepared using reasonable care.

3.2 To the extent that the Recipient will rely on any Confidential Information the subject of this Deed, the Recipient will only do so after receiving independent advice, from an appropriately qualified person, that it is appropriate to do so. The Recipient releases the Discloser from all claims, actions, damages, remedies arising from a failure to act on this independent advice.

4. INDEMNITY

4.1 The Recipient acknowledges the interest of Autogen Research in the Confidential Information and that Autogen Research may suffer harm or loss or incur a liability if the Recipient breaches this Deed.

4.2 The Recipient acknowledges that the Discloser may suffer harm or loss or incur a liability if the Recipient breaches this Deed.

4.3 Accordingly, the Recipient undertakes to indemnify Autogen Research and the Discloser from all such loss, harm or liability which may flow, directly or indirectly, from a breach of this Deed by the Recipient.

5. BREACH AND COMPULSORY DISCLOSURE

5.1 As soon as the Recipient becomes aware of any actual or threatened breach of this Deed, it must immediately notify the Discloser. Furthermore, the Recipient is obliged to do everything reasonably within its power to prevent or stop any actual or threatened breach of this Deed.

5.2 If the Recipient is required by a law or court of competent jurisdiction to disclose any Confidential Information to any unauthorised person, it must, without delay:

(a) inform the Discloser in writing;

(b) follow the Discloser's lawful direction in opposing or restricting such disclosure; and

(c) as far as possible, only disclose the Confidential Information on terms which will maintain its confidentiality.

6. CONFIDENTIAL INFORMATION NO LONGER REQUIRED

6.1 Except as otherwise provided in any other contract in writing signed by the parties, the Discloser may request in writing the delivery up of Confidential Information. Following such request, the Recipient must immediately furnish such Confidential Information to the Discloser, in each and every form in which it is held.

7. COMMUNICATIONS WITH THE DISCLOSER

7.1 All communications to the Discloser relating to this Deed shall be directed to the address of the Discloser appearing in this Deed or such other address as may be notified to the Recipient from time to time. All such communications shall be:

(a) in writing; and

(b) marked to the attention of the relevant person specified in clause 14.1 of the Research, Licence and Commercialisation Agreement referred to in clause 1.1(b) of this Deed.

8. INTELLECTUAL PROPERTY

The Recipient assigns to the Discloser, or to such other person as the Discloser nominates, all present and future intellectual property rights in all subject matter created pursuant to the Recipient's use of the Confidential Information.

9. GENERAL

9.1 All rights and obligations under this Deed are cumulative and shall not affect or be affected by any other rights, obligations or remedies available at law.

9.2 No right under this Deed shall be deemed to be waived except by notice in writing signed by both the Discloser and the Recipient. Any such waiver will not prejudice that party's rights in respect of any subsequent breach of this Deed.

9.3 The obligations of confidentiality under this Deed survive the termination of this Deed.

9.4 Remedies available to the Discloser for any breach or threatened breach by the Recipient of this Deed include, at the option of the Discloser, damages, specific performance, or injunction and any other remedies available to the Discloser at law.

9.5 If any provision in this Deed is held invalid, unenforceable or illegal for any reason, this Deed shall remain otherwise in force apart from such provision, which shall be deemed deleted.

9.6 This Deed will be governed and construed according to the laws in force in the state of Victoria, Commonwealth of Australia and the parties agree to submit to Courts and Tribunals of that jurisdiction.

EXECUTED as a Deed.

SIGNED SEALED AND DELIVERED for)
and on behalf of **THE DISCLOSER** by)
in the presence of:)

.....
(Signature)

.....
(Signature of Witness)

.....
(Name of Witness in Full)

SIGNED SEALED AND DELIVERED for)
and on behalf of THE RECIPIENT by)
in the presence of:)

.....
(Signature)

.....
(Signature of Witness)

.....
(Name of Witness in Full)

DEED OF CONFIDENTIALITY

SCHEDULE 1

1. **Date of this Deed:**

2. **The Discloser:**

   Name:

   Address:

   Telephone No:

   Facsimile No:

   Contact Person:

3. **The Recipient:**

   Name:

   Address:

   Telephone No:

   Facsimile No:

   Contact Person:

DEED OF CONFIDENTIALITY

SCHEDULE 2

ACKNOWLEDGEMENT OF OBLIGATION OF CONFIDENTIALITY

Date:

[The Discloser]

Dear Sir

Pursuant to the Deed of Confidentiality made between [.....] (the "**Discloser**") and [ ] (the "**Recipient**") [insert date of Deed], the Recipient proposes to disclose Confidential Information the subject of the said Deed of Confidentiality to me/us. Accordingly, I/we undertake as follows:

1. I/We acknowledge that I am/we are aware of and understand the obligations on the Recipient under the said Deed of Confidentiality.

2. I/We will take all steps necessary to ensure that the Confidential Information remains confidential.

3. I/We will not disclose any of the Confidential Information to any unauthorised person or persons.

4. I/We acknowledge that remedies available to the Discloser for any breach or threatened breach by me/us of this Acknowledgement include, at the option of the Discloser, damages, specific performance, or injunction and any other remedies available to the Discloser at law.

5. Except as otherwise provided in any written agreement between the Discloser and Recipient, the Discloser may request in writing the delivery up of Confidential Information. Following such request, I/we undertake to immediately furnish to you such Confidential Information, in each and every form in which it is held.

6. I/We further agree to observe the terms of the Deed of Confidentiality in favour of the Discloser to the same extent as if I/each of us had been named as the Recipient under the Deed of Confidentiality.

7. I/We acknowledge that the terms of this undertaking survive the termination of the Deed of Confidentiality.

8. Any expressions used in this Acknowledgement shall have same meaning as in the Deed of Confidentiality.

Name	Capacity	Signature
.....	.....	.....
.....	.....	.....

401

AUTOGEN 13

1

DATE March 1st. 1999

AUTOGEN PTY LTD

and

KYOKUTO PHARMACEUTICAL INDUSTRIAL CO. LTD.

SOLE LICENCE - JAPAN

DUNHILL MADDEN BUTLER

Solicitors

575 Bourke Street
MELBOURNE VIC 3000
Tel: (03) 9235 0235
Fax: (03) 9629 1429
Ref: B O'Shea

BRISBANE • CANBERRA • MELBOURNE • SYDNEY

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SCHEDULE 1 Part A - Licensed Patents
Part B - Disclosure re Licensed Patents

SCHEDULE 2 Minimum Royalty

SCHEDULE 3 Manufacturing Arrangements

THIS AGREEMENT is made on MARCH 1st 1999

BETWEEN

Autogen Pty Ltd (ACN 074 636 849)
of 210 Kings Way, South Melbourne, Melbourne, Australia, 3205

("**Autogen**")

AND

Kyokuto Pharmaceutical Industrial Co. Ltd.
of 1-1 Nihonbashi - Honcho 3 -chome, Chuo-Ku, Tokyo, Japan 103-0023

("**Kyokuto**")

RECITALS:

A. Autogen is the proprietor or licensee of certain patents and other intellectual property and has agreed to grant to Kyokuto a sole licence of such patents and intellectual property on the terms and conditions set out herein.

B. Kyokuto has expertise in the development registration and marketing of products, in particular diagnostic products.

C. The products to be sold by Kyokuto utilise GAD, and the parties have agreed to co-operate to procure a reliable and sufficient supply of GAD.

OPERATIVE PROVISIONS:

1. INTERPRETATION

1.1 Definitions

In this agreement the following expressions have the following meanings:

"**Arms Length**" means in relation to a transaction or dealing a transaction or dealing which might reasonably be expected to operate or apply between independent enterprises dealing wholly independently with one another and where neither bears the other any special duty or obligation and no special relationship exists between them and where the only consideration is cash.

"Base Rate" means the rate published as such by Westpac Banking Corporation from time to time and if no such rate is at any time published the rate quoted by Westpac Banking Corporation at that time on unsecured overdraft accommodation in excess of $100,000.

"Business Day" means a day on which the trading banks are open for general banking business in Melbourne, Australia.

"**Claim Asserted in Good Faith**" means and is limited to any claim asserted in any Licensed Patent which can reasonably be considered to be patentable under the laws of the country where filed having regard to any and all references, prior art, novelty, inventiveness, utility and any and all other relevant legal criteria.

"**Commencement Date**" means the date of execution of this agreement by the party last signing it.

"**Confidential Information**" means technical, commercial and other information, know-how, drawings, specifications and/or designs relating to the design, development, manufacture, production, registration, promotion, distribution, marketing, performance or sale of the Product and information concerning business transactions or associations including other technical or commercial co-operation or collaborative arrangements or financial arrangements with other persons or bodies or customers (existing or potential or otherwise) or licensors or licensees where the information is embodied in some Material Form, and without prejudice to the generality of the foregoing includes:

(i) all experimental, manufacturing, process, analytical, packaging, product, warehousing, quality control and quality assurance and marketing specifications, standards, procedures, processes, methods, instructions and techniques, samples, prototypes, formulae, writings of any kind, opinions or otherwise unwritten data or in the form of computer software or computer programs or any part thereof in any code or language relating to the Product;

(ii) all data and proprietary know-how relating to the manufacture of GAD or the use of GAD in the Product;

(iii) information necessary or useful in obtaining Registration or approval from any Regulatory Authority; and

(iv) all other information and other material supplied to or received by a party or its Representatives from another party or Representatives on a confidential basis pursuant to this agreement.

"**Covered By**" means when used in the context that a Product is covered by a Subsisting Claim or a Claim Asserted in Good Faith, that the Product or the normal method of operation or customarily intended use of such Product must, when such Product is manufactured, sold, or otherwise Exploited by Kyokuto or a Sub-Licensee constitute (but for the Licence) an infringement of a Subsisting Claim or in the period of 5 years from the Commencement Date an infringement of a Claim Asserted in Good Faith, considered as if it were a Subsisting Claim.

"Delivery Point" means such location(s) in the Territory as Kyokuto or its authorised agent shall notify Autogen from time to time in writing.

"Dollars" or "$" means Australian dollars.

"Exploit" means in respect of a Product - to make, have made, hire, sell or otherwise dispose of the Product, to offer to make, sell, hire or otherwise dispose of the Product, to use or import it or keep it for the purpose of doing any of those things.

"**Final Judgment**" means a judgment or decree which becomes not further appealable or reviewable through the exhaustion of all permissible applications for appeal, rehearing or review by any superior court or tribunal or through the expiration of time permitted for such applications.

"**Force Majeure**" means any cause which is not within the reasonable control of the party affected by it including, but not limited to, acts of God, industrial disputes of any kind, war declared or undeclared, civil disturbance, acts or omissions of Government or other competent authority, fire, lightning, explosion or flood.

"GAD" means the engineered hybrid of the 65KD and 67KD Isoforms of Glutamic Acid Decarboxylase, known as "GAD 67/65", manufactured in accordance with the Licensed Patents.

"**GAD Improvements**" means any improvements in respect of GAD, its manufacture or use or application in a diagnostic product.

"**GMP**" means all applicable laws of any Governmental Authority having jurisdiction over the manufacture of GAD, which laws relate to current good manufacturing practices.

"**Head Licensors**" means Monash university, International Diabetes Institute, Montech Pty Ltd, Rondole Pty Ltd and Montech Medical Developments Pty Ltd.

"**Improvements**" means any new Confidential Information or any improvement, innovation, invention or development relating to the function, design, formulation, features, process of or cost of manufacture of the Product.

"**Insolvency Event**" means the happening of any of these events:

(i) an application is made to a court for an order (and is not withdrawn or dismissed within 14 days of being made) or an order is made that a body corporate be wound up;

(ii) an application is made to a court for an order (and is not withdrawn or dismissed within 14 days of being made) to appoint a liquidator or provisional liquidator in respect of a body corporate, or one of them is appointed, whether or not under an order;

(iii) a receiver or manager or a receiver and manager or a controller or trustee (each within the meaning given in section 9 of the Corporations Law) is appointed over all or any part of the assets of a body corporate;

(iv) a meeting is convened or a resolution is passed to appoint an administrator or controller (each within the meaning given in section 9 of the Corporations Law) in respect of a body corporate;

(v) a body corporate enters into, or resolves to enter into, a scheme of arrangement or composition with, or assignment for the benefit of, all or any class of its creditors, or it proposes a reorganisation, moratorium or other administration involving any of them (except to reconstruct or amalgamate while solvent on terms approved by the other party);

(vi) a body corporate resolves to wind itself up, or otherwise dissolve itself, or gives notice of its intention to do so, (except to reconstruct or amalgamate while solvent on terms approved by the other party) or is otherwise wound up or dissolved;

(vii) a body corporate is, or states that it is, unable to pay its debts when they fall due;

(viii) a body corporate is, or makes a statement from which it may be reasonably deduced by the other party that the body corporate is, the subject of an event described in section 459C(2) or section 585 of the Corporations Law;

(ix) a body corporate takes any step to obtain protection or is granted protection from its creditors, under any applicable legislation;

(x) a person becomes insolvent under administration as defined in section 9 of the Corporations Law or action is taken which could result in that event; or

(xi) anything analogous or having a substantially similar effect to any of these events happens under the law of an applicable jurisdiction.

"**Licence**" means the right and licence granted by Autogen to Kyokuto pursuant to this agreement.

"**Licensed Patents**" means the patents and patent applications listed in Part A of **Schedule 1** and includes any continuations, continuations in part, divisions, registrations, confirmations, reissues, renewals or extensions of term thereof and includes any corresponding patent or patent application taken out or applied for in the Territory which is fairly based upon or derived from any of the aforesaid patents.

"**Licensed Technology**" means any copyright, patent, patent application, design (whether registered or unregistered), Confidential Information, knowhow and other proprietary or personal rights relating to the Product.

"**Limitation Period**" means the longer of:

(i) 7 years after expiry or termination of this agreement; or

(ii) until the expiration of one year after the expiry of the longest limitation period application to an action that may be brought in respect of Products either in contract tort or pursuant to a statutory or other product liability regime.

"Loss" means any loss, damage, cost, interest, expense, fee, penalty, fine, forfeiture, assessment, demand, action, suit, claim, proceeding, cause of action, liability or damages incurred by a person, and includes:

(i) the cost of any action taken by the person to protect itself against any loss or to preserve any right it has under this agreement;

(ii) any taxes or duties payable by the person in connection with this agreement (other than tax on its assessable income); and

(iii) where applicable, legal costs on an indemnity basis or on a solicitor and own client basis, whichever is the higher.

"**Manufacture**" means the activities relating to production of GAD including, but not limited to, production, quality control, release and storage and the tests and analyses conducted in connection therewith, but excluding, for the avoidance of doubt, activities relating to the manufacture of finished Products incorporating GAD.

"**Marketing**" means the promotion, advertising, distribution and sale of the Product and includes a product launch campaign.

"**Material Form**" in relation to Information includes any form (whether visible or not) of storage from which Information can be reproduced, and any form in which Information is embodied or encoded.

"**Minimum Royalty**" in respect of particular period of time, means the minimum royalty payable by Kyokuto during that period as set out in **Schedule 2**.

"**Month**" means calendar month.

"**Net Sales Value**" of a Product means:

(i) in the case of Arms Length sale the gross amount invoiced by Kyokuto (or the relevant sub-licensee) to any customer less any and all of the following:

(A) packing, crating, transportation or insurance charges or allowances included in such amount;

(B) trade, quantity or cash discounts or rebates actually allowed and taken;

(C) credits or allowances given or made on account of price adjustments, recalls or destruction requested or made by an appropriate government agency except to the extent credit or payment or replacement is received from Autogen; and

(D) any tax (excluding income tax), excise or other governmental charge upon or measured by the sale, transportation, delivery or use of the Product included in such amount.

(ii) in any other case, the Arms Length sale price of the Product, as determined by reference to the price at which the Product is sold to Arms Length parties.

"Party" means Autogen or Kyokuto and their respective successors and permitted assigns and "parties" means both of them.

"**Product**" means a diagnostic kit incorporating GAD as the primary active constituent, and other technology and materials sourced by or through Kyokuto, for use in the diagnostic and presymptomatic detection of insulin dependent (Type 1) diabetes mellitus (IDDM).

"**Quarter**" means each period of three months commencing on the first days of each January, April, July and October during the Term.

"**Registration**" means the approval for the manufacture of the Product and approvals or permissions that are necessary for obtaining the approval for the Marketing of the Product.

"**Regulatory Authority**" means any and all bodies and organisations regulating the importation, distribution, marketing or sale of the Product in the Territory.

"**Related Corporation**" of an entity means another entity which is related to the first within the meaning of section 50 of the Corporations Law or is in any economic entity (as defined in any approved accounting standard) which contains the first.

"**Representatives**" of a party means that party's directors, officers, employees or agents.

"**Required Insurance**" means:

(i) public liability insurance in respect of Losses up to a limit of $5,000,000 covering property damage and personal injury as may be relevant to the performance of Kyokuto's obligations under this agreement to Autogen, including (without limitation) liability, loss or damage due to negligent or malicious damage, data corruption or loss, fire, theft, electrical and water damage; and

(ii) product liability insurance in respect of Losses up to a limit of $20,000,000 covering any liability associated with use or misuse of the Product including false readings, personal injury and consequential loss.

"**Rights**" means the Licensed Patents and the Licensed Technology.

"**Royalty Period**" means each Quarter during the Term provided that where the Term commences or ends on a day other than first day of a Quarter the first and last reports will be for only so much of the Royalty Period as occurs during the Term.

"**Significant Competition**" means competition or potential competition to the Product from a third party's product which, notwithstanding the fact that it does not breach any Licensed Patent:

(i) is in whole or in part intended to have the same function or effect as the Product; or

(ii) in the country of manufacture or sale has taken or has the potential to take significant market share from the Product or has prevented or deterred or

has the capacity to prevent or deter the Product from obtaining significant market share.

"**Subsisting Claim**" means and is limited to any valid claim of a validly issued unexpired and non-lapsed Licensed Patent which is not the subject of opposition, challenge, cancellation or interference proceedings or the subject of infringement. Where a Licensed Patent has been issued in a country other than Australia without a separate and independent examination by the relevant authorities of that country that patent will be deemed to have a scope equivalent to the scope of the claims of any corresponding Australian Patent which has had examination in Australia.

"**Term**" means the period during which this agreement is in force pursuant to **clause16**, and includes in respect of royalty obligations any further period pursuant to **clause 17.4**.

"**Territory**" means Japan.

"**Trade Mark**" means the trade mark agreed between Autogen and Kyokuto as the trade mark to be used by Kyokuto for the Marketing of the Product.

"**US$**" means United States dollars.

1.2 Construction

In this agreement unless the context otherwise requires:

(a) **Business Day**. If any day appointed or specified by this agreement for the payment of any money or the doing of any act or thing falls on a day that is not a Business Day, the day so appointed or specified shall be deemed to be the next day which is a Business Day.

(b) **Collective references**. Reference to any thing (including, without limitation, any amount) is a reference to the whole or any part of it and a reference to a group of things or persons is a reference to any one or more of them.

(c) **Defined expressions**. If a word or phrase is defined, cognate words and phrases have corresponding definitions.

(d) **Gender**. Words importing any gender include the other genders.

(e) **Headings**. Headings shall be ignored in construing this document.

(f) **Joint liability**. An obligation of two or more parties shall bind them jointly and severally.

(g) **Joint obligations**. An obligation incurred in favour of two or more parties shall be enforceable by them jointly and severally.

(h) **Month**. Means a calendar month.

(i) **Numbers**. Words importing the singular include the plural and vice versa.

(j) **Parts of agreement.** References to this agreement include its recitals, schedules and annexures.

(k) **Persons.** References to persons include corporations and bodies politic.

(l) **Reconstituted bodies.** References to a body which has ceased to exist or has been reconstituted, amalgamated, reconstructed or merged, or the functions of which have become exercisable by any other person or body in its place, shall be taken to refer to the person or body established or constituted in its place or the person or body by which its functions have become exercisable.

(m) **Representatives and assigns.** References to a person include the legal personal representatives, successors and permitted assigns of that person.

(n) **Statutory amendments.** A reference to a statute, ordinance, code or other law includes regulations and other statutory instruments under it and consolidations, amendments, re-enactments or replacements of any of them (whether of the same or any other legislative authority having jurisdiction).

(o) **Variation.** References to this or any other document include the document as varied or replaced, and notwithstanding any change in the identity of the parties.

(p) **Writing.** References to writing include any mode of representing or reproducing words in tangible and permanently visible form, and include telex and facsimile transmissions.

2. GRANT OF LICENCE

2.1 Grant of licence

Autogen hereby grants to Kyokuto with effect on and from the Commencement Date a sole licence of the Rights, subject to the further provisions of this agreement, in particular **clauses 2.2** and **2.3**, to Exploit the Product in the Territory utilising the Licensed Patents and Licensed Technology for the purposes of a diagnostic. This licence does not extend to:

(a) a right to use the Licensed Patents and Licensed Technology for the purposes of a product for therapeutic or prophylactic as opposed to diagnostic, use in humans; or

(b) the use of the Licensed Patents and Licensed Technology for the purposes of Manufacturing GAD.

2.2 Matters reserved to Autogen

Kyokuto agrees and acknowledges that during the Term Autogen may appoint a third party in the Territory either exclusively or otherwise for:

(a) the manufacture of GAD utilising the Rights, where such GAD is for sale or use anywhere in the world; and

(b) the use of the Rights for the manufacture and sale of a product for therapeutic or prophylactic use in humans.

2.3 Worldwide licence

Notwithstanding the grant of a sole licence to Kyokuto under **clause 2.1**, Kyokuto agrees that Autogen may grant a non-exclusive licence in respect of the Rights in the Territory to manufacture and sell a diagnostic using GAD but only if the licensee is also taking at least a non-exclusive licence in respect of the Licensed Patents for the rest of the world. Kyokuto now consents to such grant and acknowledges that it will not constitute a breach of this agreement.

2.4 Most favoured licensee

In the event that Autogen exercises its right under **clause 2.3** to grant to a third party a further non-exclusive licence in respect of the Rights in the Territory, then it will only do so on the basis that the licence satisfies the following conditions or in the event that the licence does not, that Autogen agrees to vary the relevant conditions of this licence to be at least as favourable to Kyokuto. The conditions are:

(a) the net rate of royalty receivable by Autogen from the proposed licensee in respect of its licensed products in the Territory is greater than or equal to the net rate receivable by Autogen from Kyokuto on sales of Products, after taking into account royalties due to third parties by Autogen in respect of such sales;

(b) if GAD is being supplied by Autogen to the proposed licensee the price at which GAD is supplied to the relevant licensee is greater than or equal to the price payable by Kyokuto;

(c) unless such licence is granted more than 2 years after the date of this Agreement, the amount of any up front of lump sum payments made by the proposed licensee is greater than or equal to US$100,000.00.

3. ROYALTIES AND UP FRONT PAYMENTS

3.1 Up front fees

In consideration of the grant of the Licence by Autogen and Autogen's obligations under this agreement, Kyokuto agrees to pay to Autogen on the Commencement Date an up front fee of US$100,000. This fee is not an advance payment of royalties.

3.2 Royalty Obligation

In consideration of the grant of the Licence Kyokuto hereby agrees to pay to Autogen:

(a) in respect of sales of Products Covered By Licensed Patents in the Territory a royalty equal to 10% of the Net Sales Value of each Product sold; and

(b) if the Product is not Covered By Licensed Patents a royalty of 3.5% of the Net Sales Value of Products.

4. REGISTRATION

4.1 Registration of Product

Autogen must, at Autogen's cost, provide Kyokuto with all chemistry, quality control, other preclinical data and clinical data and documentation in Autogen's possession which is of use to or will assist Kyokuto to apply for and gain Registration. Autogen is however not required to undertake any clinical trials or development work to assist Kyokuto. Kyokuto must forthwith after the Commencement Date use reasonable endeavours to promptly:

(a) complete the development of the Product;

(b) undertake the relevant trials and other necessary activities required to seek Registration of the Product in the Territory; and

(c) apply for and gain Registration of the Product in the Territory in its own name.

The cost of undertaking the above steps is to be borne by Kyokuto.

4.2 Consent for clinical trials

Kyokuto shall not conduct or knowingly supply Product to any person who intends to conduct any clinical trials or scientific study concerning or utilising the Product (other than where such trial or study is to involve less than 15 human subjects and does not require any prior Regulatory Authority approval) without the prior written consent of Autogen, such consent not to be unreasonably withheld.

4.3 Notifications

Kyokuto must provide Autogen with evidence of an application for Registration and the gaining of Registration within 2 weeks of each of making such application and gaining such Registration.

4.4 Failure to apply for Registration

If Kyokuto fails to apply for Registration within 12 months the Commencement Date, other than where the failure to so apply was attributable to a failure by Autogen to comply with its obligations under this agreement, Autogen may at its option terminate this agreement or convert the licence granted to Kyokuto pursuant to **clause 2.1** to a non-exclusive licence for the Territory.

4.5 Refusal of Registration

If an application by Kyokuto for Registration is refused, Kyokuto is obliged to re-apply for Registration when so required by Autogen but such requirement shall only be imposed if Autogen is of the reasonable belief, following discussions with Kyokuto, that the re-application will be approved. The cost of making and prosecuting any such re-application shall be borne by Kyokuto.

4.6 Maintenance of Registrations

Kyokuto agrees to do all things necessary to ensure that all product registrations and approvals in respect of the Products are maintained and to provide Autogen with any and all documentation and information concerning any variations to such product registrations or approvals. Such product registrations and approvals include without limitation any registration concerning the packaging or labelling of the Products.

5. REPORTS

5.1 Reporting requirements

Kyokuto shall within 60 days of the end of each Royalty Period provide to Autogen a written report setting out in reasonably specific detail:

(a) the gross sales value of all Products which have been sold by Kyokuto and its sub-licensees during the preceding Royalty Period and the calculation of Net Sales Value from such gross sales,

(b) the calculation of the royalty payable on such Products, including details of the currency conversion rates used, any taxes or other amounts withheld and any adjustments on account of returns.

5.2 Internally used Products

Any Products used or consumed by Kyokuto or any of its Related Corporations in its or their own activities or other products shall be deemed to have been sold at Kyokuto's then current Arms Length selling price therefor at the time of use or consumption and shall be included in an appropriate royalty report and be subject to royalty. The preceding royalty obligation will not apply to Product consumed as part of internal acceptance or quality assurance testing, further research and development or in clinical trials to test the safety and efficacy of the Product or otherwise required for the purposes of Registration.

5.3 Time of Sale

A Product shall be deemed to be sold at the earlier of delivery to the buyer, invoice to the buyer or payment by the buyer.

5.4 Foreign currencies

Kyokuto shall calculate royalties in local currencies and convert the same to Dollars (or to such other currency as Autogen may nominate from time to time) at the ruling rate of exchange as on the last day of the Royalty Period.

5.5 Payment mechanics

The royalty payable to Autogen shall be paid to a bank account nominated by Autogen in Melbourne, Australia (or at such other location as Autogen may stipulate from time to time) within sixty days of the end of each Royalty Period.

5.6 Kyokuto to keep accounts and records

Kyokuto shall keep and retain at least for a period of 36 months after the end of the Royalty Period to which they relate, true and particular accounts and records of all sales of Products sufficient to verify Kyokuto's calculation of Net Sales Value of Products sold, the calculation of royalty based thereon and conversion of such amounts into the relevant currency.

5.7 Inspection of accounts

At any time from the Commencement Date until the expiry of two years after the end of the Term, Autogen or its duly authorised representatives reasonably acceptable to Kyokuto shall have the right to inspect and audit from time to time the accounts and records referred to in **clause 5.6** and such other matters as are directly relevant to the calculation of the amount of any payment due by Kyokuto to Autogen under this agreement and shall be entitled to take copies of such records, on the following conditions:

(a) inspection shall be limited to 2 times in any 12 Month period;

(b) inspections shall take place during normal business hours and upon reasonable prior notice to Kyokuto;

(c) employees of Autogen or its duly authorised representatives who inspect such accounts and records must be suitably qualified personnel reasonably acceptable to Kyokuto and shall:

(i) prior to inspecting such records and accounts, enter into a confidentiality agreement with Kyokuto containing undertakings similar to those in **clause11**; and

(ii) whilst inspecting such records and accounts, abide by all of Kyokuto's standard rules and regulations;

(iii) Autogen shall indemnify and hold Kyokuto harmless from all liability resulting from any negligence or any other activities on the part of Autogen's employees or duly authorised representatives inspecting such records and accounts.

5.8 Settlement of discrepancies

If any discrepancy is found by Autogen then the amount thereof must be paid within 7 days of demand therefor to Autogen.

5.9 Cost of audit

Autogen must bear the cost of any examination under **clause 5.7** unless a discrepancy of 5% or more in the amount of any royalty payment is detected in which event Kyokuto must bear the expense of the examination.

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6. MARKETING OF PRODUCT

6.1 Kyokuto's obligations

Kyokuto must use its best endeavours, at the expense of Kyokuto, to:

(a) promote, distribute and sell the Product in the Territory in order to obtain the optimum market potential for the Product;

(b) provide and maintain such suitable places of business for the storage, handling and sale of the Product at such locations throughout the Territory as Kyokuto thinks suitable;

(c) provide and maintain such marketing, sales and office staff to promote and sell the Product in accordance with this agreement, such personnel to be deemed the agents, representatives or employees of Kyokuto and not those of Autogen;

(d) maintain in the Territory sufficient stocks of the Product to meet the market demand for the Product; and

(e) no later than 2 months prior to the commencement of each year during the Term prepare sales and marketing plans in respect of the Product in the Territory for discussion with Autogen.

6.2 Commencement of Marketing

(a) If Marketing by Kyokuto has not commenced in the Territory within 3 months of Kyokuto obtaining Registration or within such other time as agreed by the parties and such failure to so commence Marketing is not attributable to any failure by Autogen to comply with its obligations under this agreement, Autogen may at its option by notice in writing to Kyokuto convert the Licence to a non-exclusive licence or terminate this agreement.

(b) Upon the giving of notice by Autogen terminating Kyokuto's Licence, the parties will enter into good faith discussion with a view to determining if and upon what basis any Registration may be transferred to Autogen and/or its nominee.

6.3 Parallel exporting

To the extent permitted by the laws of the Territory, Kyokuto agrees:

(a) not to sell the Product in any country or to persons in any country outside the Territory;

(b) not to sell or cause or knowingly permit to be sold Product to a third party within the Territory where there are reasonable grounds for Kyokuto to suspect the third party may, whether directly or indirectly, sell or cause Product to be sold outside the Territory; and

(c) to sell all Product on the condition that such Product will not be exported by the purchaser or sold to any third party whom the purchaser knows or ought reasonably to know is likely to export such Product out of the Territory.

6.4 Initial reports

Kyokuto shall within one month of the relevant dates submit to Autogen, at Kyokuto's cost, details of the date of commencement of Marketing and details of the establishment of or change to any facilities referred to in **clause 6.1(b)**.

6.5 Ongoing reports

Kyokuto must on an annual basis keep Autogen reasonably informed as to its proposed marketing activities in relation to the Products in the coming year. In particular such report is to provide estimates of the pricing and expected volumes for the Product, an outline of the distribution system, an assessment of the market place and a detailed overview of the proposed marketing and promotional strategies in respect of the Products.

6.6 Non competition

Kyokuto covenants that neither it nor its Related Corporations will during the Term make, sell or promote any product which could reasonably be regarded as competitive with the Product.

6.7 Advertising and promotion material

Kyokuto's proposed publications in relation to the Product including advertisements, sales and trade literature and instruction leaflets shall be submitted to Autogen in draft form and may only be published after Autogen has given its specific consent thereto in writing, such consent not to be unreasonably withheld or delayed. Any references by Kyokuto to Autogen will require the prior written approval of Autogen.

7. SUB-LICENSING

7.1 Sub-licensees versus distributors

If Kyokuto sells the Product to any Related Corporations, then they will deemed to be sub-licensees and not distributors. In the event that Kyokuto sells the Product in less than a fully finished form to a third party, such that additional manufacturing steps other than final packaging are required, then a sub-licence in accordance with this **clause 7** will be required. In all other cases, that is sales to non-Related Corporations where fully manufactured (whether fully packed or not) Product is supplied, it will be at Kyokuto's election whether such persons become sub-licensees or distributors.

7.2 Right to sub-licence

Subject to **clause 7.1**, Kyokuto may grant sub-licences upon such terms and conditions as it may arrange, provided Kyokuto and the sub-licences granted by it must strictly comply with the provisions of this **clause 7**, provided that Kyokuto is not entitled to licence a third party to manufacture GAD.

7.3 Sub-licences

Kyokuto shall have the right to grant sub-licences to a third party in respect of the Product provided that Kyokuto complies with the obligations set out in **clause 7.4** and the sub-licence complies with the following:

(a) the proposed sub-licencee being granted the sub-licence has the commercial capacity to promote and exploit the relevant Product with due diligence and probity and has at least sufficient skills and resources to comply with the obligations placed upon Kyokuto in relation to that Product in the Territory;

(b) neither the proposed sub-licensee nor any of its Related Corporations:

(i) manufactures, distributes or sells products competitive with the Product; or

(ii) is engaged in litigation with Autogen or its Related Corporations, or any of the Head Licensors.

(c) the sub-licence is wholly consistent with the terms of this Licence and in particular:

(i) such sub-licence does not purport to extend or continue in any circumstances where this Licence may be terminated, except in the circumstances set out in **clause 17.1(f)**;

(ii) the sub-licensee acknowledges that Autogen owns the Rights;

(d) the sub-licence prohibits the sub-licensee from taking any action or allowing any action to be taken which detracts from the ownership of the Rights by Autogen or conflicts with the provisions contained in this Licence in relation to prosecuting or defending the Licensed Patents or defending any allegation of infringement of the Rights or the Trade Marks;

(e) the sub-licence is in the English language, executed by the sub-licensee and giving its place of business;

(f) the sub-licence obliges the sub-licensee to pay to Kyokuto a royalty at least equal to the royalty payable by Kyokuto to Autogen pursuant to **clause 7.5**;

(g) the sub-licence requires the sub-licensee to maintain all books, records and accounts necessary to enable verification of Net Sales Value and royalties and other income required to be paid by Kyokuto to Autogen and permits inspection by Autogen on terms essentially identical to **clauses 5.6** and **5.7**;

(h) the sub-licence limits the duration of the sub-licence in respect of any Product for the term of this agreement and further provides for the sub-licence to terminate automatically upon the termination of this agreement, subject to **clause 17.1(f)** or upon an Insolvency Event occurring in relation to the sub-licensee;

(i) the sub-licence prohibits the sub-licensee without the consent of Autogen from assigning, transferring, mortgaging or parting with any of its rights under the sub-licence;

(j) the sub-licence obliges the sub-licensee to maintain the insurances referred to in **clause 15.5** and to obtain and maintain the Registrations and approvals referred to in **clause 4** as apply to that sub-licensee; and

(k) the sub-licence provides that all the terms and conditions of the sub-licence may be enforced by Autogen against the sub-licensee notwithstanding that Autogen is not a party to the sub-licence or any rule of law or equity to the contrary.

7.4 Notification of sub-licence

Kyokuto must within one month of the entering into of a sub-licence notify Autogen of the granting of the sub-licence and provide Autogen with general details of the sub-licensee, including information as to its financial affairs and resources and a copy of the executed sub-licence.

7.5 Calculation of royalty for sub-licences

Where any Product is Exploited by a sub-licensee, the royalty payable in respect of such Exploitation shall be calculated on the Net Sales Value of such Product by the sub-licensee on the same basis as set out in **clause 3.2**, and not as a proportion of the royalties or other receipts which may be paid by the sub-licensee to Kyokuto pursuant to any sub-licence granted by Kyokuto. Kyokuto is directly liable to Autogen for the payment of this royalty.

7.6 Up-front and lump sum fees

In addition to the amounts provided for in **clause 7.5** Kyokuto must pay to Autogen 50% of any and all amounts received by Kyokuto from any sub-licensees other than amounts calculated by reference to the net sales price of Products or the number of products sold.

7.7 Royalty reporting

Any payments due to Autogen under this **clause 7** shall be included with Kyokuto's reports and payments to be made under the provisions of **clause 5** for the Royalty Period in which any such amounts become due and payable to Kyokuto.

7.8 No licensing

Except as provide under the preceding provisions of this **clause 7**, Kyokuto may not grant any sub-licence of the rights granted to it pursuant to this agreement without the prior written consent of Autogen, such approval not to be withheld unless Autogen reasonably believes:

(a) any proposed sub-licensee will not properly perform and discharge all of the obligations of Kyokuto under this agreement in respect of the relevant sub-licensed Territory;

(b) that the proposed sub-licensee is not financially sound or will be unable to pay royalties and other amounts payable under the relevant sub-licence as and when they fall due;

(c) there are reasonable grounds to believe that the proposed sub-licensee is likely to conduct itself in a manner likely to endanger or cause injury to Autogen's reputation, the Trade Mark or the reputation, quality, image or character or the Product;

(d) the proposed sub-licence is not wholly consistent with the terms of this licence and in particular complies with **clauses 7.3(b)(i), (ii), (c), (d), (e), (f), (g), (i) and (j)**.

In no circumstances will Autogen be obliged to provide its consent less than 1 month after it is given a copy of the terms of the proposed sub-licence.

8. TRADE MARK

8.1 Trade mark - Kyokuto's obligations

Kyokuto agrees:

(a) to use reasonable endeavours to promptly procure registration of the Trade Mark in the Territory;

(b) to use the Trade mark as the sole product name or mark in relation to the Product, other than its own corporate name;

(c) not use the Trade Mark except in relation to the Products; and

(d) take all steps reasonably required in the Territory to ensure that sufficient use of the Trade mark is made therein to avoid abandonment by reason of non use and to otherwise maintain the trade mark.

8.2 Use of Trade Mark after termination

Following termination of expiry of this agreement, Kyokuto must cease to use the Trade Mark in respect of any product or service, the same as, similar to or which may be confused with the Product or otherwise in a manner which may indicate a connection or association with Autogen or GAD.

9. MINIMUM ROYALTIES

9.1 Kyokuto's obligation

Kyokuto must during the periods set out in **Schedule 2** use its best endeavours to achieve a minimum royalty payment in respect of the Product equal to the amounts set out in that schedule. For the purposes of determining any shortfall, any amounts paid by Kyokuto under **clause 7.6** are to be excluded. Unless the total royalties paid by Kyokuto in respect of a year already exceed the minimum royalty payment for that year as specified in **Schedule 2**, Kyokuto agrees to pay to Autogen on each royalty payment date at the end of each Royalty Period in that year an amount, as and by way of minimum royalty applicable for that year less the royalties already paid in that year, equal to the lesser of:

(a) 25% of the specified minimum royalty payment applicable for that year; or

(b) the minimum royalty payment applicable for that year less the royalties already paid in that year.

9.2 Serious failure to meet targets

In the event that in two successive years the royalties that would be paid by Kyokuto except for the provisions of **clause 9.1**, are less than 80% of the minimum royalties specified in **Schedule 2** then Autogen may at its option:

(a) terminate this agreement by giving 3 months notice in writing to Kyokuto of its intention so to do, the licence to terminate on the expiry of such notice; or

(b) convert Kyokuto's licence to a non-exclusive licence in the Territory.

10. ASSISTANCE

10.1 Provision of Confidential Information

Autogen shall forthwith after the Commencement Date provide the Confidential Information not already within Kyokuto's possession or control to Kyokuto and shall throughout the Term continue to provide to Kyokuto any GAD Improvements.

10.2 Provision of assistance

At the reasonable request of Kyokuto Autogen shall at reasonable intervals throughout the Term provide personal instruction, assistance and training in the Confidential Information to suitably qualified employees of Kyokuto on the following terms:

(a) instruction assistance and training shall be limited to such numbers and for such period as Autogen can satisfactorily instruct and supervise without unduly interfering with Autogen's own routines and current commitments and in this regard Autogen will be the sole judge;

(b) instruction assistance and training shall embrace all aspects of the Confidential Information;

(c) suitably qualified employees of Kyokuto will be given access to and an adequate opportunity to study the Confidential Information; and

(d) the costs of the provision of such training and assistance shall be borne by Kyokuto.

11. CONFIDENTIAL INFORMATION

11.1 Obligations to Autogen

Subject to **clauses 11.3** and **11.6**, Kyokuto covenants with Autogen as follows:

(a) to keep all Confidential Information belonging to Autogen or supplied to it by Autogen, including the existence of such Confidential Information, strictly secret and confidential (including from all its employees, servants and agents),

exercising at least the same degree of care as it uses to maintain its own confidential information;

(b) to provide proper and secure storage for such Confidential Information within its possession or control;

(c) to use such Confidential Information only for the purposes of this agreement and not for any other activity or purpose whatsoever without the prior written approval of Autogen; and

(d) to not copy or reduce to writing or any other medium any part of such Confidential Information except as may be reasonably necessary for the purposes of this agreement.

11.2 Obligations to Kyokuto

Subject to **clauses 11.3** and **11.6**, Autogen covenants with Kyokuto as follows:

(a) to keep all Confidential Information belonging to Kyokuto or supplied to it by Kyokuto, including the existence of such Confidential Information, strictly secret and confidential (including from all its employees, servants and agents), exercising at least the same degree of care as it uses to maintain its own confidential information;

(b) to provide proper and secure storage for such Confidential Information within its possession or control;

(c) to use such Confidential Information only for the purposes of this agreement and not for any other activity or purpose whatsoever without the prior written approval of Kyokuto; and

(d) to not copy or reduce to writing or any other medium any part of such Confidential Information except as may be reasonably necessary for the purposes of this agreement.

11.3 Exceptions to obligations

The obligations of confidence set out in **clauses 11.1** and **11.2** shall not extend to Confidential Information which:

(a) at the time of disclosure to a party is in the public domain or generally known in the diagnostics industry;

(b) after disclosure to a party becomes part of the public domain otherwise than as a result of the wrongful act of that party or one of that party's disclosees;

(c) a party can show was in its possession at the time of disclosure and was not acquired directly or indirectly from the other party; or

(d) is received from a third party provided that it was not acquired directly or indirectly by that third party from a party to this agreement or under an obligation of confidence;

(e) is required by compulsion of law to be disclosed,

provided that:

(f) the onus shall be on the party alleging the same to prove that one of the above exceptions has application;

(g) in any case of uncertainty as to whether the obligations in **clauses 11.1** or **11.2** have application to any information, such information shall be treated as subject to the obligations until advised otherwise by the party to whom the obligations are owed;

(h) prior to either party making any disclosure of information which is prima facie confidential information in circumstances where the party that intends to disclose the information is of the view that one of the above exceptions has application, it must notify the other party of the facts and circumstances by virtue of which it believes that it is entitled to disclose the information, and must not disclose such information until either 14 days has elapsed or the other party has indicated its consent to the disclosure of such information.

11.4 Rights in Confidential Information

Each party acknowledges and agrees that each other party has made a substantial investment in that party's Confidential Information and has a legitimate right to protect itself against wrongful disclosure or use of such Confidential Information.

11.5 Term of obligation

The obligations in this **clause 11** shall survive the expiry or termination of this agreement for whatever reason and continue indefinitely, subject always to the exceptions included in **clause 11.3**.

11.6 Permitted disclosures

Each party ("the first party") shall be permitted to disclose Confidential Information belonging to another party or supplied to it by another party ("the other party") to such of the first party's Representatives as require access to such information for the purposes of this agreement, provided that:

(a) only such Confidential Information as needs to be disclosed to a person for the purposes of this agreement will be disclosed to that person; and

(b) the first party shall:

(i) have obtained from each such person undertakings in favour of the other party substantially in the form of the relevant obligations and undertakings in this **clause 11** (but not this **clause 11.6**);

(ii) be responsible for the performance of its Representatives' undertakings referred to in **clause 11.6(b)(i)**; and

(iii) take whatever steps are reasonably necessary, including the institution of legal proceedings, to ensure that each of its Representatives is bound by and observes the terms of the undertakings referred to in **clause 11.6(b)(i)**.

11.7 Delivery-up of Confidential Information

All of a party's Confidential Information and all materials containing or embodying such Confidential Information and all copies of or extracts from or notes on the same in the possession, power or control of another party or any of its employees, servants or agents together with all forms and other materials relating to practices and procedures in relation to the Confidential Information to the extent possible shall:

(a) in the event of the expiration or sooner termination of this agreement, be delivered up by the other party to the first party at the expense of the other party; and

(b) in the event of any demand made by the first party be delivered up by the other party to the first party at the expense of the first party.

11.8 Market disclosure requirements

Nothing in this **clause 11** will in any way restrict Autogen or its Related Corporations from making whatever disclosures they may deem necessary to fulfil the requirements of and their obligations under the Corporations Law or the rules of the Australian Stock Exchange Limited.

12. IMPROVEMENTS

12.1 By Kyokuto

Any GAD Improvements invented, discovered or acquired by Kyokuto during the Term must promptly and without specific request be disclosed in full to Autogen prior to any public use or disclosure of any such GAD Improvements to any third party. Subject to the remaining provisions of this clause any such GAD Improvements will be the property of Kyokuto and Kyokuto must grant to Autogen a non-exclusive licence for a royalty to be agreed, such licence to include the right to sub-licence such GAD Improvement for the duration of the patent or other protection relating to such GAD Improvement. Kyokuto and Autogen shall discuss in good faith and agree upon the rate of royalty applicable to such licence. Autogen will be liable to account to Kyokuto for the agreed share of any incremental remuneration or other consideration received by Autogen from the use or licensing of such GAD Improvement.

12.2 By Autogen

Any Improvement invented, discovered or acquired by Autogen during the Term shall be offered to Kyokuto by way of a non-exclusive licence to use any such Improvement for the duration of the Term and upon the same terms, mutatis mutandis, as are contained in this agreement. Such Improvement will be included in the Rights without payment of any Royalty or Fee.

12.3 Additions to Licensed Patents

Autogen agrees to advise Kyokuto promptly of the filing of any patent application or of the issue of any patent which is legally or beneficially owned by Autogen and which:

(a) is dominated by or dominates any patent or patent applications otherwise included in Licensed Patents; or

(b) relates to any Product or describes and claims any improvements in or to any Product or methods or processes of making or using the same,

such that the Exploitation of the Products in the Territory by Kyokuto in accordance with the terms of this agreement would be Covered By such patent or patent application then Kyokuto shall have an option to have such patent included within Licensed Patents, such option to be exercised by notice in writing to Autogen within 3 months of notification to Kyokuto. If Kyokuto does exercise its option then such patents or patent applications will be included in Licensed Patents without increase in the earned royalty rate specified in **clause 3.**

12.4 Kyokuto kit technology

Kyokuto gives Autogen a right of first refusal in respect of the sale and exploitation of the Product, outside of the Territory. In particular it is agreed that Kyokuto will not offer the Product for sale outside of the Territory, or offer to licence the diagnostic technology relevant to the Product to any third party without first offering it to Autogen. In this regard the following provisions will apply:

(a) Kyokuto will make a written offer to Autogen to either acquire the Product or licence the relevant diagnostic technology;

(b) the offer must state, in reasonable detail, the terms and conditions on which the offer is made, and must be open for acceptance for not less than 90 days;

(c) during the 90 day offer period, Kyokuto and Autogen must confer with each other, and in good faith discuss and consider the offer;

(d) if the offer is not expressly accepted or rejected within the 90 day period, it will be deemed to have been rejected at the end of the 90 day period;

(e) if no agreement is reached between, Kyokuto and Autogen, Kyokuto will be free to negotiate the sale of the Product or the licensing of the relevant diagnostic technology with any third party, subject always to the terms of this agreement, and the other rights of Autogen outside of the Territory;

(f) however, Kyokuto may not enter into any agreement with any such third party unless Kyokuto first affords Autogen a 60 day period to evaluate and meet or better the third party offer. To this end, Kyokuto must provide Autogen with full details of the third party offer;

(g) if Autogen meets or betters the third party offer, Kyokuto must accept the Autogen offer; and

(h) the above provisions will apply for a period of 10 years or while royalties are being paid to Autogen under this agreement, whichever is longer.

13. LIABILITY

13.1 Responsibility for Products

Kyokuto must ensure at all times during the Term that the Product is manufactured, used and sold strictly in accordance with all relevant applicable requirements and in the Territory and Kyokuto will be responsible for conducting its own independent examination and verification of the accuracy and suitability of Licensed Patents, Licensed Technology and Confidential Information and for ensuring the same is suitable for the purposes for which the same is to be provided.

13.2 Autogen not liable

Autogen shall not be liable (in contract or tort or otherwise) to compensate Kyokuto for any loss howsoever arising suffered by Kyokuto arising directly or indirectly from the use of Licensed Patents, Licensed Technology or the sale of the Product.

14. INDEMNITIES

14.1 Indemnity by Kyokuto

Kyokuto agrees to indemnify Autogen against and hold Autogen harmless from any and all Losses arising from or in connection with:

(a) a breach by Kyokuto of any of its warranties or obligations under this agreement;

(b) the manufacture of the Products by Kyokuto;

(c) the storage, use, sale, shipping and Marketing of the Product by Kyokuto;

(d) any representations, express, implied or statutory made by Kyokuto as to the efficacy or safety or use to be made by any purchaser of the Product including, without limitation, representations made by reference to the labelling or packaging or the Product;

(e) it shall be a term of any sub-licence granted by Kyokuto to any third party that such third party agrees to the same extent and in the same terms as the indemnities contained in this **clause 14** to indemnify Autogen and that the sub-licensee specifically agrees that it will not challenge the standing of Autogen in the event of Autogen seeking to rely upon such indemnification;

provided that Kyokuto shall not be required to provide indemnity with respect to any Losses, to the extent they result from Autogen's or its Representatives negligence or breach of any of Autogen's warranties or obligations under this agreement, or from information about the Product supplied by Autogen to Kyokuto.

14.2 Indemnity by Autogen

Autogen agrees to indemnify Kyokuto and hold Kyokuto harmless from any and all Losses, arising from or in connection with a breach by Autogen of any of its warranties or obligations under this agreement provided that Autogen shall not be required to provide indemnity with respect to any Losses, to the extent they result from Kyokuto's or its Representatives' negligence or breach of any of Kyokuto's warranties or obligations under this agreement.

14.3 Notification regarding certain claims

Kyokuto undertakes promptly to notify Autogen of the bringing or threat of any claim or legal proceedings in the Territory involving the Products of which Kyokuto becomes aware against or involving or implicating Autogen or any of its Related Corporations or in any way touching upon or concerning the commercial interests of Autogen. In any such case the following provisions shall apply:

(a) If such claim or legal proceedings involves GAD Manufactured by Autogen or has as a substantial element an allegation that properly manufactured GAD is unsafe or has caused some loss or damage, then Autogen shall have the first right to defend or prosecute such claim or legal proceeding in the Territory and should Autogen undertake the defence or prosecution of any such claim or legal proceedings, Kyokuto shall fully co-operate with Autogen in relation to such action and the costs and expenses of any such action shall be borne by Autogen and the proceeds of such action shall belong to Autogen unless Kyokuto shall choose to participate in such action in which case both parties shall bear their own costs of the action and the proceeds shall be divided between the parties proportionately in accordance with the costs expended by each party; in the event of Autogen choosing not to prosecute or defend any such claim or legal proceedings Kyokuto may do so on its own behalf and in that event Autogen shall fully co-operate with Kyokuto in relation to such action, and the costs and expenses of any such action shall be borne by Kyokuto and the proceeds of any such action or any action for which there is no indemnification or for which indemnification is not sought shall belong to Kyokuto.

(b) In any other case Kyokuto shall have the first right to defend or prosecute such claim or legal proceeding in the Territory and should Kyokuto undertake the defence or prosecution of any such claim or legal proceedings in the Territory, Autogen shall fully co-operate with Kyokuto in relation to such action and the costs and expenses of any such action shall be borne by Kyokuto and the proceeds of such action shall belong to Kyokuto unless Autogen shall choose to participate in such action in which case both parties shall bear their own costs of the action and the proceeds shall be divided between the parties proportionately in accordance with the costs expended by each party; in the event of Kyokuto choosing not to prosecute or defend any such claim or legal proceedings Autogen may do so on its own behalf and in that event Kyokuto shall fully co-operate with Kyokuto in relation to such action, and the costs and expenses of any such action shall be borne by Autogen and the proceeds of any such action or any action of which there is no indemnification or for which indemnification is not sought shall belong to Autogen.

(c) Kyokuto agrees not to make, without Autogen's express written authority, any admission of liability to a claimant or plaintiff or his or her legal representative or insurer in respect of such claim or threatened claim or such proceedings or threatened proceedings in the Territory.

(d) Kyokuto agrees not to make, without Autogen's written authority, any settlement or compromise of such claim or threatened claim or such proceedings or threatened proceedings.

15. INSURANCE

15.1 Kyokuto to insure during Term

Kyokuto must have and must maintain for the Term the Required Insurance. The Required Insurance must be with a reputable insurer and name Autogen as an additional insured.

15.2 Warranty in respect of insurance

Kyokuto warrants that it is not aware of any fact which would prevent the insurance effected by it pursuant to this clause sustaining a claim being made in the context of this agreement.

15.3 Insurance after the Term

Kyokuto must maintain equivalent insurance coverage in place until expiry of the Limitation Period unless Autogen, acting reasonably, agrees with Kyokuto that:

(a) such insurance is not available;

(b) such insurance cannot be negotiated on reasonable commercial terms;

(c) alternative arrangements satisfactory to Autogen have been put in place; or

(d) the continuation of such insurance is no longer required by Autogen.

15.4 Further obligations in respect of insurance

Kyokuto must:

(a) prior to the Commencement Date, obtain a certificate from a reputable insurance broker confirming that the insurance required by this **clause 15** (the "**Insurance**") is in effect;

(b) during the Term and until expiry of the Limitation Period promptly notify Autogen:

(i) if it becomes aware that any of the conditions precedent to the issuance and operation of the Insurance are not, or are no longer, satisfied;

(ii) if it has made or is making claims under the Insurance which may materially affect the cover provided by the Insurance; or

(iii) if it becomes aware that the Insurance has been, or is about to be cancelled, or a notice of cancellation or other material notice under or in relation to the Insurance has been or is about to be issued by the insurers (and, upon the issuance of any such notice, it must provide a copy of the notice to Autogen).

15.5 Sub-licensees insurance

Kyokuto shall procure that all of its sub-licensees:

(a) maintain adequate product liability and third party liability insurance in respect of their activities pursuant to their respective sub-licences; and

(b) ensure that all policies of insurance taken out by any sub-licensee note the interest of Autogen thereon, and that such policies specifically extend to cover the liability of the sub-licensee to Autogen and Kyokuto pursuant to the indemnities required to be contained the relevant sub-licence in accordance with **clause 14.1(e)**.

15.6 Autogen right to insure and recover

If Kyokuto fails to itself, or to procure its sub-licensees to, take out and maintain insurance strictly as required by this **clause 15**, Autogen is entitled to effect and maintain on behalf of Kyokuto the Required Insurance in its own name, and the cost of any such insurance shall be to the account of Kyokuto and must be paid by Kyokuto to Autogen within 14 days of demand being made therefor.

16. TERM AND TERMINATION

16.1 Term

Subject to **clauses 16.2, 16.3, 16.4, 16.6, 18** and **23**, the term of this agreement and the rights granted hereunder is for 15 years or so long as the Product is still Covered By a Licensed Patent, whichever is the longer.

16.2 Termination for breach

If one party breaches any term, provision or obligation of this agreement (the "Defaulting Party") and the Defaulting Party fails to:

(a) remedy such breach within 60 days after receipt of notice from the other party requiring remedy of the breach; or

(b) if the breach cannot be remedied within the said 60 day period, commence action within the said 60 day period to remedy the breach and undertake in writing to the other party to complete remedy of the breach as soon as practicable thereafter;

the other party shall have the right to terminate this agreement immediately upon the expiration of the said period of 60 days by written notice to the Defaulting Party.

16.3 Termination in default of payment

Notwithstanding anything contained in **clause 16.2**, this agreement may be forthwith terminated by a party by giving notice to the other party if that other party defaults in the payment of any money due by that other party to the first party under this agreement and such default continues for a period of 30 days after notice has been given to the other party demanding the payment of such money.

16.4 Termination for insolvency

Notwithstanding anything contained in **clause 16.2**, this agreement may be terminated by a party giving notice to the other party upon the happening of any of the following events in respect of that other party:

(a) an Insolvency Event in respect of that other party; or

(b) if the other party is in breach of an undertaking given pursuant to **clause 16.2(b)**.

16.5 Reconstruction exception

A winding up or liquidation for the purposes of reconstruction or amalgamation by the other party shall not be an event permitting or giving rise to termination if after that reconstruction or amalgamation the resulting corporation becomes bound by the terms of this agreement by way of assignment or novation.

16.6 Termination by Autogen

Autogen may terminate this Agreement upon notice to Kyokuto if:

(a) a person or persons who did not previously hold (whether directly or indirectly through one or more persons) more than fifty percent of the issued voting capital of Kyokuto or any of Kyokuto's holding companies (if any), obtains (whether directly or indirectly through one or more persons) more than fifty percent of the issued voting capital of Kyokuto or a holding company (if any) of Kyokuto;

(b) Kyokuto or any of its Related Corporations sells, manufactures or becomes engaged in distribution of products which are competitive with the Products; or

(c) if Kyokuto or any of its sub-licensees (if any) challenges or seeks or causes to be challenged the validity of the Licensed Patents.

16.7 Termination by Kyokuto

Kyokuto may terminate this agreement upon notice to Autogen if a person or persons that did not previously hold (whether directly or indirectly through one or more persons) more than fifty percent of the issued voting capital of Autogen or any of Autogen's holding companies (if any), obtains (whether directly or indirectly through one or more persons) more than 50% of the issued voting capital of Autogen or a holding company (if any) of Autogen.

16.8 Termination to be without prejudice

Any termination of this agreement shall be without prejudice to the rights which a party has against the other in respect of anything done or omitted to be done hereunder prior to such termination or in respect of any sums or other claims outstanding at the time of termination.

17. OBLIGATIONS AND RIGHTS ON TERMINATION

17.1 Obligations of Kyokuto

Immediately upon termination or expiration of this agreement, but subject to **clause 17.4**, Kyokuto shall:

(a) pay all outstanding balances of the royalty payable in accordance with the terms of this agreement;

(b) remove all signs, advertising displays, labels and the like identifying Kyokuto as a licensee and thereafter Kyokuto will not use such signs and displays in connection with any business conducted by it and will not in any way refer to its previous association with the Rights for any commercial purpose whatsoever;

(c) not conduct its business so as to falsely reflect discredit on Autogen or the Rights; and

(d) at Autogen's option and request terminate or assign to Autogen any sub-licence granted by Kyokuto hereunder.

17.2 Obligations of Autogen

Immediately upon termination or expiration of this agreement, Autogen shall:

(a) as soon as conveniently possible reconcile all accounts relating to Kyokuto;

(b) accept all outstanding balances within existing terms of settlement within the terms of this agreement;

(c) remove all signs, advertising displays, labels and the like identifying Kyokuto as a licensee of the Rights in respect of the Territory and thereafter Autogen will not use such signs and displays in connection with any business conducted by it for any commercial purpose whatsoever; and

(d) not conduct its business so as to falsely reflect discredit on Kyokuto.

17.3 Rights of Autogen

Following termination and expiration of this agreement, Autogen or any person that Autogen may designate, shall be entitled, without incurring any liability or responsibility to Kyokuto, to negotiate or consummate arrangements for another party to act as Autogen's licensee of the rights for some or all of the Territory

17.4 Completion of sales to third parties

Following termination or expiration of this agreement, but subject to **clause 17.3**:

(a) Kyokuto shall have the right to freely sell and supply to any of its customers such stock of Product that Kyokuto has on hand at the date of termination or expiration of this agreement, but Kyokuto is not entitled, save in the case of termination arising from breach by Autogen, to manufacture any further Product except to use up, raw materials and work-in-progress owned by Kyokuto as at the date of termination.

(b) If Kyokuto has not sold and supplied such stock of Product on hand or any part of it within 6 months from the date of termination or expiration of this agreement, then at the expiry of that 6 month period, Kyokuto must destroy or otherwise deal with such remaining Product in a manner acceptable to Autogen.

(c) Any transactions between the parties pursuant to this clause shall not be construed as a renewal of this agreement nor as a waiver of termination, but shall be governed by terms identical to this agreement mutatis mutandis.

(d) If Kyokuto sells Products after termination of this agreement pursuant to this **clause 17.4** then Kyokuto shall ensure that in the period of 6 months contemplated by this **clause 17.4** that it will not market the Products in a manner likely to or calculated to damage the market credibility, integrity or ordinary price structures of the Product or the Trade Mark.

(e) All such stocks-on-hand, and Product manufactured from work in progress shall be conclusively deemed to have been sold by the end of the said period of 6 months and Kyokuto shall thereupon make an appropriate royalty payment to Autogen in respect thereto along with a written statement containing sufficient data to enable Autogen to verify the correctness of such payment.

17.5 Limitation of Kyokuto's rights

Upon termination or expiration of this agreement for any reason, Kyokuto shall not be entitled to compensation for goodwill which may have accrued to it through the marketing of the Product in the Territory.

18. WARRANTIES

18.1 General warranties

Each party represents and warrants to the other that:

(a) it has all necessary powers and authorisations necessary to enter into this agreement and observe its obligations hereunder and allow this agreement to be enforced against it; and

(b) this agreement does not contravene any law, regulation or official directive or any obligations or undertakings by which it or any of its assets are bound or cause a limitation on its powers to be exceeded; and

(c) there does not presently exist any event which would either now or with the effluxion of time entitle the other party to terminate this agreement pursuant to **clause 16**; and

(d) it is not a party to any pending or threatened action or proceeding affecting it or any of its assets before a court, governmental agency, commission or arbitrator where an adverse outcome could reasonably be expected to adversely impact upon the performance of its obligations under this agreement; and

(e) it has no immunity from the jurisdiction of a court or from legal process (whether through service of notice, attachment prior to judgment, attachment in aid of execution, execution or otherwise).

18.2 Specific warranty re Licensed Patents

Autogen warrants to Kyokuto that:

(a) as at the date of this agreement it has disclosed to Kyokuto details of all prior art sighted by Autogen by way of international search in relation to the Licensed Patents (which is also listed in Part B of **Schedule 1**); and

(b) except as disclosed in Part B of Schedule 1, as at the date of this agreement it is unaware of any other patent which has not been disclosed to Kyokuto and which may be infringed by Kyokuto exercising the Licensed Patents in accordance with the terms of this agreement.

18.3 Warranties by Kyokuto

Kyokuto warrants to Autogen that:

(a) it will obtain or has obtained from its Representatives who have access to the Confidential Information written obligations to treat such information as confidential strictly in accordance with this agreement.

(b) that it has made its own enquiries into the validity and enforceability of the Licensed Patents and satisfied itself that the Licensed Patents and the Confidential Information do not infringe the intellectual property rights of any third party, and that, save as provided in **clause 20.2,** it assumes any and all risk in relation to such infringement.

(c) it will ensure that the storage and Marketing of the Product does not breach any law, statute, rule or regulation relating to the Product.

18.4 Head Licences

Kyokuto acknowledges that various of the Rights are licensed by Autogen from the Head Licensors pursuant to various licences (the "Head Licences"). Autogen acknowledges that the only express basis in the Head Licences on which the Head Licensors can terminate the Head Licences is for non-payment of funds by Autogen. Autogen agrees to use reasonable endeavours to maintain the Head Licences and not breach them or otherwise cause them to terminate. Kyokuto specifically agrees that this agreement will terminate in the event that any of the Head Licences are terminated by the relevant Head

Licensor. Provided that the termination of any Head Licence is not due to or results directly or indirectly from any act or omission of Kyokuto, Autogen agrees to indemnify Kyokuto against any direct loss or damage it suffers as a result of the termination of this agreement, but limited in any event to the total of all royalties actually received by Autogen from Kyokuto under this agreement. In no circumstances will Autogen be liable for any indirect or consequential losses suffered by Kyokuto in such circumstances.

19. PROTECTION OF LICENSED PATENTS

19.1 Maintenance of the Licensed Patents

Autogen shall be responsible for the cost of preparing filing prosecuting and maintaining the Licensed Patents but nothing expressed or implied herein shall necessarily obligate Autogen to institute legal proceedings to protect same.

19.2 Parties to confer

If during the Term a party becomes aware of circumstances amounting to an infringement of or challenge to the Licensed Patents in the Territory, that party shall promptly notify the other party, whereafter the parties shall confer together in good faith to determine how best to terminate the infringement or challenge.

19.3 Shared proceedings

If Kyokuto and Autogen mutually agree, legal proceedings in the Territory may be instituted on the basis that all costs and expenses thereof will be borne and shared equally between Kyokuto and Autogen (proceedings instituted on such a basis being herein called "shared proceedings") in which case:

(a) whilst shared proceedings are being diligently prosecuted Kyokuto shall continue to make royalty reports to Autogen and shall continue to pay royalties on sales of Products in such country on the same basis as applied prior to the shared proceedings;

(b) if as a result of shared proceedings a Final Judgment is obtained holding all applicable claims of Licensed Patents being infringed invalid, or holding adversely as to inventorship of such Licensed Patents, or construing all applicable claims of such Licensed Patents so as not to apply to Products, such that **clause 3.2(a)** no longer applies, Kyokuto is still obliged to make further royalty payments to Autogen in respect of Products sold after the date of such Final Judgment in accordance with **clause 3.2(b)**;

(c) all costs and expenses of and incidental to shared proceedings will be borne by Kyokuto as to one-half thereof and by Autogen as to the other half thereof unless and to the extent collected from the party against whom shared proceedings were brought;

(d) any damages or other moneys recovered in any shared proceedings will be shared equally as to one-half thereof by Kyokuto and as to the other half thereof by Autogen; and

(e) shared proceedings may be terminated, compromised or otherwise settled upon such terms as may be agreed by Kyokuto and Autogen, including if necessary, the granting of a non-exclusive licence to a third party, notwithstanding that the Kyokuto licence may otherwise be exclusive (subject to the other provisions of this agreement). Kyokuto will not have any responsibility or obligation to initiate any legal proceedings anywhere other than in the Territory.

19.4 Autogen's right to act

If there is no mutual agreement within one month after the date of the notice referred to in **clause 19.2** to institute shared proceedings under **clause 19.3** then Autogen shall:

(a) within 3 months after the date of such notice, either to terminate such infringement or challenge; or

(b) commence and diligently prosecute proceedings to terminate such infringement or challenge.

19.5 Kyokuto's obligations if Autogen acts

Whilst Autogen is complying with **clause 19.4**:

(a) Kyokuto must continue to make royalty reports calculated in accordance with **clause 3.2(a)** pursuant to **clause 5**, but is only obliged to make royalty payments in accordance with **clause 3.2(b)** (the balance being withheld by Kyokuto) (other than in respect to sales made prior to the date of first infringement which otherwise attracted a full royalty obligation under **clause 3** which has not previously been satisfied) until the successful termination of such proceedings or cessation of the infringement or challenge occurs;

(b) if Autogen in proceedings instituted by it under **clause 19.4** receives a Final Judgment holding all applicable claims of Licensed Patents being infringed invalid, or holding adversely as to inventorship of such Licensed Patents, or construing all applicable claims of such Licensed Patents so as not to apply to Products for which royalties have been accrued by Kyokuto, then all moneys withheld under **clause 19.5(a)** may be retained by Kyokuto for its own benefit absolutely otherwise Kyokuto must pay the same to Autogen forthwith upon receipt of the Final Judgment;

(c) all costs and expenses of any proceedings instituted by Autogen under **clause 19.4** will be borne by Autogen unless collected from the party against whom the proceedings are brought;

(d) any damages or other moneys recovered in any such proceedings will be retained by Autogen; and

(e) Autogen shall have the right to terminate compromise or otherwise settle any proceedings it may elect to bring under **clause 19.4** upon such terms as it deems appropriate, including the right to grant a non-exclusive licence under Licensed Patents to any third party.

19.6 Kyokuto's right to act

If at any time Autogen is not complying with **clause 19.4**, Kyokuto may give a notice in writing to Autogen that it intends to take its own proceedings at the expiration of the period of one month. If in that period Autogen does not comply with **clause 19.4** Kyokuto shall have the right, but not the obligation, to at anytime within the next 3 months bring proceedings as it may see fit to terminate the infringement or challenge or to recover damages resulting therefrom, or both.

19.7 Kyokuto's proceedings

Upon the commencement of proceedings by Kyokuto pursuant to **clause 19.6** and during the pendency thereof:

(a) Kyokuto shall continue to make royalty reports to Autogen calculated in accordance with **clause 3.2(a)** pursuant to **clause 5.1** but is only obliged to make royalty payments in accordance with **clause 3.2(b)** (the balance being withheld by Kyokuto) (other than in respect to sales made prior to the date of first infringement which otherwise attracted a royalty obligation which has not previously been satisfied) until the successful termination of such proceedings or cessation of the infringement or challenge occurs;

(b) Autogen shall furnish to Kyokuto, upon the request of Kyokuto, all evidence and information in its possession and control pertaining to any such proceedings and Autogen shall join therein on a non-controlling basis to the extent requested by Kyokuto. If the furnishing of evidence and information as aforesaid is likely to involve Autogen in any material expense Kyokuto will enter into negotiations in good faith with a view to reaching a reasonable agreement as to the extent to which Autogen should be reimbursed therefor;

(c) If Kyokuto receives a Final Judgment holding all applicable claims of Licensed Patents being infringed invalid, or holding adversely as to inventorship of such Licensed Patents or construing all applicable claims of such Licensed Patents so as not to apply to Products for which royalties have been accrued by Kyokuto, then all moneys withheld under **clause 19.7(a)** may be retained by Kyokuto for its own benefit absolutely otherwise Kyokuto must pay the same to Autogen forthwith upon receipt of Final Judgment (less any amounts Kyokuto is entitled to deduct under **clause 19.7(d)**);

(d) upon any successful completion such proceedings, or upon cessation of such infringement or challenge, the amounts of any judgment or settlement of past infringement or challenge actually paid to Kyokuto shall be firstly applied to reimburse Kyokuto for its costs and expenses in prosecuting such proceedings and the balance, if any, shall be retained by Kyokuto;

(e) if the amount of any such judgment or settlement is insufficient to cover Kyokuto's costs and expenses in prosecuting such proceedings, then the costs and expenses of Kyokuto, or the remainder thereof (as the case may be) will be reimbursed to Kyokuto out of payments withheld pursuant to **clause 19.7(a)** and, if necessary, out of any and all future royalty payments which would otherwise become payable by Kyokuto provided that unlike shared proceedings under clause

19.3 Autogen will not be personally liable to reimburse Kyokuto for any of the costs and expenses incurred by Kyokuto as a result of proceedings taken by Kyokuto under **clause 19.6** except out of royalty payments as aforesaid and then only out of royalty payments accrued but not paid or out of future royalty payments and not in any event out of royalty payments previously actually made to Autogen.

20. INFRINGEMENT OF OTHERS RIGHTS

20.1 Notification of action

In the event that legal action is threatened or commenced against Kyokuto arising out of Kyokuto's use of the Rights, Kyokuto must not make any admissions or enter into any substantive steps in connection therewith but must promptly notify Autogen.

20.2 Autogen action

If such legal action against Kyokuto arises out of the use of the Rights in accordance with the terms and conditions agreed in relation to the Products, then Autogen shall have the right and obligation to defend and/or assist in the defence of such litigation and shall bear the costs and expenses of such defence.

Autogen shall attempt to settle, defend or compromise such claim on terms acceptable to it and in particular on the basis that it shares with or pays to the relevant claimant not more than fifty percent of the royalties to which Autogen may be entitled under this agreement. If Autogen is unable to secure a settlement or compromise of the third party claim on that basis, then unless a mutually satisfactory arrangement can be reached between Autogen, Kyokuto and the third party, Autogen may terminate this agreement by notice to Kyokuto.

20.3 Kyokuto action

If such legal action against Kyokuto relates to use of the Rights outside the scope of the Licence granted to Kyokuto under this agreement or otherwise in breach of this agreement, Kyokuto is solely responsible for the defence of such action at its own cost. Autogen will, if requested, comply with any reasonable request for assistance made by Kyokuto subject to Kyokuto reimbursing Autogen for any costs and expenses incurred by Autogen".

21. OTHER LICENCES

21.1 Special defintions

In this **clause 21**, the following expressions have the following meanings:

"**Base Royalty Rate**" means the rate of royalty that would otherwise be payable by Kyokuto to Autogen but for the provisions of this **clause 21**.

"**Necessary Licence**" means a licence of Other Rights which is required by Kyokuto in order for it to Exploit a Product containing GAD (but not to manufacture GAD) as

contemplated by this agreement, but which would not be required if such Product did not contain GAD, and for the sake of clarity:

(i) excludes:

(A) the Rights; and

(B) any diagnostic technology, or technology required to manufacture, use or sell a diagnostic; and

(ii) "required", when used in above context, means that if Kyokuto was to Exploit a Product containing GAD (but not to manufacture GAD) as contemplated by this agreement without such licence it would infringe the valid patent of a third party.

"**Other Rights**" means any proprietary or personal right arising from intellectual activity in the business, industrial, scientific or artistic fields. It includes a copyright, design (whether registered or unregistered), trademark (whether registered or unregistered), patent or patent application or invention, circuit layout, knowhow or confidential information.

21.2 Parties intention

The intention of the parties is that, recognising that the use of GAD in a Product may require the use by Kyokuto of Other Rights, that Autogen will be obliged, within limits, to deal with the holders of those Other Rights, with a view to procuring for Kyokuto and its Sub-licensees, a licence in respect of those Other Rights to enable them to use GAD in Products. The obligations of Autogen in this regard are not to be absolute but rather to use all reasonable endeavours to procure such licences within the limits of this clause, and on the basis, that it is expected that the ongoing "cost" of such licences are borne by Autogen out of its royalty share as otherwise provided by this agreement.

21.3 Extra Rights

In the event that it is determined that there is a Necessary Licence, then Autogen will be solely responsible for endeavouring to procure the Necessary Licence, either:

(a) by way of securing a licence of the relevant Other Rights in accordance with **clause 21.4**, in which case those Other Rights will be added to the Rights and accordingly incorporated in this agreement; or

(b) by procuring of the grant in favour of Kyokuto, on terms reasonably acceptable to Kyokuto of a licence in respect of the relevant Other Rights in accordance with **clause 21.5**, whereupon there will a reduction in the Base Royalty Rate in accordance with **clause 21.6**.

21.4 Licence by Autogen

Autogen may satisfy its obligations under this **clause 21** by procuring the grant in its favour of a licence in respect of the Other Rights, which enables those Other Rights to be included in the Licence, with the consequence that the use of those Other Rights by Kyokuto does not infringe the valid patent rights of the relevant third party. In such a case Autogen is solely responsible for the payment to the relevant third party of any

royalty due to that third party in respect of the use of the Other Rights in respect of Products.

21.5 Licence to Kyokuto

Autogen may satisfy its obligations under this **clause 21** by procuring the grant in favour of Kyokuto directly of a licence from the owner of the Other Rights, which enables Kyokuto to use GAD in the Products in the Territory. Such licence may be on terms generally similar to those contained in this agreement or on such other usual terms as may be proposed. Kyokuto agrees that it will assist in this process and enter into any relevant negotiations in good faith. If the owner of the Other Rights seeks any up front payment then that will be the responsibility of Autogen.

21.6 Royalty reduction if Kyokuto takes licence

In the event that a licence is procured in favour of Kyokuto in accordance with **clause 21.5**, then the royalty rate payable to Autogen under this agreement, will, subject to **clause 21.7**, be reduced by the amount of the royalty payable to the owner of the Other Rights. If by reason of the operation of **clause 21.7**, the full amount of such royalty is not reflected in a comparable reduction in the royalty payable to Autogen, then Kyokuto is responsible for such excess.

21.7 Limit on royalty reduction

Autogen will not be obliged to procure for itself or Kyokuto a licence from a third party under **clause 21.3**, if as a result of doing so the Net Royalty Rate is less than half of the Base Royalty Rate. However in such circumstances, Autogen will not immediately terminate this agreement but will discuss with Kyokuto as to how best the situation can be resolved in the light of the then state of Kyokuto's business using the Product.

$$NRR = BRR - ALR - KLR$$

Where:

NRR is the Net Royalty Rate

BRR is the Base Royalty Rate

ALR is the rate of royalty payable to a third party in respect of sales of Products under a licence procured by Autogen under **clause 21.4**.

KLR is the rate of the additional royalty payable by Kyokuto to a third party in respect of Products under a licence procured by Autogen under **clause 21.5**.

22. CONSTRUCTION OF PATENTS

If in any proceedings in which the validity infringement or priority of any claim of any patent or patent application included in Licensed Patents is in issue a Final Judgment is obtained the construction placed upon any such claim by such Final Judgment shall be thereafter followed not only as to such claim but as to all claims to which such construction applies with respect to acts occurring thereafter.

23. MANUFACTURE AND SUPPLY OF GAD

In the event that Autogen is going to supply Kyokuto with GAD, the parties will enter into a further formal arrangement for the supply of GAD, such arrangement to be based around the terms contained in **Schedule 3**.

Autogen acknowledges that Kyokuto is initially seeking to source supplies of GAD from the Oriental Yeast Co. Ltd. Autogen consents to the manufacture of GAD by Oriental Yeast Co. Ltd. solely for use by Kyokuto under this agreement. Kyokuto agrees to facilitate a brief but formal agreement between Autogen and Oriental Yeast Co. Ltd. to document such manufacture on a royalty free basis.

24. FORCE MAJEURE

24.1 Party not liable

Where a party is required under this agreement to perform an obligation or do any act or thing by a designated time or date (other than an obligation to make payment) ("**Obligation**"), the party shall not be liable for any delay in performing or for failure to perform an Obligation where the delay or failure arises from Force Majeure and that party has complied with this clause.

24.2 Notice of Force Majeure

A party who claims Force Majeure shall:

(a) give the other party prompt notice of the Force Majeure with reasonably full particulars and an estimate of the extent and duration of its delay in performance, or inability to perform; and

(b) use all possible diligence to remove the Force Majeure as quickly as possible provided that this shall not oblige the party to settle on terms unsatisfactory to that party any strike, lockout or other labour difficulty, or any investigation or proceeding by any governmental authority or any litigation by any third party.

24.3 Termination in case of Force Majeure

If the delay continues beyond 10 Business Days, after the notice given under **clause 24.2**, the parties shall meet to discuss in good faith a mutually satisfactory resolution of the problem and, if unable to achieve such a resolution within a further 10 Business Days, either party may elect to terminate this agreement by 5 Business Days prior written notice to the other.

25. NOTICES

25.1 Form of Notice

Any notice, approval, consent or other communication ("notice") from one party to another ("Recipient") must be in writing and be signed by a person duly authorised by the person giving the notice.

25.2 Manner of Service

A notice must be served by:

(a) leaving it at the Recipient's address;

(b) sending it by ordinary pre-paid post (airmail if being sent from or to a place outside of Australia) to the Recipient's address; or

(c) sending it by facsimile to the facsimile number of the Recipient.

25.3 Address for Service

Until other details are specified by a Party as its address or facsimile number for service the following shall apply:

Autogen

Address : 210 Kings Way, South Melbourne 3205, Australia

Facsimile : 613 9234 1198

Attention : Company Secretary

Kyokuto

Address : 3333 - 26 Kamitezuna, Takahagi City. 318, Japan

Facsimile : 81 293 23 7324

Attention : General Manager, Takahagi Works

25.4 Time of Service

A letter or facsimile shall be taken to be served:

(a) in the case of a delivered letter, on the day of delivery, unless delivery is made on a non Business Day or after 4:30 p.m. on a Business Day, in which case it shall be taken to be served on the next Business Day;

(b) in the case of a posted letter, on the third (or seventh in the case of airmail) Business Day after posting; and

(c) in the case of a facsimile, on receipt by the party giving the notice of a transmission confirmation report, unless within one Business Day of receipt the Recipient has informed the party giving the notice that the transmission was incomplete or garbled, provided that in any case if transmission is completed after 4:30 p.m. (local time in the place of receipt) or is received on a non Business Day, the notice shall be taken to be served on the next Business Day.

26. MISCELLANEOUS

26.1 Time of essence

Time will be of the essence of the obligations of each party to each other under this agreement.

26.2 Severance

If any provision shall be held invalid or unenforceable, in whole or in part in any jurisdiction, then such invalidity or unenforceability shall only affect such provision or part thereof in such jurisdiction, and shall not in any manner affect the provision in this agreement in any other jurisdiction. To the extent legally permissible an arrangement which reflects the original intent of the parties shall be substituted for such invalid or unenforceable provision.

26.3 Waiver

The failure, delay, relaxation or indulgence by any party in exercising any power or right given to that party under this agreement will not operate as a waiver of that power or right, nor will any single exercise of a power or right preclude any other or further exercise of it or the exercise of any other power or right under this agreement. A power or right may only be waived in writing, signed by the party to be bound by the waiver.

26.4 Relationship of parties

Nothing contained in this agreement shall be construed so as to place any party in the relationship of principal, employee, agent, partner, joint venturer or legal representative of any other party. The parties expressly agree and acknowledge that each of the parties is an independent contracting party and does not, unless expressly provided, have the authority or power for or on behalf of any other party to enter into any contract, to incur debts, to accept money, to assume any obligations or to make any warranties or representations.

26.5 Injunctive relief

If there is any conduct or threatened conduct which is or may be a breach of this agreement, Kyokuto acknowledges that damages may be inadequate compensation for such a breach and that Autogen shall be entitled to apply to any court of competent jurisdiction for interim or permanent injunctive relief or both restraining Kyokuto from committing any breach or threatened breach of this agreement without showing or proving any actual damage sustained by Autogen. Such rights and remedies will be cumulative and in addition to any other rights or remedies which Autogen may be entitled to at law or in equity.

26.6 Proper law

This agreement shall be construed in accordance with and governed by the laws of Victoria, Australia and its form, execution, validity, construction and effect shall be determined in accordance with the laws of Victoria. The parties agree that any dispute arising out of this Agreement shall be resolved by arbitration pursuant to the Law and procedures laid down by the International Chamber of Commerce. The arbitration shall

take place at the address of the party that does not commence the arbitration, or at some appropriate adjacent location.

26.7 Rule of construction

No rule of construction applies to this agreement to the disadvantage of a party because that party was responsible for the preparation of this agreement or any part of it.

26.8 Variation

Any modification, alteration, change or variation of any term or condition of this agreement must be in writing, executed by all parties.

26.9 Assignment

(a) This agreement is personal to Kyokuto and Kyokuto shall not be entitled to assign in whole or in part without the prior written consent of Autogen.

(b) Autogen may assign both the benefit and the burden of this agreement to a third party, provided such assignment also assigns to such third party the relevant intellectual property rights necessary for the property performance of this agreement. Autogen may assign, mortgage or charge its royalty entitlement to any party without restriction. None of the aforesaid assignments shall be binding on Kyokuto until such assignment is notified to Kyokuto.

26.10 Further documents

Each party agrees that it will forthwith upon the request of the other party execute and deliver all such instruments and agreements and will take all such other actions as the other party may reasonably request from time to time in order to give effect to the provisions and purposes of this agreement.

26.11 Costs and Taxes

Each party must pay its own costs and expenses in relation to the negotiation, preparation, execution, delivery, stamping and registration, completion, variation and discharge of this agreement and Kyokuto must pay any Tax in respect of the execution, delivery, performance, release, discharge, amendment, enforcement or attempted enforcement or otherwise of any of the following:

(a) this agreement;

(b) any agreement or document entered into or signed under this agreement;

(c) any transaction contemplated under this agreement; and

(d) any payment made or received in respect of this agreement.

26.12 Payment

Any payment due under this agreement may be made or tendered by a cheque drawn by a bank as defined by the *Banking Act* 1959 (C'th).

26.13 Interest on overdue amounts

If any amount due under this agreement is not paid when due, then the party obliged to make payment must pay to the other party interest at the Base Rate on the amount due and payable, accruing from day to day and to be computed from the date for payment of the amount until payment of the amount in full.

26.14 No set-off

Kyokuto is not entitled to set-off against any payments required to be made by it under this agreement any amounts owed to it by Autogen, or the amount of any claims by it against Autogen.

26.15 Withholding taxes

If Kyokuto is legally obliged to deduct or withhold any tax from any payment, in particular any royalty payment, to be made to Autogen hereunder, then if such payment is made from Japan for tax purposes Kyokuto shall on request provide Autogen with receipts and any other evidence from relevant revenue authorities which may be required by Autogen for its own tax affairs, and in any other case Kyokuto shall be obliged to gross up such payment so that the net payment actually received by Autogen equals the amount which Kyokuto is prima facie required to pay.

26.16 Counterparts

This agreement may be executed in counterparts, and by the parties on separate or the same counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same instrument.

26.17 Registration of agreement

If this agreement or any associated transaction is required by the law of any country to be either approved or registered in any country or with any governmental agency, Kyokuto shall be responsible for obtaining such approval or registration including without limiting the generality of the foregoing, causing this agreement to be stamped, recorded and registered at its cost in such country. Autogen agrees to co-operate in any such application or registration procedure. Kyokuto shall furnish proof of compliance with the foregoing to Autogen when and if Autogen so requires.

26.18 Not obliged to act contrary to law

No party shall be obliged to carry out or perform any of the terms of this agreement where doing so would constitute a violation of any treaty, law, code or regulation of any governmental authority whether local, national or supranational. In any event the other terms of this agreement shall nevertheless continue and the parties must use all reasonable endeavours to re-negotiate and amend this agreement so that the performance of this agreement as so amended will not involve any such violation.

26.19 Statutory rights not limited

The powers, remedies and rights conferred upon the parties by or under any statute shall (except to the extent inconsistent with the terms and provisions expressed in this agreement) be in addition to the powers, remedies and rights conferred by this agreement.

26.20 Consents

Unless this agreement provides otherwise and to the extent permitted by law, a party may, in its absolute discretion, conditionally or unconditionally give or withhold any approval or consent permitted or required to be given by it pursuant to this agreement.

26.21 Entire agreement

This agreement constitutes the entire agreement between the parties in relation to the subject matter of this agreement. Any prior arrangements, agreements, representations or undertakings are superseded and, except as expressly provided, each party acknowledges that it has not relied on any arrangement, agreement, representation or understanding which is not expressly set out in this agreement.

26.22 Waiver of certain rights

Kyokuto agrees not to make and waives any right it may have to make any claim against Autogen or its Representatives under section 52 of the *Trade Practices Act 1974*, or the corresponding provision of any state or territory enactment, for any statement or representation made prior to entering into this agreement.

SCHEDULE 1

PART A

Licensed Patents

(Referred to in **clause 1.1**, definition of "Licensed Patents")

	Document No.	Inventors	Applicant	Earliest priority date	Principal development
1.	*WO 94/18568	Mackay, Rowley, Zimmet	Monash University	9-Feb-93	Dimers and oligomers of GAD required to create autoantigenic reactivity with IDDM sera
2.	*PCT/AU98/00025	Mackay, Rowley, Zimmet	Monash University	21-Jan-97	Expression in yeast of antigenically active, recombinant hybrid glutamic acid decarboxylase

*Licensed Patent is the Japanese patent or patent application corresponding to these Australian patent applications.

PART B

Disclosure re Licensed Patents

(Referred to in **clause 18.2**, Specific Warranty re Licensed Patents)

The following is a list of patents which Autogen have disclosed to Kyokuto as details of all prior art sighted by Autogen by way of international search in relation to the Licensed Patents.

	Patent	Japanese Application No.	Inventors	Applicant	Earliest priority date	Principal development
1.	WO 90/07117	-	Atkinson, Maclaren	University of Florida	23-Dec-88	64 K antigens; also contemplated the detection of autoantibodies to 64K serine kinase

	Patent	Japanese Application No.	Inventors	Applicant	Earliest priority date	Principal development
2.	WO 92/03733	9227408, 1515651	Atkinson, Maclaren	University of Florida	17-Aug-90	64K antigen AD; combination of GAD protein + ICA + ISA
3.	WO 92/04632	91516703, 94523340	Baekkeskov et al	Regents of the University of California and Yale University	7-Sep-90	Low mwt GAD and high mwt GAD isoforms
4.	EP 519469	92158195, 95509191	...	The Regents of the University of California	21-Sep-90	Polypeptides from GAD with the formula X-Pro-Glu+Val-Lys-Y-Lys-Z
5.	WO 92/05446	91518259	Tobin, Erlanger, Kaufman	The Regents of the University of California	21-Sep-90	GAD_{65} cDNA recombinant technology
6.	EP 499176 (Abstract)	9227942	...	Boehringer Mannheim GMBH	14-Feb-91	Monoclonal IgG antibodies against islet cell; use in production of GAD
7.	WO 92/14485	92504792	Harrison et al	Amrad Corporation Limited	22-Feb-91	Nucleic acid to GAD_{67} isoform
8.	WO 92/19972	-	...	Novo Nordisk A/S	3-May-91	IMR GAD = 67kD GAD
9.	WO 92/20811	93500208	Lernmark et al	University of Washington and Zymogenetics Inc.	15-May-91	Purified GAD + construct
10.	WO 92/21979	93500663	...	Board of Regent, The University of Texas System	3-Jun-91	Cells with GAD epitope
11.	WO 93/13420 (Abstract)	-	...	Joslin, Diabetes Center	26-Dec-91	Islet cell AB-restricted rICA-GAD absorbed - non restricted nrICA-GAD absorbed
12.	US Patent No.5.200318	93109139	Rabin, Knowles	Miles Inc.	13-May-92	GAD/ICA512 or GAD/ICA512/ICA 12 panel
13.	JP06094708 (Abstract)	6094708	...	NKK Corporation	9-Sep-92	GAD + carrier
14.	Wo 94/10297	-	...	Elias Entwicklungslabor Immunoassays	4-Nov-92	GAD-1 and GAD-2

	Patent	Japanese Application No.	Inventors	Applicant	Earliest priority date	Principal development
	(Abstract)			GMB		immunoassay
15.	WO 94/12529 (Abstract)	94513497	...	The Regents of the University of California	3-Dec-92	Solid support + fusion polypeptides with GAD65
16.	US Patent No. 5,547,847	-	Hagopian et al	University of Washington	7-Sep-93	Assay for anti-GAD provides method for aiding diagnosis and classification and predicting clinical course of IDDM

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SCHEDULE 2

Minimum Royalty

(Referred to in **clause 9.1**))

Year 1	Nil
Year 2	US$50,000
Year 3 and after	US$100,000

SCHEDULE 3

Manufacturing Arrangements

MANUFACTURE AND SUPPLY OF GAD

"**Forecasting and Ordering Procedures**" means the procedures attached hereto as **Annexure "A"** concerning, inter alia:

(i) the provision by Kyokuto or its authorised agent to Autogen of written forecasts of its requirements of GAD;

(ii) the acceptance or modification of such forecasts;

(iii) the submission by Kyokuto or its authorised agent to Autogen of firm purchase orders for GAD; and

(iv) the progression, delivery and execution of such orders,

as the same may be amended or modified from time to time by mutual agreement between Kyokuto and Autogen.

"**GAD Specifications**" means the specifications for the GAD as set out in **Annexure "B"**, as varied from time to time by Autogen in accordance with this agreement.

1. Purchase and Sale

During the Term, and subject to the terms and conditions set forth herein, Autogen hereby agrees to Manufacture or have Manufactured and sell to Kyokuto, and Kyokuto hereby agrees to purchase from Autogen all of Kyokuto's requirements of GAD for use by Kyokuto solely in the manufacture of Products for sale in the Territory in accordance with this agreement.

2. Forecasting and Ordering Procedures.
Autogen and Kyokuto undertake to comply with their respective obligations set out in the Forecasting and Ordering Procedures.

3. Prices

(a) During the initial year of the Term Autogen will sell, and Kyokuto will purchase, GAD at the price set forth in **Annexure "C"**. Thereafter, at any time during the Term, Autogen may increase or decrease the price to be paid by Kyokuto for GAD upon 30 days prior written notice. All Taxes as may be imposed from time to time on such price and the cost of insurance and transport will be added to the purchase price and paid by Kyokuto.

(b) Kyokuto may give Autogen notice of its desire to renegotiate the price for GAD.

4. Exclusion of standard forms

In ordering and delivering GAD, Autogen, Kyokuto or its authorised agent, as the case may be, may employ their respective standard forms, but nothing in those forms shall be construed to modify, amend or supplement the terms of this agreement and, in the case of any conflict herewith, the terms of this agreement shall prevail.

5. Delivery

(a) Autogen shall deliver or cause to be delivered in accordance with the Forecasting and Ordering Procedures GAD supplied hereunder to the Delivery Point.

(b) Autogen will, at Kyokuto's expense, insure or procure the insurance of, the GAD while in transit to the Delivery Point against such customary risks and for such amounts as may be agreed from time to time in writing between Autogen and Kyokuto.

(c) All shipments of Product shall be F.O.B. manufacturing site, freight collect.

(d) Title to, and risk of loss with respect to, the GAD shall pass to Kyokuto when the GAD is placed in the possession of the carrier at the Manufacturing site.

(e) Autogen must obtain at its own risk and cost any licence or other official authorisation and carry out all customs formalities necessary for the exportation of GAD from its country of origin into the Territory.

(f) Kyokuto shall obtain or caused to be obtained through its authorised agent at its own risk and cost any licence or other official authorisation and carry out all customs formalities necessary for the importation of GAD into the Territory.

6. Payment

Payment in full for GAD purchased hereunder shall be made by Kyokuto to Autogen in Australian Dollars, or such other currency as may be agreed at the time of invoice, and shall become due and payable within 60 days of the date of invoice or such longer period as the parties may mutually agree in writing. Products shall be invoiced on or after shipment. Payment for each shipment of GAD shall be made by wire transfer to an account provided in writing by Autogen or as otherwise reasonably specified by Autogen. Payment for shipments of GAD by Autogen to Kyokuto made prior to the date of execution of this agreement shall be due and payable in full within 10 days of execution of this agreement.

7. Quality

(a) Autogen covenants that all the Products delivered hereunder shall be Manufactured in accordance with, and shall comply with, and conform to, the GAD Specifications.

(b) Kyokuto undertakes or shall cause its authorised agent to undertake that each shipment of GAD delivered by Autogen hereunder shall be subject to visual inspection by or on behalf of Kyokuto and that, in the event that such inspection shall reveal or Kyokuto otherwise discovers that the said shipment (or any part thereof) does not comply with the GAD Specifications, Kyokuto or its authorised agent shall notify Autogen accordingly, including the basis for such non-

compliance; provided that Kyokuto or its authorised agent shall be required to make the notification aforesaid within 30 days of the date of receipt of the said shipment or 30 days of discovery in the event that non-compliance as aforesaid could not reasonably have been discovered by such visual inspection.

(c) In the event that Autogen receives notification from Kyokuto or its authorised agent pursuant to **clause 7(b)** that any shipment of GAD (or any part thereof) supplied by Autogen to Kyokuto does not comply with the GAD Specifications, Autogen shall (if such notification is accepted by Autogen or is agreed or confirmed pursuant to **clause 7(d)**) request Kyokuto or its authorised agent either to arrange for the said shipment (or the defective part thereof) to be returned to Autogen or (if Autogen shall so direct) to the company that has manufactured the said shipment at Autogen's expense or to destroy the said shipment (or any part thereof) at Autogen's expense in a manner stipulated by Autogen in accordance with the GAD Specifications or to retain the said shipment (or the defective part thereof) until further notice. Autogen shall then, within 90 days following receipt of such notification from Kyokuto, either:

(i) supply Kyokuto at no additional cost with an equivalent quantity of GAD in compliance with the GAD Specifications; or

(ii) if agreed by the Parties, refund the price paid by Kyokuto for the non-complying GAD. In addition, if such non-complying GAD has been formulated into Products, Autogen shall refund the price paid by Kyokuto for the manufacture of such Products.

(d) In the event of any dispute between Autogen and Kyokuto as to whether or not Autogen has manufactured and supplied any shipment of GAD (or any part thereof) in compliance with the GAD Specifications, Autogen and Kyokuto shall attempt to resolve the matter amicably. If within 30 days of the dispute having arisen the matter has not been resolved, either Autogen or Kyokuto shall have the right to request that the matter be referred to an independent laboratory acceptable to both of them and the decision of such laboratory shall be final and binding on both of them.

(e) The remedies specified in this **clause 7** constitute the exclusive remedy of Kyokuto against Autogen and the entire liability of Autogen in connection with any rejected shipment of GAD and, any nonconforming GAD which is not rejected by Kyokuto pursuant to the terms shall be deemed to have been approved and accepted by Kyokuto and not be subject to subsequent revocation of acceptance.

(f) In no event shall Autogen be liable to Kyokuto for any indirect, incidental, special or consequential damages, including, but not limited to, any claim for damages based upon lost profits.

8. Import/Export Regulations

Applicable law and regulations may make it illegal to import certain products into certain countries. Any orders placed by Kyokuto for GAD are executed at the Kyokuto's risk in so far as these restrictions are concerned and Kyokuto shall bear the full cost of

compliance with such restrictions. All orders must be accompanied by the appropriate export/import permits.

9. Quantitative Deficiencies

Kyokuto shall inform Autogen of any claim relating to quantitative deficiencies in GAD within 15 days following actual receipt by Kyokuto which Kyokuto considers to have been caused prior to shipment hereunder. Any claim for a quantitative defect which is not made within such 15 days shall be deemed to have been waived by Kyokuto. In the event Kyokuto determines there is a quantitative deficiency from the applicable order the parties shall investigate such deficiency and Kyokuto shall only be obligated to pay for actual quantities delivered.

10. Shelf Life

Autogen will not deliver to Kyokuto any GAD that has less than {{ }} months of shelf life remaining without the prior written consent of Kyokuto, which consent shall not be unreasonably withheld.

11. Use of GAD

Kyokuto shall use the GAD purchased from Autogen solely for use in Products sold by Kyokuto in the Territory pursuant to this agreement.

EXECUTED as an agreement

The common seal of **Autogen Pty Ltd** is affixed in accordance with its articles of association in the presence of:

AUTOGEN PTY. LTD. A.C.N. 003 685 617
THE COMMON SEAL OF

Director

JOSEPH ISAAC GUTNICK
(name printed)

Director/Secretary

PETER JAMES LEE
(name printed)

The common seal of Kyokuto Pharmaceutical Industrial Co. Ltd. is affixed in accordance with its articles of association in the presence of:

~~Director~~ PRESIDENT

HIROSHI KIKUCHI
(name printed)

Director

KAZUNOBU TANNO
(name printed)

AGT 30

6.17

THIS SERVICE DEED is made the 25th day of November 1988

BETWEEN: AUSTRALIA WIDE INDUSTRIES LIMITED ("the Client")

VICTORIA STAMP DUTY
25/11/88
$10

of the one part

AWI ADMINISTRATION SERVICES PTY. LTD. of 3rd Floor, 468 St. Kilda Road, Melbourne ("the Service Company")

of the other part

W H E R E A S :

A. THE Service Company has been providing managerial and administrative services to the Client and has provided certain facilities and equipment for the use of the Client in the conduct of its business.

B. THE Service Company and the Client now wish to formalise the terms and conditions which apply to the provision of these services, facilities and equipment.

NOW THIS DEED WITNESSES AS FOLLOWS:

1. THE Service Company has provided and agrees to continue to provide or procure, until termination of this Deed, managerial and administrative services and facilities and equipment required for the business conducted by the Client and as requested by the Client. The services include but are not limited to provision and maintenance of staff, all payroll facilities and employee records required by law and by usual accounting procedures, provision of all types of insurance in accordance with prudent business practice and provision of legal, financial and accounting advice and services.

2. THE Service Company has procured and shall continue to procure either by purchase or lease items of equipment including vehicles, necessary in the conduct of the business of the Client and shall continue to lease and/or make available the same to the Client.

3. THE Service Company agrees to continue to meet sundry office and running expenses incurred by the Client upon the Client providing to the Service Company original accounts and invoices received in respect of these expenses.

4. IN addition to the above the Service Company shall continue to procure and provide for the Client various services including but not limited tc the making available of stationery, furniture, furnishings, floral arrangements, library facilities, reference books, periodicals, transport, secretarial services, telephone answering services, photocopying and duplicating facilities and any other services as may be required from time to time by the Client as and when requested by the Client.

5. THE Service Company and the Client shall execute any further agreements or documents and do such acts and things as may be reasonably required tc record the terms upon which any particular service is provided.

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6. UNLESS otherwise agreed and subject to Clause 9 below, the Servic Company shall be responsible for all outgoings in respect of any items c services supplied including insurance, stamp duty, rent, maintenance ar hiring charges and other expenses and outgoings.

7. The Client shall not obtain from sources other than the Service Compar or shall not itself perform or provide the services contemplated by th: Deed unless it first requests the Service Company to provide the servic and the Service Company on the expiration of one month after such reque: has failed to provide the service.

8. The Client shall pay to the Service Company in consideration of th services provided hereunder a service fee equal to the aggregate of th cost and expense to the Service Company of providing the service: facilities and equipment (less any moneys already paid by the Clier pursuant to Clause 9 below) and 15% thereof and such fee shall be pai by the Client within 21 days from the receipt of the monthly invoice frc the Service Company. The parties may vary this fee from time to time b mutual written agreement.

9. THE Service Company at all times is entitled to request that the Clien provide moneys to the Service Company, on receipt by the Service Compar of an invoice, demand or account or upon notification of a claim or requirement to make a payment for greater than $1,000.00 in relation t or as a result of the provision or termination of any of the services facilities or equipment provided to the Client by the Service Compar either prior to or after the Service Company making that payment. Th Client shall within 14 days after the receipt of such a request pay th moneys required as instructed by the Service Company.

10. The Client shall reimburse the Service Company for the costs and expense incurred by it but not paid by the Client to date for the provision o the services, facilities and equipment by the Service Company to th Client plus 15% thereof within 21 days from the date of the invoice fo such amounts received from the Service Company by the Client.

11. The Client shall indemnify and keep indemnified the Service Company fo all costs, expenses, claims, outgoings, damages and liabilities incurred resulting or arising directly or indirectly, from the provision o termination of services, facilities and equipment to the Client whethe pursuant to this Deed or prior to the execution of this Deed and shal include any breach by the Client of this Deed or any lease agreement o other agreement with the Service Company or any breach by the Servic Company of any lease or other agreement such breach being caused by resulting or arising from some act or omission by the Client. Thi indemnity shall survive termination of this Deed.

12. The Client covenants that it has and shall continue to:-

    12.1 keep and maintain the items of equipment referred to in Clause ("the Equipment") in good repair,

    12.2 if applicable, use or permit the use of the Equipment only b properly qualified or licensed personnel;

    12.3 skillfully and properly test the Equipment to ensure it is saf for use and operation;

12.4 take care of the Equipment in order to prevent damage, loss or destruction to the Equipment;

12.5 at the expiry of any lease entered into by the Service Company in respect to an item or items of the Equipment ("Lease"), to deliver that item or items to the Service Company or to the lessor under the particular Lease, as instructed by the Service Company;

12.6 in all respects use and treat the Equipment as though it was the lessee under each Lease;

12.7 make all necessary payments on request by the Service Company pursuant to Clause 9 above, required to be made by the lessee under each or any of the Leases on a return of the Equipment or any items of the Equipment by the Client, prior to the expiry of the particular Lease covering that item or items of Equipment.

13.

13.1 IF either party breaches in any way this Deed or causes directly or indirectly either party to be in breach of another agreement in relation to the subject matter of this Deed, the non-defaulting party may send a notice of default to the other party requiring the default to be remedied within 14 days from the receipt of the notice.

13.2 If the defaulting party does not remedy the default within fourteen (14) days from the receipt of the notice the non-defaulting party may, without prejudice to its rights at law, demand specific performance, terminate the agreement, and/or demand damages.

13.3 The defaulting party shall pay the costs of any action taken by the other party as a result of the default.

14.

14.1 Either the Service Company or the Client may terminate this Deed by sixty days prior written notice ("Notice of Termination").

14.2 The Notice of Termination, if given by the Client, must set out which of the staff employed by the Service Company, whose services were provided wholly for the conduct of the Client business, ("the Staff") that the Client wishes to offer employment with the Client after the termination of this Deed and the items of Equipment of which the Client desires to retain possession until the expiry of the Lease in relation to that item or items of Equipment.

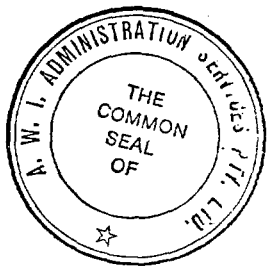
14.3 The Notice of Termination, if given by the Service Company, shall request the Client to give written notice within 14 days of the date of the Termination Notice (or such further time, as agreed in writing) of which of the Staff the Client wishes to employ and the items of Equipment of which the Client wishes to retain possession until the expiry of the Lease in relation to that item or items of Equipment.

14.6 In the event the Service Company does not terminate the employment of any one or more of the Staff within one month after the date of the receipt of the information required in sub-clauses 14.2 or 14.3 ("the Receipt Date") or if the information is not received within the time allowed pursuant to this Deed, one month after the last day for the Client to provide that information ("the Information Date") the Client shall not be liable for any termination pay in respect such staff but shall be liable for the adjustment of leave and other entitlements. In the event the Service Company does not return the Equipment or any of item of Equipment within four months of the Receipt Date or the Information Date as the case may be, the Client shall not be liable for any payments required pursuant to the lease upon the return of the Equipment prior to the expiry of the lease.

15. IN calculating the periods of service of the Staff and all entitlements and adjustments for and in relation to the Staff, the Client shall be liable for the total time the relevant member of the Staff was providing services for the conduct of the business of the Client whether the Client or the Service Company was the employer or not.

16. THIS Deed shall be construed in accordance with the laws of Victoria.

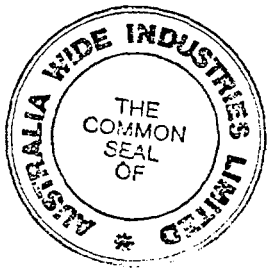
THE COMMON SEAL OF AWI)
ADMINISTRATION SERVICES)
PTY. LTD. was hereunto affixed)
in accordance with its Articles)
of Association in the presence of:)



..... Director

..... Secretary

THE COMMON SEAL of AUSTRALIA)
WIDE INDUSTRIES LIMITED was)
hereunto affixed in accordance)
with its Articles of Association)
in the presence of:)



..... Director

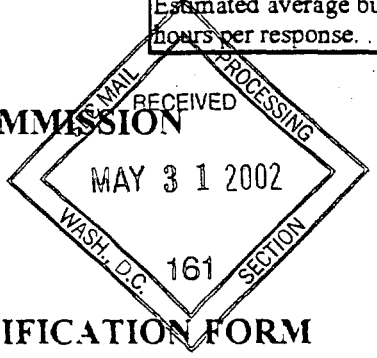
..... Secretary

SEC xxxx (3-02)

*** An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid control number. Any member of the public may direct to the Commission any comments concerning the accuracy of this burden estimate and any suggestions for reducing this burden. This collection of information has been reviewed by OMB in accordance with the clearance requirements of 44 U.S.C. 3507.**

OMB APPROVAL
OMB Number: 3235-0518
Expires: March 31, 2005
Estimated average burden hours per response. . . 2.0

EXHIBIT VOLUME 2



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form CB

TENDER OFFER/RIGHTS OFFERING NOTIFICATION FORM
(AMENDMENT NO. 1)

Please place an X in the box(es) to designate the appropriate rule provision(s) relied upon to file this Form:

Securities Act Rule 801 (Rights Offering)	☒
Securities Act Rule 802 (Exchange Offer)	☐
Exchange Act Rule 13e-4(h)(8) (Issuer Tender Offer)	☐
Exchange Act Rule 14d-1(c) (Third Party Tender Offer)	☐
Exchange Act Rule 14e-2(d) (Subject Company Response)	☐

Autogen Limited
(Name of Subject Company)

Not Applicable
(Translation of Subject Company's Name into English (if applicable))

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Australia

(Jurisdiction of Subject Company's Incorporation or Organization)

Peter Lee, Company Secretary, Autogen Limited

(Name of Person(s) Furnishing Form)

Ordinary Shares

(Title of Class of Subject Securities)

Not Applicable

(CUSIP Number of Class of Securities (if applicable))

Brian Brodrick, Esq.
Phillips Nizer LLP Tel: 212-841-0700
666 Fifth Avenue, New York, New York 10103

(Name, Address (including zip code) and Telephone Number (including area code) of Person(s) Authorized to Receive Notices and Communications on Behalf of Subject Company)

May 17, 2002*

(Date Tender Offer/Rights Offering Commenced)

*Date of first publication. Subject to 7 day exposure period pursuant to Australian Corporations Act of 2001.

GENERAL INSTRUCTIONS

I. ***Eligibility Requirements for Use of Form CB***

A. Use this Form to furnish information pursuant to Rules 13e-4(h)(8), 14d-1(c) and 14e-2 (d) under the Securities Exchange Act of 1934 ("Exchange Act"), and Rules 801 and 802 under the Securities Act of 1933 ("Securities Act").

Instructions:

1. For the purposes of this Form, the term "subject company" means the issuer of the securities in a rights offering and the company whose securities are sought in a tender offer.

2. For the purposes of this Form, the term "tender offer" includes both cash and securities tender offers.

B. The information and documents furnished on this Form are not deemed "filed" with the Commission or otherwise subject to the liabilities of Section 18 of the Exchange Act.

II. ***Instructions for Submitting Form***

A. You must furnish five copies of this Form and any amendment to the Form (see Part I,

Item 1.(b)), including all exhibits and any other paper or document furnished as part of the Form, to the Commission at its principal office. Each copy must be bound, stapled or otherwise compiled in one or more parts, without stiff covers. The binding must be made on the side or stitching margin in such manner as to leave the reading matter legible.

B. The persons specified in Part IV may manually sign the original and at least one copy of this Form and any amendments. You must conform any unsigned copies. Typed signatures are acceptable so long as manually signed copies are retained by the filing person for five years.

C. You must furnish this Form to the Commission no later than the next business day after the disclosure documents submitted with this Form are published or otherwise disseminated in the subject company's home jurisdiction.

D. In addition to any internal numbering you may include, sequentially number the manually signed original of the Form and any amendments by handwritten, typed, printed or other legible form of notation from the first page of the document through the last page of the document and any exhibits or attachments. Further, you must set forth the total number of pages contained in a numbered original on the first page of the document.

III. *Special Instructions for Complying with Form CB*

Under Sections 3(b), 7, 8, 10, 19 and 28 of the Securities Act of 1933, and Sections 12, 13, 14, 23 and 36 of the Exchange Act of 1934 and the rules and regulations adopted under those Sections, the Commission is authorized to solicit the information required to be supplied by this form by certain entities conducting a tender offer, rights offer or business combination for the securities of certain issuers.

Disclosure of the information specified in this form is mandatory. We will use the information for the primary purposes of assuring that the offeror is entitled to use the Form and that investors have information about the transaction to enable them to make informed investment decisions. We will make this Form a matter of public record. Therefore, any information given will be available for inspection by any member of the public.

Because of the public nature of the information, the Commission can use it for a variety of purposes. These purposes include referral to other governmental authorities or securities self-regulatory organizations for investigatory purposes or in connection with litigation involving the Federal securities laws or other civil, criminal or regulatory statutes or provisions.

PART I – INFORMATION SENT TO SECURITY HOLDERS

Item 1. *Home Jurisdiction Documents*

(a)

You must attach to this Form the entire disclosure document or documents, including any amendments thereto, in English, that you have delivered to holders of securities or published in the subject company's home jurisdiction that are required to be disseminated to U.S. security holders or published in the United States. The Form need not include any documents incorporated by reference into those disclosure document(s) and not

published or distributed to holders of securities.

(b) Furnish any amendment to a furnished document or documents to the Commission under cover of this Form. Indicate on the cover page the number of the amendment.

Item 2. ***Informational Legends***

You may need to include legends on the outside cover page of any offering document(s) used in the transaction. *See* Rules 801(b) and 802(b).

Note to Item 2. If you deliver the home jurisdiction document(s) through an electronic medium, the required legends must be presented in a manner reasonably calculated to draw attention to them.

PART II – INFORMATION NOT REQUIRED TO BE SENT TO SECURITY HOLDERS

The exhibits specified below must be furnished as part of the Form, but need not be sent to security holders unless sent to security holders in the home jurisdiction. Letter or number all exhibits for convenient reference.

(1) Furnish to the Commission any reports or information (in English or an English summary thereof) that, in accordance with the requirements of the home jurisdiction, must be made publicly available in connection with the transaction but need not be disseminated to security holders.

(2) Furnish copies of any documents incorporated by reference into the home jurisdiction document(s).

(3) If any name is signed to this Form under a power of attorney, furnish manually signed copies of the power of attorney.

PART III – CONSENT TO SERVICE OF PROCESS

(1) When this Form is furnished to the Commission, the person furnishing this Form (if a non-U.S. person) must also file with the Commission a written irrevocable consent and power of attorney on Form F-X.

(2) Promptly communicate any change in the name or address of an agent for service to the Commission by amendment of the Form F-X.

PART IV – SIGNATURES

(1) Each person (or its authorized representative) on whose behalf the Form is submitted must sign the Form. If a person's authorized representative signs, and the authorized

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Peter Lee

(Signature)

Peter Lee Secretary

(Name and Title)

May 24, 2002

(Date)

http://www.sec.gov/divisions/corpfin/forms/cb.htm
Last update:03/25/2002

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AUTOGEN LIMITED

Part II Exhibit List to Form CB

Volume 1

1 Research and License agreement (Field of Obesity) dated 28 April 1999 ("Obesity Research Agreement"), as amended by the Addendum dated 15 March 2001

2 Research and License Agreement (Field of Diabetes) dated 28 April 1999 ("Diabetes Research agreement") as amended by the addendum dated 16 March 2001

3 Commercialisation License (Field of Obesity) "Beacon" dated 28 April, 1999 ("Commercialisation License")

4 Research and License agreement (Strategic Alliance in Human Gene) dated 11 February 2002 ("Human Gene Research Agreement")

5 Service Agreement dated 21 December 2001 entered into with Sequenom Inc. ("Sequenom Agreement")

6 Research agreement dated 28 February 1997 entered into with Deakin University and IDI ("Deakin agreement I")

7 Research, License and Commercialisation Agreement dated 14 January 1998 entered into with IDI ("IDI Agreement II")

8 Research Agreement with the International Diabetes Institute and Menzies Research Unit dated 7 February 2002 ("Menzies Agreement")

9 Research, License and Commercialisation agreement dated 16 August 2000 entered into with Deakin University ("Deakin agreement III")

10 Licensing Arrangement with Kyokuto Pharmaceutical Industrial Co. Ltd.

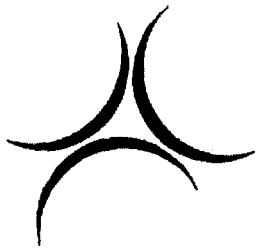
11 Arrangements with AXIS Consultants Summary of Service Agreement dated 25 November 1988

Volume 2

12 Company Constitution

13 Consents

14 ASX Announcements



Corporations Law

A Company Limited by Shares

CONSTITUTION

of

AUTOGEN LIMITED

ACN 000 248 304

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Remove this top section if desired before framing

Certificate of Registration on Change of Name

This is to certify that

AUSTRALIA WIDE INDUSTRIES LTD

Australian Company Number 000 248 304

did on the tenth day of May 1999 change its name to

AUTOGEN LIMITED

Australian Company Number 000 248 304

The company is a public company.

The company is limited by shares.

The company is taken to be registered as a company under the Corporations Law of New South Wales.

Issued by the
Australian Securities and Investments Commission
on this tenth day of May, 1999.

Alan Cameron
Chairman

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NATIONAL COMPANIES AND SECURITIES COMMISSION

Companies (New South Wales) Code

(Sub-section 72(9))

Registered No.:
54084-16

CERTIFICATE OF INCORPORATION ON CHANGE OF NAME OF COMPANY

This is to certify that

KINGSWAY GROUP LIMITED
originally called N. & B. FINANCE & DEVELOPMENT CORPORATION LIMITED

which was on the twenty-ninth day of September, 1958 incorporated

under the Companies Act, 1936 as a public company, on the

twenty-ninth day of May, 1986 changed its name to

AUSTRALIA WIDE INDUSTRIES LIMITED

and that the company is a public company, and is a company limited by shares.

Given under the seal of the National Companies and Securities Commission at Sydney on this twenty-ninth day of May, 19 86.

A person authorised by the
Corporate Affairs Commission of New South Wales
Delegate of the National Companies
and Securities Commission.

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50801-6

1. DEFINITIONS AND INTERPRETATION

1.1 Definitions

In this Constitution:

"Address" means:

(a) in the case of a Member, the address of the Member in the Register;

(b) in the case of a Director, an Alternate Director or the auditors of the Company, such address of that person derived from information that is available to the public from the Australian Securities and Investments Commission;

(c) in the case of ASX, such address as provided by the Listing Rules; or

(d) in the case of any Recipient, such address (if any), whether within or outside the Jurisdiction, as notified in writing to the Company by the Recipient for the purpose of serving notice on that Recipient.

"Alternate Director" means a person for the time being holding office as an alternate director of the Company under Article 23.1.

"Appointer" means in respect of an Alternate Director the Director who appointed the Alternate Director under Article 23.1.

"ASX" means Australian Stock Exchange Limited or any successor body.

"Business Day" has the meaning given in the Listing Rules if the Company is Listed, and otherwise means a day which is not a Saturday, Sunday or public holiday in the Jurisdiction.

"Certificate" means a certificate in respect of Shares or Options.

"CHESS", **"CHESS Subregister"**, and **"CHESS Approved"** have the meaning given in the SCH Business Rules.

"Company" means the company named above whatever its name may be from time to time.

"Corporations Law" has the meaning given to that term by Part 3 of the Corporations (Victoria) Act 1990, to the extent to which it applies to the Company.

"Corporation" means any body corporate, whether formed or incorporated within or outside the Jurisdiction.

"Debenture" means a debenture, debenture stock (perpetual, redeemable or otherwise), bond, note, charge, bill of sale, other security or debt instrument.

"Director" means a director for the time being of the Company.

"Dispose" has the meaning given in the Listing Rules.

"Eligible Member" means, in relation to a meeting of Members, any person who is or was the registered holder of a Share at the time prescribed for this purpose under Article 12.4(f) in the notice convening the meeting.

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"Eligible Voter" means, in relation to a meeting of Members:

(a) an Eligible Member;

(b) a proxy of an Eligible Member;

(c) an attorney of an Eligible Member; or

(d) the Representative of an Eligible Member.

"Executive Director" means a Director acting in an executive capacity for the Company.

"Fully Paid" includes credited as fully paid.

"Group Company" means the Company or a subsidiary of the Company.

"Jurisdiction" means Victoria.

"Listed" means having been admitted to the official list of ASX and at the relevant time still being so admitted.

"Listing Rules" means the listing rules of ASX as amended or replaced from time to time, except to the extent of any express written waiver by ASX in their application to the Company.

"Marketable Parcel" has the meaning given in the Listing Rules.

"Managing Director" means a person holding office as a managing director of the Company under Article 18.1.

"Member" means a person whose name is entered in the Register as the holder of a Share.

"Non-Executive Directors" means all Directors other than Executive Directors.

"Office" means the registered office for the time being of the Company.

"Officer" has the meaning given in:

(a) section 241(4) of the Corporations Law, in the case of Article 35; and

(b) section 82A of the Corporations Law, in all other cases.

"Option" means an option over an unissued Share.

"Personal Representative" means, in relation to a deceased person, the legal personal representative, executor or administrator of that person's estate.

"Prescribed Notice" means, in relation to a meeting, the Prescribed Period or such shorter period of notice allowed under the Corporations Law.

"Prescribed Period" means 28 days.

"Prescribed Rate" means 15% per annum or such other rate as the Directors may determine from time to time.

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"Proceedings" means, in relation to a person, any proceedings (whether civil or criminal) in which it is alleged that the person has done or omitted to do some act, matter or thing:

(a) in his or her capacity as an Officer of a Group Company; or

(b) in the course of acting in connection with the affairs of a Group Company; or

(c) otherwise arising out of the person holding office as an Officer of a Group Company,

including proceedings alleging that he or she was guilty of negligence, default, breach of trust or breach of duty in relation to a Group Company.

"Proper SCH Transfer" has the meaning given in section 9 of the Corporations Law.

"Recipient" means a Member or other person receiving notice under this Constitution.

"Record Date" has the meaning given in the Listing Rules.

"Register" means the register of Members kept under the Corporations Law and, where appropriate, includes a sub-register conducted by or for the Company pursuant to the Corporations Law, Listing Rules or SCH Business Rules.

"Relevant Director" means, in relation to an annual general meeting, a Director, but excludes:

(a) the Managing Director who, under Article 18.3, is not subject to retirement under Article 17.1; and

(b) a Director retiring in accordance with Article 16.4(b).

"Representative" means a person appointed under Article 15.10 or under section 250D of the Corporations Law.

"Restricted Securities" has the meaning given in the Listing Rules.

"Restriction Agreement" means, in relation to a Security, the restriction agreement entered into by the Company under the Listing Rules in respect of that Security.

"SCH" has the meaning given in the SCH Business Rules.

"SCH Business Rules" has the meaning given in section 9 of the Corporations Law.

"Seal" means the common seal of the Company (if any).

"Secretary" means the secretary for the time being of the Company, and if there are joint secretaries, any one or more of such joint secretaries.

"Security" has the meaning given in the Listing Rules.

"Share" means a share in the capital of the Company.

"Technology" includes radio, telephone, closed circuit television or other electronic means or telecommunications device for audio or audio-visual communication.

"Transmittee" means a person entitled to a Share because of:

(a) the death, bankruptcy or mental incapacity of a Member; or

(b) a Member being subject to a Vesting Event.

"Vesting Event" means in relation to a Share of a Member, the vesting in, or transfer (not being a transfer of a Share in accordance with Article 8) to, a person (other than that Member) of that Share pursuant to:

(a) any legislation, statute, ordinance, code or other law;

(b) any order of a court of competent jurisdiction; or

(c) any other method by which securities (as defined in the Corporations Law) may vest in, or be transferred to, a person without that person becoming a Member.

1.2 Interpretation

In this Constitution:

(a) headings are for convenience only and do not affect meaning;

and unless the contrary intention appears:

(b) words importing the singular number include the plural number and vice versa;

(c) words importing any gender include all other genders;

(d) a reference to a person includes a corporation, a partnership, a body corporate, an unincorporated association and a statutory authority;

(e) where any word or phrase is given a defined meaning any other part of speech or grammatical form in respect of that word or phrase has a corresponding meaning;

(f) a reference to an Article or a Schedule is to an article or a schedule of this Constitution and a reference in a Schedule to a paragraph is to a paragraph of that Schedule;

(g) any Schedule is part of this Constitution;

(h) a reference to this Constitution is to this Constitution (and where applicable any of its provisions) as amended, supplemented or replaced from time to time;

(i) a reference to any legislation or to any section or provision thereof includes any statutory modification, amendment or re-enactment or any statutory provision substituted for it;

(j) a reference to a meeting of Members includes a meeting of any class of Members; and

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(k) any power, right, discretion or authority conferred upon any person or people under this Constitution may be exercised at any time and from time to time.

1.3 Application of Corporations Law

Except so far as a contrary intention appears anywhere in this Constitution:

(a) section 110B of the Corporations Law is to operate to apply provisions of the Corporations Law in the interpretation of this Constitution so far as they can apply and with such changes as are necessary as if this Constitution were an instrument made under the Corporations Law, but is not to so apply sections 109D, 109X and 109Y of the Corporations Law;

(b) an expression used in a particular Part or Division of the Corporations Law which is given a special meaning by any provision of that Part or Division for the purposes of the whole or any part of that Part or Division has, in any provision of this Constitution which deals with a matter dealt with by the whole or any part of that Part or Division the same meaning as in that Part or Division;

(c) an expression which is given a general meaning by any provision of the Corporations Law has the same meaning in this Constitution; and

(d) section 110C of the Corporations Law (which deals amongst other things with severance of invalid provisions) applies in the interpretation and operation of this Constitution as if it was an instrument made under the Corporations Law.

1.4 Application while Listed

(a) A reference to the Listing Rules, the SCH Business Rules or ASX in this Constitution has effect if, and only if, at the relevant time the Company is Listed.

(b) For the purposes of this Constitution, if the provisions of:

(i) the Corporations Law and the Listing Rules; or
(ii) the Corporations Law and the SCH Business Rules,

conflict on the same matter, the provisions of the Corporations Law prevail.

1.5 Replaceable rules

Each of the provisions of the sections or sub-sections of the Corporations Law which would but for this Article 1.5 apply to the Company as a replaceable rule in accordance with section 135(1) of the Corporations Law is displaced and does not apply to the Company.

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2. SHARES

2.1 Control of Directors

The unissued Shares and all Options are under the control of the Directors who, subject to:

(a) the Corporations Law;

(b) the Listing Rules; and

(c) any rights for the time being attached to any special class of Shares,

may, on behalf of the Company:

(d) allot, issue or otherwise dispose of those unissued Shares to such persons, on such terms and conditions, at such times, with such preferred, deferred, qualified or other rights or restrictions (including the right to have any amounts payable to the holder, whether by way of or on account of dividends, repayment of capital or participation in surplus assets or profits of the Company paid in the currency of a country other than Australia), and for such consideration as the Directors think fit; and

(e) grant Options on such terms and conditions, at such times and for such consideration as the Directors think fit.

2.2 Issues of Securities to related parties

Notwithstanding anything contained in this Constitution to the contrary, the Company will not issue Securities to a related party (as defined in the Listing Rules) of the Company to the extent that the Company doing so would contravene the Listing Rules or the Corporations Law.

2.3 Preference Shares

(a) The Company may issue any Shares as preference Shares including:

(i) preference Shares which are liable to be redeemed in a manner permitted by the Corporations Law; and

(ii) preference Shares in accordance with the terms of Schedule 3.

(b) Holders of preference Shares have the same rights as holders of ordinary Shares in relation to receiving notices, reports and audited accounts, and attending meetings of Members.

(c) A holder of a preference Share only has the right to vote:

(i) during a period during which a dividend (or part of a dividend) in respect of the Share is in arrears;

(ii) on a proposal to reduce the share capital of the Company;

(iii) on a resolution to approve the terms of a buy-back agreement;

(iv) on a proposal that affects rights attached to the Share;

(v) on a proposal to wind up the Company;

(vi) on a proposal for the disposal of the whole of the property, business and undertaking of the Company; and

(vii) during the winding up of the Company.

2.4 Applications for Shares

Where the Company receives an application for a Share signed by or on behalf of the applicant and the Company allots a Share to the applicant as a consequence of that application, the application is to be treated as:

(a) an agreement by the applicant to accept that Share subject to the terms and conditions on which the Share is allotted;

(b) a request by the applicant for the Company to enter the applicant's name in the Register in respect of that Share; and

(c) an agreement by the applicant to become a Member and, subject to the Corporations Law, to be bound by this Constitution on being registered as the holder of that Share.

2.5 Brokerage and commission on subscriptions for unissued Shares

(a) The Company may pay brokerage or commission to a person in respect of that person or another person agreeing to subscribe for unissued Shares.

(b) Payments by way of brokerage or commission may be satisfied by the payment of cash, by the allotment of fully or partly paid Shares or partly by the payment of cash and partly by the allotment of fully or partly paid Shares.

3. SHARE HOLDING STATEMENTS AND CERTIFICATES

3.1 Uncertificated holdings and holding statements

(a) Notwithstanding any other provision of this Constitution, the Directors may determine:

(i) not to issue Certificates; or
(ii) to cancel existing Certificates without issuing any replacement Certificates,

where such practice is not contrary to the Corporations Law, the Listing Rules and the SCH Business Rules.

(b) Where the Directors have made a determination, a Member will be entitled to receive statements of the holdings of Shares of the Member as the Company is required to give pursuant to the Corporations Law, the Listing Rules and the SCH Business Rules.

3.2 Member's entitlement to Certificates

Subject to Article 3.1:

(a) every Member will be entitled to one Certificate, or to several Certificates in reasonable denominations, in respect of each class of Shares registered in the Member's name; and

(b) the Company will despatch Certificates to Members in accordance with the requirements of the Corporations Law, the Listing Rules and the SCH Business Rules.

3.3 Issuing of Certificates

(a) Any Certificates will:

(i) be uniquely numbered;
(ii) contain such information as required by the Corporations Law and the Listing Rules; and
(iii) be executed in a manner permitted under the Corporations Law and the Listing Rules as the Directors may determine.

(b) Subject to Article 3.4(c), the Company will not charge a fee for issuing Certificates.

3.4 Duplicate Certificates

(a) If any Certificate is worn out or defaced, then on production of it to the Directors, the Directors may order it to be cancelled and the Company may issue a duplicate of it.

(b) If any Certificate is lost or destroyed, then on application by the Member in accordance with the Corporations Law, the Company will issue a duplicate of it if required by the Corporations Law.

(c) The Company will issue any duplicate Certificate under this Article 3.4:

(i) on the conditions set out in the Corporations Law and the Listing Rules; and
(ii) subject to the Listing Rules, on payment of a fee (not exceeding that prescribed in the Corporations Law) as the Directors determine.

3.5 Certificates of joint holders

(a) The number of Certificates issued in respect of Shares held jointly by 2 or more persons will be the same number which would be issued for those Shares if those Shares were held by one person.

(b) Delivery of a certificate for a Share to any one of several joint holders named in the Register in relation to that Share is deemed to be delivery to all the joint holders.

3.6 Options

This Article 3 applies, with necessary alterations, to Options and other Securities to the extent required by the Corporations Law, Listing Rules or SCH Business Rules.

4. REGISTER

4.1 Registered holder absolute owner

Except as required by law, the SCH Business Rules or as otherwise required by this Constitution, the Company:

(a) is entitled to treat the registered holder of any Share as the absolute owner of that Share; and

(b) is not bound to recognise any equitable or other claim to, or interest in, that Share on the part of any other person, whether or not the Company has notice of that claim or interest.

4.2 Transferor is holder until transfer registered

A transferor of Shares remains the registered holder of the Shares transferred until the earlier of:

(a) a Proper SCH Transfer for those Shares has taken effect in accordance with SCH Business Rules; or

(b) the transfer for those Shares is registered and the name of the transferee is entered in the Register in respect of them.

4.3 Non-closure and audit of Register

(a) The Company will not close the Register in contravention of the Listing Rules or the SCH Business Rules.

(b) While the Company is Listed, the Register will be audited at such intervals, by such person and in such manner as required by the Listing Rules and the SCH Business Rules.

4.4 Subregisters

(a) The Company will:

(i) authorise SCH as its agent to establish and administer a CHESS Subregister; and

(ii) establish and administer an issuer sponsored subregister (as defined in the Listing Rules),

for Securities of the Company to the extent required by the Corporations Law, the Listing Rules and the SCH Business Rules.

(b) The Company will not provide for a certificated subregister (as defined in the Listing Rules) in contravention of the Listing Rules.

(c) The Company will comply with all obligations imposed on the Company under the Listing Rules and the SCH Business Rules in respect of conversions of Securities of the Company from one subregister of the Register to another subregister of the Register.

5. CALLS ON SHARES

5.1 Directors' power to make calls

Subject to the Corporations Law and the Listing Rules, the Directors may, on behalf of the Company:

(a) make such calls on the Members as the Directors think fit in respect of all or any part of the amount unpaid on Shares held by the Members, unless the conditions of issue of the Shares make that money payable at fixed times; and

(b) differentiate between the Members as to the amounts of calls to be paid on Shares and as to the times for payment of those calls.

5.2 Notice of call

(a) Notices of any calls given by the Company must specify the amount of the call, the time and place of payment, the person to whom that call must be paid, and such other information as may be required by the Listing Rules.

(b) The Company will give Members such notice of any call as may be required by the Listing Rules.

(c) The non-receipt of a notice of any call or the accidental omission to give notice of any call to any of the Members will not invalidate the call.

5.3 Terms and time of calls

(a) Subject to the Listing Rules and the conditions of issue of a Share, a call may be made payable by instalments.

(b) Subject to the Listing Rules, the Directors may revoke or postpone any call.

(c) A call is deemed to have been made when the Directors resolve to make the call.

5.4 Payment of calls

(a) Subject to Article 5.4(b), each Member must pay the amount of every call so made on the Member to the persons and at the times and places specified in the notice of the call.

(b) If, by the terms of issue of any Share or otherwise, any amount unpaid on that Share is made payable at any fixed time or by instalments at fixed times, every such amount or instalment will be payable as if it were a call duly made by the Directors.

(c) In this Constitution, a reference to a call includes an amount unpaid on Shares referred to in Article 5.4(b).

5.5 Interest on unpaid calls

(a) If the sum payable in respect of any call is not paid on or before the date appointed for its payment, the holder for the time being of the Share in respect of which the call has been made will pay interest at the Prescribed Rate on the sum payable from the date appointed for payment to the time of the actual payment.

(b) The Directors may waive payment of interest under Article 5.5(a) in whole or in part.

5.6 Liability of joint holders for calls

The joint holders of a Share are jointly and severally liable for the payment of all calls due in respect of that Share.

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5.7 Proof of liability for calls

On the trial or hearing of any action for the recovery of any money due for any call:

(a) proof that:

(i) the name of the Member sued is entered in the Register as the holder or one of the holders of the Shares in respect of the call; and

(ii) subject to Article 5.4(b), the resolution making the call is duly recorded in the minute book and notice of the call was duly given to the Member sued,

will be conclusive evidence of the debt due in respect of a call; and

(b) it will not be necessary to prove the appointment of the Directors who made the call or any other matter.

5.8 Payment of calls in advance

(a) The Company may accept from any Member an amount representing all or any part of the amount unpaid on the Shares held by the Member beyond the amount actually called for.

(b) The Company may pay interest on any advance payment pursuant to Article 5.8(a) to the extent that the amount paid for the time being exceeds the amount of the calls made on the Shares in respect of which the advance payment is made. The interest rate is to be agreed between the Directors and the Member who makes the advance payment.

(c) The amount paid in advance pursuant to Article 5.8(a) will not confer a right to participate in a dividend determined to be paid or otherwise to participate in profits of the Company for the period before the date when the amount advanced would, but for such payment, have become payable.

(d) The Directors may repay the amount advanced pursuant to Article 5.8(a) on giving to the Member at least 14 days' notice in writing.

6. FORFEITURE

6.1 Notice to pay calls and interest

If any Member does not pay any call on or before the date for its payment, the Directors may, at any time after that date while any part of the call remains unpaid, serve a notice on that Member requiring the Member to pay the call together with any interest that may have accrued and all expenses that may have been incurred by the Company by reason of the non-payment.

6.2 Form of notice to pay calls and interest

A notice under Article 6.1 must:

(a) specify a date being not less than 10 Business Days from the date of the notice and a place or places on and at which the call, interest, and expenses are to be paid; and

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(b) state that if payment is not made at or before the time and at the place appointed, the Shares in respect of which the call was made will be liable to be forfeited.

6.3 Failure to comply with notice

(a) If the requirements of any notice under Article 6.1 are not complied with, the Directors may by resolution, at any time after the date specified in the notice but before payment of all calls, interest and expenses due in respect of the Shares the subject of the notice, forfeit all or any of those Shares.

(b) Forfeiture will include all dividends determined to be paid in respect of the forfeited Shares and not actually paid before the forfeiture.

(c) Forfeiture of Shares held on the CHESS Subregister must comply with the SCH Business Rules.

6.4 Notice of forfeiture

(a) When any Share has been forfeited, the Company must:

(i) give notice of the forfeiture to the Member in whose name it stood immediately before the forfeiture; and

(ii) make an entry of the forfeiture with the date of forfeiture in the Register.

(b) Failure by the Company to give notice or to make an entry as specified in Article 6.4(a) will not invalidate the forfeiture in any way.

6.5 Sale or reissue of forfeited Shares

Subject to the Listing Rules, the Directors may on behalf of the Company sell, otherwise dispose of or reissue a Share which has been forfeited on such terms and in such manner as the Directors think fit and, in the case of reissue, with or without any money paid on the Share by any former holder being credited as fully paid.

6.6 Cancellation of forfeiture

Where any Share has been forfeited, the Directors may on behalf of the Company, at any time before a sale, disposition or reissue of the Share, cancel the forfeiture on such terms as the Directors think fit.

6.7 Company may receive consideration

Subject to Article 7.5, the Company may receive the consideration (if any) given for a forfeited Share on any sale, disposition or reissue of the Share.

6.8 Previous holder's position

(a) Any Member whose Shares have been forfeited ceases to be a Member in respect of the forfeited Shares.

(b) Notwithstanding Article 6.8(a) but subject to Article 6.8(c), a Member whose Shares have been forfeited remains liable to pay to the Company, all calls, interest and expenses owing on or in respect of those Shares at the time of forfeiture, together with interest on such amounts from the time of forfeiture until payment at the Prescribed Rate.

(c) Subject to the Listing Rules, the Directors may, on behalf of the Company:

(i) enforce the payment of all or any part of the amounts referred to in Article 6.8(b) if the Directors think fit but are not under any obligation so to do; or

(ii) release a Member from the liability to pay any amount referred to in Article 6.8(b).

6.9 Proof of due forfeiture

A certificate in writing from the Company signed by 2 Directors or one Director and the Secretary that:

(a) a call in respect of any Shares was made;

(b) notice of the call was served;

(c) default in payment of the call was made; and

(d) forfeiture of the Shares was made by resolution of the Directors to that effect,

will be sufficient evidence of:

(e) the facts stated in such certificate as against all persons claiming to be entitled to those Shares; and

(f) the right and title of the Company to dispose of them.

7. LIENS

7.1 Company's lien for calls

(a) The Company has a first and paramount lien on:

(i) the specific Shares registered in the name of the Member, whether solely or jointly with others;

(ii) the proceeds of sale of those Shares; and

(iii) all dividends from time to time determined to be payable in respect of those Shares,

for:

(iv) each unpaid call or instalment which is due but unpaid on those Shares;

(v) all amounts which the Company is required by law to pay, and has paid, in respect of those Shares or the forfeiture or sale of those Shares; and

(vi) reasonable interest and expenses incurred by the Company because any of the abovementioned amounts is not paid by the holder of those Shares.

(b) Unless otherwise agreed, the registration of a transfer of a Share will operate as a waiver of the Company's lien (if any) on that Share.

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7.2 Payments by the Company on Member's behalf

If any law of any country, state or place imposes or purports to impose any immediate or future liability upon the Company to make any payment or empowers any government or taxing authority or governmental official to require the Company to make any payment:

(a) in respect of Shares held solely or jointly;

(b) in respect of a transfer or transmission of Shares by a Member;

(c) in respect of dividends, bonuses or other money due or payable or which may become due and payable to a Member; or

(d) otherwise for or on account of or in respect of a Member;

whether as a consequence of:

(e) the death of that Member;

(f) the non-payment of any income tax, capital gains tax, wealth tax or other tax by that Member or the Personal Representative of that Member;

(g) the non-payment of any estate, probate, succession, death, stamp or other duty by that Member or the Personal Representative of that Member; or

(h) any other act or thing;

then, in addition to any right or remedy that law may confer on the Company:

(i) the Member or, if the Member is deceased, the Member's Personal Representative, will:

(i) fully indemnify the Company against that liability;
(ii) reimburse the Company for any payment made under or as a consequence of that law immediately on demand by the Company; and
(iii) pay interest from the date the Company makes a payment under or as a consequence of that law until the date the Company is reimbursed for that payment at such rate (not exceeding any rate prescribed by or under the Corporations Law) as the Directors determine;

(j) the Company may recover, as a debt due from that Member or from that Member's Personal Representative, any money payable to the Company under this Article 7.2; and

(k) except in the case of a Proper SCH Transfer and subject to the Listing Rules, the Company may refuse to register a transfer of any Shares by that Member or that Member's Personal Representative until all money payable to the Company under this Article 7.2 has been paid.

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7.3 Recovery by Company of amount paid on Member's behalf

Subject to the Listing Rules, all amounts paid or to be paid under Article 7 may be:

(a) deducted by the Company from any money payable by the Company to that Member or that Member's Personal Representative (as the case may be) in respect of those Shares; or

(b) recovered by the Company by action or otherwise from the Member or the Member's Personal Representative (as the case may be).

7.4 Enforcement of liens by sale

(a) Subject to this Article 7.4, for the purpose of enforcing any lien, the Directors may, on behalf of the Company, sell the Shares subject to the lien in such manner as the Directors think fit.

(b) Subject to Article 7.2, no sale of Shares subject to a lien will be made until:

(i) notice in writing of the intention to sell has been served on the Member or the Member's Personal Representative (as the case may be); and

(ii) the Member or the Member's Personal Representative has defaulted in the payment, fulfilment or discharge of the debts or liabilities giving rise to the lien for 10 Business Days after service of that notice.

(c) Any notice under this Article must comply with the Listing Rules and the SCH Business Rules.

7.5 Application of proceeds of sale, other disposal or reissue

(a) The proceeds of any sale, other disposal or reissue of any Shares pursuant to Article 6 or this Article 7 will be applied in payment of:

(i) first, the expenses of the sale, other disposal or reissue;

(ii) second, any expenses necessarily incurred in respect of the forfeiture, enforcement of a lien on the sale, other disposal or reissue; and

(iii) third, the calls, interest, expenses, money paid or liabilities due and unpaid,

and the residue (if any) will be held on trust by the Company until paid to the Member or the Member's Personal Representative or assigns (as the case requires) or as that person directs in writing.

(b) The Company will so pay the residue (if any) referred to in Article 7.5(a) within 5 Business Days of the Company receiving the Certificate (if any) that relates to the forfeited Shares or such other satisfactory evidence as the Company may require relating to ownership of the forfeited Shares.

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7.6 Execution of transfer of Shares sold

On any sale or other disposal after forfeiture under Article 6, or on enforcing a lien in purported exercise of the powers in this Article 7, the Directors may:

(a) appoint a person to effect a transfer of the Shares sold or otherwise disposed of, and that person will have authority to do all things as may be necessary or appropriate for it to do to effect the transfer; and

(b) cause the transferee's name to be entered in the Register in respect of the Shares sold or otherwise disposed of.

7.7 Transferee's title

(a) The title of the transferee to the Shares sold under Article 6 or this Article 7 is not affected by any irregularity or invalidity in connection with the forfeiture, sale or disposal of the Share.

(b) The transferee of Shares sold under Article 6 or this Article 7 is not bound to determine the regularity of the proceedings or the application of the purchase money (if any) and, after the transferee's name has been entered in the Register in respect of those Shares, the validity of the sale or other disposal will not be impeached by any person.

(c) The remedy of any person aggrieved by a sale or other disposal of Shares under Article 6 or this Article 7 will be in damages only and against the Company exclusively.

7.8 Exemption from lien

The Directors, on behalf of the Company, may at any time exempt any Share wholly or in part from the provisions of this Article 7.

7.9 Protection of lien

The Company may do all such things as may be necessary or appropriate for it to do under the Listing Rules and the SCH Business Rules to protect any lien, charge or other right to which it may be entitled under any law or this Constitution.

7.10 Further powers regarding transfers

Following the sale of any Shares after forfeiture or for enforcing a lien, charge or right to which the Company is entitled under any law or under this Constitution, the Company may do all things necessary or desirable for it to do under the SCH Business Rules in relation to a transfer effected by a Proper SCH Transfer.

8. TRANSFER OF SHARES

8.1 Forms of transfer

Subject to this Constitution, a Member may transfer any Shares the Member holds by:

(a) a Proper SCH Transfer or any other method of transferring or dealing in shares introduced by the ASX or operated in accordance with the SCH Business Rules or Listing Rules and, in any such case, recognised under the Corporations Law; or

(b) a written instrument of transfer in any usual form or in any other form approved by either the Directors or the ASX, that is otherwise permitted by law.

8.2 CHESS transfers

(a) The Directors may do anything they consider necessary or desirable and which is permitted under the Corporations Law, the Listing Rules and the SCH Business Rules to facilitate involvement by the Company in any system established or recognised by the Corporations Law and the Listing Rules or the SCH Business Rules in respect of transfers of, or dealings, in marketable securities.

(b) The Company will comply with all obligations imposed on the Company under the Corporations Law, the Listing Rules and the SCH Business Rules in respect of a Proper SCH Transfer or any other transfer of Shares.

(c) Notwithstanding any other provision in this Constitution, the Company will not prevent, delay or interfere with the generation of, or registration of, a Proper SCH Transfer except as expressly permitted by the Corporations Law, the Listing Rules or the SCH Business Rules.

8.3 Registration process

The following provisions apply to instruments of transfer referred to in Article 8.1(b):

(a) unless the instrument of transfer is otherwise a sufficient transfer under the Corporations Law, the instrument will be signed by, or executed by or on behalf of:

(i) the transferor; and
(ii) if required by the Company, the transferee;

(b) the instrument of transfer will be left at the place where the Register is kept, accompanied by the Certificate (if any) in respect of the Shares to be transferred and such other evidence as the Directors require to prove the transferor's title to, or right to transfer, the Shares; and

(c) on registration of a transfer of Shares, the Company will cancel the old Certificate (if any).

8.4 Directors to register transfers

Subject to Articles 7.2(k), 8.3, 8.5, 8.10 and 8.13, the Directors will not refuse to register or fail to register or give effect to a transfer of Shares.

8.5 Refusal to register transfers other than Proper SCH Transfer

(a) The Directors may refuse to register any transfer of Shares (other than a Proper SCH Transfer) where the Listing Rules permit the Company to do so.

(b) The Directors will refuse to register any transfer of Shares (other than a Proper SCH Transfer) where:

(i) the Corporations Law or the Listing Rules require the Company to do so, or the transfer is in breach of the Listing Rules; or

(ii) those Shares are Restricted Securities and the transfer is in breach of any Restriction Agreement in respect of those Shares.

8.6 Notice of refusal to register

(a) Where the Directors refuse to register a transfer of Shares under Article 8.5, the Company will give written notice of the refusal and the reasons for the refusal to the transferee and the person who lodged the transfer, if not the transferee, within 5 Business Days after the date on which the transfer was lodged with the Company.

(b) Failure by the Company to give notice under Article 8.6(a) will not invalidate the refusal to register the transfer in any way.

8.7 Retention of transfers by Company

(a) All instruments of transfer of Shares which are registered will be retained by the Company.

(b) Except in the case of fraud, any instrument of transfer of Shares which the Directors decline or refuse to register will, on demand, be returned to the transferee.

8.8 Powers of attorney

Any power of attorney granted by a Member empowering the donee to transfer Shares which may be lodged, produced or exhibited to the Company or any Officer of the Company:

(a) will be taken and deemed to continue and remain in full force and effect as between the Company and the grantor of that power; and

(b) may be acted on, until express notice in writing that it has been revoked or notice of the death of the grantor has been given and lodged at the Office or at the place where the Register is kept.

8.9 No fees for registering transfers

(a) Subject to Article 8.9(b), the Company will not charge a fee for:

(i) registering Proper SCH Transfers;
(ii) registering paper-based transfers in registrable form;
(iii) splitting certificates, renunciations and transfer forms;
(iv) issuing certificates and transmission receipts;
(v) effecting conversions between subregisters of the Register;
(vi) noting transfer forms;
(vii) issuing a statement showing the opening balance of a holding on any issuer sponsored subregister maintained pursuant to Article 4.5;
(viii) issuing a routine transaction statement, as defined in the Listing Rules, to a Member on any issuer-sponsored subregister maintained pursuant to Article 4.5; or
(ix) sending to a Member details of a change to the Member's holding of Shares which arises from an issue of Shares or an acquisition of rights.

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(b) The Company may charge a reasonable fee:

(i) pursuant to Article 3.4(c);
(ii) for marking a transfer form, or marking a renunciation and transfer form, within 2 Business Days after the form is lodged with the Company; and
(iii) for issuing a special transaction statement, as defined in the Listing Rules.

8.10 Restricted Securities

Except as permitted by the Listing Rules or ASX:

(a) the registered holder of a Security which is a Restricted Security will not Dispose of that Security during the escrow period specified in the Restriction Agreement in respect of that Security; and

(b) the Company will refuse to acknowledge a Disposal (including registering a transfer) of a Security which is a Restricted Security during the escrow period specified in the Restriction Agreement in respect of that Security.

8.11 Holding locks

The Company may, or may request SCH to, apply or remove a holding lock (as defined in the Listing Rules) to Securities where permitted to do so under the Listing Rules and SCH Business Rules.

8.12 Options

Articles 8.2, 8.4, 8.5, 8.6 and 8.9 apply, with necessary alterations, to Options and other Securities to the extent required by the Corporations Law, Listing Rules or SCH Business Rules.

8.13 Proportional takeovers

(a) Subject to the Listing Rules and the SCH Business Rules, but notwithstanding any other provision of this Constitution, the Directors may refuse any transfer of Shares giving effect to a contract resulting from the acceptance of an offer made under a proportional takeover scheme under section 635(b) of the Corporations Law unless and until a resolution to approve the takeover scheme is approved in accordance with the provisions of Schedule 2.

(b) This Article 8.13 ceases to have effect on the third anniversary of the date of its adoption, or last renewal, in accordance with the Corporations Law.

9. TRANSMISSION OF SHARES

9.1 Title to Shares of deceased Member and deceased joint holder

(a) If a Member (not being one of several joint holders) dies, the Company will recognise only the Personal Representative of that Member as having any title to or interest in the Shares registered in the name of that Member or any benefits accruing in respect of those Shares.

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(b) If a Member (being any one or more of the joint registered holders of any Shares) dies, the Company will recognise only the surviving joint registered holders of those Shares as having any title to or interest in, or any benefits accruing in respect of, those Shares.

(c) Nothing in this Constitution will be taken to release the estate of a deceased Member from any liability.

(d) Where 2 or more persons are jointly entitled to any Share in consequence of the death of the registered holder of that Share, for the purpose of this Constitution they will be deemed to be joint holders of that Share.

9.2 Title to Shares on transmission event

(a) Subject to the Bankruptcy Act 1966, the Corporations Law and the SCH Business Rules, a Transmittee who gives the Directors the information they reasonably require to establish the Transmittee's entitlement to be registered as the holder of any Shares may:

(i) elect to be registered as a Member in respect of those Shares by giving a signed notice in writing to the Company; or

(ii) transfer those Shares to another person.

(b) Subject to the SCH Business Rules, a notice or transfer under Article 9.2(a) is subject to all provisions of this Constitution relating to transfers of Shares as if the event giving rise to the Transmittee's entitlement to the Shares had not occurred and the notice or transfer was a transfer signed by that Member.

(c) If the Company has acted in good faith in registering a Transmittee or the transferee of a Transmittee under this Article 9.2, that person will indemnify the Company to the extent of any loss or damage suffered by the Company as a result of such registration.

9.3 Rights of Transmittee

(a) Subject to Article 9.3(b), a Transmittee who has given to the Directors the information referred to in Article 9.2(a) is entitled to the same rights to which the Transmittee would be entitled if registered as the holder of the Share.

(b) Subject to the Corporations Law, a Transmittee will not be entitled in respect of a Share to exercise any right conferred by membership in relation to general meetings or meetings of Members in respect of that Share until the Transmittee is registered as a holder of the Share.

10. ALTERATION OF CAPITAL

10.1 Converting shares

(a) The Company may by ordinary resolution passed at a general meeting convert all or any of its Shares into a larger or smaller number of Shares.

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(b) Subject to the Listing Rules, where Shares are converted under Article 10.1(a), the Company in general meeting may determine by special resolution that as between the Shares resulting from that conversion, one or more of the Shares has some preference or special advantage in relation to dividends, capital, voting or anything else over or compared with one or more of the other Shares.

10.2 Reductions of capital

(a) Subject to the Corporations Law and the Listing Rules, the Company may reduce its share capital in any manner.

(b) Without limiting the generality of Article 10.2(a), the Company when reducing its share capital may resolve that such reduction be effected wholly or in part by the distribution of specific assets (whether held in the name of the Company or in the name of any wholly owned subsidiary of the Company) and in particular Fully Paid shares, debentures, debenture stock or other securities of any other Corporation or in any one or more of such ways.

(c) Where the Company pursuant to a reduction of its share capital distributes to its Members shares in another Corporation:

(i) the Members will be deemed to have agreed to become members of that Corporation; and

(ii) each of the Members appoints the Company or any of the Directors as its agent to execute any transfer of shares or other document required to effect the distribution of shares to that Member.

10.3 Power to buy-back Shares

Subject to the Corporations Law and the Listing Rules, the Company may buy Shares in itself on terms and at times determined by the Directors.

10.4 Cancelling Shares

The Company may by ordinary resolution passed at a general meeting cancel Shares that have been forfeited under the terms on which the Shares are on issue.

10.5 Disposal of less than Marketable Parcels

If at any time the total number of Shares held by a Member is less than a Marketable Parcel, the Company may procure the disposal of those Shares in accordance with the provisions of Schedule 1 and the Listing Rules.

11. VARIATION OF CLASS RIGHTS

11.1 Consent or special resolution of Members in class

If at any time the share capital is divided into different classes of Shares, the rights attached to any class may be varied or cancelled unless otherwise provided by this Constitution or by the terms of issue of the Shares of that class:

(a) with the consent in writing of holders of the Shares included in that class who are entitled to at least 75% of the votes that may be cast in respect of those Shares; or

(b) by a special resolution passed at a separate meeting of the holders of the Shares included in that class.

11.2 Meetings of class Members

(a) The provisions contained in this Constitution concerning general meetings or meetings of Members will apply, so far as they are capable of application and with the necessary changes, to every meeting held under Article 11.1 but so that the necessary quorum is 2 or more persons who, between them, hold or represent by proxy or attorney or Representative, at least one-fourth of the Shares of the class.

(b) Any holder of Shares of the class present in person or by proxy, attorney or Representative, may demand a poll.

11.3 No variation of rights of preference Shares

If the Company issues any new preference Shares that rank equally with an existing class of preference Shares, the issue of the new preference Shares is not a variation of the rights attaching to the existing preference Shares unless otherwise expressly provided by the terms of issue of the existing preference Shares.

12. MEETINGS OF MEMBERS

12.1 Calling meetings of Members

(a) The Directors may call a meeting of Members whenever they think fit.

(b) To the extent permitted by the Corporations Law, a Director may call a meeting of Members.

(c) The Directors will call and arrange a general meeting on the request of Members made in accordance with the Corporations Law.

(d) The Members may call and arrange to hold a general meeting as provided by the Corporations Law.

12.2 Annual general meetings

The Company will hold annual general meetings in accordance with the Corporations Law and the Listing Rules.

12.3 Notice of Members' meetings

The Company must give to Members not less than Prescribed Notice of a meeting of Members.

12.4 Contents of notice

A notice of a meeting of Members will:

(a) set out the place, date and time of the meeting (and, if the meeting is to be held in 2 or more places, the technology that will be used to facilitate this);

(b) subject to the Corporations Law, state the general nature of the business of the meeting;

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(c) if a special resolution is to be proposed at the meeting, set out the intention to propose the special resolution and state the resolution;

(d) in the case of an election of Directors, set out the names of the candidates for election;

(e) if an Eligible Member is entitled to appoint a proxy, contain a statement that:

(i) the Eligible Member has a right to appoint a proxy;
(ii) the proxy of an Eligible Member does not need to be a Member; and
(iii) an Eligible Member who is entitled to cast 2 or more votes may appoint 2 proxies and may specify the proportion or number of the Eligible Member's votes each proxy is entitled to exercise;

(f) state the date and time before (but not more than 48 hours before) the meeting at which attendance and voting rights for the meeting (and any adjournment of such meeting for less than the Prescribed Period) will be fixed; and

(g) set out or include any additional information or documents specified by the Corporations Law and the Listing Rules.

12.5 Failure to give notice

Subject to the Corporations Law, the accidental omission to give notice of any meeting of Members to, or the non-receipt of that notice by, any of the Members will not invalidate any resolution passed at that meeting.

12.6 Notice of adjourned meeting

(a) Whenever a meeting of Members is adjourned for a period not exceeding the Prescribed Period, no further notice of the time and place of the adjourned meeting need be given by the Company.

(b) Whenever a meeting of Members is adjourned for a period exceeding the Prescribed Period, at least 3 days' notice of the time and place of the adjourned meeting will be given by the Company.

12.7 Persons entitled to notice of meeting of Members

(a) Notice of every meeting of Members (including an adjourned meeting referred to in Article 12.6(b)) will be given in a manner authorised by Article 33.1 and in accordance with the Corporations Law and Listing Rules to:

(i) every Member;
(ii) every Director and Alternate Director;
(iii) the auditors of the Company; and
(iv) ASX.

(b) Subject to the Corporations Law, no person other than those persons specified in Article 12.7(a) is entitled to receive notices of meetings of Members.

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12.8 Persons entitled to attend meetings of Members

(a) All Eligible Members are entitled to attend meetings of Members as well as any other persons entitled to attend under the Corporations Law or the Listing Rules.

(b) Subject to this Constitution, each Director is entitled to attend and speak at all meetings of Members.

(c) The chairperson of a meeting of Members may require any person to leave and remain out of any meeting of Members if that person, in the opinion of the chairperson, is not complying with his or her reasonable directions.

12.9 Postponement or cancellation of meeting

The Directors may whenever they think fit postpone or cancel any meeting of Members other than a meeting called as a result of a request under Article 12.1(c).

12.10 Meeting of Members at more than one place

(a) A meeting of Members called in accordance with this Constitution may be held in 2 or more separate meeting places linked together by an instantaneous audio-visual communication device or any other Technology which, by itself or in conjunction with other arrangements:

(i) gives the Members as a whole in the separate meeting places a reasonable opportunity to participate in proceedings;
(ii) enables the chairperson to be aware of proceedings in each such place; and
(iii) enables the Members in each such place to vote on a show of hands and on a poll.

(b) A Member present at one of the separate meeting places is taken to be present at the meeting of Members and entitled to exercise all rights which the Member is granted under this Constitution.

(c) Where a meeting of Members is held in 2 or more separate places pursuant to Article 12.10(a), that meeting will be deemed to have been held at one of those places as is determined by the chairperson of the meeting.

13. PROCEEDINGS AT MEETINGS OF MEMBERS

13.1 Business of annual general meeting

The business of an annual general meeting is:

(a) to receive and consider the annual financial report and any other accounts, reports and statements as are required to be laid before the meeting;

(b) to elect Directors;

(c) to determine the remuneration of the Directors; and

(d) to transact any other business which under this Constitution or the Corporations Law ought to be or may be transacted at an annual general meeting.

13.2 Special business

(a) All business transacted at an annual general meeting other than the matters specified in Article 13.1 and all business transacted at any other meeting of Members will be deemed special business.

(b) Subject to the Corporations Law, no person may move at any meeting of Members:

(i) any resolution (other than a resolution in the same terms as specified in the notice of meeting); or
(ii) any amendment of a resolution,

in respect of special business, unless the approval of the chairperson of the meeting is obtained.

13.3 Quorum

(a) A quorum for a meeting of Members is two (2) Eligible Voters who have the right to vote at that meeting.

(b) For the purposes of determining whether a quorum is present:

(i) where an Eligible Member appoints more than one proxy or attorney or Representative, only one such proxy, attorney or Representative will be counted; and
(ii) an Eligible Member who is present in their own capacity and as a proxy, attorney or Representative of another Eligible Member will be counted only once.

(c) No business can be transacted at any meeting of Members unless the requisite quorum is present at the commencement of the meeting.

(d) If a quorum is present at the beginning of a meeting of Members it is deemed present throughout the meeting unless the chairperson otherwise declares on the chairperson's own motion or on the motion of an Eligible Voter.

(e) If half an hour after the time appointed for a meeting of Members a quorum is not present:

(i) a meeting called by the Directors on a request of Members, or called by the Members as is provided by the Corporations Law, will be dissolved; and
(ii) in any other case, the meeting will be adjourned to the date, time and place as the Directors may by notice to the Members appoint, but failing such appointment, then to the same day in the next week at the same time and place as the meeting adjourned.

(f) If after half an hour from the time appointed for an adjourned meeting of Members, a quorum is not present, then the meeting will be dissolved.

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13.4 Chairperson

(a) The chairperson of Directors or, in the chairperson's absence, the deputy chairperson, if any, will preside as chairperson at every meeting of Members.

(b) If:

(i) there is no chairperson or deputy chairperson; or
(ii) at any meeting of Members neither the chairperson nor the deputy chairperson is present within 15 minutes of the time appointed for holding the meeting or willing to act as chairperson for all or part of that meeting,

the Director present or, if more than one Director is present, a majority of those Directors present, may choose another Director as chairperson of the meeting of Members or part of that meeting (as the case may be).

(c) If no Director is present or if all Directors present decline to act as chairperson of all or part of a meeting of Members, the Eligible Members present may choose one of their number to be chairperson of that meeting or part of that meeting (as the case may be).

13.5 Voting: show of hands or poll

(a) At any meeting of Members a resolution put to the vote of the meeting will be decided on a show of hands unless:

(i) before a vote is taken; or
(ii) before or immediately after the declaration of the result of the show of hands,

a poll is demanded:

(iii) by the chairperson;
(iv) by at least 5 Eligible Members, present in person or by proxy or attorney or by a Representative, having the right to vote at the meeting; or
(v) by any Eligible Member or Eligible Members, present in person or by proxy or attorney or by a Representative, who are together entitled to at least 5% of the votes that may be cast on that resolution on a poll.

(b) No poll will be demanded on any resolution concerning the election of a chairperson of a meeting or the adjournment of any meeting.

13.6 Questions decided by majority

Subject to the requirements of the Corporations Law in relation to special resolutions, a resolution will be taken to be carried if more votes are cast in favour of the resolution than against it.

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13.7 Declaration by chairperson of resolution's result

A declaration by the chairperson of a meeting of Members that a resolution has on a show of hands been carried or carried by a particular majority, or lost or not carried by a particular majority, and an entry to that effect in the book of proceedings of the Company, will be conclusive evidence of the fact without proof of the number or proportion of the votes recorded in favour of or against that resolution.

13.8 Conduct of poll

(a) If a poll has been demanded under this Article 13, it will be taken:

(i) in such manner and at such time and place as the chairperson directs; and

(ii) either at once or after an interval or adjournment or otherwise.

(b) The result of the poll as declared by the chairperson will be deemed to be the resolution of the meeting of Members at which the poll was demanded.

(c) A demand for a poll may be withdrawn.

(d) A demand for a poll will not prevent the continuance of the meeting or the transaction of any business other than the resolution on which a poll has been demanded.

13.9 Adjournment of meetings of Members

(a) The chairperson must adjourn a meeting of Members from time to time and from place to place or close that meeting if the Eligible Members present with a majority of votes that may be cast at that meeting agree or direct the chairperson to do so.

(b) No business will be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place.

13.10 General conduct of meetings

(a) Subject to the Corporations Law, the chairperson will be responsible for the general conduct of meetings of Members and for the procedures to be adopted at meetings of Members.

(b) The chairperson may make rulings or adjourn a meeting of Members without putting the question (or any question) to the vote if such action is required to ensure the orderly conduct of the meeting.

(c) The chairperson may require the adoption of any procedures which are, in the chairperson's opinion, necessary or desirable for the proper and orderly casting or recording of votes at any meeting of Members, whether on a show of hands or on a poll.

(d) The chairperson may determine conclusively any dispute concerning the admission, validity or rejection of a vote at a meeting of Members.

(e) The chairperson of a meeting of Members may refuse admission to, or require to leave and remain out of, the meeting any person:

(i) in possession of a pictorial-recording or sound-recording device;
(ii) in possession of a placard or banner;
(iii) in possession of an article considered by the chairperson to be dangerous, offensive or liable to cause disruption;
(iv) who refuses to produce or to permit examination of any article, or the contents of any article, in the person's possession; or
(v) who behaves or threatens to behave in a dangerous, offensive or disruptive manner.

(f) The chairperson may delegate the powers conferred by this Article to such person or persons as he or she thinks fit.

(g) Nothing contained in this Article 13.10 will be taken to limit the powers conferred on the chairperson by law.

14. VOTES AT MEETINGS OF MEMBERS

14.1 Number of votes

Subject to any special rights or restrictions for the time being attaching to any class of Shares and Articles 14.3, 14.6, 14.7, 14.8 and 15.10:

(a) on a show of hands at a meeting of Members, every Eligible Voter present has one vote; and

(b) on a poll at a meeting of Members, every Eligible Member (not being a Corporation) present in person or by proxy or attorney, and every Eligible Member (being a Corporation) present by a Representative or by proxy or attorney, has one vote for each Share that Eligible Member holds, but:

(i) if at any time there is on issue any Share which has not been Fully Paid that Share on a poll will confer only that fraction of one vote which the amount paid (not credited) on that Share, excluding any amounts paid up in advance of the applicable due date for payment, bears to the total amounts paid and payable (excluding amounts credited) on that Share; and
(ii) if the total number of votes to which an Eligible Member is entitled on a poll does not constitute a whole number, then the Company will disregard the fractional part of that total.

14.2 Votes of incapacitated Member

If a Member is mentally incapacitated, the person entitled to manage that Member's estate may, subject to Article 9.3(b), exercise any rights of the Member in relation to a meeting of Members as if that person were the Member.

14.3 No vote if call unpaid or breach of Restriction Agreement

Notwithstanding this Article 14, an Eligible Voter will not be entitled to vote on any resolution, whether on a show of hands or on a poll, in respect of any Shares:

(a) on which any calls due and payable in respect of those Shares have not been paid; or

(b) which are Restricted Securities where there is a subsisting breach of any Restriction Agreement in respect of those Shares.

14.4 Objections to qualification to vote

(a) No objection to the qualification of any person to vote at a meeting of Members will be raised except at the meeting or adjourned meeting at which the vote objected to is given or tendered, and every vote not disallowed at that meeting is valid for all purposes.

(b) Any objection to the qualification of any person to vote at a meeting of Members made within the time referred to in Article 14.4(a) will be referred to the chairperson of the meeting, whose decision, made in good faith, is final and conclusive.

14.5 Vote of joint holders

(a) Where there are joint registered holders of any Shares, any one of them may vote at any meeting of Members personally, by proxy, by attorney, or by Representative in respect of those Shares as if that person was solely entitled to those Shares.

(b) If more than one of the joint holders of any Shares is present as an Eligible Voter at any meeting of Members, only the joint holder present whose name stands first in the Register in respect of the Shares is entitled to vote in respect of those Shares as an Eligible Voter.

(c) For the purposes of this Article 14.5, several Personal Representatives of a deceased Member in whose sole name any Shares are registered will be deemed joint holders of those Shares.

14.6 Proxy not to vote if Member present

If an Eligible Member is present at a meeting of Members and a proxy or attorney for such Eligible Member is also present, the proxy or attorney is not, in respect of the Shares to which the proxy or attorney relates, entitled to speak at the meeting or vote on a show of hands or on a poll.

14.7 When numerous proxies are present

If more than one proxy or attorney for an Eligible Member is present at a meeting of Members then:

(a) none of them will be entitled to vote on a show of hands; and

(b) on a poll the vote of each one is of no effect where each such person is appointed to exercise:

(i) a specified number of the Eligible Member's votes and such numbers in aggregate exceed the total number of votes that could be cast by the Eligible Member; or

(ii) a specified proportion of the Eligible Member's votes and such proportions in aggregate exceed 100%.

14.8 No vote if contrary to Corporations Law or Listing Rules

Notwithstanding anything contained in this Constitution to the contrary:

(a) an Eligible Voter will not be entitled to vote; and

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(b) the Company will disregard any vote purported to be cast by an Eligible Voter,

on a particular resolution where such a vote is prohibited by the Corporations Law, Listing Rules or ASX.

15. PROXIES AND REPRESENTATIVES

15.1 Right to appoint proxy or attorney

(a) An Eligible Member who is entitled to attend and cast a vote at a meeting of Members may appoint a person (whether a Member or not) as the Eligible Member's proxy or attorney, as the case may be, to attend and vote for the Eligible Member at the meeting.

(b) If an Eligible Member is entitled to cast 2 or more votes at a meeting of Members that Eligible Member may appoint 2 proxies or attorneys.

(c) The appointment of a proxy or attorney by an Eligible Member may specify the proportion or number of the Eligible Member's votes that the proxy or attorney may exercise.

(d) Where an Eligible Member appoints 2 proxies or attorneys, and the appointment does not specify the proportion or number of the Eligible Member's votes that each proxy or attorney may exercise, each such proxy or attorney, as the case may be, may exercise one half of the votes of the Eligible Member.

(e) If the total number of votes to which a proxy or attorney is entitled to exercise does not constitute a whole number, then the Company will disregard the fractional part of such total.

(f) A proxy or attorney may be appointed for all meetings or for any number of meetings or for a particular purpose.

15.2 Form of proxy or attorney

(a) An instrument appointing a proxy or attorney:

(i) must be in writing executed under the hand of the appointer or of the appointer's attorney duly authorised in writing or, if the appointer is a Corporation, under its common seal (if any) or the hand of its duly authorised attorney or executed in a manner permitted by the Corporations Law;

(ii) may contain directions as to the manner in which the proxy or attorney, as the case may be, is to vote in respect of any particular resolution or resolutions; and

(iii) subject to the Corporations Law, may otherwise be in any form as the Directors may prescribe or accept.

(b) A facsimile of a written appointment of a proxy or a power of attorney is valid.

(c) An appointment of a proxy is not invalid by virtue only of the fact that it contains only some but not all of the information required by the Corporations Law.

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15.3 Directors or chairperson decide validity

Subject to the Corporations Law, the chairperson's decision or, in his or her absence, the Directors' decision as to the validity of a proxy or power of attorney or a facsimile thereof will be final and binding.

15.4 Authority conferred on proxy or attorney

Unless otherwise provided in the instrument, an instrument appointing a proxy or attorney will be taken to confer authority:

(a) to vote on a show of hands in accordance with the directions (if any) given in the instrument;

(b) even though the instrument may refer to specific resolutions and may direct the proxy or attorney how to vote on those resolutions:

(i) to vote on any amendment moved to the proposed resolutions and on any motion that the proposed resolutions not be put or any similar motion; and

(ii) to vote on any procedural motion, including any motion to elect the chairperson, to vacate the chair or to adjourn the meeting;

(c) to speak on any proposed resolution on which the proxy or attorney may vote; and

(d) to demand or join in demanding a poll on any resolution on which the proxy or attorney may vote.

15.5 Deposit of power of attorney and proxy form before meeting

An instrument appointing an attorney or a proxy and, the power of attorney or other authority (if any) under which it is signed or a copy of that power or authority certified as a true copy or a facsimile of any of the documents referred to in this Article, must be deposited:

(a) at the place, fax number or electronic address as is specified in the notice of meeting of Members to which the proxy or attorney relates; or

(b) at the Office or a fax number at the Office,

not less than 48 hours before the time scheduled for commencement of the meeting (or any adjournment of that meeting) at which the person named in the instrument intends to vote.

15.6 Vote by proxy valid notwithstanding intervening event

Unless the Company has received written notice not less than 48 hours before the time scheduled for the commencement of the meeting at which a person named in a proxy or power of attorney, as the case may be, intends to vote, a vote cast by that person will, subject to this Constitution, be valid even if, before the person votes:

(a) the appointing Member dies;

(b) the Member is mentally incapacitated;

(c) the Member revokes the proxy or power of attorney;

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(d) the Member revokes the authority under which the person was appointed by a third party; or

(e) the Member transfers the Shares in respect of which the proxy or power of attorney is given.

15.7 How proxy is to vote

(a) Any form of proxy sent out by the Company to Members in respect of a proposed meeting of Members will make provision for the Member to indicate whether the Member wishes to vote for or against each resolution.

(b) An Eligible Member may, but need not, specify the manner in which a proxy is to vote on a particular resolution.

(c) Where an Eligible Member does specify how a proxy is to vote on a particular resolution:

(i) the proxy need not vote on a show of hands, but if the proxy does so, the proxy must vote in accordance with that specification;

(ii) if the proxy has 2 or more appointments that specify different manners in which a proxy is to vote on the resolution, the proxy must not vote on a show of hands;

(iii) if the proxy is the chairperson of the meeting concerned, the proxy must vote in accordance with that specification; and

(iv) if the proxy is not the chairperson of the meeting concerned, the proxy need not vote on a poll, but if the proxy does so, the proxy must vote in accordance with that specification.

15.8 Only blank proxy forms to be sent out

Proxy forms sent to Members by the Company must provide for the Member to appoint a proxy of the Member's choice, but may specify who is to be appointed as proxy if the Member does not choose.

15.9 Failure to name appointee

Any instrument of proxy in which the name of the appointee is not filled in will be deemed to be given in favour of the chairperson or such other person as is nominated by the Directors in the instrument of proxy or the notice calling the meeting of Members to which the proxy relates.

15.10 Appointment of Representative by Corporation

(a) Any Corporation which is a Member may appoint an individual (either by name or position and whether a Member or not) as its representative to exercise all or any of the powers the Corporation may exercise at a meeting of Members.

(b) A Representative may be appointed for any number of, or all, meetings of Members.

(c) A Corporation may appoint more than one Representative but only one Representative may exercise that Corporation's powers at any one time.

(d) The appointment of a Representative by a Corporation may set out restrictions on the Representative's powers.

(e) Unless otherwise specified in the appointment, a Representative acting in accordance with his or her authority until it is revoked by the Corporation, is entitled to exercise the same powers on behalf of that Corporation as that Corporation could exercise at a meeting or in voting on a resolution.

(f) A certificate

(i) under the seal of the Corporation;
(ii) signed by 2 directors of the Corporation (or where the Corporation has only one director, signed by that director); or
(iii) signed by one director and one secretary of the Corporation,

or any other document as the chairperson of the meeting in his or her sole discretion considers sufficient, will be prima facie evidence of the appointment, or of the revocation of the appointment, as the case may be, of a Representative.

16. DIRECTORS: APPOINTMENT AND REMOVAL

16.1 Number of Directors

(a) Subject to Articles 16.1(b) and 16.1(c), the Company must at all times have such number of directors as the Directors determine, being a number not less than a minimum of 3 and not more than a maximum of 12.

(b) The Directors cannot reduce the number of Directors below the number in office at the time of any determination under Article 16.1(a).

(c) The Company in general meeting may increase or reduce the maximum or minimum number of Directors by ordinary resolution, but the minimum cannot be less than 3.

16.2 Limited ability of Directors to act during vacancies

The continuing Directors may act notwithstanding any vacancy in their number, but for as long as the number of Directors is below the minimum fixed by this Constitution, the Directors will not act except:

(a) in emergencies;

(b) for the purpose of filling up vacancies; or

(c) for the purpose of convening a meeting of Members.

16.3 Director need not be Member

A Director need not be a Member.

16.4 Casual vacancies and additional Directors

(a) The Directors may appoint any person as a Director either to fill a casual vacancy or as an addition to the Directors, but the total number of Directors will never exceed the maximum number fixed in accordance with this Constitution.

(b) Subject to Article 16.4(c), any Director appointed under Article 16.4(a):

(i) may retire at the next general meeting of the Company; and
(ii) must retire at the next following annual general meeting of the Company (unless the Director has retired in accordance with Article 16.4(b)(i)),

and, in either case, may submit himself or herself for and will be eligible for re-election at that meeting.

(c) Article 16.4(b) will not apply if the Director appointed under Article 16.4(a):

(i) is appointed as a Managing Director before the next following annual general meeting; and
(ii) is determined by the Directors to be the Managing Director who is not subject to retirement in accordance with Article 17.1.

16.5 Appointment of Directors by general meeting

Subject to the provisions of this Constitution, the Company in general meeting may by ordinary resolution appoint any person:

(a) as a new Director; or

(b) as a Director to fill up all or any vacated offices resulting from one or more Directors retiring at, or ceasing to hold office at the conclusion of, that meeting.

16.6 Resignation of Directors

A Director may resign from office on giving the Company notice in writing.

16.7 Removal of Directors by general meeting

Subject to the Corporations Law, the Company in general meeting convened on Prescribed Notice may by ordinary resolution:

(a) remove any Director; and

(b) if thought fit, appoint another qualified person in place of that Director.

16.8 Suspension of Director guilty of prejudicial behaviour

(a) If the conduct or position of any Director is such that continuance in office appears to a majority of the Directors to be prejudicial to the interests of the Company, a majority of the Directors at a meeting of the Directors specially convened for that purpose may suspend that Director.

(b) Within 14 days of the suspension, the Directors will call a general meeting, at which the Members may either:

(i) confirm the suspension and remove that Director from office in accordance with Article 16.7; or
(ii) annul the suspension and reinstate that Director.

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16.9 Vacation of office of Director

(a) Subject to Article 17, each Director will remain in office until his or her office is vacated pursuant to Article 16.9(b).

(b) The office of a Director is vacated if that Director:

(i) becomes of unsound mind or a person whose person or estate is liable to be dealt with in any way under the law relating to mental health;
(ii) is absent without the consent of the Directors from all meetings of the Directors held during a period of 6 months and the Directors resolve that his or her office be vacated;
(iii) resigns the office of Director in accordance with Article 16.6 or 18.3;
(iv) is removed under the provisions of Article 16.7 or 18.2;
(v) ceases to be a Director by virtue of Article 18.4;
(vi) becomes an insolvent under administration (within the meaning of the Corporations Law); or
(vii) otherwise ceases to be, or becomes prohibited from being, a Director by virtue of the Corporations Law.

17. RETIREMENT OF DIRECTORS

17.1 Retirement of Directors at annual general meetings

At every annual general meeting, if and for so long as there are:

(a) 3 or more Relevant Directors, one-third of the Relevant Directors or, if their number is not a multiple of 3 then the next lowest whole number of Relevant Directors divisible by 3; or

(b) fewer than 3 Relevant Directors, one Relevant Director,

will retire from office and be eligible for re-election.

17.2 Each Director will retire at every third annual general meeting

(a) Notwithstanding Article 17.1, each Relevant Director will retire from office no later than at the third annual general meeting following his or her last election or appointment by a general meeting, but may submit himself or herself for and will be eligible for re-election.

(b) Any Relevant Director who at any annual general meeting retires under this Article 17.2 will be eligible to count towards the number to retire under Article 17.1 at the same meeting.

17.3 Order of retirement of Directors at annual general meetings

(a) The Relevant Directors to retire under Article 17.1 will be those who have been longest in office.

(b) As between 2 or more Relevant Directors who have been in office an equal length of time, the Directors to retire will be determined by lot, failing agreement between them.

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(c) Where a Director has previously vacated office, the length of time which that Director has been in office will be computed from the Director's last election or appointment by a general meeting.

17.4 Nomination of Directors for office

(a) No person other than a Director retiring in accordance with this Constitution is eligible for election to the office of Director at any meeting of Members unless:

(i) in the case of a person whose nomination is recommended by the Directors, at least the Prescribed Period before the meeting;
(ii) in the case of a meeting of Members that the Directors have been requested by Members to call, 30 Business Days before the meeting; and
(iii) in any other case, at least 35 Business Days before the meeting,

there has been left at the Office:

(iv) a notice in writing signed by a Member duly entitled to attend and vote at the meeting for which notice is given of that Member's intention to propose the person for election; and
(v) notice in writing signed by the person of his or her willingness to be elected.

(b) Members duly entitled to attend and vote at the meeting may also propose themselves for election as a Director in accordance with this Constitution.

(c) The Company must give to Members not less than Prescribed Notice of each and every candidate for election as a Director at a meeting of Members.

18. MANAGING DIRECTOR AND EXECUTIVE DIRECTORS

18.1 Appointment of Managing Director

The Directors may appoint one or more of their number as Managing Directors:

(a) either for a fixed term or without any limitation as to the period for which the person appointed is to hold the office; and

(b) subject to this Constitution, on any terms and conditions that the Directors determine.

18.2 Removal, suspension, replacement of absent Managing Director

(a) Subject to the provisions of any contract between a Managing Director and the Company, the Directors may:

(i) remove or dismiss or suspend a Managing Director from that office and appoint another or others in his or her place; or
(ii) appoint a temporary substitute for a Managing Director while that Managing Director is absent or unable to act.

(b) No Managing Director is entitled to attend or vote at any meeting of Directors while under suspension from office.

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18.3 Retirement of Managing Director

(a) The Managing Director, or if more than one, that Managing Director as determined by the Directors:

(i) will not be subject to retirement in accordance with Article 17.1;

and

(ii) will not be taken into account in determining the order of retirement of Directors or the number of Directors to retire.

(b) After the Directors have determined which Managing Director is exempt from the requirement to retire in accordance with Article 17.1, the exemption will not apply to any other Managing Director until the Managing Director determined from time to time to have the benefit of the exemption ceases to be a Managing Director.

(c) If, at the time a Managing Director ceases to have the benefit of the exemption from the requirement to retire in accordance with Article 17.1, that Managing Director has held office as a director without re-election for a period longer than the period permitted by the Listing Rules, then that Managing Director will retire from office at the next general meeting of the Company and be eligible for re-election.

(d) Subject to the provisions of any contract between each Managing Director and the Company, a Managing Director:

(i) is subject to the same provisions in this Constitution as to resignation and removal as the other Directors; and

(ii) will immediately cease to be a Managing Director if for any reason he or she ceases to hold the office of Director.

18.4 Powers of Managing Director and Executive Directors

(a) The Directors may entrust to and confer on each Managing Director and each Executive Director such of the powers exercisable under this Constitution by the Directors as the Directors think fit.

(b) The Directors may confer any of the powers referred to in Article 18.5(a):

(i) for any period;

(ii) to be exercised for any objects and purposes; and

(iii) subject to any terms and conditions,

as the Directors think fit.

(c) The Directors may confer any of the powers referred to in Article 18.5(a) either collaterally with or to the exclusion of and in substitution for all or any of the powers of the Directors in that behalf, and may revoke, withdraw, alter or vary all or any of the powers conferred.

(d) Notwithstanding any provision of this Constitution, every Managing Director and Executive Director will at all times and in all respects be subject to the control of the Directors.

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19. POWERS OF COMPANY AND ITS DIRECTORS

19.1 Directors have powers of the Company

(a) The business of the Company is to be managed by or under the direction of the Directors.

(b) The Directors may exercise all the powers of the Company and do all such acts and things which the Company is authorised or permitted to exercise and do and which are not by this Constitution or by statute directed or required to be exercised or done by the Company in general meeting.

(c) The operation and effect of this Article 19.1 are not limited in any way by the following provisions of this Article 19.

19.2 Directors may exercise Company's power to borrow

The Directors may exercise all the powers of the Company to:

(a) borrow or raise money;

(b) charge any property or business of the Company and all or any of its unpaid capital;

(c) issue Debentures or give any other security for a debt, liability or obligation of the Company or of any other person; and

(d) guarantee or to become liable for the payment of money or the performance of any obligations by any other person.

19.3 Directors may exercise power to give security

The Directors may exercise the powers conferred on them by Article 19.2 in such manner and upon terms and conditions in all respects as the Directors think fit, and in particular but without limiting the generality of the foregoing, by the issue of any Debenture on the whole or any part of the property of the Company (both present and future), including its uncalled capital for the time being.

19.4 Terms of Debentures

Any Debentures may be issued by the Company at a discount, premium or otherwise and with any special privileges as to redemption, surrender, drawings, conversion, allotment of Shares, attending and voting at meetings of Members, appointment of directors, or other matter.

19.5 Assignability of Debentures

Debentures issued or given by the Company may be made assignable free from any equities between the Company and the person to whom the Debentures may be issued.

19.6 Commission on issue of Debentures

The Company may pay a commission to a person in respect of that person or another person agreeing to subscribe for any Debentures of the Company.

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19.7 Security from Company for Directors

If:

(a) the Directors or any of them; or

(b) any other person,

become or are about to become personally liable for the payment of any sum due from the Company, the Directors may execute or cause to be executed any mortgage, charge, bill of sale or security over or affecting the whole or any part of the assets of the Company in order to secure the Directors or persons so becoming liable from any loss in respect of such liability.

19.8 Directors may appoint attorney or agent

(a) The Directors may, by resolution, power of attorney, or other written instrument, appoint any person or persons, to be attorney or agent of the Company:

(i) for any purposes;
(ii) with any powers, authorities and discretions being powers, authorities and discretions vested in or exercisable by the Directors;
(iii) for any period; and
(iv) subject to any conditions,

as the Directors think fit.

(b) An appointment under Article 19.8(a) may:

(i) be on any terms for the protection and convenience of persons dealing with the attorney or agent as the Directors think fit; and
(ii) authorise the attorney or agent to delegate all or any of the powers, authorities and discretions vested in the attorney or agent.

19.9 Execution of negotiable instruments

All cheques, promissory notes, banker's drafts, bills of exchange and other negotiable instruments signed, drawn, accepted, endorsed or otherwise executed by the Company, and all receipts for money paid to the Company, will be signed, drawn, accepted, endorsed or otherwise executed, as the case may be, in the manner and by the persons as the Directors determine.

20. REMUNERATION OF DIRECTORS

20.1 Remuneration of Non-Executive Directors

(a) The remuneration of the Non-Executive Directors will not:

(i) be more than the aggregate fixed sum which is determined by a general meeting, or until so determined, such sum as determined by the Directors; nor
(ii) be by way of a commission on, or percentage of, profits or operating revenue.

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(b) Provided that the aggregate remuneration paid to the Non-Executive Directors does not exceed the aggregate fixed sum determined in accordance with Article 20.1(a), the Directors will determine:

(i) the amount of remuneration to be paid, or applied for the benefit of, each Non-Executive Director; and

(ii) the proportions and the manner in which such remuneration will be paid or applied,

or until so determined, the aggregate fixed sum will be paid to the Non-Executive Directors equally.

(c) For the purposes of this Article 20.1, the remuneration of Non-Executive Directors does not include payments made in connection with the provision of superannuation benefits, the payment of superannuation benefits or any other payments made as a consequence of and in accordance with Articles 20.3, 20.4 or 20.5.

(d) The remuneration of the Non-Executive Directors will be deemed to accrue from day to day.

20.2 Remuneration of Executive Directors

The remuneration of the Executive Directors:

(a) will, subject to the provisions of any contract between each of them and the Company, be fixed by the Directors; and

(b) may be by way of fixed salary or commission on or percentage of profits of the Company or of any other Corporation in which the Company is interested or partly in one way and partly in another or others,

but will not be by way of commission on, or percentage of, operating revenue.

20.3 Payments on retirement, loss of office or death of Director

Subject to the Corporations Law and the Listing Rules, the Directors may give a prescribed benefit including an exempt benefit to a person in connection with the retirement of a person from a prescribed office in relation to the Company.

20.4 Remuneration of Directors - extra services, payment of expenses and increases in fees

(a) If any Director is called upon to:

(i) perform extra services (including being a member on a committee referred to in Article 22.9); or

(ii) make any special exertion in going or residing abroad or otherwise for any of the purposes of the Company,

the Company may, subject to the Corporations Law and Article 20.4(b), pay additional remuneration or provide benefits to that Director as the Directors determine.

(b) Any additional remuneration or benefits paid or provided under Article 20.4(a) will not be:

(i) by way of commission on or percentage of operating revenue; or

(ii) except in the case of an Executive Director, by way of commission on or percentage of profits.

(c) The Company will pay all reasonable travelling, accommodation and other expenses incurred by a Director in consequence of his or her attendance at meetings of Directors and otherwise in the execution of his or her duties as a Director.

20.5 Interests in staff funds

Subject to the Corporations Law and Listing Rules, any Director may participate in any association, institution, fund, trust or scheme for the benefit of past or present employees or Directors of the Company, a related body corporate of the Company or any of their respective predecessors in business, or for the benefit of the dependants of any such persons, or for the benefit of persons connected with any of those persons.

21. DIRECTORS' CONTRACTS WITH COMPANY

21.1 Director may hold other office of profit

A Director may hold any other office or place of profit in the Company (except that of auditor) in conjunction with the office of Director, on terms as the Directors arrange.

21.2 Contract not avoided when Director interested

Subject to the Corporations Law:

(a) no Director will be disqualified by virtue of holding the office of Director from holding any office or place of profit under any Corporation in which the Company is a shareholder or is otherwise interested;

(b) no Director will be disqualified by virtue of holding the office of Director from contracting with the Company or any Corporation in which the Company is a shareholder or is otherwise interested, either as vendor, purchaser or otherwise, and nor will any contract or arrangement entered into by or on behalf of the Company in which any Director is in any way interested be avoided; and

(c) a Director is not liable to account to the Company for any profit arising from that office or place of profit or realised by the contract or arrangement, or by any participation in an association or otherwise under Article 20.5 by reason only of the Director holding that office or of the fiduciary relations thereby established, provided that the disclosure required by Article 21.6 has been made.

21.3 When Director may vote

(a) A Director who has an interest in a matter that is being considered at a meeting of Directors, may, despite that interest, vote, be present and be counted in a quorum at that meeting, unless that is prohibited by the Corporations Law or the Listing Rules.

(b) No act of the Company is invalid or voidable by reason only of a failure of the Director to comply with a prohibition on voting, whether imposed by the Corporations Law or otherwise, in relation to a matter in which the Director is interested.

21.4 Director may act in professional capacity

Subject to the Corporations Law:

(a) any Director may act by himself or herself or the Director's firm may act in a professional capacity for the Company or any other Corporation in which the Company is a shareholder or is otherwise interested; and

(b) that Director and that Director's firm will be entitled to remuneration for professional services as if that Director were not a Director,

but nothing in this Article 21.4 authorises a Director or that Director's firm to act as an auditor of the Company.

21.5 Director may affix Seal notwithstanding interest

Notwithstanding that a Director is interested in a contract or arrangement, that Director may be appointed as the Director to sign on behalf of the Company or in whose presence the Seal of the Company is to be affixed to any instrument to which the interest relates.

21.6 Disclosure of interest

Unless the Directors are required by the Corporations Law to disclose their respective interests in a matter in which the Company has an interest, the following provisions apply in respect of such disclosure by a Director.

(a) A Director who is in any way, whether directly or indirectly, interested in a matter in which the Company has an interest will declare the nature of the interest at a meeting of the Directors as soon as practicable after the relevant facts have come to the Director's knowledge.

(b) For the purposes of Article 21.6(a), a general notice given to the Directors by a Director to the effect that the Director is an officer or member of a specified Corporation or a member of a specified firm or is otherwise interested in any Corporation or firm and is to be regarded as interested in any matter, after the date of the notice, in which that Corporation or firm may have an interest, will be deemed to be a sufficient declaration of interest in relation to the matter if:

(i) the notice states the nature and extent of the Director's interest in the Corporation or firm;
(ii) when the matter is first considered, the extent of the Director's interest in the Corporation or firm is not greater than is stated in the notice; and
(iii) the notice is given at a meeting of the Directors or the Director takes reasonable steps to ensure that it is brought up and read at the next meeting of the Directors after it was given.

(c) It is the duty of a Director who holds any office or possesses any property the holding of which office or the possession of which property might, whether directly or indirectly, create duties or interests in conflict with the duties or interests as a Director of the Company of that Director to declare the fact of his or her holding the office or possessing the property and the nature, character and extent of the conflict:

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(i) if that Director was not a Director at the time he or she commenced to hold such office or possess such property, at the first meeting of Directors held after that Director was appointed as a Director; or

(ii) otherwise, at the first meeting of Directors held after that Director commenced to hold the office or possess the property.

21.7 Record of disclosures by Directors

It is the Secretary's duty to record in the minutes any disclosure given by a Director under this Article 21.

22. PROCEEDINGS OF DIRECTORS

22.1 Meetings of Directors

The Directors may hold a meeting, adjourn and otherwise regulate their meetings as they think fit.

22.2 Quorum for meetings of Directors

(a) The Directors may determine the quorum necessary for the transaction of business.

(b) Until otherwise determined, a quorum for the purpose of considering a matter at a meeting will be 2 persons, each of whom is:

(i) a Director or an Alternate Director; and

(ii) entitled under the Corporations Law to vote on a motion that may be moved in relation to such matter at that meeting.

(c) A meeting of the Directors during which a quorum is present is competent to exercise all or any of the authorities, powers and discretions under this Constitution for the time being vested in or exercisable by the Directors generally.

(d) Where a quorum cannot be established for a meeting of Directors (or consideration of a particular matter) a Director may convene a general meeting of Members to deal with the matter or the matters in question.

(e) For the purposes of determining whether a quorum is present, an Alternate Director who is present in both his or her own capacity as a Director and as an Alternate Director for one or more Appointers will be counted only once.

(f) The Directors do not need to be present in the same place to satisfy the quorum requirement.

22.3 Calling meetings of Directors

A Director may at any time, and the Secretary will on the request of a Director, call a meeting of the Directors.

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22.4 Notice of meetings of Directors

(a) Notice of every Directors' meeting must be given to each Director and Alternate Director.

(b) Notice of a meeting of Directors may be given:

(i) in writing, by electronic mail to an electronic address or by any Technology; and

(ii) provided it accords with Article 22.4(b)(i), in different ways to different Directors and Alternate Directors.

(c) If notice of a meeting of Directors cannot be given to a particular Director or Alternate Director in accordance with Article 22.4(b), written notice served on:

(i) the usual residential address of that person;

(ii) the alternative address of that person notified under the Corporations Law; or

(iii) such other address (including an electronic address) provided to the Company by that person for the purpose of serving notice on that person,

will constitute notice to that person of that meeting for the purposes of this Article 22.4.

22.5 Meetings by using Technology

(a) Without limiting the discretion of the Directors to regulate their meetings under Article 22.1, the Directors may, if they think fit, confer by any Technology.

(b) Notwithstanding that the Directors are not present together in one place at the time of the conference, a resolution passed by the conference will be deemed to have been passed at a meeting of the Directors held on the day on which and at the time at which the conference was held.

(c) The provisions of this Constitution relating to proceedings of Directors apply to the conference to the extent that they are capable of applying, and with the necessary changes.

(d) A Director present at the commencement of the conference will be conclusively presumed to have been present and, subject to other provisions of this Constitution, to have formed part of the quorum throughout the conference.

(e) Any minutes of a conference of the type referred to in Article 22.5(a) purporting to be signed by the chairperson of that conference or by the chairperson of the next succeeding meeting of Directors will be sufficient evidence of the observance of all necessary formalities regarding the convening and conduct of the conference.

(f) When, by the operation of Article 22.5(b), a resolution is deemed to have been passed at a meeting of the Directors, that meeting will be deemed to have been held at such place as is determined by the chairperson of the relevant conference, provided that at least one of the Directors who took part in the conference was at that place for the duration of the conference.

22.6 Votes at meetings of Directors

(a) Motions and resolutions arising at any meeting of the Directors will be decided by a majority of votes and, subject to the provisions of Article 21, each Director has one vote.

(b) A person who is an Alternate Director is entitled to one vote (in addition to the Alternate Director's own vote as a Director, if any) on behalf of each Appointer whose alternate the Alternate Director is and who is not personally present.

22.7 Casting vote for chairperson of Directors

Subject to the Corporations Law and Listing Rules, in case of an equality of votes the chairperson of a meeting of Directors will have a casting vote in addition to any vote he or she has in his or her capacity as a Director.

22.8 Chairperson and deputy chairperson of Directors

(a) The Directors may elect a chairperson of Directors.

(b) The Directors may also elect a deputy chairperson who, in the absence of the chairperson at a meeting of the Directors, may exercise all the powers and authorities of the chairperson.

(c) If:

(i) no chairperson or deputy chairperson is elected; or
(ii) at any meeting the chairperson or deputy chairperson is not present within half an hour of the time appointed for holding the meeting or is not willing to act as chairperson for all or part of that meeting,

the Directors present will choose one of their number to be chairperson of that meeting or part of that meeting (as the case may be).

(d) The Directors may determine the period for which a person elected as chairperson or deputy chairperson is to hold office.

(e) If the Directors do not make a determination under Article 22.8(d), the person concerned will hold office until otherwise resolved by the Directors or until the person ceases to be a Director.

(f) If the Directors do make a determination under Article 22.8(d), the person concerned will hold office until the first to occur of:

(i) the expiration of that period;
(ii) the person ceasing to be a Director; or
(iii) the Directors at any time during that period resolving that the person will from that time cease to hold that office.

(g) When a Director who is the chairperson or deputy chairperson retires at a general meeting either in accordance with Article 17.1 or otherwise and is re-appointed or re-elected as a Director at that meeting, that chairperson or deputy chairperson will not by that fact alone cease to be the chairperson or deputy chairperson as the case may be.

22.9 **Committees of Directors**

(a) The Directors may:

(i) delegate any of their powers to committees consisting of one or more members who are Directors as they think fit; and

(ii) revoke that delegation.

(b) A committee will conform to any directions and regulations that may be imposed upon it by the Directors in the exercise of its powers.

(c) So far as they are capable of application and with the necessary changes, the provisions of the Constitution for regulating the meetings and proceedings of the Directors govern the meetings and proceedings of committees of 2 or more members to the extent that the same are consistent with any directions and regulations made by the Directors.

(d) Where a committee consists of 2 or more members, a quorum will be any 2 members or a larger number as the committee itself determines.

22.10 **Defects in appointment or qualifications of Director**

All acts:

(a) done at any meeting of the Directors; or

(b) of a committee of Directors; or

(c) by any person acting as a Director,

will be as valid as if every such person or committee had been duly appointed and every Director was qualified and entitled to vote, notwithstanding that it is afterwards discovered that:

(d) there was some defect in the appointment of a Director or of the committee or of the person acting; or

(e) any Director was disqualified or not entitled to vote.

22.11 **Written resolutions of Directors**

(a) If all of the Directors have signed a document containing a statement that they are in favour of a resolution of the Directors in terms set out in the document, a resolution in those terms will be deemed to have been passed at a meeting of the Directors held on the day on which and at the time at which the document was last signed by a Director.

(b) For the purposes of this Article 22.11:

(i) 2 or more separate documents containing statements in identical terms each of which is signed by one or more Directors will together be deemed to constitute one document containing a statement in those terms signed by the Directors;

(ii) a reference to all the Directors does not include a reference to a Director who, at a meeting of Directors, would not be entitled to vote on the resolution;

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(iii) a document signed by an Alternate Director need not also be signed by the Alternate Director's Appointer and, if signed by a Director who has appointed an Alternate Director, need not be signed by the Alternate Director in that capacity; and

(iv) any document so signed by a Director may be received by the Company at the Office (or other place agreed by the Directors) by post, by facsimile or other Technology which displays the Director's signature or by delivery (personal or otherwise).

23. ALTERNATE DIRECTORS

23.1 Appointment and removal of Alternate Directors

(a) Each Director has power to appoint any person who:

(i) is not an auditor of the Company or a partner or employer or employee of an auditor of the Company; and

(ii) is approved for that purpose by a majority of the other Directors after receipt of an instrument appointing an Alternate Director in accordance with Article 23.7,

to be the alternate of the Director in the Appointer's place during such times as the Appointer determines.

(b) An Alternate Director need not be a Member.

(c) The Appointer, at any time and regardless of whether the appointment of an Alternate Director is for a specified period, may revoke the appointment of a person as his or her Alternate Director.

23.2 Notice of appointment or removal of Alternate Directors

Any appointment or removal of an Alternate Director will be effected by facsimile or other notice in writing to the Company.

23.3 Rights and powers of Alternate Directors

(a) Subject to the Corporations Law, an Alternate Director:

(i) may act in the place of his or her Appointer;

(ii) is entitled to attend and vote and be counted in determining a quorum at any meeting of the Directors except while his or her Appointer is present;

(iii) has all the rights and powers of his or her Appointer (other than those conferred by Article 23.1) and will be subject to the duties of his or her Appointer;

(iv) will be subject in all respects to the conditions applicable to the other Directors, except as provided by Article 23.4; and

(v) may act as an Alternate Director to more than one Director and is entitled to one vote in respect of each Appointer where the Appointer is not present.

(b) Subject to the Corporations Law, an Alternate Director is not prohibited from voting or being present in respect of a matter by reason only that the Alternate Director's Appointer is prohibited from voting or being present in respect of that matter.

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23.4 Remuneration of Alternate Directors

(a) Subject to Article 23.4(b), the rights (if any) of an Alternate Director in respect of remuneration lie against his or her Appointer only and not against the Company.

(b) The Company may pay remuneration to an Alternate Director in accordance with Article 20.4.

23.5 Alternate Director is an Officer of Company

An Alternate Director is an Officer of the Company and will not be deemed to be the agent of his or her Appointer.

23.6 Alternate goes when Appointer goes

(a) Subject to Article 23.6(b), if any Appointer ceases to be a Director, his or her Alternate Director (if any) immediately ceases to be an Alternate Director.

(b) When an Appointer retires at a general meeting and is re-appointed as a Director at that meeting, his or her Alternate Director (if any) will remain an Alternate Director for that Director unless the instrument of appointment of the Alternate Director otherwise provides.

23.7 Form of appointment of Alternate Director

Any instrument appointing an Alternate Director will, as nearly as circumstances will admit, be in the following form or to the effect of the following:

> **"AUTOGEN LIMITED ACN 000 248 304**
>
> I, the undersigned being a Director of the above named Company in accordance with the power granted to me in the Constitution of the Company nominate and appoint of
>
> to act as Alternate Director in my place and to exercise and discharge all my duties as a Director.
>
> Signed this day of , ."

or in any other form as the Directors may accept.

24. MINUTES

24.1 Minutes of all proceedings to be kept

The Directors will cause minutes of:

(a) all proceedings and resolutions of meetings of Members;

(b) all proceedings and resolutions of meetings of the Directors, including meetings of committees of Directors; and

(c) all resolutions passed by the Directors without a meeting of Directors in accordance with Article 22.11,

to be duly entered in books kept for that purpose in accordance with the Corporations Law.

24.2 Minutes to be signed by chairperson

The Directors will cause the minutes referred to in Articles 24.1(a) and 24.1(b) to be signed by:

(a) the chairperson of the meeting at which the proceedings took place or at which the resolutions were proposed; or

(b) the chairperson of the next meeting.

24.3 Minutes to be presumed accurate

Where the minutes referred to in Articles 24.1(a) and 24.1(b) are signed in accordance with Article 24.2, those minutes will be presumed to be an accurate record of the relevant proceedings and resolutions unless the contrary is proved.

24.4 Inspection of minutes of meetings of Members

Books containing the minutes of proceedings of meetings of Members will be open for inspection by any Member without charge.

25. SECRETARY

25.1 Appointment and removal of Secretary

(a) A Secretary or Secretaries will be appointed by the Directors in accordance with the Corporations Law for the term, at the remuneration and on the conditions as the Directors think fit.

(b) Any Secretary appointed pursuant to Article 25.1(a) may be removed by the Directors.

25.2 Acting Secretary

The Directors may appoint a person as an acting Secretary or as a temporary substitute for a Secretary who, for the purposes of this Constitution, will be deemed to be a Secretary.

26. EXECUTION OF DOCUMENTS

26.1 Custody and use of Seal

(a) The Directors may provide a Seal for the Company and, if so, will provide for the safe custody of that Seal.

(b) The Seal will only be used by the authority of the Directors or of a committee of the Directors authorised by the Directors in that behalf.

26.2 Execution with a Seal

If the Company has a Seal, it may execute a document if the Seal is fixed to the document and the fixing of the Seal is witnessed by 2 Directors, a Director and a Secretary, or a Director or Secretary and another person appointed by the Directors for that purpose.

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26.3 Execution without the Seal

The Company may execute a document without using a Seal if the document is signed by 2 Directors, a Director and a Secretary, or a Director or Secretary and another person appointed by the Directors for that purpose.

26.4 Facsimile signature on certificates

The Directors may determine:

(a) either generally or in a particular case; and

(b) in any event, subject to such conditions as the Directors think fit,

that wherever a certificate for Securities of the Company requires a signature, that requirement will be satisfied by a facsimile of the signature affixed by mechanical or other means.

27. RESERVE FUNDS

27.1 Establishment and purpose of reserve funds

Subject to the Corporations Law, before determining that a dividend be paid, the Directors may set aside out of the profits of the Company any sums as the Directors think proper as a reserve fund to be applied, at the Director's discretion, for any purpose for which the profits of the Company may be properly applied, including but not limited to the following:

(a) to meet contingencies;

(b) for equalising dividends;

(c) for special dividends;

(d) for repairing, improving and maintaining any property of the Company; and

(e) for all other purposes as the Directors in their absolute discretion think conducive to the interests of the Company.

27.2 Power to invest reserve funds

(a) The Directors may invest any of the sums set aside as a reserve fund on any investments as the Directors think fit, and may deal with, vary, and dispose of all or any part of those sums for the benefit of the Company.

(b) The Directors may divide the reserve fund into any special funds as the Directors think fit and employ the whole or any part of the reserve fund in the business of the Company without being bound to keep it separate from the other assets.

(c) Pending any application of reserves in accordance with this Article 27.2, and at the discretion of the Directors, the reserves may be used in the business of the Company or be invested as the Directors think fit.

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27.3 Profits may be carried forward without going to reserve

The Directors may carry forward so much of the profits remaining as the Directors consider ought not to be distributed as dividends without transferring those profits to a reserve fund.

28. DIVIDENDS

28.1 Proportional distribution of profits

(a) Subject to:

(i) any special rights or restrictions for the time being attaching to any Shares; and
(ii) Articles 5.8, 27.1 and 28.2(e),

the profits of the Company will be divisible among the Members in the proportion which the amount of the share capital paid (not credited) on the Shares held by them respectively at the time at which entitlements thereto are determined bears to the total amounts paid or payable (excluding amounts credited) on all those Shares held by the Members at that time.

(b) Subject to Article 28.1(a), any share capital paid up on a Share during the period in respect of which a dividend is determined to be paid will only entitle the holder of that Share to an apportioned amount of that dividend from the date of payment, unless the terms of issue otherwise provide.

(c) A determination by the Directors as to the amount of profits available for dividend is conclusive.

28.2 Directors determine dividends

(a) The Directors may determine that a dividend, whether interim or final, is payable to the Members out of profits and those Members will be entitled to participate in accordance with Article 28.1 and this Article 28.2.

(b) Subject to the Listing Rules, the Directors may fix:

(i) the amount of a dividend;
(ii) the Record Date for determining entitlements to, and for the payment of, a dividend; and
(iii) the method of payment of a dividend.

(c) The persons entitled to be paid a dividend will be:

(i) in the case of holdings of Shares which are CHESS Approved, those persons so entitled in accordance with the SCH Business Rules; and
(ii) in the case of holdings of Shares which are not CHESS Approved (if any), persons whose names are entered in the Register as the holders of the Shares at the Record Date fixed for determining entitlements to dividends in accordance with Article 28.2(b).

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(d) Without limiting the generality of their powers under Articles 28.2(a) and 28.2(b), the Directors may pay any preferential dividends on Shares issued on terms that preferential dividends are payable on those Shares, whether on fixed dates or otherwise.

(e) If a breach occurs of the Listing Rules in relation to Shares which are Restricted Securities or a breach occurs of any Restriction Agreement in relation to those Shares, the Member holding the Shares in question will cease to be entitled to any dividends in respect of those Shares for as long as the breach subsists.

28.3 No interest on dividends

The Company is not required to pay any interest on any dividend.

28.4 Payment of dividends with assets, shares or debentures

(a) The Directors may determine that a dividend is payable wholly or in part by the distribution of specific assets, including Fully Paid shares or Debentures of the Company or of any other Corporation.

(b) If the Company is required to distribute to its Members, by way of dividend, shares in another Corporation:

(i) the Members will be deemed to have agreed to become members of that Corporation; and
(ii) each Member appoints the Company or any of the Directors as its agent to execute any transfer of shares or other document required to effect the distribution of shares to the Members.

(c) Where a dispute arises in regard to a distribution under this Article 28.4, the Directors may:

(i) settle the matter as they consider expedient;
(ii) fix the value for distribution of the specific assets or any part of those assets;
(iii) determine that cash payments will be made to any Members on the basis of the value so fixed in order to adjust the rights of all parties; and
(iv) may vest any specific assets in trustees as the Directors consider expedient.

(d) If distribution of specific assets to a particular Member is illegal or, in the Directors' opinion, impracticable, the Directors may make a cash distribution to the Member equal to the cash value or the proposed distribution of specific assets.

28.5 Power of one joint holder to give receipt for dividends

Any one of several persons who are registered as the joint holders of any Share may give effectual receipts for all dividends and payments on account of dividends in respect of the Share.

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28.6 Method of payment of dividends

(a) Payment of any dividend or other money in respect of a Share may be made in any manner and by any means as determined by the Directors including by:

(i) directly crediting the account nominated in writing by the person entitled to that dividend under Article 28.2 or that other money (**"Payee"**) from time to time;

(ii) cheque made payable to the Payee or another person nominated in writing by the Payee (**"Nominee"**) sent through the post to:

A. in the case where the Payee is not a Member, an address as nominated in writing by the Payee;

B. in the case where the Payee is a joint holder of the Share in respect of which the dividend or other money is payable, the address in the Register of the person whose name stands first on the Register in respect of the joint holding; or

C. otherwise, to the address of the Payee in the Register.

(b) The payment of any dividend or other money in respect of a Share is at the Payee's or Nominee's risk.

(c) Money earned by the Company on the amount of a dividend pending clearance of such a cheque or other collection by a Payee or Nominee will be for the benefit of the Company.

28.7 Power to retain dividends on which there is a lien

The Directors may retain the whole or part of any dividend on which the Company has a lien, and may apply that sum in or towards satisfaction of the debts, liabilities or engagements in respect of which the lien exists.

28.8 Retention of Transmittee dividends

Subject to the Corporations Law, the Directors may retain the dividends payable on a Share in respect of which a Transmittee is entitled under Article 9.2 to:

(a) elect to be registered as a Member; or

(b) transfer to another person,

until that Transmittee becomes a Member in respect of that Share or duly transfers that Share.

28.9 Effect on dividends of transfer of Shares

Subject to the SCH Business Rules, a transfer of Shares registered after the Record Date for a dividend but before the dividend is paid will not pass the right to that dividend.

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28.10 Bonus share plans and dividend reinvestment plans

(a) The Directors may establish and maintain one or more bonus share plans whereby any Member or any number or class of Members eligible in accordance with the plans may elect (in the manner prescribed by the plans) to forego any dividends that may be payable on all or some of the ordinary Shares held by that Member, and to receive instead some other entitlement in accordance with the plans including the allotment to the Member of fully paid ordinary Shares in the capital of the Company.

(b) The Directors may establish and maintain one or more dividend reinvestment plans whereby any Member or any number or class of Members eligible in accordance with the plans may elect (in the manner prescribed by the plans) that dividends payable by the Company will be applied on behalf of that Member in subscribing for fully paid ordinary Shares in the capital of the Company in accordance with the plans.

(c) Subject to the Listing Rules, the Directors may implement, suspend, terminate or vary the terms and conditions of any such plans as and when the Directors consider appropriate.

28.11 Unclaimed dividends

In the discretion of the Directors, all dividends paid but unclaimed may:

(a) in the case of dividends distributable other than as money, be realised into money; and

(b) in any case, be invested for the benefit of the Company until claimed or until required to be dealt with in accordance with any law relating to unclaimed money.

29. CAPITALISATION OF PROFITS

29.1 Profits may be capitalised

The Directors, or any general meeting on the recommendation of the Directors, may resolve that any money, investments or other assets forming part of the undivided profits of the Company:

(a) standing to the credit of the reserve fund or in the hands of the Company; and

(b) available for dividend,

be capitalised and distributed amongst Members.

29.2 Proportionate distribution of amounts capitalised

(a) A distribution under Article 29.1 will be made to the Members who would be entitled to receive the same if distributed by way of dividend and in the same proportions, on the footing that they become entitled to it as capital.

(b) All or any part of the capitalised fund may be applied on behalf of those Members:

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(i) in paying up in full any unissued Shares or debentures of the Company, which will be distributed accordingly;

(ii) in or towards payment of the uncalled liability on any issued Shares or debentures of the Company; or

(iii) partly as mentioned in Article 29.2(b)(i) and partly as mentioned in Article 29.2(b)(ii),

and that distribution or payment will be accepted by Members in full satisfaction of their interest in the capitalised sum.

29.3 Determination of entitlements to distribution

A resolution under Article 29.1 may fix the time at which entitlements to the distribution are determined.

29.4 Settlement of disputes about distribution

(a) For the purpose of giving effect to any resolution under Article 29.1, the Directors may settle any dispute which arises in regard to the distribution as the Directors think expedient, and in particular may:

(i) in cases where Shares or debentures become issuable in fractions, make cash payments or declare that fractions be ignored; and

(ii) authorise any person to make an agreement with the Company on behalf of all the Members entitled to any further Shares or debentures on the capitalisation, providing for the issue to them, credited as Fully Paid, of any further shares or debentures or for the payment up by the Company on their behalf of the amounts or any part of the amounts remaining unpaid on their existing Shares by the application of their respective proportions of the sum resolved to be capitalised.

(b) Any agreement made under Article 29.4(a)(ii) will be effective and binding on all Members concerned.

30. ACCOUNTS

30.1 Company to keep accounts

The Company will keep all accounting and other records of the business of the Company as it is required to keep by the Corporations Law and Listing Rules.

30.2 Financial report to be laid before annual general meeting

At the annual general meeting in every year, the Directors will lay before the meeting:

(a) the financial report for the last financial year of the Company that ended before that meeting; and

(b) any other accounts, reports and statements as are required by the Corporations Law.

30.3 Copy of accounts to be sent

Subject to the Corporations Law, a copy of the financial report and other reports referred to in Article 30.2 must be sent to Members and other persons entitled to receive them as required by the Corporations Law and the Listing Rules.

30.4 Accounts conclusive

(a) The financial report of the Company when audited and approved or received by a general meeting at which it is presented will be conclusive except as regards any material error discovered in it within 3 months after its approval or receipt.

(b) Whenever any material error is discovered within that 3 month period, the financial report will be corrected immediately and then it will be conclusive.

31. AUDITORS: APPOINTMENT AND REMOVAL

The auditors of the Company will:

(a) be appointed and may be removed as provided in the Corporations Law; and

(b) perform the duties and have the rights and powers as may be provided in the Corporations Law.

32. SECRECY

32.1 Members not entitled to discovery

(a) Subject to the Corporations Law and the Listing Rules, the Directors will determine whether and to what extent, at what time and place, and under what conditions, the accounting records and other documents of the Company will be open to the inspection of Members other than Directors.

(b) Subject to the Corporations Law and the Listing Rules, a Member not being a Director does not have the right, but may in the absolute discretion of the Directors be authorised, to inspect or to require or receive any information, or to require discovery of any record or document of the Company or any information respecting any detail of the Company's trading or business, or any matter which is or may be in the nature of a trade secret, confidential information, mystery of trade or secret process which may relate to the conduct of the business of the Company.

32.2 Officers of Company not to disclose information

(a) Every Director, Managing Director, manager, Secretary, auditor, trustee, member of a committee, agent, accountant or other Officer is bound to observe secrecy with respect to all transactions of the Company with its customers, the state of the account of any individual, and all related matters.

(b) If required by the Directors, every such person will, before commencing that person's duties or employment or at any time afterwards, sign and make a declaration in a book to be kept for that purpose that they will not reveal or make known any of the matters, affairs or concerns which may come to their knowledge as Director, Managing Director, manager, Secretary, auditor, trustee, member of a committee, agent, accountant or other Officer and whether relating to transactions of the Company with its customers or the state of the account of any individual or to anything else, to any person or persons except:

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(i) in the course and in the performance of their duties; or
(ii) under compulsion or obligation of law; or
(iii) when officially required so to do by the Directors or by the auditors for the time being, or by any general meeting of Members.

33. NOTICES

33.1 Method of service of notices

(a) A notice may be served by the Company on a Recipient by any of the following methods:

(i) by serving it personally on the Recipient;
(ii) by leaving it at the Address of the Recipient;
(iii) by sending it by post addressed to the Recipient at the Address of the Recipient; or
(iv) by sending it to a facsimile number or electronic address (if any) nominated by the Recipient for the purpose of serving notices on the Recipient.

(b) The Company will acknowledge receipt of all notifications of change of address by holders of partly paid Shares.

33.2 Notices to overseas members without Australian address

If the address of a Member in the Register is not within Australia, all notices to that Member will be posted by air-mail, or sent by facsimile transmission or air courier.

33.3 Notices to joint holders

All notices with respect to any Shares to which persons are jointly entitled will be given to the person named first in the Register, and notice so given will be sufficient notice to all holders of those Shares.

33.4 Notice by advertisement

Any notice by a court of law or otherwise required or allowed to be given by the Company to the Members or any of them by advertisement will unless otherwise stipulated be sufficiently advertised if advertised once in a daily newspaper circulating in the states and territories of Australia.

33.5 Time of service by post

(a) Any notice sent by post, air-mail or air courier will be deemed to have been served on the day following that on which the letter, envelope or wrapper containing the notice is posted or delivered to the air courier.

(b) In proving service of any notice it will be sufficient to prove that the letter, envelope or wrapper containing the notice was properly addressed and put into the post office or other public postal receptacle or delivered to the air courier.

(c) A certificate in writing signed by any manager, Secretary or other Officer of the Company that the letter envelope or wrapper containing the notice was so addressed and posted is conclusive evidence thereof.

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33.6 **Time of service by facsimile transmission**

Any notice sent by facsimile transmission will be deemed to have been served on receipt by the Company of a transmission report confirming successful transmission.

33.7 **Time of service by electronic means (other than facsimile)**

Any notice sent by electronic means (other than facsimile) will be deemed to have been served on the Business Day after it is sent.

33.8 **Service when Member dead or bankrupt**

Subject to the Corporations Law:

(a) any notice or document sent under this Constitution by post to or left at the address in the Register of any Member will:

(i) notwithstanding that Member is then deceased or bankrupt; and
(ii) whether or not the Company has notice of that Member's death or bankruptcy,

be deemed to have been duly served in respect of any Shares whether held solely or jointly with other persons by that Member until another person is registered in place of the deceased or the bankrupt (as the case may be) Member as the holder or joint holder of those Shares; and

(b) service under Article 33.7(a) will, for all purposes of this Constitution, be deemed a sufficient service of that notice on the deceased's heirs, Personal Representatives and all persons (if any) jointly interested with the deceased or the bankrupt (as the case may be) in those Shares.

33.9 **Unregistered transferees bound by notices**

Every person who by operation of law, transfer or any other means becomes entitled to any Share is bound by every notice in respect of the Share which, before that person's name and address was entered on the Register, was given to the person from whom that person derived title to that Share and to every previous holder of that Share.

33.10 **Signatures on notices**

The signature to any notice to be given by the Company may be written or printed or a facsimile of it may be affixed by mechanical or other means.

33.11 **Calculation of notice period**

Where a period of notice is required to be given, only one of the day on which the notice is dispatched and the day of doing the act or other thing will not be included in the number of days or other period.

34. **WINDING UP**

34.1 **Distributions**

Subject to any special rights for the time being attaching to any class of Shares, if on a winding up of the Company there remains a surplus:

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(a) the liquidator may, with the sanction of a special resolution, divide among the Members in kind the whole or any part of the property of the Company representing that surplus, and may for that purpose set whatever value the liquidator considers fair on any property to be so divided, and determine how the division is to be carried out as between the Members or different classes of Members; and

(b) that surplus will be divided amongst the Members in proportion to the amount paid up on their Shares, whether or not the liquidator exercises the power under Article 34.1(a).

34.2 Vesting of property in trustees for contributories

Subject to Article 34.3, the liquidator may with the sanction of a special resolution vest the whole or any part of the property in trustees on such trusts for the benefit of the contributories or any of them as the liquidator thinks fit.

34.3 Encumbered property: Member not compelled to accept

No Member will be compelled by the provisions of this Article 34 to accept any property, including shares or other securities, in respect of which there is any liability.

35. INDEMNITIES AND INSURANCE

35.1 Indemnity against liabilities

To the extent permitted by law, the Company:

(a) indemnifies every person who is, or has been, a Director or Secretary; and

(b) may, by deed, indemnify or agree to indemnify a person who is, or has been, an Officer of a Group Company,

against a liability incurred by that person, in his or her capacity as such a Director, Secretary or Officer, to another person (other than the Company or a related body corporate of the Company) provided that the liability does not arise out of conduct involving a lack of good faith.

35.2 Indemnity for costs and expenses

To the extent permitted by law, the Company:

(a) indemnifies every person who is, or has been, a Director or Secretary; and

(b) may, by deed, indemnify or agree to indemnify a person who is, or has been, an Officer of a Group Company,

against a liability for costs and expenses incurred by that person:

(c) in defending any Proceedings in which judgment is given in that person's favour, or in which that person is acquitted; or

(d) in connection with an application in relation to any Proceedings in which the Court grants relief to that person under the Corporations Law.

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35.3 Insurance

To the extent permitted by law, the Company may pay, or agree to pay, a premium in respect of a contract insuring a person who is, or has been, an Officer of a Group Company against a liability:

(a) incurred by that person:

(i) in his or her capacity as an Officer of a Group Company;
(ii) in the course of acting in connection with the affairs of a Group Company; or
(iii) otherwise arising out of the person holding office as an Officer of a Group Company,

provided that the liability does not arise out of conduct involving:
(iv) a wilful breach of duty in relation to a Group Company; or
(v) a contravention of sections 232(5) or 232(6) of the Corporations Law; or

(b) for costs and expenses incurred by that person in defending Proceedings, whatever their outcome.

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Schedule 1

Unmarketable Parcel of Shares

1. **In this Schedule:**

"MP Shares" means Shares in a new Holding (withing the meaning of the SCH Business Rules) created by a transfer on or after 1 September 1999 of a number of Shares that was less than a Marketable Parcel at the time a Proper SCH Transfer was initiated or a paper based transfer was lodged with the Company, including Shares registered in a Member's name jointly with other Members.

"New Member" means a Member who is given a notice by Directors under paragraph 3.

"Notice" means a notice given by the Directors under paragraph 2 or paragraph 3 (as the case requires).

"Old Member" means a Member who is given a notice by Directors under paragraph 2.

"Relevant Member" means an Old Member or a New Member (as the case requires).

"Relevant Shares" means (as the case requires):

(a) the Shares of an Old Member specified in a Notice; or

(b) the MP Shares of a New Member specified in a Notice.

"Reply" means, in respect of an Old Member, a written notice to the Company given by that person by the date specified in Notice given to that person that the provisions of this Schedule are not to apply to the Relevant Shares.

"Sale Proceeds" means:

(a) in the case of the Shares of an Old Member, the proceeds of sale or other disposal of those Shares pursuant to this Schedule; and

(b) in the case of the Shares of a New Member, the proceeds of any sale or other disposal of those Shares pursuant to this Schedule less all costs incurred as a result of that sale or disposal.

2. Subject to the SCH Business Rules, if at any time the total number of Shares held by a Member (including Shares registered in the Member's name jointly with other Members) is less than a Marketable Parcel, the Directors may give a written notice to the Member at the Member's address in the Register stating that unless the Member gives written notice to the Company by a specified date (being not less than 42 days after the date of service of the Notice) requiring that the provisions of this Schedule are not to apply to the Relevant Shares, then the Relevant Shares are liable to be sold or disposed of pursuant to this Schedule.

3. Subject to the SCH Business Rules, the Directors may give a written notice to a Member who is the registered holder of MP Shares at the Member's address in the Register stating that the Relevant Shares are liable to be sold or disposed of pursuant to this Schedule.

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4. If an Old Member gives a Reply, the Directors will not sell the Relevant Shares.

5. If an Old Member does not give a Reply, the Directors may, subject to the following provisions of this Schedule, sell or otherwise dispose of the Relevant Shares of that Old Member (together with all accretions, entitlements, rights or benefits attaching to them, including any dividends determined by the Directors to be paid but unpaid as at that date).

6. Subject to:

   (a) giving a Notice to a New Member; and

   (b) the following provisions of this Schedule,

   the Directors may sell or otherwise dispose of the Relevant Shears of that New Member (together with all accretions, entitlements, rights or benefits attaching to them, including any dividends determined by the Directors to be paid but unpaid as at the that date).

7. Where the Directors propose to sell or otherwise dispose of any Relevant Shares the Company will within 7 days after having given the Notice publish in a newspaper circulating generally throughout Australia a notice specifying:

   (a) the intention to sell or otherwise dispose of the Relevant Shares;

   (b) the name of the Relevant Member; and

   (c) the number of Relevant Shares.

8. Subject to the SCH Business Rules, any Shares to be sold or otherwise disposed of under this Schedule may be sold or disposed of on such terms and in such manner and at such time as the Directors think fit, but unless otherwise determined by the Directors:

   (a) the Shares will be sold through a broker (within the meaning of the SCH Business Rules) which will use its best endeavours to obtain the highest possible price in respect of the sale of the Shares at that time; and

   (b) in the case of the Shares of a New Member, the Shares will not be sold in a manner so as to create new MP Shares.

9. **For the purpose of a sale or disposal of Shares under paragraph 8:**

   (a) the Relevant Member appoints the Company as its agent;

   (b) subject to the Listing Rules, the Relevant Member appoints the Company and each of the Directors and the Secretary from time to time jointly and each of them severally as its attorney and attorneys in the Member's name and on the Member's behalf to effect any transfer or disposal of the Relevant Shares; and

   (c) in the case of Shares held on the CHESS Subregister, the Company may initiate a holding adjustment to move the Shares to another subregister of the Register.

10. The transferee of any Relevant Shares sold or otherwise disposed of under this Schedule is not required to see to the regularity of proceedings or to the application of any purchase money or other consideration.

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11. After the transferee's name has been entered in the Register as the holder of the Relevant Shares, the validity of the sale or other disposal to the transferee may not be impeached by any person and the remedy of any person aggrieved by the sale or disposal is in damages only and against the Company exclusively.

12. Subject to Articles 3.1 and 4.4(b), the Company may issue to a transferee of Relevant Shares a certificate or other document as may be required to evidence the transferee's title to the Shares.

13. The Company's receipt for any consideration received by it as a result of the sale or other disposal of any Shares pursuant to this Schedule will be a good discharge to the transferee of those Shares and any person claiming through that transferee.

14. **The Company will deal with the Sale Proceeds as follows:**

(a) the Company will pay the Sale Proceeds into a separate bank account opened and maintained by the Company for that purpose only;

(b) the Company will hold Sale Proceeds in trust for the transferor of the Relevant Shares;

(c) the Company will, immediately following the receipt of the Sale Proceeds, notify the Relevant Member in writing that the Sale Proceeds have been received by the Company and are being held by the Company pending instructions from the Member as to how they are to be dealt with;

(d) the Company will deal with the Sale Proceeds as instructed by the Member on whose behalf they are held, provided that in the case of the Shares of an Old Member, that instruction is accompanied by:

(i) the certificate or certificates (if any) for the Relevant Shares or, such other document evidencing title to the Relevant Shares as the Directors consider appropriate; or

(ii) if that certificate has been lost or destroyed, a statement and undertaking pursuant to subsection 1089(2) of the Corporations Law;

(e) in the case of the Shares of an Old Member, the Company will not remit the Sale Proceeds until the certificate, other document or statement and undertaking referred to in paragraph 14(d) are received by the Company; and

(f) where the Sale Proceeds have been held in trust for more than 2 years, the Company will, before the expiration of 10 years after the Sales Proceeds were received by the Company, pay the same to the Minister administering the legislation in force in the Jurisdiction relating to unclaimed money.

15. If the consideration received in respect of the sale of any Relevant Shares is listed securities in another Corporation, the Directors will be authorised and entitled to sell or dispose of such listed securities and the provisions of paragraphs 8 to 14 of this Schedule will apply to that sale or disposal so far as they are capable of application and with the necessary changes having been made.

16. The Company will bear all costs incurred as a result of the sale of any Shares pursuant to a notice given by the Directors under paragraph 2.

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17. Where a certificate in writing under the hand of any 2 of the Directors or any one Director and the Secretary states that:

(a) any notice required to be served by or on the Company pursuant to this Schedule was or was not served, as the case may be;

(b) any advertisement required to be published pursuant to this Schedule was published; and

(c) any action of the Directors required to be taken under or pursuant to this Schedule was taken

that certificate is sufficient and conclusive evidence of the facts stated in it as against all persons claiming to be entitled to any Shares affected by the certificate and to the right of the Company to sell or otherwise dispose of the same.

18. The Company will cancel the Share certificates (if any) of all Members whose Shares have been sold or otherwise disposed of pursuant to this Schedule.

19. The Directors may only exercise the powers given by this Schedule in respect of notices given pursuant to paragraph 2 at one time (which will not affect the number of shareholders to which the Directors may address Notices pursuant to paragraph 2) in any 12 month period.

20. This Schedule will cease to have effect in respect of the Shares of an Old Member following the announcement of a takeover offer or takeover announcement but, subject to paragraph 19, the procedure may be commenced again after the close of the offers made under the takeover offer or takeover announcement.

21. Notwithstanding anything contained in this Constitution to the contrary, at any time after giving a notice pursuant to paragraph 3 to a New Member, the Directors may determine that New Member will not be entitled to vote or to receive dividends in respect of some or all of the Shares the subject of that notice.

22. If the Directors make a determination under paragraph 21 in respect of some or all of the Shares a New Member, the Company will pay to that New Member any dividends on those Shares which are withheld pursuant to paragraph 21 after the sale or other disposal of those Shares.

Schedule 2

Plebiscite to Approve Proportional Takeover Scheme

1. *In this Schedule:*

   "Approving Resolution" means a resolution to approve a Takeover Scheme made in accordance with the provisions of this Schedule.

   "Takeover Scheme" means a takeover scheme made in accordance with section 635(b) of the Corporations Law in respect of a Relevant Class of Shares in the Company.

   "Relevant Class" means the class of Shares in the Company to which a Takeover Scheme relates.

2. The registration of a transfer giving effect to a contract resulting from the acceptance of an offer made under a Takeover Scheme is prohibited unless and until an Approving Resolution is passed or is deemed to have been passed in accordance with the provisions of this Schedule.

3. An Approving Resolution will be voted on at a meeting of those Members of the Company (other than the offeror under the Takeover Scheme or any associate of the offeror) who held Shares in the Relevant Class at the end of the day on which the first offer under the Takeover Scheme was made.

4. The meeting referred to in paragraph 3 will be:

   (a) convened and conducted by the Company;

   (b) conducted in accordance with the provisions of this Constitution relating to meetings of Members with such modifications as the circumstances require; and

   (c) convened such that the Approving Resolution is voted on before the day which is 14 days before the end of the offer period under the Takeover Scheme,

   and only the persons entitled by paragraph 3 to attend the meeting are entitled to vote on the Approving Resolution.

5. Subject to this Constitution, each person entitled to vote on the Approving Resolution is entitled to one vote for each Share in the Relevant Class held by them.

6. The Approving Resolution will be taken to have been passed if the proportion that the number of votes in favour of the resolution bears to the total number of votes on the resolution is greater than one-half, and otherwise will be taken to have been rejected.

7. If at the end of the day 15 days before the end of the offer period under the Takeover Scheme no resolution to approve the Takeover Scheme has been voted on in accordance with this Schedule, then for the purposes of this Schedule, a resolution to approve the Takeover Scheme will be deemed to have been passed in accordance with this Schedule.

Schedule 3

Preference Shares

1. **In this Schedule, unless the context otherwise requires:**

"Dividend" means any distribution of any property (including without limitation, money, Fully Paid shares, debentures, debenture stock or other securities of the Company or of any other Corporation) to a Holder in respect of a Preference Share as a dividend, whether interim or final.

"Dividend Date" means, in respect of a Preference Share, a date specified in the Issue Resolution on which a Dividend in respect of that Preference Share is payable.

"Dividend Rate" means, in respect of a Preference Share, the terms specified in the Issue Resolution for the calculation of the amount of Dividend to be paid in respect of that Preference Share on any Dividend Date, which calculation may be wholly or partly established by reference to an algebraic formula.

"Franked Dividend" has the meaning given in section 160APA of the *Income Tax Assessment Act 1936* (Cth)

"Holder" means, in respect of a Preference Share, the registered holder of that Share.

"Issue Resolution" means the resolution specified in paragraph 3.

"Preference Share" means a Share issued under Article 2.3(a)(ii).

"Redeemable Preference Share" means a Preference Share which is specified in the Issue Resolution as being liable to be redeemed in a manner permitted by the Corporations Law.

"Redemption Amount" means, in respect of a Redeemable Preference Share, the amount specified in the Issue Resolution to be paid on redemption of the Redeemable Preference Share.

"Redemption Circumstances" means, in respect of a Redeemable Preference Share, whether the Preference Share is liable to be redeemed:

(a) at the option of the Holder, or of the Company, or both, and the period of notice required to be given prior to such redemption;

(b) upon the happening of a particular event; or

(c) at a fixed time.

"Redemption Date" means, in respect of a Redeemable Preference Share, the date specified in the Issue Resolution for the redemption of that Preference Share or the date upon which an event specified in the Issue Resolution occurs which results in the redemption of that Preference Share.

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"Specified Date" means, in respect of a Redeemable Preference Share, the date (if any) specified in the Issue Resolution before which that Redeemable Preference Share may not be redeemed by the Holder.

Each Preference Share confers upon its Holder:

(a) the rights referred to in Articles 2.3(b) and 2.3(c);

(b) the right in winding up to payment in cash of the amount then paid up on it, and any arrears of Dividend in respect of that Preference Share in priority to any other class of Shares;

(c) the right in priority to any payment of a Dividend to any other class of Shares, to a cumulative preferential dividend payable on each Dividend Date in relation to that Preference Share calculated in accordance with the Dividend Rate in relation to that Preference Share; and

(d) no right to participate beyond the extent elsewhere specified in this paragraph 2 in surplus assets or profits of the Company, whether in winding up or otherwise.

3. **The Directors may only allot a Preference Share where by resolution it specifies:**

(a) the Dividend Date;

(b) the Dividend Rate;

(c) whether the Preference Share is or is not a Redeemable Preference Share;

(d) if the Preference Share is a Redeemable Preference Share, the Redemption Amount, the Redemption Date, the Redemption Circumstances and any Specified Date for that Redeemable Preference Share; and

(e) any other terms and conditions to apply to that Preference Share.

4. The Issue Resolution in establishing the Dividend Rate for a Preference Share may specify that the Dividend is to be:

(a) fixed;

(b) variable depending upon any variation of the respective values of any factors in an algebraic formula specified in the Issue Resolution; or

(c) variable depending upon such other factors as the Board may specify in the Issue Resolution,

and may also specify that the Dividend is to be a Franked Dividend or not a Franked Dividend.

5. Where the Issue Resolution specifies that the Dividend to be paid in respect of the Preference Share is to be a Franked Dividend the Issue Resolution may also specify:

(a) the extent to which such Dividend is to be franked; and

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(b) the consequences of any Dividend paid not being so franked, which may include a provision for an increase in the amount of the Dividend to such an extent or by reference to such factors as may be specified in the Issue Resolution.

6. Subject to the Corporations Law, the Company must redeem a Redeemable Preference Share on issue:

(a) in the case where the Redeemable Preference Share is liable to be redeemed at the option of the Company, on the specified date where the Company, not less than the number of Business Days specified in the Issue Resolution before that date, has given a notice to the Holder of that Redeemable Preference Share stating that the Redeemable Preference Share will be redeemed on the specified date;

(b) in the case where the Redeemable Preference Share is liable to be redeemed at the option of the Holder, on the specified date where the Holder of that Redeemable Preference Share, not less than the number of Business Days specified in the Issue Resolution before that date, has given a notice to the Company stating that the Redeemable Preference Share will be redeemed on the specified date; and

(c) in any event, on the Redemption Date,

but no Redeemable Preference Share may be redeemed by the Holder before the Specified Date unless the Redemption Date occurs before that date.

7. The Certificate (if any) issued by the Company in relation to any Preference Share, must specify in relation to that Preference Share:

(a) the date of issue of the Preference Share;

(b) the Dividend Rate and Dividend Dates;

(c) whether the Preference Share is a Redeemable Preference Share;

(d) if the Preference Share is a Redeemable Preference Share, the:

(i) Redemption Circumstances;
(ii) Redemption Amount; and
(iii) Redemption Date to the extent possible or if not, the event which if it occurs will result in redemption of that Redeemable Preference Share; and

(e) any other matter the Directors determine.

8. On redemption of a Redeemable Preference Share, the Company, after the Holder has surrendered to the Company the Certificate (if any) in respect of that Redeemable Preference Share, must pay to the Holder the Redemption Amount by:

(a) directly crediting the account nominated in writing by the Holder from time to time; or

(b) cheque made payable to the Holder or such other person nominated in writing by the Holder sent through the post to:

(i) in the case where the Holder is a joint holder of the Redeemable Preference Share, the address in the Register of the person whose name stands first on the Register in respect of the joint holding; or

(ii) otherwise, to the address of the Holder in the Register.

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DAVIES COLLISON CAVE
PATENT & TRADE MARK ATTORNEYS

17 May. 2002

By facsimile (original by courier)

The Directors
Autogen Limited
210 Kings Way
SOUTH MELBOURNE VIC 3205

Our Ref: 2337716/EJH/aal

Re: Consent to be named

Dear Sirs

Davies Collison Cave, of 1 Little Collins Street, Melbourne, Victoria consents to be named in the Prospectus ("Prospectus") described in the Schedule as the Patent and Trade Mark Attorneys of Autogen Limited ("the Company") in the form and context in which they are named.

Davies Collison Cave has had no involvement in the preparation of the Prospectus other than the reference to Davies Collison Cave in the form and context in which we are named. Davies Collison Cave does not make, or purport to make, any statement in the Prospectus, nor is any statement in the Prospectus based on any statement by Davies Collison Cave except to the extent that it has prepared an independent expert's report "Report on Applications for Letters Patent in Australia and overseas" appearing in Part 6 of the Prospectus ("its Experts Report"); and to the maximum extent permitted by law, expressly disclaims and takes no responsibility for any part of the Prospectus other than its Experts Report.

SCHEDULE

A Prospectus to be dated on or about 17 May 2002 and issued by the Company for a renounceable rights issue of approximately 12,700,000 shares at an issue price of 65 cents per share on the basis of 1 new share for every 3 existing share held to raise approximately $8,237,054.

Yours sincerely
DAVIES COLLISON CAVE

E JOHN L HUGHES
for and on behalf of Davies Collison Cave

Davies Collison Cave
Patent & Trade Mark Attorneys

Melbourne
1 Little Collins Street
Melbourne Victoria
Australia 3000
GPO Box 4387QQ
Melbourne Victoria
Australia 3001
Telephone +61 3 9254 2777
Facsimile +61 3 9254 2770

Other Offices

Sydney
Level 10 10 Barrack Street
Sydney New South Wales
Australia 2000
GPO Box 3876
Sydney New South Wales
Australia 2001
Telephone +61 2 9262 2611
Facsimile +61 2 9262 1080

Brisbane
Level 3 303 Coronation Drive
Milton Queensland
Australia 4064
PO Box 2219
Milton Business Centre
Queensland Australia 4064
Telephone +61 7 3368 2255
Facsimile +61 7 3368 2262

Canberra
Level 11 St George Centre
60 Marcus Clarke Street
Canberra City ACT
Australia 2601
Telephone +61 2 6248 8063
Facsimile +61 2 6248 6591

Email: mail@davies.com.au
Website: www.davies.com.au
ABN: 22 077 969 519

In association with:
Davies Collison Cave Solicitors
Intellectual Property Law

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FOURSIGHT

ASSOCIATES PTY LTD

Dr Graham Mitchell AO, Sir Gustav Nossal AC CBE, Professor David Penington AC, Dr John Stocker AO
Richard Allen Building, Level 2, 164 Flinders Lane, Melbourne, Victoria, 3000, Australia
Telephone +613 9288 5414 Facsimile +613 9288 5362
cathie.irvin@foursight.com.au www.foursight.com.au ABN 61 075 614 792

17 May 2002

The Directors
Autogen Limited
210 Kings Way
SOUTH MELBOURNE VICTORIA 3205

Dear Sirs

CONSENT TO BE NAMED

Foursight Associates Pty Ltd of Level 2, 164 Flinders Lane, Melbourne, Victoria consents to be named in the Prospectus ("Prospectus") described in the Schedule as experts to the offer of Autogen Limited ("the Company") in the form and context in which they are named.

Foursight Associates Pty Ltd has had no involvement in the preparation of the Prospectus other than the reference to Foursight Associates Pty Ltd in the form and context in which we are named. Foursight Associates Pty Ltd does not make, or purport to make, any statement in the Prospectus, nor is any statement in the Prospectus based on any statement by Foursight Associates Pty Ltd except to the extent that it has prepared an independent expert's report dated 17 April 2002 appearing in Part 6 of the Prospectus ("its Expert's Report"); and to the maximum extent permitted by law, expressly disclaims and takes no responsibility for any part of the Prospectus other than its Expert's Report.

SCHEDULE

A Prospectus to be dated on or about 17 May 2002 and issued by the Company for a renounceable rights issue of approximately 12,700,000 shares at an issue price of 65 cents per share on the basis of 1 new share for every 3 existing share held to raise approximately $8,237,054.

Yours sincerely

David G. Penington
for and on behalf of
Foursight Associates Pty Ltd

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PKF

Chartered Accountants
& Business Advisers

Level 11, CGU Tower
485 La Trobe Street
Melbourne 3000
GPO Box 5099BB
Melbourne 3001

Tel: (03) 9602 1611
Fax: (03) 9602 3870

www.pkf.com.au

17 May 2002

The Directors
Autogen Limited
210 Kings Way
SOUTH MELBOURNE VIC 3205

Dear Sirs

CONSENT TO BE NAMED

PKF ("PKF") of Level 11, CGU Tower, 485 LaTrobe Street, Melbourne, Victoria consents to be named in the Prospectus described in the Schedule ("Prospectus") as the auditor of Autogen Limited ("the Company") in the form and context in which they are named.

PKF has had no involvement in the preparation of the Prospectus other than the reference to PKF in the form and context in which we are named. PKF does not make, or purport to make, any statement in the Prospectus, nor is any statement in the Prospectus based on any statement by PKF; and to the maximum extent permitted by law, expressly disclaims and takes no responsibility for any part of the Prospectus other than a reference to its name

SCHEDULE

A Prospectus to be dated on or about 17 May 2002 and issued by the Company for a renounceable rights issue of approximately 12,700,000 shares at an issue price of 65 cents per share on the basis of 1 new share for every 3 existing share held to raise approximately $8,237,054.

Yours faithfully
PKF

Michael Phillips

M J Phillips
Partner

Computershare

Investor Services

Computershare Investor Services Pty Limited
ABN48078279277
Level Twelve 565 Bourke Street Melbourne
Victoria 3000 Australia
GPO Box 2975EE Melbourne
Victoria 3001 Australia
DX Box 30941
Investor enquiries 1300 850 505
Telephone 61 3 9611 5711
Facsimile 61 3 9611 5710
www.computershare.com

Australia
Canada
Channel Islands
Hong Kong
Ireland
New Zealand
Philippines
South Africa
United Kingdom
USA

17-May-02

The Directors
Autogen Limited
210 Kings Way
SOUTH MELBOURNE VIC 3205

Dear Sirs

CONSENT TO BE NAMED

Computershare Investor Services Pty Limited ("Computershare") of Level 12, 565 Bourke Street, Melbourne, Victoria consents to be named in the Prospectus described in the Schedule ("Prospectus") as the share registry of Autogen Limited ("the Company") in the form and context in which they are named.

Computershare has had no involvement in the preparation of the Prospectus other than the reference to Computershare in the form and context in which we are named. Computershare does not make, or purport to make, any statement in the Prospectus, nor is any statement in the Prospectus based on any statement by Computershare; and to the maximum extent permitted by law, expressly disclaims and takes no responsibility for any part of the Prospectus other than a reference to its name.

SCHEDULE

A Prospectus to be dated on or about 17 May 2002 and issued by the Company for a renounceable rights issue of approximately 12,700,000 shares at an issue price of 65 cents per share on the basis of 1 new share for every 3 existing share held to raise approximately $8,237,054.

Yours faithfully

Stuart Jury
for and on behalf of
Computershare Investor Services Pty Limited

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S B A

Schetzer Brott & Appel

SOLICITORS & CONSULTANTS

Partners
S. M. Brott *LL.B*
J. Appel *LL.B*
M. Landau *M.Com Law (Melb) B.Ec. ASA*

Associates
S. Bond *B.A (Hons) LL.B. (Hons)*

52 Market Street
Melbourne 3000
●
P.O. Box 400
Collins Street West
Melbourne 8007
D.X. 31315 Midtown
●
Ph 03 9614 7000
Fax 03 9614 7100
Email -
Sba@sbalaw.com
Website-
www.sbalaw.com
●
ABN 44 151 735 675

Our Ref: ML:NT:020281
Your Ref:

16 May 2002

The Directors
Autogen Limited
210 Kings Way
SOUTH MELBOURNE VIC 3205

Dear Sirs

CONSENT TO BE NAMED

Schetzer Brott & Appel of 52 Market Street, Melbourne, Victoria consents to be named in the Prospectus described in the Schedule ("Prospectus") as the lawyers to the offer of Autogen Limited ("the Company") in the form and context in which they are named.

Schetzer Brott & Appel has had no involvement in the preparation of the Prospectus other than the reference to Schetzer Brott & Appel in the form and context in which we are named. Schetzer Brott & Appel does not make, or purport to make, any statement in the Prospectus, nor is any statement in the Prospectus based on any statement by Schetzer Brott & Appel; and to the maximum extent permitted by law, Schetzer Brott & Appel expressly disclaims and takes no responsibility for any part of the Prospectus other than a reference to its name.

SCHEDULE

A Prospectus to be dated on or about 17 May 2002 and issued by the Company for a renounceable rights issue of approximately 12,700,000 new shares at an issue price of 65 cents per new share on the basis of 1 new share for each existing share held to raise approximately $8,255,000.

Yours faithfully

for and on behalf of
Schetzer Brott & Appel

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Rule 3.19A.3

Appendix 3Z

Final Director's Interest Notice

Information or documents not available now must be given to ASX as soon as available. Information and documents given to ASX become ASX's property and may be made public.

Introduced 30/9/2001.

Name of entity	Autogen Limited
ABN	79 000 248 304

We (the entity) give ASX the following information under listing rule 3.19A.3 and as agent for the director for the purposes of section 205G of the Corporations Act.

Name of director	Jeffrey Jonas
Date of last notice	02/01/2002
Date that director ceased to be director	16/05/2002

Part 1 – Director's relevant interests in securities of which the director is the registered holder
In the case of a trust, this includes interests in the trust made available by the responsible entity of the trust

Number & class of securities
None

Part 2 – Director's relevant interests in securities of which the director is not the registered holder
In the case of a trust, this includes interests in the trust made available by the responsible entity of the trust

Name of holder & nature of interest Note: Provide details of the circumstances giving rise to the relevant interest	Number & class of securities
None	

+ See chapter 19 for defined terms.

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Part 3 – Director's interests in contracts

Detail of contract	None
Nature of interest	
Name of registered holder (if issued securities)	
No. and class of securities to which interest relates	

+ See chapter 19 for defined terms.

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Autogen Limited

ABN 79 000 248 304

Mark this box with an "X" if you have made any changes to your name or address details

Please return completed form to:

Autogen Limited.
C/- Computershare Investor Services Pty Limited
GPO Box 52A
MELBOURNE VIC 3001
Tollfree: 1300 850 505
Telephone: (03) 9615 5970
Facsimile: (03) 9473 2529

ENTITLEMENT AND ACCEPTANCE FORM

RENOUNCEABLE RIGHTS ISSUE CLOSING
7.00 PM MELBOURNE TIME ON 24 JUNE 2002

Registered name and address for this holding

SECURITYHOLDER REFERENCE NUMBER / HOLDER IDENTIFICATION NUMBER

Fold here

SHARE-HOLDING AT 7.00PM ON 28 MAY 2002	ENTITLEMENT TO NEW SHARES ON A 1:3 BASIS	AMOUNT PAYABLE ON FULL ACCEPTANCE AT A$0.65 PER NEW SHARE	ENTITLEMENT NUMBER

Renounceable Rights Issue of approximately 12.7 million New Shares on the basis of 1 New Share for every 3 Ordinary Shares registered and entitled to participate on 28 May 2002 at an issue price of A$0.65 per New Share and on the terms and conditions of the Prospectus dated 17 May 2002.

IMPORTANT:

- This document is of value and requires your immediate attention. If you do not understand it, or are in doubt as to how to deal with it, you should consult your accountant, stockbroker, solicitor or other professional adviser immediately.
- The rights referred to in this Entitlement and Acceptance Form may be transferred electronically in CHESS without surrendering this Entitlement and Acceptance Form.
- This Entitlement and Acceptance Form should not be relied upon as evidence of the current entitlement of the person named in this Entitlement and Acceptance Form.
- Receipt of this form by **7.00 p.m. Melbourne time on 24 June 2002** with your remittance will constitute acceptance in accordance with the terms of the Prospectus dated **17 May 2002.**
- Rights trading commenced on **22 May 2002** and is expected to close on **17 June 2002**.

TO BE COMPLETED BY SHAREHOLDER

Number of Shares accepted

$ Amount enclosed at $0.65 per Share

Fold here

Please complete the following payment details

Drawer	Bank	BSB No or Branch name	Amount A$

Contact Details

Contact Name	Telephone Number - Business Hours	Telephone Number - After Hours
	( )	( )

See "General Instructions" on the reverse side of this form for signing requirements.

Securityholder 1 or Director	Securityholder 2 or Director/Company Secretary	Securityholder 3 or Sole Director and Sole Company Secretary

AGT RRI

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Instructions to your Stockbroker

I/We have accepted		Shares as per reverse side
And attach hereto a cheque/bankers draft for .	A$	being acceptance money at $0.65 per share
I/We wish to sell		rights to shares

*This instruction *has/has not previously been notified to you*
*delete whichever does not apply

LODGMENT INSTRUCTIONS
RENOUNCEABLE RIGHTS ISSUE CLOSING 7.00 P.M. MELBOURNE TIME ON 24 JUNE 2002

1. Acceptance of your Entitlement in Full or Part

Complete the form overleaf. If you are accepting your rights entitlement in full or part please forward it together with your remittance ($0.65 per New Share) to the Share Registry, Computershare Investor Services Pty Limited, in the enclosed reply-paid envelope, so as to arrive by no later than 7.00 p.m. Melbourne time on 17 JUNE 2002. Your cheque must be made payable to "**Autogen Limited**", and crossed "**Not Negotiable**".

2. Sale of your Entitlement in Part by your Stockbroker/Agent and acceptance of the balance

You should either:

- Contact your Stockbroker verbally and provide details as requested which appear overleaf.
- Complete the form overleaf for the number of new shares you are accepting and return this form together with your remittance ($0.65 per New Share) direct to the Share Registry, Computershare Investor Services Pty Limited, in the enclosed reply-paid envelope

OR

- Complete the "Instructions to your Stockbroker" panel above.
- Complete the form overleaf for the number of New Shares you are accepting and attach your remittance to this Form.
- Forward this Entitlement and Acceptance Form to your Stockbroker.

IMPORTANT NOTICE TO HOLDERS WITH SHARES ON THE CHESS SUBREGISTER

Holders whose existing Shares are held on the CHESS Subregister as detailed overleaf, should in the first instance contact their Sponsoring Broker/Agent in respect of any proposed on-market sale of their rights.

3. Sale of your Entitlement in full by your Stockbroker

If you wish to sell your rights entitlement in full, you should either:

- Contact your Stockbroker verbally and provide details as requested which appear overleaf,

OR

- Complete the "Instructions to your Stockbroker" panel above and forward this Entitlement and Acceptance Form to your Stockbroker.

4. Disposal of your Entitlement other than through a Stockbroker

A Standard (gold coloured) Renunciation form must be used for all other transactions. These forms may be obtained from your Stockbroker or the Share Registry, Computershare Investor Services Pty Limited.

GENERAL INSTRUCTIONS

- Only cheques or bank drafts in Australian dollars and drawn on a bank or financial institution in Australia will be accepted.
- Your cheque must be made payable to "**Autogen Limited**" and crossed "**Not Negotiable**".
- Receipts for payment will not be forwarded.

Signatures are required only if you have made amendments to the address as stated.

- The Shareholder and each joint Shareholder (if applicable) must sign.
- Companies need to sign under seal in accordance with their constitution.
- If signed by an Attorney, please forward the Power of Attorney to the Share Registry for noting, unless already noted.

PRIVACY NOTICE

Autogen Limited (AGT), through its agent, Computershare Investor Services Pty Limited, collects personal information when you submit this form. Your personal information is used by AGT and its agent to process your acceptance of the Rights Offer and to administer the acquisition of shares to which you are entitled or your other dealings in your rights. To do these things, AGT usually discloses, and by executing this Form you consent to AGT disclosing, your personal information to the following organisations (which may be located outside Australia): stockbrokers involved in the trading or taking up of rights; the Securities Clearing House; AGT related bodies corporate; AGT legal, financial and professional advisors; and organisations to which AGT outsource its functions and activities (such as its mailing house). If your personal information is not provided to AGT, it will be unable to do these things. In most cases, you can gain access to your personal information on request.

IF YOU HAVE ANY ENQUIRIES CONCERNING YOUR ENTITLEMENT, PLEASE CONTACT THE SHARE REGISTRY ON TELEPHONE: 1300 850 505

Rule 2.7, 3.10.3, 3.10.4, 3.10.5

Appendix 3B

New issue announcement, application for quotation of additional securities and agreement

Information or documents not available now must be given to ASX as soon as available. Information and documents given to ASX become ASX's property and may be made public.

Introduced 1/7/96. Origin: Appendix 5. Amended 1/7/98, 1/9/99, 1/7/2000, 30/9/2001, 11/3/2002.

Name of entity

Autogen Limited

ABN

79 000 248 304

We (the entity) give ASX the following information.

Part 1 - All issues

You must complete the relevant sections (attach sheets if there is not enough space).

1	+Class of +securities issued or to be issued	Fully paid Ordinary Shares.
2	Number of +securities issued or to be issued (if known) or maximum number which may be issued	Approximately 12,672,391 fully paid ordinary shares.
3	Principal terms of the +securities (eg, if options, exercise price and expiry date; if partly paid +securities, the amount outstanding and due dates for payment; if +convertible securities, the conversion price and dates for conversion)	One fully paid ordinary share for every three fully paid ordinary shares held on 28 May 2002.

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+ See chapter 19 for defined terms.

4	Do the +securities rank equally in all respects from the date of allotment with an existing +class of quoted +securities? If the additional securities do not rank equally, please state: • the date from which they do • the extent to which they participate for the next dividend, (in the case of a trust, distribution) or interest payment • the extent to which they do not rank equally, other than in relation to the next dividend, distribution or interest payment	Yes.
5	Issue price or consideration	$0.65 per share.
6	Purpose of the issue (If issued as consideration for the acquisition of assets, clearly identify those assets)	1. To expand Autogen's research programs and intellectual property folio; 2. To promote the competitiveness of Autogen's projects by providing funding and resources to enable the Company to deliver products for commercialisation as quickly as possible; 3. To provide the working capital necessary for all aspects of the business including resources for the protection of patents and intellectual property and identifying and establishing new project opportunities and alliances.
7	Dates of entering +securities into uncertificated holdings or despatch of certificates	15 July 2002

8	Number and +class of all +securities quoted on ASX (*including* the securities in clause 2 if applicable)	Number	+Class
		50,689,562	Ordinary Shares
		22,159,749	Options maturing 12/03/2010

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+ See chapter 19 for defined terms.

9	Number and +class of all +securities not quoted on ASX (*including* the securities in clause 2 if applicable)	Number 670,000 @$1.16 335,000@$0.8958 800,000	+Class Options maturing 31/03/2010 Options expiring 31/12/2003
10	Dividend policy (in the case of a trust, distribution policy) on the increased capital (interests)	N/A	

Part 2 - Bonus issue or pro rata issue

11	Is security holder approval required?	No
12	Is the issue renounceable or non-renounceable?	Renounceable.
13	Ratio in which the +securities will be offered	One for three.
14	+Class of +securities to which the offer relates	Fully paid ordinary shares.
15	+Record date to determine entitlements	28 May 2002.
16	Will holdings on different registers (or subregisters) be aggregated for calculating entitlements?	N/A
17	Policy for deciding entitlements in relation to fractions	Rounded up.
18	Names of countries in which the entity has +security holders who will not be sent new issue documents Note: Security holders must be told how their entitlements are to be dealt with. Cross reference: rule 7.7.	All countries other than Australia, New Zealand and USA.
19	Closing date for receipt of acceptances or renunciations	24 June 2002.

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20	Names of any underwriters	N/A
21	Amount of any underwriting fee or commission	N/A
22	Names of any brokers to the issue	N/A
23	Fee or commission payable to the broker to the issue	N/A
24	Amount of any handling fee payable to brokers who lodge acceptances or renunciations on behalf of +security holders	N/A
25	If the issue is contingent on +security holders' approval, the date of the meeting	No.
26	Date entitlement and acceptance form and prospectus or Product Disclosure Statement will be sent to persons entitled	31 May 2002
27	If the entity has issued options, and the terms entitle option holders to participate on exercise, the date on which notices will be sent to option holders	Sent on 15 April 2002
28	Date rights trading will begin (if applicable)	22 May 2002
29	Date rights trading will end (if applicable)	17 June 2002
30	How do +security holders sell their entitlements *in full* through a broker?	Using the Entitlement and Acceptance Form enclosed with the Prospectus.
31	How do +security holders sell *part* of their entitlements through a broker and accept for the balance?	Using the Entitlement and Acceptance Form enclosed with the Prospectus.

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+ See chapter 19 for defined terms.

32	How do +security holders dispose of their entitlements (except by sale through a broker)?	A Standard Renunciation Form available from the Share Registry.
33	+Despatch date	15 July 2002

Part 3 - Quotation of securities

You need only complete this section if you are applying for quotation of securities

34 Type of securities
(tick one)

(a) ☑ Securities described in Part 1

(b) ☐ All other securities

Example: restricted securities at the end of the escrowed period, partly paid securities that become fully paid, employee incentive share securities when restriction ends, securities issued on expiry or conversion of convertible securities

Entities that have ticked box 34(a)

Additional securities forming a new class of securities

(If the additional securities do not form a new class, go to 43)

Tick to indicate you are providing the information or documents

35 ☐ If the +securities are +equity securities, the names of the 20 largest holders of the additional +securities, and the number and percentage of additional +securities held by those holders

36 ☐ If the +securities are +equity securities, a distribution schedule of the additional +securities setting out the number of holders in the categories
1 - 1,000
1,001 - 5,000
5,001 - 10,000
10,001 - 100,000
100,001 and over

37 ☐ A copy of any trust deed for the additional +securities

(now go to 43)

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+ See chapter 19 for defined terms.

Entities that have ticked box 34(b)

38	Number of securities for which +quotation is sought	
39	Class of +securities for which quotation is sought	
40	Do the +securities rank equally in all respects from the date of allotment with an existing +class of quoted +securities? If the additional securities do not rank equally, please state: • the date from which they do • the extent to which they participate for the next dividend, (in the case of a trust, distribution) or interest payment • the extent to which they do not rank equally, other than in relation to the next dividend, distribution or interest payment	
41	Reason for request for quotation now Example: In the case of restricted securities, end of restriction period (if issued upon conversion of another security, clearly identify that other security)	

42	Number and +class of all +securities quoted on ASX (*including* the securities in clause 38)	Number	+Class

(now go to 43)

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+ See chapter 19 for defined terms.

All entities

Fees

43 Payment method (tick one)

☐ Cheque attached

☐ Electronic payment made

Note: Payment may be made electronically if Appendix 3B is given to ASX electronically at the same time.

☐ Periodic payment as agreed with the home branch has been arranged

Note: Arrangements can be made for employee incentive schemes that involve frequent issues of securities.

Quotation agreement

1 +Quotation of our additional +securities is in ASX's absolute discretion. ASX may quote the +securities on any conditions it decides.

2 We warrant the following to ASX.

- The issue of the +securities to be quoted complies with the law and is not for an illegal purpose.
- There is no reason why those +securities should not be granted +quotation.
- An offer of the +securities for sale within 12 months after their issue will not require disclosure under section 707(3) or section 1012C(6) of the Corporations Act.

  Note: An entity may need to obtain appropriate warranties from subscribers for the securities in order to be able to give this warranty
- Section 724 or section 1016E of the Corporations Act does not apply to any applications received by us in relation to any +securities to be quoted and that no-one has any right to return any +securities to be quoted under sections 737, 738 or 1016F of the Corporations Act at the time that we request that the +securities be quoted.
- We warrant that if confirmation is required under section 1017F of the Corporations Act in relation to the +securities to be quoted, it has been provided at the time that we request that the +securities be quoted.
- If we are a trust, we warrant that no person has the right to return the +securities to be quoted under section 1019B of the Corporations Act at the time that we request that the +securities be quoted.

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+ See chapter 19 for defined terms.

3 We will indemnify ASX to the fullest extent permitted by law in respect of any claim, action or expense arising from or connected with any breach of the warranties in this agreement.

4 We give ASX the information and documents required by this form. If any information or document not available now, will give it to ASX before +quotation of the +securities begins. We acknowledge that ASX is relying on the information and documents. We warrant that they are (will be) true and complete.

Sign here: ..... Date: 17th May 2002
(Company Secretary)

Print name: Peter J Lee

== == == == ==

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+ See chapter 19 for defined terms.



Autogen Limited
ABN 79 000 248 304

Registered Office:
210 Kings Way, South Melbourne
Victoria 3205 Australia
Telephone: +613 9234 1188
Facsimile: +613 9234 1198
Email: agt@axisc.com.au

16 May 2002

Manager Announcements
Company Announcements Office
Australian Stock Exchange Limited
4th Floor
20 Bridge Street
Sydney NSW 2000

Dear Sir

Summary of Announcement

(i) Amendment to Terms of Issues of Shares

(ii) Resignation of a Director

Details of Announcement

(i) On 18 March 2002, the Company announced an issue of shares to all shareholders.

Having given further consideration to the proposed issue, the Directors wish to advise that the issue price of the shares under the Rights Issue will be 65 cents per share.

(ii) Dr. J. Jonas has resigned as a Director to pursue his other business interests.

Yours faithfully

PETER LEE
General Manager Corporate
& Company Secretary

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M:\Documents\Autogen\Autogen Limited\Corporate\Announcements\AGT J Jonas resignation.doc

Autogen Limited ABN 79 000 248 304

Registered Office:
210 Kings Way, South Melbourne
Victoria 3205 Australia
Telephone: +613 9234 1188
Facsimile: +613 9234 1198
Email: agt@awi.com.au

Ref: AGT 432

3 May 2002

Manager Announcements
Company Announcements Office
Australian Stock Exchange Limited
4th Floor
20 Bridge Street
Sydney NSW 2000

Dear Sir

Summary of Announcement

Resignation of Director

Details of Announcement

The Company advises that The Hon RJL Hawke has resigned as a Director of the Company due to the increasing level of his business and non-business commitments.

The Company is grateful for Mr Hawke's contributions over his 3 years as a Director.

Yours sincerely

PETER LEE
General Manager Corporate
& Company Secretary

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Rule 3.19A.3

Appendix 3Z

Final Director's Interest Notice

Information or documents not available now must be given to ASX as soon as available. Information and documents given to ASX become ASX's property and may be made public.

Introduced 30/9/2001.

Name of entity	Autogen Limited
ABN	79 000 248 304

We (the entity) give ASX the following information under listing rule 3.19A.3 and as agent for the director for the purposes of section 205G of the Corporations Act.

Name of director	Robert James Lee Hawke
Date of last notice	02/01/2002
Date that director ceased to be director	30/04/2002

Part 1 – Director's relevant interests in securities of which the director is the registered holder
In the case of a trust, this includes interests in the trust made available by the responsible entity of the trust

Number & class of securities
None

Part 2 – Director's relevant interests in securities of which the director is not the registered holder
In the case of a trust, this includes interests in the trust made available by the responsible entity of the trust

Name of holder & nature of interest Note: Provide details of the circumstances giving rise to the relevant interest	Number & class of securities
None	

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+ See chapter 19 for defined terms.

Part 3 – Director's interests in contracts

Detail of contract	None
Nature of interest	
Name of registered holder (if issued securities)	
No. and class of securities to which interest relates	

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+ See chapter 19 for defined terms.

Rule 2.7, 3.10.3, 3.10.4, 3.10.5

Appendix 3B

New issue announcement, application for quotation of additional securities and agreement

Information or documents not available now must be given to ASX as soon as available. Information and documents given to ASX become ASX's property and may be made public.

Introduced 1/7/96. Origin: Appendix 5. Amended 1/7/98, 1/9/99, 1/7/2000, 30/9/2001, 11/3/2002.

Name of entity

Autogen Limited

ABN

79 000 248 304

We (the entity) give ASX the following information.

Part 1 - All issues

You must complete the relevant sections (attach sheets if there is not enough space).

1	+Class of +securities issued or to be issued	Ordinary
2	Number of +securities issued or to be issued (if known) or maximum number which may be issued	200,000.
3	Principal terms of the +securities (eg, if options, exercise price and expiry date; if partly paid +securities, the amount outstanding and due dates for payment; if +convertible securities, the conversion price and dates for conversion)	Fully paid

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+ See chapter 19 for defined terms.

4	Do the +securities rank equally in all respects from the date of allotment with an existing +class of quoted +securities? If the additional securities do not rank equally, please state: • the date from which they do • the extent to which they participate for the next dividend, (in the case of a trust, distribution) or interest payment • the extent to which they do not rank equally, other than in relation to the next dividend, distribution or interest payment	Yes
5	Issue price or consideration	75 cents per share
6	Purpose of the issue (If issued as consideration for the acquisition of assets, clearly identify those assets)	As consideration for Global Markets Capital Group LLC agreeing to serve as non exclusive US strategic and corporate advisor (refer ASX Announcement of 26 March 2002).
7	Dates of entering +securities into uncertificated holdings or despatch of certificates	2 May 2002

8	Number and +class of all +securities quoted on ASX (*including* the securities in clause 2 if applicable)	Number	+Class
		38,017,171 22,159,749	Ordinary Options expiring 12/03/2010

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+ See chapter 19 for defined terms.

9	Number and +class of all +securities not quoted on ASX (*including* the securities in clause 2 if applicable)	Number 670,000 @ $1.16 335,000 @ $0.8958 800,000	+Class Options expiring 31/03/2010 Options expiring 31/12/2003
10	Dividend policy (in the case of a trust, distribution policy) on the increased capital (interests)	N/A	

Part 2 - Bonus issue or pro rata issue

11	Is security holder approval required?	N/A
12	Is the issue renounceable or non-renounceable?	N/A
13	Ratio in which the +securities will be offered	N/A
14	+Class of +securities to which the offer relates	N/A
15	+Record date to determine entitlements	N/A
16	Will holdings on different registers (or subregisters) be aggregated for calculating entitlements?	N/A
17	Policy for deciding entitlements in relation to fractions	N/A
18	Names of countries in which the entity has +security holders who will not be sent new issue documents Note: Security holders must be told how their entitlements are to be dealt with. Cross reference: rule 7.7.	N/A
19	Closing date for receipt of acceptances or renunciations	N/A

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20	Names of any underwriters	N/A
21	Amount of any underwriting fee or commission	N/A
22	Names of any brokers to the issue	N/A
23	Fee or commission payable to the broker to the issue	N/A
24	Amount of any handling fee payable to brokers who lodge acceptances or renunciations on behalf of +security holders	N/A
25	If the issue is contingent on +security holders' approval, the date of the meeting	N/A
26	Date entitlement and acceptance form and prospectus or Product Disclosure Statement will be sent to persons entitled	N/A
27	If the entity has issued options, and the terms entitle option holders to participate on exercise, the date on which notices will be sent to option holders	N/A
28	Date rights trading will begin (if applicable)	N/A
29	Date rights trading will end (if applicable)	N/A
30	How do +security holders sell their entitlements *in full* through a broker?	N/A
31	How do +security holders sell *part* of their entitlements through a broker and accept for the balance?	N/A

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+ See chapter 19 for defined terms.

32	How do +security holders dispose of their entitlements (except by sale through a broker)?	N/A
33	+Despatch date	N/A

Part 3 - Quotation of securities

You need only complete this section if you are applying for quotation of securities

34 Type of securities
(*tick one*)

(a) ☑ Securities described in Part 1

(b) ☐ All other securities

Example: restricted securities at the end of the escrowed period, partly paid securities that become fully paid, employee incentive share securities when restriction ends, securities issued on expiry or conversion of convertible securities

Entities that have ticked box 34(a)

Additional securities forming a new class of securities
(If the additional securities do not form a new class, go to 43)

Tick to indicate you are providing the information or documents

35 ☐ If the +securities are +equity securities, the names of the 20 largest holders of the additional +securities, and the number and percentage of additional +securities held by those holders

36 ☐ If the +securities are +equity securities, a distribution schedule of the additional +securities setting out the number of holders in the categories
1 - 1,000
1,001 - 5,000
5,001 - 10,000
10,001 - 100,000
100,001 and over

37 ☐ A copy of any trust deed for the additional +securities

(now go to 43)

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+ See chapter 19 for defined terms.

Entities that have ticked box 34(b)

38	Number of securities for which +quotation is sought	
39	Class of +securities for which quotation is sought	
40	Do the +securities rank equally in all respects from the date of allotment with an existing +class of quoted +securities? If the additional securities do not rank equally, please state: • the date from which they do • the extent to which they participate for the next dividend, (in the case of a trust, distribution) or interest payment • the extent to which they do not rank equally, other than in relation to the next dividend, distribution or interest payment	
41	Reason for request for quotation now Example: In the case of restricted securities, end of restriction period (if issued upon conversion of another security, clearly identify that other security)	

42	Number and +class of all +securities quoted on ASX (*including* the securities in clause 38)	Number	+Class

(now go to 43)

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+ See chapter 19 for defined terms.

All entities

Fees

43 Payment method (tick one)

☐ Cheque attached

☐ Electronic payment made

Note: Payment may be made electronically if Appendix 3B is given to ASX electronically at the same time.

☐ Periodic payment as agreed with the home branch has been arranged

Note: Arrangements can be made for employee incentive schemes that involve frequent issues of securities.

Quotation agreement

1 +Quotation of our additional +securities is in ASX's absolute discretion. ASX may quote the +securities on any conditions it decides.

2 We warrant the following to ASX.

- The issue of the +securities to be quoted complies with the law and is not for an illegal purpose.
- There is no reason why those +securities should not be granted +quotation.
- An offer of the +securities for sale within 12 months after their issue will not require disclosure under section 707(3) or section 1012C(6) of the Corporations Act.

  Note: An entity may need to obtain appropriate warranties from subscribers for the securities in order to be able to give this warranty
- Section 724 or section 1016E of the Corporations Act does not apply to any applications received by us in relation to any +securities to be quoted and that no-one has any right to return any +securities to be quoted under sections 737, 738 or 1016F of the Corporations Act at the time that we request that the +securities be quoted.
- We warrant that if confirmation is required under section 1017F of the Corporations Act in relation to the +securities to be quoted, it has been provided at the time that we request that the +securities be quoted.
- If we are a trust, we warrant that no person has the right to return the +securities to be quoted under section 1019B of the Corporations Act at the time that we request that the +securities be quoted.

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+ See chapter 19 for defined terms.

3 We will indemnify ASX to the fullest extent permitted by law in respect of any claim, action or expense arising from or connected with any breach of the warranties in this agreement.

4 We give ASX the information and documents required by this form. If any information or document not available now, will give it to ASX before +quotation of the +securities begins. We acknowledge that ASX is relying on the information and documents. We warrant that they are (will be) true and complete.

Sign here: ..... Date: 2/5/02
(Director/Company Secretary)

Print name:

== == == == ==

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Rule 2.7, 3.10.3, 3.10.4, 3.10.5

Appendix 3B

New issue announcement, application for quotation of additional securities and agreement

Information or documents not available now must be given to ASX as soon as available. Information and documents given to ASX become ASX's property and may be made public.

Introduced 1/7/96. Origin: Appendix 5. Amended 1/7/98, 1/9/99, 1/7/2000, 30/9/2001, 11/3/2002.

Name of entity

Autogen Limited

ABN

79 000 248 304

We (the entity) give ASX the following information.

Part 1 - All issues

You must complete the relevant sections (attach sheets if there is not enough space).

1	+Class of +securities issued or to be issued	Options expiring at various dates up to 31 December 2003.
2	Number of +securities issued or to be issued (if known) or maximum number which may be issued	800,000 Options.
3	Principal terms of the +securities (eg, if options, exercise price and expiry date; if partly paid +securities, the amount outstanding and due dates for payment; if +convertible securities, the conversion price and dates for conversion)	The Options are exercisable as follows: 200,000 when AGT share price reaches $1.00 200,000 when AGT share price reaches $1.10 200,000 when AGT share price reaches $1.20 200,000 when AGT share price reaches $1.40 The share price must remain at the above for 10 business days to enable the options to be exercised.

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+ See chapter 19 for defined terms.

4	Do the +securities rank equally in all respects from the date of allotment with an existing +class of quoted +securities? If the additional securities do not rank equally, please state: • the date from which they do • the extent to which they participate for the next dividend, (in the case of a trust, distribution) or interest payment • the extent to which they do not rank equally, other than in relation to the next dividend, distribution or interest payment	No. Once exercised. N/A N/A
5	Issue price or consideration	Advisory Services.
6	Purpose of the issue (If issued as consideration for the acquisition of assets, clearly identify those assets)	The options are being issued pursuant to an Advisory Agreement to promote the Company.
7	Dates of entering +securities into uncertificated holdings or despatch of certificates	N/A.

		Number	+Class
8	Number and +class of all +securities quoted on ASX (*including* the securities in clause 2 if applicable)	37,817,171 22,159,749	Ordinary Shares Options expiring 12/03/2010

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+ See chapter 19 for defined terms.

9	Number and +class of all +securities not quoted on ASX (*including* the securities in clause 2 if applicable)	Number 670,000 @$1.16 335,000 @$0.8958 800,000	+Class Options expiring 31/03/2010 Options expiring 31/12/2003
10	Dividend policy (in the case of a trust, distribution policy) on the increased capital (interests)	N/A	

Part 2 - Bonus issue or pro rata issue

11	Is security holder approval required?	N/A
12	Is the issue renounceable or non-renounceable?	N/A
13	Ratio in which the +securities will be offered	N/A
14	+Class of +securities to which the offer relates	N/A
15	+Record date to determine entitlements	N/A
16	Will holdings on different registers (or subregisters) be aggregated for calculating entitlements?	N/A
17	Policy for deciding entitlements in relation to fractions	N/A
18	Names of countries in which the entity has +security holders who will not be sent new issue documents Note: Security holders must be told how their entitlements are to be dealt with. Cross reference: rule 7.7.	N/A
19	Closing date for receipt of acceptances or renunciations	N/A

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+ See chapter 19 for defined terms.

20	Names of any underwriters	N/A
21	Amount of any underwriting fee or commission	N/A
22	Names of any brokers to the issue	N/A
23	Fee or commission payable to the broker to the issue	N/A
24	Amount of any handling fee payable to brokers who lodge acceptances or renunciations on behalf of +security holders	N/A
25	If the issue is contingent on +security holders' approval, the date of the meeting	N/A
26	Date entitlement and acceptance form and prospectus or Product Disclosure Statement will be sent to persons entitled	N/A
27	If the entity has issued options, and the terms entitle option holders to participate on exercise, the date on which notices will be sent to option holders	N/A
28	Date rights trading will begin (if applicable)	N/A
29	Date rights trading will end (if applicable)	N/A
30	How do +security holders sell their entitlements *in full* through a broker?	N/A
31	How do +security holders sell *part* of their entitlements through a broker and accept for the balance?	N/A

585

+ See chapter 19 for defined terms.

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33	+Despatch date	N/A

Part 3 - Quotation of securities

You need only complete this section if you are applying for quotation of securities

34 Type of securities
(*tick one*)

(a) ☐ Securities described in Part 1

(b) ☐ All other securities

Example: restricted securities at the end of the escrowed period, partly paid securities that become fully paid, employee incentive share securities when restriction ends, securities issued on expiry or conversion of convertible securities

Entities that have ticked box 34(a)

Additional securities forming a new class of securities
(If the additional securities do not form a new class, go to 43)

Tick to indicate you are providing the information or documents

35 ☐ If the +securities are +equity securities, the names of the 20 largest holders of the additional +securities, and the number and percentage of additional +securities held by those holders

36 ☐ If the +securities are +equity securities, a distribution schedule of the additional +securities setting out the number of holders in the categories
1 - 1,000
1,001 - 5,000
5,001 - 10,000
10,001 - 100,000
100,001 and over

37 ☐ A copy of any trust deed for the additional +securities

(now go to 43)

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+ See chapter 19 for defined terms.

Entities that have ticked box 34(b)

38	Number of securities for which +quotation is sought	
39	Class of +securities for which quotation is sought	
40	Do the +securities rank equally in all respects from the date of allotment with an existing +class of quoted +securities? If the additional securities do not rank equally, please state: • the date from which they do • the extent to which they participate for the next dividend, (in the case of a trust, distribution) or interest payment • the extent to which they do not rank equally, other than in relation to the next dividend, distribution or interest payment	
41	Reason for request for quotation now Example: In the case of restricted securities, end of restriction period (if issued upon conversion of another security, clearly identify that other security)	

42	Number and +class of all +securities quoted on ASX (*including* the securities in clause 38)	Number	+Class

(now go to 43)

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+ See chapter 19 for defined terms.

All entities

Fees

43 Payment method (tick one)

☐ Cheque attached

☐ Electronic payment made

Note: Payment may be made electronically if Appendix 3B is given to ASX electronically at the same time.

☐ Periodic payment as agreed with the home branch has been arranged

Note: Arrangements can be made for employee incentive schemes that involve frequent issues of securities.

Quotation agreement

1 +Quotation of our additional +securities is in ASX's absolute discretion. ASX may quote the +securities on any conditions it decides.

2 We warrant the following to ASX.

- The issue of the +securities to be quoted complies with the law and is not for an illegal purpose.
- There is no reason why those +securities should not be granted +quotation.
- An offer of the +securities for sale within 12 months after their issue will not require disclosure under section 707(3) or section 1012C(6) of the Corporations Act.

  Note: An entity may need to obtain appropriate warranties from subscribers for the securities in order to be able to give this warranty
- Section 724 or section 1016E of the Corporations Act does not apply to any applications received by us in relation to any +securities to be quoted and that no-one has any right to return any +securities to be quoted under sections 737, 738 or 1016F of the Corporations Act at the time that we request that the +securities be quoted.
- We warrant that if confirmation is required under section 1017F of the Corporations Act in relation to the +securities to be quoted, it has been provided at the time that we request that the +securities be quoted.
- If we are a trust, we warrant that no person has the right to return the +securities to be quoted under section 1019B of the Corporations Act at the time that we request that the +securities be quoted.

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+ See chapter 19 for defined terms.

3 We will indemnify ASX to the fullest extent permitted by law in respect of any claim, action or expense arising from or connected with any breach of the warranties in this agreement.

4 We give ASX the information and documents required by this form. If any information or document not available now, will give it to ASX before +quotation of the +securities begins. We acknowledge that ASX is relying on the information and documents. We warrant that they are (will be) true and complete.

Sign here: P.J.Lee ..... Date: 1/5/02
(Company Secretary)

Print name: Peter J Lee

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+ See chapter 19 for defined terms.

Autogen Limited

Autogen Limited
ABN 79 000 248 304

Registered Office:
210 Kings Way, South Melbourne
Victoria 3205 Australia
Telephone: +613 9234 1188
Facsimile: +613 9234 1198
Email: agt@axisc.com.au

Monday 15 April, 2002

PRESS RELEASE
FOR IMMEDIATE RELEASE

USA DISCOVERY GENETICS COMPANY SEQUENOM TO USE AUTOGEN'S eXpress TECHNOLOGY TO VALIDATE GENE TARGETS

Gene and protein discovery company Autogen Limited [ASX:AGT] today announced an agreement with leading discovery genetics company SEQUENOM, Inc. (Nasdaq: SQNM) to use Autogen's eXpress Technology Platform to validate and characterise SEQUENOM™ proprietary genetic targets. The agreement follows a previously announced memorandum of understanding between the two companies.

SEQUENOM, based in San Diego, has integrated its MassARRAY™ technology platform, sample repository, SNP assay portfolio and innovative strategies to determine the medical impact of genes. To date the company has identified and prioritized more than 120 candidate disease genes that suggest a broad population impact.

Autogen management said the agreement confirmed the international competitiveness of its eXpress Technology Platform. "That SEQUENOM has agreed to utilize our expertise and resources to add value to their initial discoveries demonstrates the competitiveness of our own discovery programs in diabetes/obesity and depression and anxiety that utilize the technology platform," said Professor Greg Collier, Autogen Chief Operating Officer.

"The agreement strengthens our partnerships with USA biotech companies and helps raise our international profile as a leading gene and protein discovery company," he said. Autogen now has links in the USA with SEQUENOM Inc. and with Southwest Foundation via the Autogen Center of Statistical Genomics in San Antonio, Texas.

"Our increasing presence in the USA is pleasing in view of our recent appointment of Global Markets Capital Corporation of New York as US strategic and corporate advisor." Global Markets Capital will establish an American Depositary Receipt program for Autogen and advise it in relation to a NASDAQ listing.

"By the very nature of our population genetics approach, each of the candidate disease genes we identify suggest significant market potential," said Jay Lichter, Ph.D., Executive Vice President of Business Development at SEQUENOM. "The critical next step toward transitioning these genes into novel therapeutics is to validate their function. Autogen's technology and expertise in functional genomics should help us to create the highest possible value for our targets."

The agreement with SEQUENOM demonstrates the need for discovery companies to validate their gene discoveries with functional data. By determining the functions of initial gene discoveries and evaluating cellular functions and interactions, Autogen's eXpress

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Technology Platform will help determine if initial gene discoveries can be translated into "druggable" targets for future therapeutic development with pharmaceutical partners.

Following the developments with Sequenom and the appointment of Global Capital Markets Corporation of New York to assist with an ADR program and listing on Nasdaq, Autogen has decided to concentrate its international focus on the USA and has put on hold the proposed listing in Singapore.

About the company: Autogen is an Australian biotechnology company engaged in gene and protein discovery. It utilises its eXpress Technology Platform in all phases of research and development including new target discovery, target validation and functional genomics to support the development of genetic targets and therapeutics.

For more information:
Professor Greg Collier,
Autogen Chief Operating Officer
Ph: 03 9234 1188 or 0419 897 501
www.autogenlimited.com.au

Renate Krelle
Monsoon Communications
Ph: 03 9620 3333

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Autogen Limited

Autogen Limited
ABN 79 000 248 304

Registered Office:
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Email: agt@axisc.com.au

MEDIA RELEASE

AUTOGEN APPOINTS NEW YORK-BASED GLOBAL MARKETS CAPITAL CORPORATION TO PURSUE NASDAQ LISTING

Tuesday 26 March 2002

Gene discovery company Autogen Limited [ASX:AGT] today announced it had appointed Global Markets Capital Corporation of New York as US strategic and corporate advisor.

Global Markets Capital will establish an American Depositary Receipt program for the company and to advise it in relation to a listing on NASDAQ.

Professor Greg Collier, Autogen's Chief Operating Officer, said the agreement will open up sources of investment in US markets.

"Autogen has established a niche of partnerships and collaborations in the USA including Sequenom in San Diego and South Western Foundation and Autogen Center for Statistical Genetics in San Antonio, Texas," he said. "Appointing Global Markets Capital is part of our strategy to raise awareness in Autogen's activities in the USA and will continue to strengthen our collaborations with the USA biotechnology industry."

Mr Mark Saunders, President of Global Markets Capital, said US investors had responded favourably to companies like Autogen with a strong interest in gene discovery: "Autogen's research programs, including its work in the areas of obesity and diabetes, coupled with its existing collaborations with US institutions, will stand it in good stead in the US market," he said.

For more information:

Professor Greg Collier, Autogen Chief Operating Officer
Ph: 03 9234 1188 or 0419 897 501

Mark Saunders, Global Markets Capital
Ph: 1 (954) 325 9624

Richard Allen
Monsoon Communications
Ph: 03 9620 3333

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Autogen Limited

ABN 79 000 248 304

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Facsimile: +613 9234 1198

18 March 2002

Manager Announcements
Company Announcements Office
Australian Stock Exchange Limited
10th Floor
20 Bond St
SYDNEY NSW 2000

Dear Sir

Summary of Announcement

1:3 Renounceable Rights Issue of Ordinary Shares

Announcement

The Directors announce a 1:3 renounceable rights issue of ordinary shares at an issue price of A$0.75 per share. A disclosure document is being prepared for the issue. The funds raised from the issue will be used to continue the Company's research programs and provide working capital.

Yours faithfully

J.I. Gutnick

J I GUTNICK
Chairman & Managing Director

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Rules 4.1, 4.3

Appendix 4B (rule 4.13(b))

Half yearly/preliminary final report

Introduced 1/7/2000. Amended 30/9/2001.

Name of entity

Autogen Limited

ABN	Half yearly *(tick)*	Preliminary final *(tick)*	Half year/financial year ended ('current period')
79 000 248 304	✓		31 December, 2001

For announcement to the market

Extracts from this report for announcement to the market (see note 1). $A'000

Revenues from ordinary activities *(item 1.1)*	~~up~~/down	19.5 %	to	2,029
~~Profit~~ (loss)from ordinary activities after tax (before amortisation of goodwill) attributable to members *(item 1.20)*	up/~~down~~	47.7 %	to	3,609
~~Profit~~ (loss) from ordinary activities after tax attributable to members (*item 1.23*)	up/down	47.7 %	to	3,609
Profit (loss) from extraordinary items after tax attributable to members (*item 2.5(d)*)	gain (loss) of	-		-
Net ~~profit~~ (loss) for the period attributable to members *(item 1.11)*	up/down	47.7 %	to	3,609

Dividends (distributions)	Amount per security	Franked amount per security
Final dividend *(Preliminary final report only - item 15.4)* Interim dividend *(Half yearly report only - item 15.6)*	- ¢	- ¢
Previous corresponding period *(Preliminary final report - item 15.5; half yearly report - item 15.7)*	- ¢	- ¢

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+ See chapter 19 for defined terms.

+Record date for determining entitlements to the dividend, (in the case of a trust, distribution) *(see item 15.2)*	-

Brief explanation of omission of directional and percentage changes to profit in accordance with Note 1 and short details of any bonus or cash issue or other item(s) of importance not previously released to the market:

Consolidated profit and loss account

		Current period - $A'000	Previous corresponding period - $A'000
1.1	Revenues from ordinary activities	2,029	2,519
1.2	Expenses from ordinary activities (*see items 1.24 + 12.5 + 12.6*)	(5,634)	(4,947)
1.3	Borrowing costs	(4)	(16)
1.4	Share of net profit (loss) of associates and joint venture entities (*see item 16.7*)	-	-
1.5	**Profit (loss) from ordinary activities before tax**	(3,609)	(2,444)
1.6	Income tax on ordinary activities *(see note 4)*	-	-
1.7	**Profit (loss) from ordinary activities after tax**	(3,609)	(2,444)
1.8	Profit (loss) from extraordinary items after tax (*see item 2.5*)	-	-
1.9	**Net profit (loss)**	(3,609)	(2,444)
1.10	Net profit (loss) attributable to outside +equity interests		-
1.11	**Net profit (loss) for the period attributable to members**	(3,609)	(2,444)

Consolidated retained profits

1.12	Retained profits (accumulated losses) at the beginning of the financial period	(52,686)	(49,269)
1.13	Net profit (loss) attributable to members (*item 1.11*)	(3,609)	(2,444)
1.14	Net transfers to and from reserves	-	-
1.15	Net effect of changes in accounting policies	-	-

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+ See chapter 19 for defined terms.

1.16	Dividends and other equity distributions paid or payable	-	-
1.17	**Retained profits (accumulated losses) at end of financial period**	(56,295)	(51,713)

Profit restated to exclude amortisation of goodwill

		Current period $A'000	Previous corresponding period $A'000
1.18	Profit (loss) from ordinary activities after tax before outside equity interests (*items 1.7*) and amortisation of goodwill	(3,609)	(2,444)
1.19	Less (plus) outside +equity interests	-	-
1.20	**Profit (loss) from ordinary activities after tax (before amortisation of goodwill) attributable to members**	(3,609)	(2,444)

Profit (loss) from ordinary activities attributable to members

		Current period $A'000	Previous corresponding period $A'000
1.21	Profit (loss) from ordinary activities after tax (*item 1.7*)	(3,609)	(2,444)
1.22	Less (plus) outside +equity interests	-	-
1.23	**Profit (loss) from ordinary activities after tax, attributable to members**	(3,609)	(2,444)

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+ See chapter 19 for defined terms.

Revenue and expenses from ordinary activities

AASB 1004 requires disclosure of specific categories of revenue and AASB 1018 requires disclosure of expenses from ordinary activities according to either their nature of function. Entities must report details of revenue and expenses from ordinary activities using the layout employed in their accounts. See also items 12.1 to 12.6.

		Current period $A'000	Previous corresponding period $A'000
1.24	Details of revenue and expenses		
	Revenue		
	Revenue from ordinary activities		
	Research	1,847	2,143
	Interest	172	376
	Other	10	-
	Expenses		
	Costs from ordinary activities		
	Research and development expenditure	(3,761)	(2,544)
	Administration	(1,783)	(929)
	Depreciation	(90)	(91)
	Interest expense	(4)	(16)
	Increase in provisions for diminution in the value of investment	-	(1,365)
	Discontinued operations		
	Loss from operations of discontinued controlled entity	-	(18)

Intangible and extraordinary items

		Consolidated - current period			
		Before tax $A'000 (a)	Related tax $A'000 (b)	Related outside +equity interests $A'000 (c)	Amount (after tax) attributable to members $A'000 (d)
2.1	Amortisation of goodwill	-	-	-	-

+ See chapter 19 for defined terms.

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2.2	Amortisation of other intangibles	-	-	-	-
2.3	**Total amortisation of intangibles**	-	-	-	-
2.4	Extraordinary items (details)	-	-	-	-
2.5	**Total extraordinary items**	-	-	-	-

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+ See chapter 19 for defined terms.

Comparison of half year profits

(Preliminary final report only)

		Current year - $A'000	Previous year - $A'000
3.1	Consolidated profit (loss) from ordinary activities after tax attributable to members reported for the *1st* half year (item 1.23 in the half yearly report)	N/A	N/A
3.2	Consolidated profit (loss) from ordinary activities after tax attributable to members for the *2nd* half year	N/A	N/A

Consolidated balance sheet

		At end of current period $A'000	As shown in last annual report $A'000	As in last half yearly report $A'000
	Current assets			
4.1	Cash	3,119	7,095	11,473
4.2	Receivables	1,436	313	76
4.3	Investments	-	-	-
4.4	Inventories	-	-	-
4.5	Other (prepayments)	16	6	19
4.6	**Total current assets**	**4,571**	**7,414**	**11,568**
	Non-current assets			
4.7	Receivables	252	251	162
4.8	Investments (equity accounted)	-	-	-
4.9	Other investments	294	294	926
4.10	Inventories	-	-	-
4.11	Exploration and evaluation expenditure capitalised (see para .71 of *AASB 1022*)	-	-	-
4.12	Development properties (+mining entities)	-	-	-
4.13	Other property, plant and equipment (net)	255	345	582
4.14	Intangibles (net)	-	-	-
4.15	Other (deferred expenditure)	69	-	-
4.16	**Total non-current assets**	**870**	**890**	**1670**
4.17	**Total assets**	**5,441**	**8,304**	**13,238**
	Current liabilities			
4.18	Payables	1,869	1,076	880
4.19	Interest bearing liabilities	111	287	364
4.20	Provisions	-	-	-

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+ See chapter 19 for defined terms.

4.21	Other (deferred revenue)	145	-	880
4.22	**Total current liabilities**	**2,125**	**1,363**	**2,124**
	Non-current liabilities			
4.23	Payables	-	-	-
4.24	Interest bearing liabilities	-	16	46
4.25	Provisions	-	-	-
4.26	Other (provide details if material)	-	-	-
4.27	**Total non-current liabilities**	**-**	**16**	**46**
4.28	**Total liabilities**	**2,125**	**1,379**	**2,170**
4.29	**Net assets**	**3,316**	**6,925**	**11,068**

Consolidated balance sheet continued

	Equity			
4.30	Capital/contributed equity	47,945	47,945	47,945
4.31	Reserves	11,666	11,666	14,836
4.32	Retained profits (accumulated losses)	(56,295)	(52,686)	(51,713)
4.33	**Equity attributable to members of the parent entity**	3,316	6,925	11,068
4.34	Outside +equity interests in controlled entities	-	-	-
4.35	**Total equity**	**3,316**	**6,925**	**11,068**
4.36	Preference capital included as part of 4.33	-	-	-

Exploration and evaluation expenditure capitalised

To be completed only by entities with mining interests if amounts are material. Include all expenditure incurred regardless of whether written off directly against profit.

		Current period $A'000	Previous corresponding period - $A'000
5.1	Opening balance	-	-
5.2	Expenditure incurred during current period	-	-
5.3	Expenditure written off during current period	-	-
5.4	Acquisitions, disposals, revaluation increments, etc.	-	-

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5.5	Expenditure transferred to Development Properties	-	-
5.6	**Closing balance as shown in the consolidated balance sheet** *(item 4.11)*	-	-

Development properties

(To be completed only by entities with mining interests if amounts are material)

		Current period $A'000	Previous corresponding period - $A'000
6.1	Opening balance	-	-
6.2	Expenditure incurred during current period	-	-
6.3	Expenditure transferred from exploration and evaluation	-	-
6.4	Expenditure written off during current period	-	-
6.5	Acquisitions, disposals, revaluation increments, etc.	-	-
6.6	Expenditure transferred to mine properties	-	-
6.7	**Closing balance as shown in the consolidated balance sheet** *(item 4.12)*	-	-

Consolidated statement of cash flows

		Current period $A'000	Previous corresponding period - $A'000
	Cash flows related to operating activities		
7.1	Receipts from customers	1,933	3,023
7.2	Payments to suppliers and employees	(6,048)	(3,067)
7.3	Dividends received from associates	-	-
7.4	Other dividends received	-	-
7.5	Interest and other items of similar nature received	167	375
7.6	Interest and other costs of finance paid	(4)	(16)
7.7	Income taxes paid	-	-
7.8	Other (Sponsorship for Biotechnology Forum)	5	-
7.9	**Net operating cash flows**	**(3,947)**	**315**
	Cash flows related to investing activities		
7.10	Payment for purchases of property, plant and equipment	-	-
7.11	Proceeds from sale of property, plant and equipment	-	-
7.12	Payment for purchases of equity investments	-	-

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+ See chapter 19 for defined terms.

7.13	Proceeds from sale of equity investments	-	-
7.14	Loans to other entities	-	-
7.15	Loans repaid by other entities	-	-
7.16	Other (provide details if material)	-	-
7.17	**Net investing cash flows**	-	-
	Cash flows related to financing activities		
7.18	Proceeds from issues of +securities (shares, options, etc.)	-	13
7.19	Proceeds from borrowings	-	-
7.20	Repayment of borrowings	(29)	(52)
7.21	Dividends paid	-	-
7.22	Other (provide details if material)	-	-
7.23	**Net financing cash flows**	**(29)**	**(39)**
7.24	**Net increase (decrease) in cash held**	(3,976)	276
7.25	Cash at beginning of period *(see Reconciliation of cash)*	7,095	11,197
7.26	Exchange rate adjustments to item 7.25.	-	-
7.27	**Cash at end of period** *(see Reconciliation of cash)*	3,119	11,473

Non-cash financing and investing activities

Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows are as follows. If an amount is quantified, show comparative amount.

-

Reconciliation of cash

Reconciliation of cash at the end of the period (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.		Current period $A'000	Previous corresponding period - $A'000
8.1	Cash on hand and at bank	213	168
8.2	Deposits at call	908	257
8.3	Bank overdraft	-	-
8.4	Other (provide details) Commercial Paper	1,998	11,048
8.5	**Total cash at end of period** *(item 7.27)*	**3,119**	**11,473**

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+ See chapter 19 for defined terms.

Ratios		Current period	Previous corresponding period
	Profit before tax / revenue		
9.1	Consolidated profit (loss) from ordinary activities before tax (*item 1.5*) as a percentage of revenue (*item 1.1*)	N/A	N/A
	Profit after tax / +equity interests		
9.2	Consolidated net profit (loss) from ordinary activities after tax attributable to members (*item 1.9*) as a percentage of equity (similarly attributable) at the end of the period (*item 4.33*)	(108.83%)	(22.08%)

Earnings per security (EPS)		Current period	Previous corresponding period
10.1	Calculation of the following in accordance with *AASB 1027: Earnings per Share*		
	(a) Basic EPS	(9.54¢)	(6.46¢)
	(b) Diluted EPS (if materially different from (a))	-	-
	(c) Weighted average number of ordinary shares outstanding during the period used in the calculation of the Basic EPS	37,817,171	37,816,891

NTA backing *(see note 7)*		Current period	Previous corresponding period
11.1	Net tangible asset backing per +ordinary security	8.77¢	29.27¢

Details of specific receipts/outlays, revenues/ expenses

		Current period $A'000	Previous corresponding period - $A'000
12.1	Interest revenue included in determining item 1.5	172	376
12.2	Interest revenue included in item 12.1 but not yet received (if material)	4	-
12.3	Interest costs excluded from borrowing costs, capitalised in asset values	-	-

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12.4	Outlays (except those arising from the +acquisition of an existing business) capitalised in intangibles (if material)	-	-
12.5	Depreciation and amortisation (excluding amortisation of intangibles)	(90)	(91)
12.6	Other specific relevant items not shown in item 1.24 *(see note 15)*	-	-

Control gained over entities having material effect

13.1	Name of entity (or group of entities)	-
13.2	Consolidated profit (loss) from ordinary activities and extraordinary items after tax of the entity (or group of entities) since the date in the current period on which control was +acquired	$ -
13.3	Date from which such profit has been calculated	-
13.4	Profit (loss) from ordinary activities and extraordinary items after tax of the entity (or group of entities) for the whole of the previous corresponding period	$ -

Loss of control of entities having material effect

14.1	Name of entity (or group of entities)	-
14.2	Consolidated profit (loss) from ordinary activities and extraordinary items after tax of the entity (or group of entities) for the current period to the date of loss of control	$ -
14.3	Date to which the profit (loss) in item 14.2 has been calculated	-
14.4	Consolidated profit (loss) from ordinary activities and extraordinary items after tax of the entity (or group of entities) while controlled during the whole of the previous corresponding period	$ -

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+ See chapter 19 for defined terms.

14.5	Contribution to consolidated profit (loss) from ordinary activities and extraordinary items from sale of interest leading to loss of control	$ -

Reports for industry and geographical segments

Information on the industry and geographical segments of the entity must be reported for the current period in accordance with AASB 1005: Financial Reporting by Segments. Because of the different structures employed by entities, a pro forma is not provided. Segment information should be completed separately and attached to this report. However, the following is the presentation adopted in the Appendices to AASB 1005 and indicates which amounts should agree with items included elsewhere in this report.

Segments

Operating Revenue

Sales to customers outside the economic entity

Inter-segment sales — See Attached

Unallocated revenue

Total revenue

Segment result

Unallocated expenses

Consolidated profit (loss) from ordinary activities before tax (equal to item 1.5)

Segment assets)
Unallocated assets)
Total assets (*equal to item 4.17*))

Comparative data for segment assets should be as at the end of the previous corresponding period.

Dividends (in the case of a trust, distributions)

15.1	Date the dividend (distribution) is payable	-
15.2	+Record date to determine entitlements to the dividend (distribution) (ie, on the basis of registrable transfers received by 5.00 pm if +securities are not +CHESS approved, or security holding balances established by 5.00 pm or such later time permitted by SCH Business Rules if +securities are +CHESS approved)	-
15.3	If it is a final dividend, has it been declared? *(Preliminary final report only)*	-

Amount per security

		Amount per security	Franked amount per security at 36% tax	Amount per security of foreign source dividend
15.4	*(Preliminary final report only)* **Final dividend:** Current year	- ¢	- ¢	- ¢

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15.5	Previous year	- ¢	- ¢	- ¢
15.6	*(Half yearly and preliminary final reports)* **Interim dividend:** Current year	- ¢	- ¢	- ¢
15.7	Previous year	- ¢	- ¢	- ¢

Total dividend (distribution) per security (interim *plus* final)

(Preliminary final report only)

		Current year	Previous year
15.8	+Ordinary securities	- ¢	- ¢
15.9	Preference +securities	- ¢	- ¢

Half yearly report - interim dividend (distribution) on all securities *or* Preliminary final report - final dividend (distribution) on all securities

		Current period $A'000	Previous corresponding period - $A'000
15.10	+Ordinary securities	-	-
15.11	Preference +securities	-	-
15.12	Other equity instruments	-	-
15.13	**Total**	-	-

The +dividend or distribution plans shown below are in operation.

-

The last date(s) for receipt of election notices for the +dividend or distribution plans

-

Any other disclosures in relation to dividends (distributions)

-

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+ See chapter 19 for defined terms.

Details of aggregate share of profits (losses) of associates and joint venture entities

		Current period $A'000	Previous corresponding period - $A'000
16.1	Profit (loss) from ordinary activities before income tax	-	-
16.2	Income tax on ordinary activities	-	-
16.3	**Profit (loss) from ordinary activities after income tax**	-	-
16.4	Extraordinary items net of tax	-	-
16.5	**Net profit (loss)**	-	-
16.6	Outside +equity interests	-	-
16.7	**Net profit (loss) attributable to members**	-	-

Material interests in entities which are not controlled entities

The economic entity has an interest (that is material to it) in the following entities. If the interest was acquired or disposed of during either the current or previous corresponding period, indicate date of acquisition ("from xx/xx/xx") or disposal ("to xx/xx/xx").

Name of entity	Percentage of ownership interest held at end of period or date of disposal		Contribution to net profit (loss) (*item 1.9*)	
17.1 Equity accounted associates and joint venture entities	Current period	Previous corresponding period	Current period - $A'000	Previous corresponding period- $A'000
	-	-	-	-
17.2 Total	-	-	-	-
17.3 Other material interests	-	-	-	-
17.4 Total	-	-	-	-

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+ See chapter 19 for defined terms.

Issued and quoted securities at end of current period

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

Category of +securities		Total number	Number quoted	Issue price per security (see note 14) (cents)	Amount paid up per security (see note 14) (cents)
18.1	**Preference +securities** *(description)*	-	-	-	-
18.2	Changes during current period (a) Increases through issues (b) Decreases through returns of capital, buybacks, redemptions	-	-	-	-
18.3	**+Ordinary securities**	37,817,171	37,817,171	-	-
18.4	Changes during current period (a) Increases through issues (b) Decreases through returns of capital, buybacks	-	-	-	-
18.5	**+Convertible debt securities** *(description and conversion factor)*	-	-	-	-
18.6	Changes during current period (a) Increases through issues (b) Decreases through securities matured, converted	-	-	-	-

18.7	**Options** *(description and conversion factor)*			*Exercise price*	*Expiry date (if any)*
		22,159,749	22,159,749	$1.25	12/03/2010
	Employee Share Option Plan	720,000	-	$1.16	31/03/2010
	-	335,000	-	$0.8958	31/03/2010

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+ See chapter 19 for defined terms.

18.8	Issued during current period	-	-	-	-
18.9	Exercised during current period	-	-	-	-
18.10	Expired during current period	20,000	-	$1.16	31/03/2010
18.11	**Debentures** *(totals only)*	-	-		
18.12	**Unsecured notes** *(totals only)*	-	-		

Comments by directors

Comments on the following matters are required by ASX or, in relation to the half yearly report, by AASB 1029: Half-Year Accounts and Consolidated Accounts. The comments do not take the place of the directors' report and statement (as required by the Corporations Act) and may be incorporated into the directors' report and statement. For both half yearly and preliminary final reports, if there are no comments in a section, state NIL. If there is insufficient space to comment, attach notes to this report.

Basis of accounts preparation

If this report is a half yearly report, it is a general purpose financial report prepared in accordance with the listing rules and AASB 1029: Half-Year Accounts and Consolidated Accounts. It should be read in conjunction with the last +annual report and any announcements to the market made by the entity during the period. [Delete if preliminary final statement.]

Material factors affecting the revenues and expenses of the economic entity for the current period

-

A description of each event since the end of the current period which has had a material effect and is not related to matters already reported, with financial effect quantified (if possible)

-

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Franking credits available and prospects for paying fully or partly franked dividends for at least the next year

-

Changes in accounting policies since the last annual report are disclosed as follows.
(Disclose changes in the half yearly report in accordance with AASB 1029: Half-Year Accounts and Consolidated Accounts. Disclose changes in the preliminary final report in accordance with AASB 1001: Accounting Policies-Disclosure.)

-

Additional disclosure for trusts

19.1	Number of units held by the management company or responsible entity or their related parties.	-
19.2	A statement of the fees and commissions payable to the management company or responsible entity. Identify: • initial service charges • management fees • other fees	-

Annual meeting

(Preliminary final report only)

The annual meeting will be held as follows:

Place	-
Date	-
Time	-
Approximate date the +annual report will be available	-

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+ See chapter 19 for defined terms.

Compliance statement

1 This report has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 12).

Identify other standards used

2 This report, and the +accounts upon which the report is based (if separate), use the same accounting policies.

3 This report does/does not* *(delete one)* give a true and fair view of the matters disclosed (see note 2).

4 This report is based on +accounts to which one of the following applies.

(Tick one)

- [x] The +accounts have been audited.
- [ ] The +accounts have been subject to review.
- [ ] The +accounts are in the process of being audited or subject to review.
- [ ] The +accounts have *not* yet been audited or reviewed.

5 If the audit report or review by the auditor is not attached, details of any qualifications are attached/will follow immediately they are available* *(delete one)*. *(Half yearly report only - the audit report or review by the auditor must be attached to this report if this report is to satisfy the requirements of the Corporations Act.)*

6 The entity has/does not have* *(delete one)* a formally constituted audit committee.

Sign here: ..... Date: 15/3/02
(Director/Company Secretary)

Print name: PETER LEE

Notes

1. **For announcement to the market** The percentage changes referred to in this section are the percentage changes calculated by comparing the current period's figures with those for the previous corresponding period. Do not show percentage changes if the change is from profit to loss or loss to profit, but still show whether the change was up or down. If changes in accounting policies or procedures have had a material effect on reported figures, do not show either directional or percentage changes in profits. Explain the reason for the omissions in the note at the end of the announcement section.

2. **True and fair view** If this report does not give a true and fair view of a matter (for example, because compliance with an Accounting Standard is required) the entity must attach a note providing additional information and explanations to give a true and fair view.

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+ See chapter 19 for defined terms.

3. **Consolidated profit and loss account**

Item 1.1 The definition of "revenue" and an explanation of "ordinary activities" are set out in *AASB 1004: Revenue*, and *AASB 1018: Statement of financial performance*.

Item 1.6 This item refers to the total tax attributable to the amount shown in item 1.5. Tax includes income tax and capital gains tax (if any) but excludes taxes treated as expenses from ordinary activities (eg, fringe benefits tax).

4. **Income tax** If the amount provided for income tax in this report differs (or would differ but for compensatory items) by more than 15% from the amount of income tax *prima facie* payable on the profit before tax, the entity must explain in a note the major items responsible for the difference and their amounts.

5. **Consolidated balance sheet**

Format The format of the consolidated balance sheet should be followed as closely as possible. However, additional items may be added if greater clarity of exposition will be achieved, provided the disclosure still meets the requirements of *AASB 1029: Half-Year Accounts and Consolidated Accounts*, and *AASB 1040: Statement of Financial Position*. Banking institutions, trusts and financial institutions identified in an ASIC Class Order dated 2 September 1997 may substitute a clear liquidity ranking for the Current/Non-Current classification.

Basis of revaluation If there has been a material revaluation of non-current assets (including investments) since the last +annual report, the entity must describe the basis of revaluation adopted. The description must meet the requirements of *AASB 1010: Accounting for the Revaluation of Non-Current Assets*. If the entity has adopted a procedure of regular revaluation, the basis for which has been disclosed and has not changed, no additional disclosure is required. Trusts should also note paragraph 10 of *AASB 1029* and paragraph 11 of *AASB 1030: Application of Accounting Standards etc.*

6. **Consolidated statement of cash flows** For definitions of "cash" and other terms used in this report see *AASB 1026: Statement of Cash Flows*. Entities should follow the form as closely as possible, but variations are permitted if the directors (in the case of a trust, the management company) believe that this presentation is inappropriate. However, the presentation adopted must meet the requirements of *AASB 1026*. +Mining exploration entities may use the form of cash flow statement in Appendix 5B.

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+ See chapter 19 for defined terms.

7. **Net tangible asset backing** Net tangible assets are determined by deducting from total tangible assets all claims on those assets ranking ahead of the +ordinary securities (ie, all liabilities, preference shares, outside +equity interests etc). +Mining entities are *not* required to state a net tangible asset backing per +ordinary security.

8. **Gain and loss of control over entities** The gain or loss must be disclosed if it has a material effect on the +accounts. Details must include the contribution for each gain or loss that increased or decreased the entity's consolidated profit (loss) from ordinary activities and extraordinary items after tax by more than 5% compared to the previous corresponding period.

9. **Rounding of figures** This report anticipates that the information required is given to the nearest $1,000. However, an entity may report exact figures, if the $A'000 headings are amended. If an entity qualifies under ASIC Class Order 98/0100 dated 10 July 1998, it may report to the nearest million dollars, or to the nearest $100,000, if the $A'000 headings are amended.

10. **Comparative figures** Comparative figures are the unadjusted figures from the previous corresponding period. However, if there is a lack of comparability, a note explaining the position should be attached.

11. **Additional information** An entity may disclose additional information about any matter, and must do so if the information is material to an understanding of the reports. The information may be an expansion of the material contained in this report, or contained in a note attached to the report. The requirement under the listing rules for an entity to complete this report does not prevent the entity issuing reports more frequently. Additional material lodged with the +ASIC under the Corporations Act must also be given to ASX. For example, a directors' report and declaration, if lodged with the +ASIC, must be given to ASX.

12. **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if one) must be complied with.

13. **Corporations Act financial statements** As at 1/7/96, this report may be able to be used by an entity required to comply with the Corporations Act as part of its half-year financial statements if prepared in accordance with Australian Accounting Standards.

14. **Issued and quoted securities** The issue price and amount paid up is not required in items 18.1 and 18.3 for fully paid securities.

15. **Relevant Items** AASB 1018 requires the separate disclosure of specific revenues and expenses which are not extraordinary but which are of a size, nature or incidence that disclosure is *relevant* in explaining the financial performance of the reporting entity. the term "relevance" is defined in AASB 1018. For foreign entities, there are similar requirements in other accounting standards normally accepted by ASX.

16. **$ Dollars** If reporting is not in A$, all references to $A must be changed to the reporting currency. If reporting is not in thousands of dollars, all references to "000" must be changed to the reporting value.

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+ See chapter 19 for defined terms.

18. SEGMENT INFORMATION		31 December 2001 A$ '000	30 June 2001 A$ '000	31 December 2000 A$ '000
INDUSTRY SEGMENTS				
Operating revenue				
Investments	Proceeds on sale of investment	-	10	-
Biotechnology research				
	Interest received from Outside Entities	171	654	376
	Proceeds from research agreements	1,848	3,899	2,143
	Sundry revenue	10	-	-
Other				
	Proceeds on sale of land and buildings	-	120	-
		2,029	4,683	2,519
Operating loss after tax (No income tax payable by segments)				
Investments		-	1,137	(1,365)
Biotechnology research		(3,609)	(4,555)	(1,063)
Other		-	-	(16)
		(3,609)	(3,418)	(2,444)
Total Assets				
Investments		294	294	926
Biotechnology research		5,147	8,010	12,259
Other		-	-	53
		5,441	8,304	13,238

GEOGRAPHICAL SEGMENTS

The Consolidated Entity operates within Australia.

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+ See chapter 19 for defined terms.

Autogen Limited
and its Controlled Entity

ABN 79 000 248 304

REPORT TO SHAREHOLDERS
FOR THE HALF YEAR ENDED
31 DECEMBER 2001

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Autogen Limited
ABN 79 000 248 304

Chairman's Report

March 2002

Dear Shareholder,

Autogen's has continued to progress as a world leader in genomics during the past six months with a number of important milestones being achieved by the Company.

The main highlight for Autogen over the past half-year was the announcement of a key collaboration between Autogen and Sequenom Inc, a major US genetics company. The collaboration will see Sequenom utilize Autogen's eXpress Technology Platform to functionally validate a selection of Sequenom's candidate disease gene targets. This collaboration demonstrates the exceptional capabilities of our research team and recognizes the international standing of our high throughput eXpress Technology Platform.

During the past six months, Autogen's major strategic partner in obesity and diabetes research, Merck-Lipha, increased its stake to 14.99% of the issued shares in Autogen Limited. This increase highlights the confidence that this major pharmaceutical company has in Autogen's world-class research.

Autogen's major research and development program in obesity and diabetes continues to progress well, with an additional 12 gene discoveries submitted for preliminary patent protection for this program over the last six months. This takes the total number of gene discoveries from the obesity and diabetes project to 36 as at December 31, 2001 and cements Autogen's position as one of Australia's leading gene discovery companies.

Another highlight for Autogen over the past six months was the biotechnology forum hosted by Autogen in conjunction with JB Were, Arnold Bloch Leibler and Westpac, featuring the former Prime Minister of Israel Mr Benjamin Netanyahu. Mr Netanyahu was invited to address an audience of key biotechnology analysts and industry participants on the subject of the "impact of biotechnology on Israel's economy and what lessons Australia's biotechnology industry can learn from the success of Israel".

Another major development for Autogen over this period was the identification of a key gene, AGT-203, associated with diabetes. AGT-203 was first discovered in Autogen's animal model of diabetes and obesity, the Israeli Sand Rat. Importantly, Autogen has also identified the same gene in humans and AGT-203 maps precisely to a "hot-spot" for genes linked with type 2 diabetes on human chromosome 3. Our researchers have shown that levels of AGT-203 are reduced in the muscles of obese, diabetic Sand Rats suggesting AGT-203 expression may offer a new lead in understanding the development of diabetes. We are currently conducting further studies in human samples to investigate whether AGT-203 is responsible for the linkage with Type 2 diabetes previously observed in this genomic region. The results of these studies will be considered in conjunction with the gene expression data to determine the likelihood of AGT-203 as a new target for the treatment of Type 2 diabetes. This discovery gives Autogen a major advantage over other research teams around the world who have tried, but so far failed, to identify a candidate gene in this chromosomal region that causes diabetes.

A further exciting development over this period was the announcement by Autogen of an important breakthrough in the search for the cause of Alzheimer's disease, atherosclerosis and arthritis. The Autogen research team has discovered that one of its new key genes, Tanis, codes for the receptor of a key protein believed to play a role in these diseases as well as in diabetes and obesity. Tanis was shown to be a receptor for serum amyloid A (SAA), an acute phase protein linked with a number of disease states. This research result provides an exciting link between a diabetes gene and a protein

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important in inflammation and should open up new ways of studying and treating a number of serious human disease states, particularly cardiovascular disease.

Further strengthening Autogen's research capability was the announcement of the appointment of leading US statistical geneticist, Dr John Blangero, as head of the Company's Human Statistical Genomics Program and as a member of the Scientific Advisory Board. Dr Blangero is from the Department of Genetics at the Southwest Foundation for Biomedical Research in San Antonio. He was the major driving force behind the development of new software with the capability to greatly expand the amount of data that can be handled in genetic studies of families. Dr Blangero's acceptance of both of these Autogen appointments is a clear acknowledgement of Autogen's prominent ranking among the world's biotechnology companies involved in gene discovery and genetics. His analytical expertise will complement Autogen's genetic studies on human DNA and serum samples from isolated populations with a high susceptibility to diabetes and obesity.

Autogen's expansion plans into depression and anxiety received a boost over the past six months with the discovery of the Israeli Sand Rat as a valid new animal model for human depression. Autogen has submitted a patent application for the use of this model for studying genes involved in depression and anxiety and for testing new drugs for depression and anxiety.

On the corporate development front, this period has also seen the decision by Autogen to list its shares on the Singapore Stock Exchange. Autogen has signed a mandate letter with UOB Asia and United Overseas Bank Limited, one of the largest banking and financial services group in Singapore. This letter confirms the appointment of UOB Asia as the lead manager for the Company's proposed listing of Autogen's shares on the SGX-ST and subsequent public offering of its shares to investors in Asia. Autogen's strategic decision to focus on Singapore as a source of capital has resulted from the realisation that over the next decade, Singapore is set to provide a significant amount of capital that will become available to emerging biotechnology companies such as Autogen by both the government of Singapore and the investment community in Singapore.

We would like to thank our shareholders for their continued support and loyalty and we look forward to the forthcoming six months being a period of continued growth for Autogen.

J. I. Gutnick

J I GUTNICK

Chairman & Managing Director

The technical aspects of this report have been reviewed by Professor Greg Collier, Autogen's Chief Operating Officer, who has 20 years experience in the biotechnology research field.

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Autogen Limited
ABN 79 000 248 304

Directors Report

The Directors of Autogen Limited present their report for the half year ended 31 December 2001. This Report should be read in conjunction with the 2001 Annual Report together with announcements made by the Company in accordance with the continuous disclosure obligations arising under the Corporations Act 2001.

1. Directors

The Directors of the Company in office since 1 July 2001 and at the date of this report are:

Mr Joseph I Gutnick FAusIMM FAIM MAICD
Chairman and Managing Director

The Hon. Robert Hawke A.C. BA LLB Blitt(Oxon)
Non-Executive Director

Mr Jean-Noel Treillis
Non-Executive Director

Dr Jeffrey M Jones M.D
Non-Executive Director

Dr David Tyrwhitt PhD(Geology) BSc(Hons) FSEG(USA) FAusIMM CPGeo FIMM(London)
Non-Executive Director

2. Review and result of operation

A review of operations is contained in the Chairman's Report. The financial result of the operations was a loss of $3,608,646 after providing for income tax.

Signed in accordance with a resolution of the Board of Directors at Melbourne this 15th day of March 2002.

J. I. Gutnick

J I Gutnick
Director

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Autogen Limited and its Controlled Entity
Statements of Financial Performance for the Half Year Ended 31 December 2001

	Note	Consolidated 31 December 2001 $	Consolidated 31 December 2000 $
Revenue			
Revenue from ordinary activities			
Research		1,847,606	2,143,064
Interest		171,665	376,306
Other		10,000	-
Total revenue		2,029,271	2,519,370
Expenses			
Costs from ordinary activities			
Research and development expenditure		(3,761,337)	(2,543,942)
Administration		(1,782,959)	(929,077)
Depreciation		(89,886)	(91,226)
Interest expense		(3,735)	(16,411)
Increase in provisions for diminution in the value of investment		-	(1,365,238)
Total costs and expenses		(5,637,917)	(4,945,894)
Operating loss from ordinary activities before income tax		(3,608,646)	(2,426,524)
Discontinued operations			
Loss from operations of discontinued controlled entity		-	(17,950)
Operating loss before income tax		(3,608,646)	(2,444,474)
Income tax attributable to ordinary activities		-	-
Operating loss after income tax		(3,608,646)	(2,444,474)
Basic earnings/(loss) per share (cents)	2	(9.54)	(6.46)

The Statements of Financial Performance are to be read in conjunction with the attached notes to and forming part of these Financial Statements.

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Autogen Limited and its Controlled Entity
Statements of Financial Position as at 31 December 2001

	Note	Consolidated 31 December 2001 $	Consolidated 30 June 2001 $	Consolidated 31 December 2000 $
CURRENT ASSETS				
Cash assets		3,119,232	7,094,869	11,472,984
Prepayments		15,744	6,542	18,914
Receivables		1,436,318	312,661	75,614
TOTAL CURRENT ASSETS		4,571,294	7,414,072	11,567,512
NON-CURRENT ASSETS				
Receivables		252,525	251,479	161,900
Other financial assets		362,368	293,702	926,374
Property, plant and equipment		255,258	345,144	582,293
TOTAL NON-CURRENT ASSETS		870,151	890,325	1,670,567
TOTAL ASSETS		5,441,445	8,304,397	13,238,079
CURRENT LIABILITIES				
Payables		2,013,745	1,075,839	1,760,079
Interest bearing liabilities		111,137	287,670	363,980
TOTAL CURRENT LIABILITIES		2,124,882	1,363,509	2,124,059
NON-CURRENT LIABILITIES				
Interest bearing liabilities		-	15,679	46,137
TOTAL NON-CURRENT LIABILITIES		-	15,679	46,137
TOTAL LIABILITIES		2,124,882	1,379,188	2,170,196
NET ASSETS		3,316,563	6,925,209	11,067,883
EQUITY				
Contributed equity		47,944,756	47,944,756	47,944,266
Reserves		11,666,476	11,666,476	14,836,143
Accumulated losses	3	(56,294,669)	(52,686,023)	(51,712,526)
TOTAL EQUITY		3,316,563	6,925,209	11,067,883

The Statements of Financial Position are to be read in conjunction with the attached notes to and forming part of these Financial Statements.

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Autogen Limited and its Controlled Entity
Statements of Cash Flows for the Half Year Ended 31 December 2001

	Consolidated 31 December 2001 $	Consolidated 31 December 2000 $
CASH FLOWS FROM OPERATING ACTIVITIES		
Proceeds from research revenue	1,932,818	3,023,185
Payments in the course of operations	(6,047,822)	(3,067,282)
Interest received	166,665	375,448
Interest paid	(3,735)	(16,411)
Sundry income	5,000	-
NET CASH (USED IN)/PROVIDED BY OPERATING ACTIVITIES	(3,947,074)	314,940
CASH FLOWS FROM FINANCING ACTIVITIES		
Net proceeds from issue of options	-	12,624
Repayments of borrowings	(28,563)	(52,041)
NET CASH (USED IN) FINANCING ACTIVITIES	(28,563)	(39,417)
Net increase/(decrease) in cash held	(3,975,637)	275,523
Cash at the beginning of the financial period	7,094,869	11,197,461
CASH AT THE END OF THE FINANCIAL PERIOD	3,119,232	11,472,984

The Statements of Cash Flows are to be read in conjunction with the attached notes to and forming part of these Financial Statements.

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1. BASIS OF PREPARATION OF HALF YEAR FINANCIAL STATEMENTS

This half year consolidated Financial Report is a general purpose financial report and has been prepared in accordance with applicable Accounting Standards, Urgent Issues Group Consensus Views, other authoritative pronouncements of the Australian Accounting Standards Board, and the Corporations Act 2001. The Financial Report has been prepared on the historical cost basis and except where stated, does not take into account changing money values or current valuations of non-current assets. Except where stated, the accounting policies are consistent with those of the previous year. For the purpose of preparing the half year Financial Report, the half year has been treated as a discrete reporting period. It is recommended that this half year Financial Report should be read in conjunction with the 2001 Annual Report and any public announcements made by Autogen Limited during the half year in accordance with the continuous disclosure obligations arising under the Corporations Act 2001.

Notes of a type normally included in an Annual Financial Report are not included.

2. EARNINGS/(LOSS) PER SHARE

	Consolidated 31 December 2001 Number	Consolidated 31 December 2000 Number
Weighted average number of ordinary shares on issue used in the calculation of basic earnings/(loss) per share	37,817,171	37,816,891

There are no potential ordinary shares considered to be dilutive

3. ACCUMULATED LOSSES

	Consolidated 31 December 2001 $	Consolidated 30 June 2001 $	Consolidated 31 December 2000 $
Accumulated losses at the beginning of the period	(52,686,023)	(49,268,052)	(49,268,052)
Net loss for the period	(3,608,646)	(3,417,971)	(2,444,474)
Accumulated losses at the end of the period	(56,294,669)	(52,686,023)	(51,712,526)

4. CONTINGENT LIABILITIES

The Company is a party to an action commenced by the liquidator of Cambridge Gulf Investments Pty Ltd ("CGI"). In December 1996, the Company, together with other shareholders of CGI received shares held by CGI in a publicly listed company. The liquidator alleges that the assignment of these shares amounted to conduct prohibited by the law on various grounds. The Company has denied the claims. Soon after it received the shares in December 1996, the Company sold them on the open market. If the Company is unsuccessful in its defence of the claim, the Company's maximum potential liability is likely to be the value for which the shares were sold by the Company on the open market, being $1.5 million and legal costs of the action. In the current financial year, interlocutary proceedings have continued and the matter is awaiting a trial date, likely to be in June 2002.

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5. SEGMENT INFORMATION		2001 $	2000 $
INDUSTRY SEGMENTS			
Operating revenue			
Biotechnology research	Interest received from outside entities	171,665	376,306
	Proceeds from research agreements	1,847,606	2,143,064
	Sundry revenue	10,000	-
		2,029,271	2,519,370
Operating loss after tax (No income tax payable by segments)			
Investments		-	(1,365,238)
Biotechnology research		(3,608,646)	(1,063,003)
Other		-	(16,233)
		(3,608,646)	(2,444,474)
Total Assets			
Investments		293,702	926,374
Biotechnology research		5,147,743	12,258,512
Other		-	53,193
		5,441,445	13,238,079

GEOGRAPHICAL SEGMENTS

The Consolidated Entity operates within Australia.

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Autogen Limited and its Controlled Entity
Directors' Declaration

In the opinion of the Directors of Autogen Limited

(a) The accompanying financial statements and notes are in accordance with the Corporations Act 2001, including:

(i) giving a true and fair view of the financial position of the Consolidated Entity as at 31 December 2001 and of its performance, as represented by the results of its operations and its cash flows for the half year ended on that date: and

(ii) complying with Accounting Standards and the Corporations Regulations 2001.

(b) There are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

Signed in accordance with a Resolution of the Board of Directors at Melbourne this 15th day of March 2002.

J.I. Gutnick

J.I. Gutnick
Director

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PKF

Chartered Accountants
& Business Advisers

Level 11, CGU Tower
485 La Trobe Street
Melbourne 3000
GPO Box 5099BB
Melbourne 3001

Tel: (03) 9602 1611
Fax: (03) 9602 3870

www.pkf.com.au

INDEPENDENT AUDIT REPORT TO THE MEMBERS OF AUTOGEN LIMITED

Scope

We have audited the financial report of Autogen Limited for the half-year ended 31 December 2001. The financial report includes the consolidated financial statements of the consolidated entity comprising the company and the entities it controlled at half-year end or from time to time during the half-year. The company's directors are responsible for the financial report. We have conducted an independent audit of this financial report in order to express an opinion on it to the members of the company.

Our audit has been conducted in accordance with Australian Auditing Standards to provide reasonable assurance whether the financial report is free of material misstatement. Our procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial report, and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion whether, in all material respects, the financial report is presented fairly in accordance with Accounting Standard AASB 1029: Interim Financial Reporting and other mandatory professional reporting requirements and statutory requirements in Australia so as to present a view which is consistent with our understanding of the consolidated entity's financial position, and performance as represented by the results of its operations and its cash flows.

The audit opinion expressed in this report has been formed on the above basis.

Audit Opinion

In our opinion, the financial report of Autogen Limited is in accordance with:

(a) the Corporations Act 2001, including:

(i) giving a true and fair view of the consolidated entity's financial position as at 31 December 2001 and of its performance for the half-year ended on that date; and

(ii) complying with Accounting Standard AASB 1029: Interim Financial Reporting and the Corporations Regulations 2001; and

(b) other mandatory professional reporting requirements.

PKF

PKF
Chartered Accountants

15 March, 2002
Melbourne

Michael Phillips

M J Phillips
Partner

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Autogen Limited

Autogen Limited
ABN 79 000 248 304

Registered Office:
210 Kings Way, South Melbourne
Victoria 3205 Australia
Telephone: +613 9234 1188
Facsimile: +613 9234 1198
Email: agt@axisc.com.au

AGT: 432

22 February 2002

Manager Announcements
Company Announcements Office
Australian Stock Exchange Limited
4th Floor
20 Bridge Street
Sydney NSW 2000

Dear Sir

Summary of Announcement

Autogen files a patent application in the USA for five new genes

Details of Announcement

Melbourne-based biotechnology Company Autogen Limited [ASX: AGT] today announced the filing of a provisional patent application in the USA for five new genes discovered in the Company's diabetes and obesity program. This brings to 41 the number of genes that the Company has placed under patent protection since the beginning of the gene discovery program.

The new gene discoveries have the potential to be used to develop novel therapies for diabetes and obesity - areas that represent substantial drug markets worldwide. The discoveries were made using Autogen's Israeli Sand Rat Model for human obesity and diabetes and the Company's eXpress Technology Platform facilities. The diabetes and obesity program is a collaboration with Merck-Lipha, a German Pharmaceutical Company.

Professor Greg Collier, Autogen's Chief Operating Officer, said the Company was thrilled to have made the new patent applications, which expand the Company's target portfolio. "The new applications have confirmed and strengthened our position as a world leader in this area of research," he said. "To have close to 50 genes under patent protection puts us in a tremendously strong position to move forward in this area. We expect to be filing more patents this year".

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"It is important to realise that these genes are the pick of the crop. Autogen has discovered thousands of differentially-expressed genes, but narrowed that number down to 41 which have the right properties to qualify as genuine diabetes and obesity genes. All these genes have the potential to be developed as drug targets."

Autogen Limited specialises in the use of gene discovery approaches to identify novel therapeutic targets for drug development and to secure pharmaceutical alliances. Autogen has various research projects including programs in diabetes and obesity, and depression and anxiety. These programs are supported by the Company's in-house eXpress Technology Platform, which provides a high throughput capability for identifying new genes and their proteins and validating their role in diseased states. Autogen's diabetes and obesity research has backing from the major European pharmaceutical group Merck-Lipha which has taken a 15% shareholding and committed a minimum of $A25 million funding to Autogen's research programs up to 2005. The Company has made two important milestone discoveries: the *Beacon* gene for obesity and the *Tanis* gene for diabetes. The Company now has 41 diabetes- and obesity-related genes in various stages of patent protection.

Yours faithfully

J. I. Gutnick

J I GUTNICK
Chairman & Managing Director

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Rule 3.19A.1

Appendix 3X

Initial Director's Interest Notice

Information or documents not available now must be given to ASX as soon as available. Information and documents given to ASX become ASX's property and may be made public.

Introduced 30/9/2001.

Name of entity	Autogen Limited
ABN	79 000 248 304

We (the entity) give ASX the following information under listing rule 3.19A.1 and as agent for the director for the purposes of section 205G of the Corporations Act.

Name of Director	Jeffrey Jonas
Date of appointment	19/12/2000

Part 1 - Director's relevant interests in securities of which the director is the registered holder
In the case of a trust, this includes interests in the trust made available by the responsible entity of the trust

Number & class of securities
NIL

Part 2 – Director's relevant interests in securities of which the director is not the registered holder
In the case of a trust, this includes interests in the trust made available by the responsible entity of the trust

Name of holder & nature of interest Note: Provide details of the circumstances giving rise to the relevant interest.	Number & class of Securities
NIL	

+ See chapter 19 for defined terms.

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Part 3 – Director's interests in contracts

Detail of contract	NIL
Nature of interest	
Name of registered holder (if issued securities)	
No. and class of securities to which interest relates	

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+ See chapter 19 for defined terms.

Rule 3.19A.1

Appendix 3X

Initial Director's Interest Notice

Information or documents not available now must be given to ASX as soon as available. Information and documents given to ASX become ASX's property and may be made public.

Introduced 30/9/2001.

Name of entity	Autogen Limited
ABN	79 000 248 304

We (the entity) give ASX the following information under listing rule 3.19A.1 and as agent for the director for the purposes of section 205G of the Corporations Act.

Name of Director	Jean-Noel Treilles
Date of appointment	08/02/2000

Part 1 - Director's relevant interests in securities of which the director is the registered holder
In the case of a trust, this includes interests in the trust made available by the responsible entity of the trust

Number & class of securities
NIL

Part 2 – Director's relevant interests in securities of which the director is not the registered holder
In the case of a trust, this includes interests in the trust made available by the responsible entity of the trust

Name of holder & nature of interest Note: Provide details of the circumstances giving rise to the relevant interest.	Number & class of Securities
NIL	

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+ See chapter 19 for defined terms.

Part 3 – Director's interests in contracts

Detail of contract	NIL
Nature of interest	
Name of registered holder (if issued securities)	
No. and class of securities to which interest relates	

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+ See chapter 19 for defined terms.

Rule 3.19A.1

Appendix 3X

Initial Director's Interest Notice

Information or documents not available now must be given to ASX as soon as available. Information and documents given to ASX become ASX's property and may be made public.

Introduced 30/9/2001.

Name of entity	Autogen Limited
ABN	79 000 248 304

We (the entity) give ASX the following information under listing rule 3.19A.1 and as agent for the director for the purposes of section 205G of the Corporations Act.

Name of Director	Robert James Lee Hawke
Date of appointment	11/02/1999

Part 1 - Director's relevant interests in securities of which the director is the registered holder
In the case of a trust, this includes interests in the trust made available by the responsible entity of the trust

Number & class of securities
None

Part 2 – Director's relevant interests in securities of which the director is not the registered holder
In the case of a trust, this includes interests in the trust made available by the responsible entity of the trust

Name of holder & nature of interest Note: Provide details of the circumstances giving rise to the relevant interest.	Number & class of Securities
None	

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+ See chapter 19 for defined terms.

Part 3 – Director's interests in contracts

Detail of contract	None
Nature of interest	
Name of registered holder (if issued securities)	
No. and class of securities to which interest relates	

633

+ See chapter 19 for defined terms.

Rule 3.19A.1

Appendix 3X

Initial Director's Interest Notice

Information or documents not available now must be given to ASX as soon as available. Information and documents given to ASX become ASX's property and may be made public.

Introduced 30/9/2001.

Name of entity	Autogen Limited
ABN	79 000 248 304

We (the entity) give ASX the following information under listing rule 3.19A.1 and as agent for the director for the purposes of section 205G of the Corporations Act.

Name of Director	Joseph Isaac Gutnick
Date of appointment	03/07/1987

Part 1 - Director's relevant interests in securities of which the director is the registered holder
In the case of a trust, this includes interests in the trust made available by the responsible entity of the trust

Number & class of securities
3,920 Fully Paid Ordinary Shares 200,000 Employee Options - Expiring 31/3/2010 Note : Joseph Gutnick is a Director & Shareholder of Edensor Nominees Pty Ltd which is a Substantial Share & Option holder of the company. Edensor Nominees Pty Ltd is the Trustee of the Gutnick Family Trust.

Part 2 – Director's relevant interests in securities of which the director is not the registered holder
In the case of a trust, this includes interests in the trust made available by the responsible entity of the trust

Name of holder & nature of interest Note: Provide details of the circumstances giving rise to the relevant interest.	Number & class of Securities
NIL	

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+ See chapter 19 for defined terms.

Part 3 – Director's interests in contracts

Detail of contract	NIL
Nature of interest	
Name of registered holder (if issued securities)	
No. and class of securities to which interest relates	

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+ See chapter 19 for defined terms.

Rule 3.19A.1

Appendix 3X

Initial Director's Interest Notice

Information or documents not available now must be given to ASX as soon as available. Information and documents given to ASX become ASX's property and may be made public.

Introduced 30/9/2001.

Name of entity	Autogen Limited
ABN	79 000 248 304

We (the entity) give ASX the following information under listing rule 3.19A.1 and as agent for the director for the purposes of section 205G of the Corporations Act.

Name of Director	David Stuart Tyrwhitt
Date of appointment	14/11/1996

Part 1 - Director's relevant interests in securities of which the director is the registered holder
In the case of a trust, this includes interests in the trust made available by the responsible entity of the trust

Number & class of securities
NIL

Part 2 – Director's relevant interests in securities of which the director is not the registered holder
In the case of a trust, this includes interests in the trust made available by the responsible entity of the trust

Name of holder & nature of interest Note: Provide details of the circumstances giving rise to the relevant interest.	Number & class of Securities
NIL	

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+ See chapter 19 for defined terms.

Part 3 – Director's interests in contracts

Detail of contract	NIL
Nature of interest	
Name of registered holder (if issued securities)	
No. and class of securities to which interest relates	

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+ See chapter 19 for defined terms.

Autogen Limited

Autogen Limited
ABN 79 000 248 304

Registered Office:
210 Kings Way, South Melbourne
Victoria 3205 Australia
Telephone: +613 9234 1188
Facsimile: +613 9234 1198
Email: agt@axisc.com.au

20 December 2001

Manager Announcements
Company Announcements Office
Australian Stock Exchange Limited
4th Floor
20 Bridge Street
Sydney NSW 2000

Dear Sir

Summary of Announcement

Autogen Limited ("Autogen") and SEQUENOM, Inc ("SEQUENOM") a major US genetics company, form collaboration.

Details of Announcement

Autogen,(ASX:AGT) an Australian biotechnology company and SEQUENOM (NASDAQ:SQNM) a major US genetics company, today announced a collaboration to utilize Autogen's eXpress technology platform to functionally validate a selection of SEQUENOM's candidate disease gene targets.

Chairman and Managing Director of Autogen, Mr Joseph Gutnick, said "This collaboration demonstrates the exceptional capabilities of our research team and recognizes the international standing of our high throughput eXpress technology platform. This re-affirms Autogen's place as one of Australia's leading genomics companies."

SEQUENOM is a leader in discovery genetics. SEQUENOM is commercializing its MassARRAY technology through the sale of products and services and is using MassARRAY in combination with its clinical samples and strategic approach to identify the genes associated with today's most prevalent diseases. By the nature of SEQUENOM's novel population genetics program, SEQUENOM is systematically identifying potential disease-related genes that impact the health of a significant portion of the human population. By focusing on genes with a broad population impact, SEQUENOM expects to play an important role in bringing new diagnostic and therapeutic products to the marketplace with significant market potential.

Autogen is a leading gene and protein discovery company that uses its unique animal model, access to human populations and its eXpress technology platform to produce validated gene targets.

Professor Greg Collier, Autogen's Chief Operating Officer said, "SEQUENOM is one of the largest genetics companies in the US with a global reach of customers and we are very pleased that they have selected us to validate their candidate gene targets. "

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For more information on Autogen, please visit the Company's Web site located at www.autogenlimited.com.au, or contact Professor Greg Collier, Chief Operating Officer on 03 9234 1188 or 0419 897 501.

The technical aspects of this report have been reviewed by Professor Greg Collier who has approximately 20 years of experience in the area of medical research.

Yours faithfully

J I GUTNICK
Chairman & Managing Director

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Autogen Limited

ABN 79 000 248 304

Registered Office:
210 Kings Way, South Melbourne
Victoria 3205 Australia
Telephone: +613 9234 1188
Facsimile: +613 9234 1198

AGT: 432F

19 December 2001

Manager Announcements
Company Announcements Office
Australian Stock Exchange Limited
10th Floor
20 Bond St
SYDNEY NSW 2000

Dear Sir

The Directors advise that the person responsible for communication with ASX in relation to listing rule matters is the Company Secretary, or in his absence, the Company Secretarial Officer.

Yours faithfully

PETER LEE
General Manager Corporate
& Company Secretary

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Autogen Limited

Autogen Limited
ABN 79 000 248 304

Principal Office:
210 Kings Way, South Melbourne
Victoria 3205 Australia
Telephone: +613 9234 1188
Facsimile: +613 9234 1198
Email: agt@axisc.com.au

Ref: AGT 432

5 December 2001

Manager Announcements
Company Announcements Office
Australian Stock Exchange Limited
4th Floor
20 Bridge Street
Sydney NSW 2000

Dear Sir

Summary of Announcement

Autogen Limited ("Autogen") announces the discovery of a new animal model of Human Depression.

Announcement

Autogen, a Melbourne based biotechnology company, has discovered a new animal model for human depression, the Israeli Sand Rat. Autogen has submitted a patent application for the use of this model for studying genes involved in depression and anxiety and for testing new drugs for depression and anxiety.

Stress related diseases are increasingly common in today's society and the World Health Organisation (WHO) has warned that depression will be second only to heart diseases as a cause of disability world wide by 2020. Anti-depressant drugs are the highest selling drug class in the world with sales expected to reach US$15 billion by 2002. Consequently, new anti-depressant drugs have the potential to generate substantial revenues for the companies involved in their discovery and development.

The identification of new strategies for the prevention and/or treatment of depression has been hampered by a lack of appropriate models in which to test potential new drugs. Currently used animal models rely on chronic stress or surgical paradigms to induce depression like illness. Such models have numerous problems and do not closely resemble depression in humans.

Autogen researchers have found that the Israeli Sand Rat shows signs of depression after isolation from siblings. Of particular interest is the observation that the rats exhibit a range of responses to social isolation that closely resembles that of human populations. Some of the rats show no disturbance in behaviour after isolation, while others seem unable to cope and

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rapidly decline into depression as evidenced by behavioural modifications and a loss of appetite and body weight. These types of responses make them ideal for studying gene expression during the development of the disease. In addition, this animal model is invaluable for testing the efficacy of new antidepressant drugs.

"We are very excited to have discovered such a relevant model for depression" said Professor Greg Collier, Chief Operating Officer. "This discovery gives Autogen a major advantage in both the discovery of new genes or proteins involved in depression, and in the testing and validation of potential new drugs in pharmaceutical pipelines for the treatment of this disease".

Mr Joseph Gutnick, Chairman and Managing Director of Autogen, says "This is an important new step for Autogen into the largest pharmaceutical market in the world. This new animal model coupled with our technology platform for validating new drug targets sets us above the rest of the competition looking for new gene targets for antidepressant drugs. We have already had interest from large pharmaceutical companies interested in collaborating with us for the use of our animal model".

Autogen is an Australian biotechnology company focused on the research and discovery of gene targets for new therapies and diagnostics.

For more information on Autogen, please visit the Company's Web site located at www.autogenlimited.com.au, or contact Professor Greg Collier, Chief Operating Officer on 03 9234 1188 or 0419 897 501.

The technical aspects of this report have been reviewed by Professor Greg Collier who has approximately 20 years experience in the area of medical research.

Yours faithfully

J I Gutnick

J I GUTNICK
Chairman & Managing Director

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Autogen Limited ABN 79 000 248 304

Registered Office:
210 Kings Way, South Melbourne
Victoria 3205 Australia
Telephone: +613 9234 1188
Facsimile: +613 9234 1198
Email: agt@awi.com.au

Ref: AGT 432

29 November 2001

Manager Announcements
Company Announcements Office
Australian Stock Exchange Limited
4th Floor
20 Bridge Street
Sydney NSW 2000

Dear Sir

Summary of Announcement

Result of resolutions put to members at the Annual General Meeting held today.

Details of Announcement

In accordance with ASX Listing Rules the Company advises that the resolutions put to shareholders at today's Annual General Meeting were passed on a show of hands.

In accordance with S251AA(2) of the Corporations Act 2001, the voting preferences of shareholders who lodged proxies were:

Resolution 2(a)

For	17,180,562
Against	9,131
Open	17,490
Abstain	2,000

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Resolution 2(b)

For	17,181,743
Against	7,950
Open	17,490
Abstain	2,000

Resolution 3

For	17,174,997
Against	9,580
Open	17,490
Abstain	7,116

Yours faithfully



PETER LEE
General Manager Corporate
& Company Secretary

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Autogen Limited

Autogen Limited
ABN 79 000 248 304

Principal Office:
210 Kings Way, South Melbourne
Victoria 3205 Australia
Telephone: +613 9234 1188
Facsimile: +613 9234 1198
Email: agt@axisc.com.au

28 November 2001

Manager Announcements
Company Announcements Office
Australian Stock Exchange Limited
10th Floor
20 Bond St
SYDNEY NSW 2000

Dear Sir

Summary of Announcement

Autogen discovers a further six new genes in its diabetes and obesity program

Announcement

Autogen is pleased to announce that it has filed a provisional patent in the USA for six new genes in its obesity and diabetes program, further confirming the success of the Company's technology platform. This filing takes to 36 the number of genes that Autogen has placed under patent protection from its diabetes and obesity gene discovery program.

"We are extremely excited about these latest discoveries," said the Company's Chief Operating Officer, Professor Greg Collier. "This once again validates our capacity to discover genes using our unique animal model and technology platform".

Chairman & Managing Director of Autogen, Mr Joseph Gutnick, said, "once again, Autogen is able to show its shareholders that its unique technology platform is working and we are achieving results. This is why we have recently been successful in attracting a number of institutional investors to our register and why we are widely recognized as one of Australia's leading genomics companies".

These latest discoveries have been achieved under Autogen's collaboration with Merck-Lipha, Autogen's partner in its diabetes and obesity program and significant shareholder
(14.99%). Under this collaboration, Merck-Lipha has committed a minimum of $25 million of funding towards the development of Autogen's diabetes and obesity program.

Professor Paul Zimmet, internationally respected diabetes specialist and Chairman of the Company's Scientific Advisory Board, said "the Australian public in general and the Australian scientific community in particular, should be enormously proud that home grown science emerging from Autogen is able

to achieve these fantastic results. We must not forget that if these gene discoveries are validated and end up as drug targets, then we will have worldwide blockbuster drugs emerging from Autogen".

For more information on Autogen, visit the Company's website at www.autogenlimited.com.au or contact Mr Joseph Gutnick on 03 9234 1444, or Professor Greg Collier on 0419 897 501 or 03 9234 1332.

The technical aspects of this report have been reviewed by Professor Greg Collier who has approximately 20 years of experience in the area of medical research.

Yours faithfully

J. I. Gutnick

J I GUTNICK
Chairman & Managing Director

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Autogen Limited ABN 79 000 248 304

Registered Office:
210 Kings Way, South Melbourne
Victoria 3205 Australia
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Facsimile: +613 9234 1198
Email: agt@awi.com.au

REF: AGT 432

13 November 2001

Manager Announcements
Company Announcements Office
Australian Stock Exchange Limited
4th Floor
20 Bridge Street
Sydney NSW 2000

Dear Sir

Summary of Announcement

Autogen signs a mandate letter with UOB Asia Limited ("UOB Asia") to manage the listing of Autogen shares on the Singapore Exchange Securities Trading Limited ("SGX-ST").

Details of Announcement

Autogen Limited (Australian Stock Exchange: AGT) is pleased to announce that it has signed a mandate letter with UOB Asia and United Overseas Bank Limited, one of the largest banking and financial services group in Singapore, which confirms the appointment of UOB Asia as the lead manager for the Company's proposed listing of Autogen's shares on the SGX-ST and subsequent public offering of its shares to investors in Asia.

Mr Joseph Gutnick, Chairman and Managing Director of Autogen said that " Autogen's strategic decision to focus on Singapore as a source of capital has resulted from the realisation that over the next decade, Singapore is set to provide a significant amount of capital that will become available to emerging biotechnology companies such as Autogen by both the government of Singapore and the investment community in Singapore. As Singapore aims to become a world leading hub for biotechnology, Autogen is pleased that UOB has chosen Autogen to be its first ever biotechnology company that it lists on the Singapore Exchange".

Melbourne based Autogen is a leading genomics biotechnology company focused on the research and discovery of gene targets for new therapies and diagnostics and has emerged as one of Australia's leading gene discovery companies.

For more information on Autogen, please visit the Company's Web site located at www.autogenlimited.com.au, or contact Mr Joseph Gutnick, Chairman and Managing Director on 03 9234 1444 or Professor Greg Collier, Chief Operating Officer on 03 9234 1188 or 0419 897 501.

Yours faithfully

J.I. Gutnick

J I GUTNICK
Chairman & Managing Director

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Autogen Limited ABN 79 000 248 304

Registered Office:
210 Kings Way, South Melbourne
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Telephone: +613 9234 1188
Facsimile: +613 9234 1198
Email: agt@awi.com.au

AGT 432

25 October 2001

Manager Announcements
Company Announcements Office
Australian Stock Exchange Limited
4th Floor
20 Bridge Street
Sydney NSW 2000

Dear Sir

Summary of Announcement

Lodgement of 2001 Annual Report and Notice of Meeting

Details of Announcement

Please find attached a copy of the following documents:

- 2001 Annual Report
- Notice of Meeting for Annual General Meeting

Yours faithfully

PETER LEE
General Manager Corporate
& Company Secretary

m:documents/autogen/autogen limited/corporate/announcements/agt lodgement of 2001 annual report

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AUTOGEN LIMITED

A.B.N. 79 000 248 304

NOTICE OF ANNUAL GENERAL MEETING

NOTICE IS HEREBY GIVEN that the Annual General Meeting of Autogen Limited (the "Company") will be held at the Kimberley Gardens Hotel, 441 Inkerman Street, St Kilda East. Victoria. 3183 Australia on Thursday 29 November 2001, commencing at 10.30 a.m. for the following purposes:

ORDINARY BUSINESS

1. **To consider the Financial Statements and Reports**

   "THAT the Financial Statements of the Company and the Reports of the Directors and Auditor for the year ended 30 June 2001 be considered."

2. **Election of Directors**

   (a) To re-elect Dr David Stuart Tyrwhitt as a Director

   "THAT Dr David Stuart Tyrwhitt, retires and being eligible, offers himself for re-election."

   (b) To elect Dr Jeffrey Jonas as a Director

   "THAT Dr Jeffrey Jonas, appointed as a Director since the last Annual General Meeting, retires in accordance with the Company's Constitution and being eligible, offers himself for election."

3. **Approval to Issue Ordinary Shares**

   "THAT approval be given to the Board of Directors to issue up to 20 million ordinary shares in the capital of the Company"

Voting Exclusion Statement

The Company will disregard any votes cast in relation to resolution 3 by a person who may participate in the proposed issue and a person who might obtain a benefit, except a benefit solely in the capacity of a holder of ordinary securities if the resolution is passed.

However, the Company need not disregard a vote if:

- It is cast by a person as proxy for a person who is entitled to vote, in accordance with the directions on the proxy form; or
- It is cast by the person chairing the meeting as proxy for a person who is entitled to vote, in accordance with the direction on the proxy form to vote as the proxy decides.

By Order of the Board

Dated this 24th day of October 2001.

P.J. Lee
General Manager Corporate
& Company Secretary

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AUTOGEN LIMITED
A.B.N. 79 000 248 304

Explanatory Statement for Annual General Meeting

Resolution 2 **Election of Directors**

(a) Dr D S Tyrwhitt

In accordance with the Company's Constitution, one third of the Directors (other than the Managing Director) are required to retire by rotation and are entitled to offer themselves for re-election. It is Dr Tyrwhitt's turn to retire by rotation at this year's annual general meeting. Dr Tyrwhitt is offering himself for re-election.

Dr Tyrwhitt has been a Director of the Company since 1996. Dr Tyrwhitt has in excess of 40 years general business experience including a number of years as Chief Executive Officer of the Australian subsidiary of a major US based company.

(b) Dr J M Jonas

Dr Jonas was appointed a Non-Executive Director of the Company in December 2000. In accordance with the Company's Constitution a person appointed as a Director during the year is required to retire at the next annual general meeting and is entitled to offer himself for re-election. As Dr Jonas was appointed during the year, he must retire as a Director at this year's annual general meeting. Dr Jonas is offering himself for re-election.

Dr Jonas has extensive experience in pharmaceutical development, including in the areas of biotechnology, pharmacoeconomics, psychopharmacology, as well as the acquisition and development of new cancer, antibiotic and immunological drugs. He has held a number of key appointments in the USA over the past 10 years, is the author of a book on Prozac™ and over 100 scientific articles, abstracts and book chapters.

Resolution 3 **Issue of up to 20 million Ordinary Shares**

The Company has been positioning itself to register in the USA, undertake a capital raising and list on Nasdaq in the USA. Documentation is currently being finalised and it is anticipated that the capital raising will be completed in the next few months.

ASX Listing Rules only allow the issue of shares up to 15% of the existing number of issued shares, unless shareholders in general meeting have approved such issue. The proposed issue of up to 20 million ordinary shares is in excess of 15% of the existing number of issued shares and therefore requires shareholder approval.

The Directors provide the following information in respect to the proposed issue of up to 20 million ordinary shares

- the shares will be issued no later than three months (or a later date if ASX waive the relevant listing rule) from the date of passing of this resolution
- the minimum issue price will be 80% of the average market price on ASX for the five prior days on which sales were recorded before the issue.
- the shares will rank pari passu with ordinary shares on issue at the time of issue of the new shares.
- the funds will be used to advance the Company's medical research program and for working capital.
- it is anticipated that the allotment of shares will occur in one tranche.
- the identity of the allottees is not yet known and the Company proposes to use an underwriter in the USA to assist with the identification of proposed allottees.

Proxy Form

All correspondence to:
Computershare Investor Services Pty Limited
GPO Box 242E Melbourne
Victoria 3001 Australia
Enquiries (within Australia) 1300 850 505
(outside Australia) 61 3 9615 5970
Facsimile 61 3 9473 2555
www.computershare.com

Autogen Limited
ABN 79 000 248 304

Mark this box with an 'X' if you have made any changes to your name or address details (see reverse) [X]

Securityholder Reference Number (SRN)

AGT

Appointment of Proxy

I/We being a member/s of Autogen Limited hereby appoint

[X] the Chairman of the Meeting (mark with an 'X') **OR** [ ] Write here the name of the person you are appointing if this person **is someone other than** the Chairman of the Meeting.

or if ng the person named, or if no person is named, the Chairman of the Meeting, as my/our proxy and to vote in accordance with the following directions (or if no directions have been given, as the p ees fit) at the Annual General Meeting of Autogen Limited to be held at the Kimberley Gardens Hotel, 441 Inkerman Street, St Kilda East on Thursday, 29 November 2001 at 10:30am and at any adjournment of that meeting.

Voting directions to your proxy - please mark [X] to indicate your directions

		For	Against	Abstain*
Item a.	Re-election of Dr David Stuart Tyrwhitt as a Director			
Item b.	Election of Dr Jeffrey Jonas as a Director			
Item c.	Issue of up to 20 million ordinary shares			

*If you mark the abstain box for a particular item, you are directing your proxy not to vote on that item.

Appointing a second Proxy

I/We wish to appoint a second proxy

[X] Mark with an 'X' if you wish to appoint a second proxy. **AND** [ ]% **OR** [ ] State the percentage of your voting rights or the number of securities for this Proxy Form.

Authorised signature/s

This section ***must*** be signed in accordance with the instructions overleaf to enable your directions to be implemented.

Individual or Securityholder 1	Securityholder 2	Securityholder 3
Individual/Sole Director and Sole Company Secretary	Director	Director/Company Secretary

Contact Name _____ Contact Daytime Telephone _____ Date / /

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How to complete the Proxy Form

1 Your Name and Address

This is your name and address as it appears on the share register of Autogen Limited. If this information is incorrect, please mark the box and make the correction on the form. Securityholders sponsored by a broker should advise their broker of any changes. **Please note, you cannot change ownership of your securities using this form.**

2 Appointment of a Proxy

If you wish to appoint the Chairman of the Meeting as your proxy, mark the box. If the person you wish to appoint as your proxy is someone other than the Chairman of the Meeting please write the name of that person. If you leave this section blank, or your named proxy does not attend the meeting, the Chairman of the Meeting will be your proxy and vote on your behalf. A proxy need not be a securityholder of Autogen Limited.

3 Votes on Items of Business

You may direct your proxy how to vote by placing a mark in one of the three boxes opposite each item of business. All your securities will be voted in accordance with such a direction unless you indicate only a portion of voting rights are to be voted on any item by inserting the percentage or number of securities you wish to vote in the appropriate box or boxes. If you do not mark any of the boxes on a given item, your proxy will vote as he or she chooses. If you mark more than one box on an item your vote on that item will be invalid.

4 Appointment of a Second Proxy

If you wish to appoint a second proxy, an additional Proxy Form may be obtained by telephoning the share register of Autogen Limited or you may copy this form.

To appoint a second proxy you must:

(a) indicate that you wish to appoint a second proxy by marking the box.

(b) on each of the first Proxy Form and the second Proxy Form state the percentage of your voting rights or number of securities applicable to that form.

(c) return both forms together in the same envelope.

5 Authorised Signature(s)

You must sign this form as follows in the spaces provided:

Joint Holding:	where the holding is in more than one name all of the holders must sign.
Power of Attorney:	if signed under a Power of Attorney, you must have already lodged it with the registry, or alternatively, attach a certified photocopy of the Power of Attorney to this Proxy Form when you return it.
Companies:	a Director can sign jointly with another Director or a Company Secretary. A sole Director who is also a sole Company Secret can also sign. A sole Director of a corporation without a Company Secretary can sign, pursuant to s204A of the Corporations Act 2001. Please indicate the office held by signing in the appropriate space.

If a representative of the corporation is to attend the meeting the appropriate "Certificate of Appointment of Corporate Representative" should be produced prior to admission. A form of the certificate may be obtained from the share register of Autogen Limited.

Lodgement of a Proxy

This Proxy Form (and any Power of Attorney under which it is signed) must be received not later than 48 hours before the commencement of the meeting. Any Proxy Form received after that time will not be valid for the scheduled meeting.

Documents may be lodged using the reply paid envelope or:

- by posting, delivery or facsimile to Autogen Limited share registry at the address opposite, or
- by delivery or facsimile to the Registered Office of Autogen Limited being
  210 Kingsway
  SOUTH MELBOURNE VIC 3205
  Facsimile (03) 9234 1255

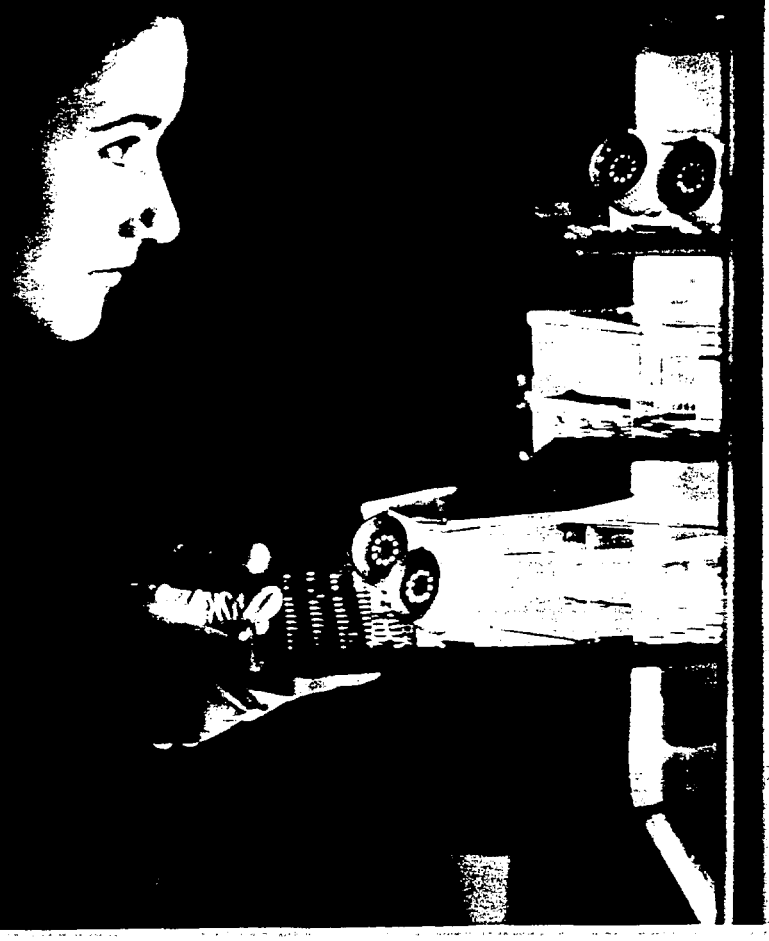
Autogen Limited share registry
Computershare Investor Services Pty Limited
GPO Box 242E
Melbourne Victoria 3001
Australia
Facsimile (03) 9473 2555

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www.autogenlimited.com.au

ANNUAL REPORT 2001



AUTOGEN ANNUAL REPORT 2001

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Autogen

FROM THE CHAIRMAN

Dear Shareholder

When I began my involvement in Autogen some 3 years ago, I could not have foreseen that Autogen would emerge so quickly as one of Australia's leading genomics biotechnology companies.

As we look back on the past few years, it gives me and my fellow Autogen directors, the Scientific Advisory Board, scientists and staff an enormous amount of pride to see how successful Autogen has become in such a short period of time.

But we have just begun, and as you will see from the annual report, Autogen has in place a sound and commercially viable plan for transforming our key scientific assets into discoveries to form the basis for new drug discoveries.

Our scientific team under the direction of Professor Greg Collier, Autogen's Chief Operating Officer, has now discovered 34 novel genes in our major research and development program in obesity and diabetes. Autogen's partner in this program, the European pharmaceutical company Merck-Lipha, is clearly satisfied with our achievements, as evidenced by their recent increase in shareholding to 14.99%.

The two leading candidate genes in this obesity and diabetes program, the Beacon gene for obesity and the Tanis gene for diabetes, continue to create an enormous amount of excitement amongst researchers worldwide. This excitement stems from the realisation that potential new applications for these genes are emerging outside the areas of obesity and diabetes. For example, Autogen's Tanis gene is now emerging as a potential receptor that may be useful in the fight against Alzheimer's, arthritis and cardiovascular disease.

Autogen's state-of-the-art gene and protein discovery technology platform, "eXpress", is a vital tool in our search for genes and their applications. Autogen is now positioning itself to subcontract "eXpress" to other pharmaceutical and biotechnology companies as a means of discovering and validating their own targets. This move will open up a new area of revenue for Autogen.

Autogen is expanding its gene discovery program to include anxiety and depression. By utilising our exclusive access to an excellent animal model, Autogen aims to progress this program



rapidly. It will form the basis of a collaboration with another major pharmaceutical company, similar to that between Autogen and Merck-Lipha for obesity and diabetes.

Once again we pay tribute to our internationally respected Scientific Advisory Board, headed by Professor Paul Zimmet AO, which now consists of Professor Ian Gust AO, Professor Robert Williamson FRS, and Dr Ian Mackay AM. A recent addition to this advisory board is the leading US statistical geneticist, Dr John Blangero, from the Department of Genetics at Southwest Foundation for Biomedical Research in San Antonio, who will also head the Company's Human Statistical Genomics Program. This appointment of Dr Blangero as an exclusive consultant and scientific advisor is a coup for Autogen, as he certainly ranks as one of the best-recognised world experts in statistical genetics.

Recognising the long-term potential of an investment in Autogen, a number of international investment institutions have become substantial shareholders. We are confident that investors in Autogen are positioning themselves to be a part of a world-class effort to discover treatments for some of the world's prevalent diseases, for which they will be greatly rewarded.

The world financial markets may have had a shaky year, but a company such as Autogen that is able to tap into and capitalise on the information contained within human genome will weather any financial storm that lies ahead and provide successful returns for shareholders.

Autogen aims to achieve this by ensuring our management remains focussed and continues to achieve its milestones.

We look forward to rewarding our loyal shareholders with continued success and thank our shareholders for their continued support.

J. I. Gutnick

J I GUTNICK

Chairman & Managing Director


AUTOGEN ANNUAL REPORT 2001



OUR HIGHEST PRIORITY

To become a world leader in identifying new target proteins for drug therapy and commercialising scientific discoveries.

Autogen was founded to make gene discoveries for prevalent diseases, based on strong scientific research.

Autogen's gene discoveries in

- obesity;
- diabetes; and
- depression and anxiety

will form the basis for novel pharmaceutical treatments and methods of diagnosis.

Some key discoveries to date also have implications for the treatment of heart disease, arthritis and Alzheimer's.

Obesity, diabetes, depression and anxiety share common features.

These diseases are:

- widespread;
- complex, involving multiple genes; and
- costly to the community and to individuals.

People of both sexes and all ages from around the world may suffer from these diseases.

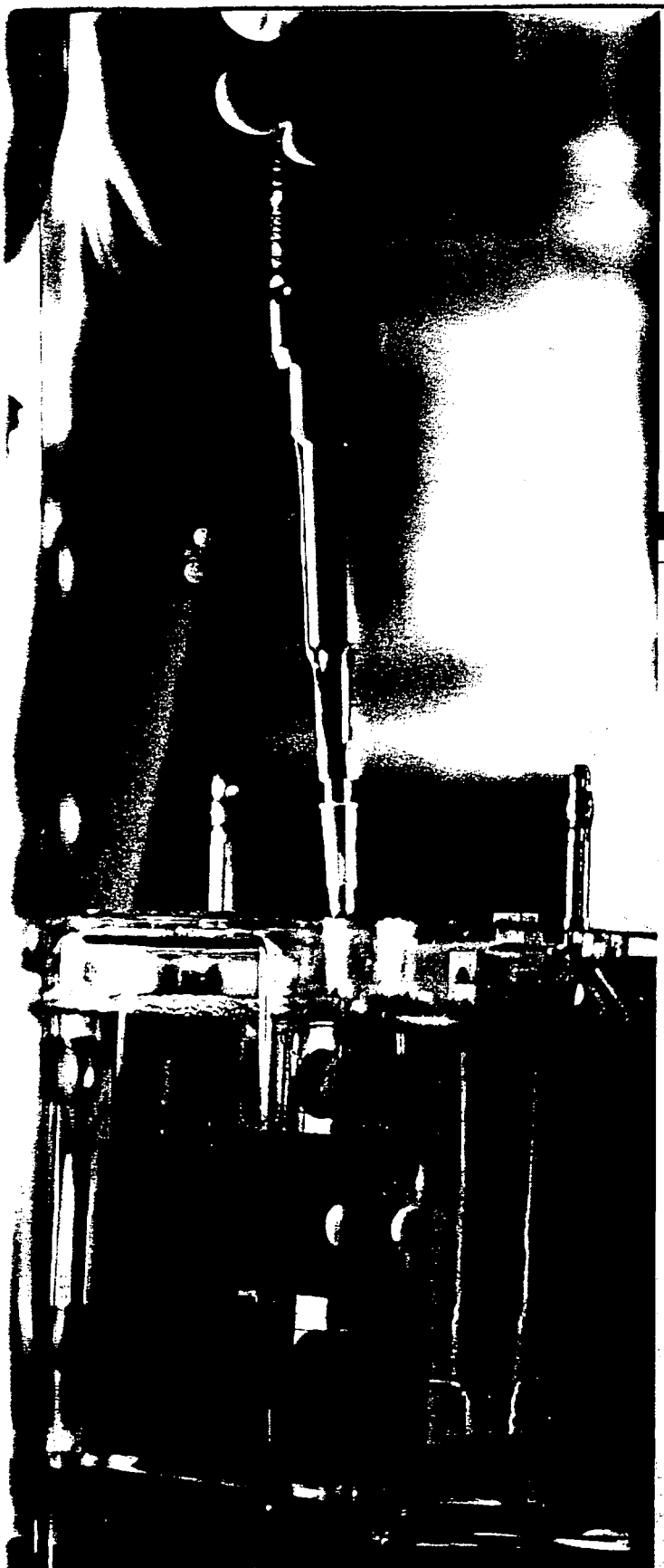
Autogen's research programs are extending current knowledge in the search for new targets for medicinal therapies.

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Growth in research and development expenditure

Gene and protein discoveries



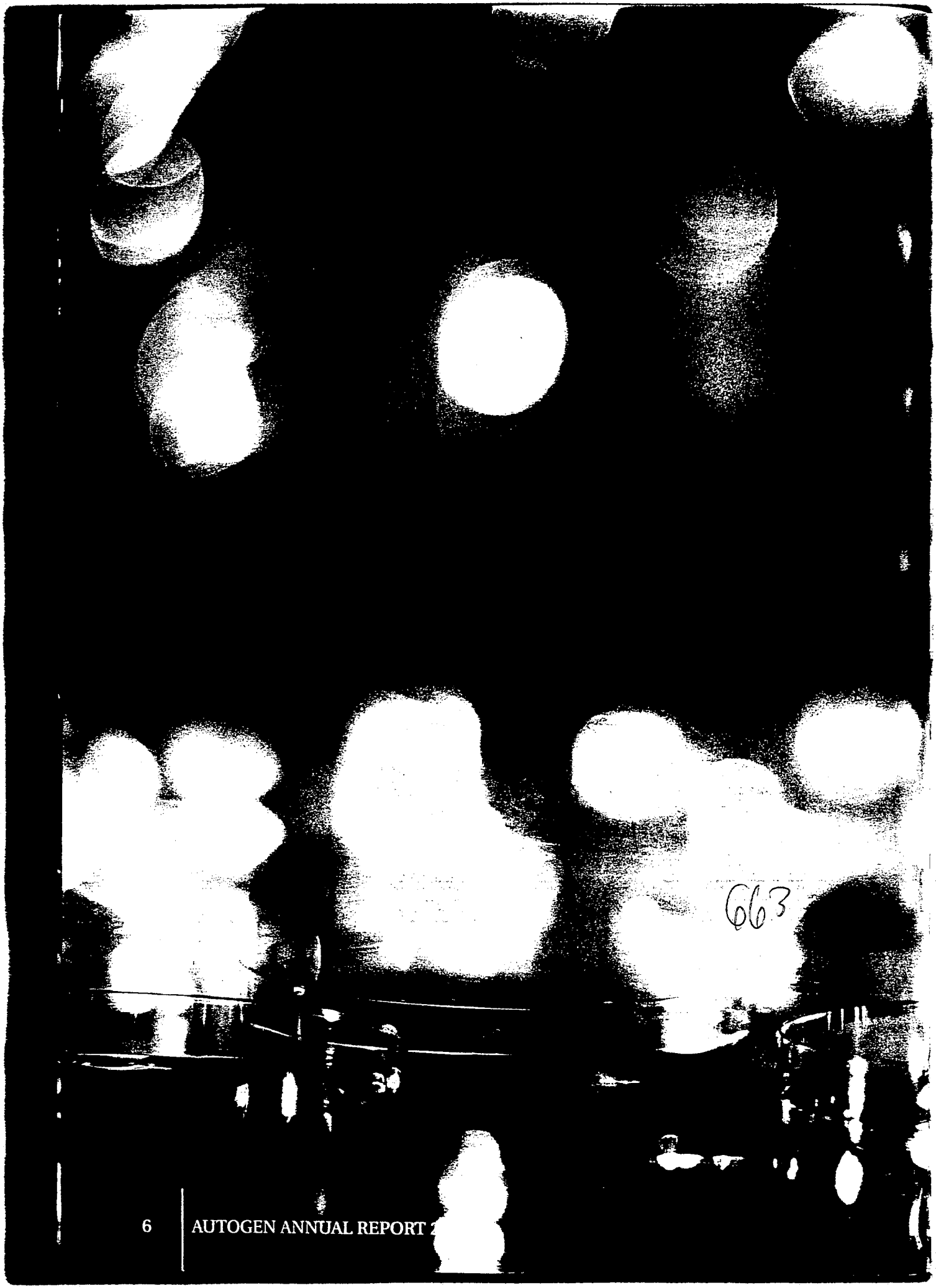
Autogen's success in gene discovery and validation stems from a strategic mix of scientific expertise and advanced technology.

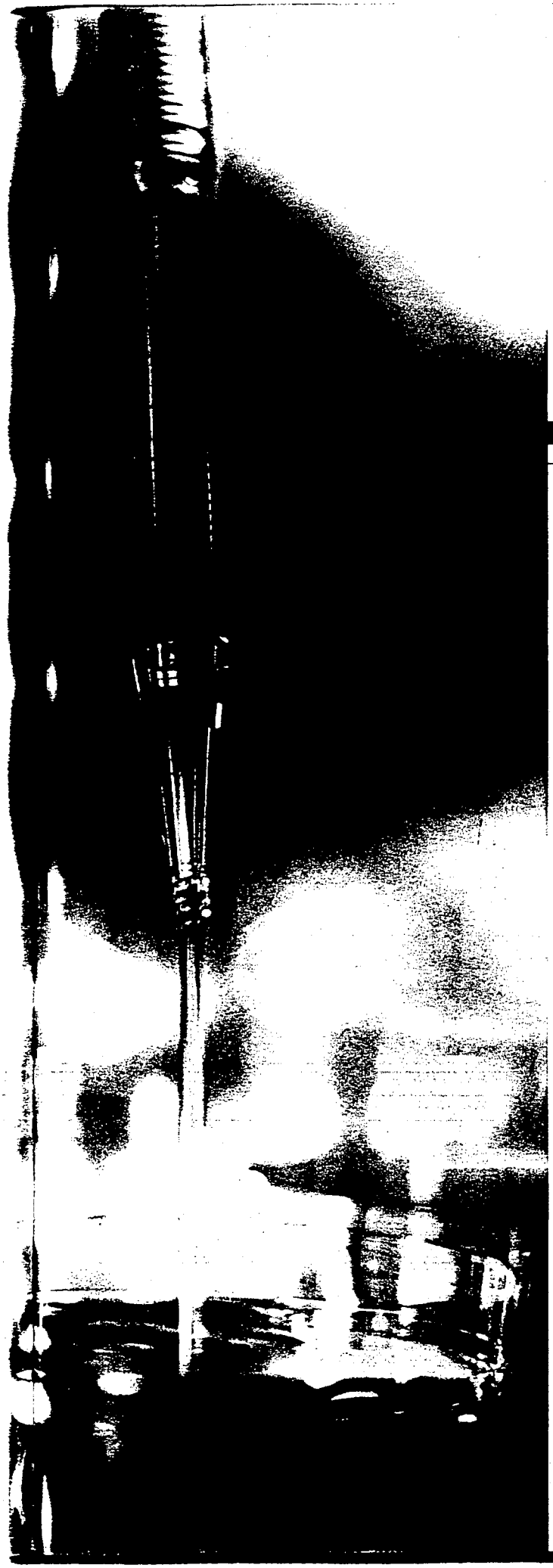
OUR ACHIEVEMENTS

Autogen's gene discovery program has progressed beyond all expectations.

- Discoveries
  A total of 34 new genes in diabetes and obesity under patent protection.
- Gene Chip Facility
  Our new research facility at Deakin University was opened in October 2000. It houses many elements of our technology platform for high throughput gene discovery.
- eXpress from DNA to target
  Proven technology platform.
- Expanded human populations
  New contracts give Autogen access to the human samples that are critical to gene discovery.
- Animal model of depression and anxiety
  The new depression and anxiety program is boosted by our validation of the best animal model in the world for these conditions.

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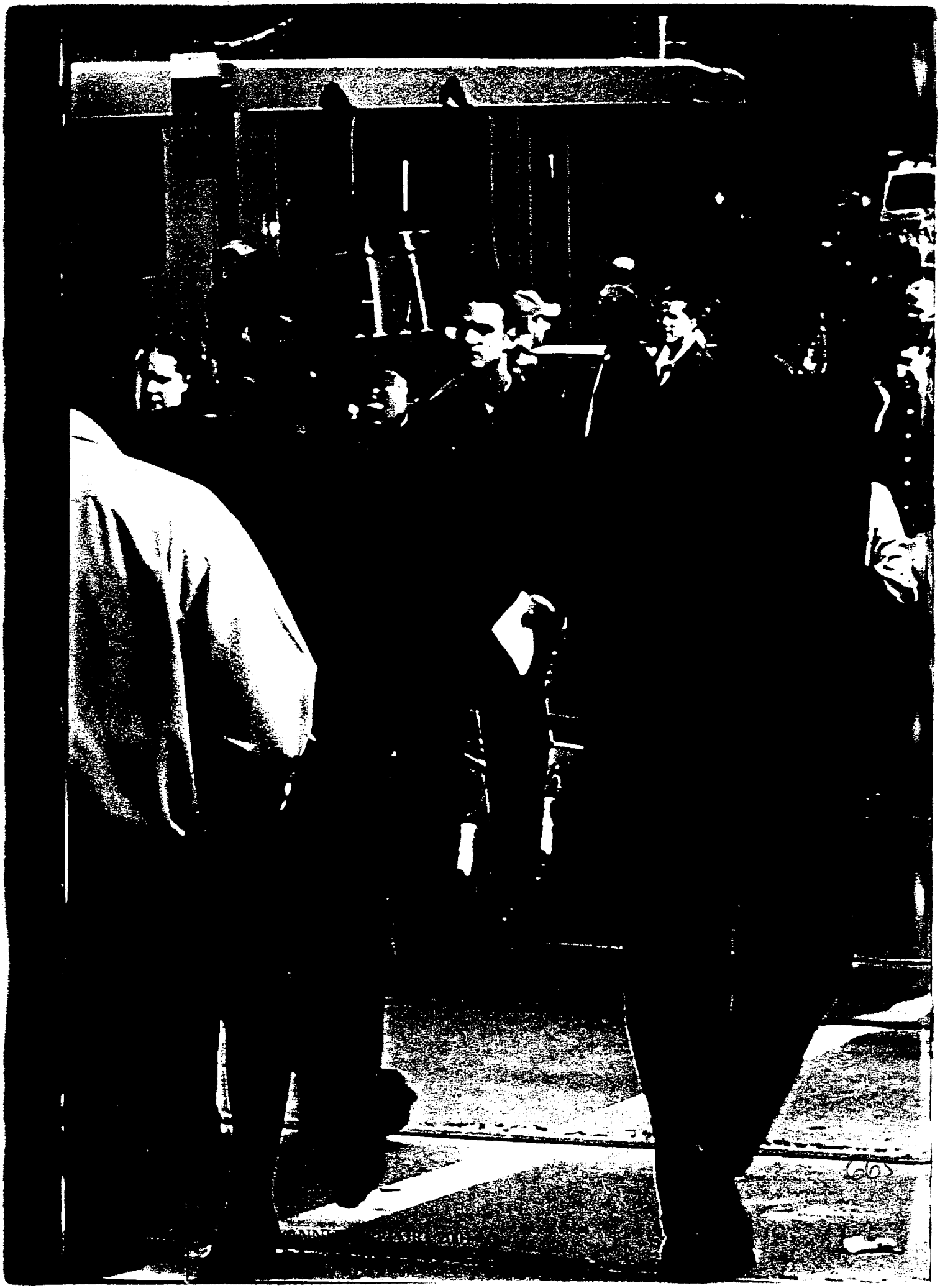


OUR NEW BUSINESS OPPORTUNITIES

Our new gene discovery program – depression and anxiety, our comprehensive human populations and our proven platform technology represent new business opportunities.

- Collaborations with pharmaceutical companies in:
  - The Depression and Anxiety program
  - eXpress Technology Platform for gene and protein discovery and validation
  - Sample collections from diverse human populations
- Access to eXpress Technology Platform for validating potential targets before clinical trials begin
- Collaborations with biotechnology companies in:
  - Proteomics
  - Pharmacogenomics
  - Diagnostics

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OUR ETHICS

Autogen is very sensitive to the ethical issues surrounding genetic research.

- Complicated ethical issues
  Any research that includes the use of humans or human biological material encompasses wide-ranging ethical issues.
- Autogen's commitment to ethical research
  Our research in the human genetics program is conducted strictly in accordance with the highest ethical standards.
- Established ethics policies
  We have consulted experts in the field of bioethics in framing policy for research into human genetics.

  Our policies comply with the requirements for justice, beneficence and respect for participants in our studies.

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2. HUMAN POPULATIONS
Samples from human populations with susceptibility to disease are needed for human genetics studies.

3. GENE DISCOVERY
Microarray gene chip technology incorporating robotics is used to identify genes with different activity in tissues from healthy animals compared to those from animals with the disease. For human DNA, linkage mapping and positional cloning identify gene modifications in common diseases.

BIOINFORMATICS

1. ANIMAL COLONY
A good animal model of a human disease is the first requirement.







11. PROTEIN TARGET
When a new gene survives the rigorous screening of steps 1–10 in the technology platform, Autogen approaches the pharmaceutical industry to establish partners for Stage 2 – drug development.



10. PHYSIOLOGICAL FUNCTION IN VIVO
Adding a protein of unknown function to its site of production in the body, or injecting it into the bloodstream, can yield extra information about the protein's function in the whole animal.

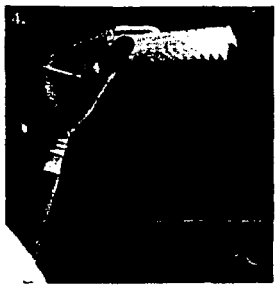


9. PHYSIOLOGICAL FUNCTION IN VITRO
Adding a protein of unknown function to cells in culture can yield information about the protein's role.



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4. GENE EXPRESSION
Gene activity in different tissues is measured by Northern Blotting, and quantitative PCR.



BIOINFORMATICS

5. PROTEIN AND ANTIBODY PRODUCTION
For functional studies on new genes, protein is produced by chemical means or by recombinant techniques in bacterial systems. Antibodies are powerful tools for studying protein function.



eXpress Technology Platform

From DNA to Target

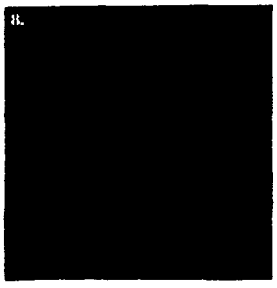
Our scientific research program encompasses a spectrum of methods from across the fields of gene discovery, protein discovery and physiology. The strategic sequence for effective application of these diverse research tools is provided by our in-house technology platform, eXpress.



6. ADENOVIRAL-MEDIATED TRANSFECTION AND ANTISENSE TECHNOLOGY
These techniques are applied to overexpress or block expression of the new gene in cells to test the effects of high levels and low levels of the protein product.

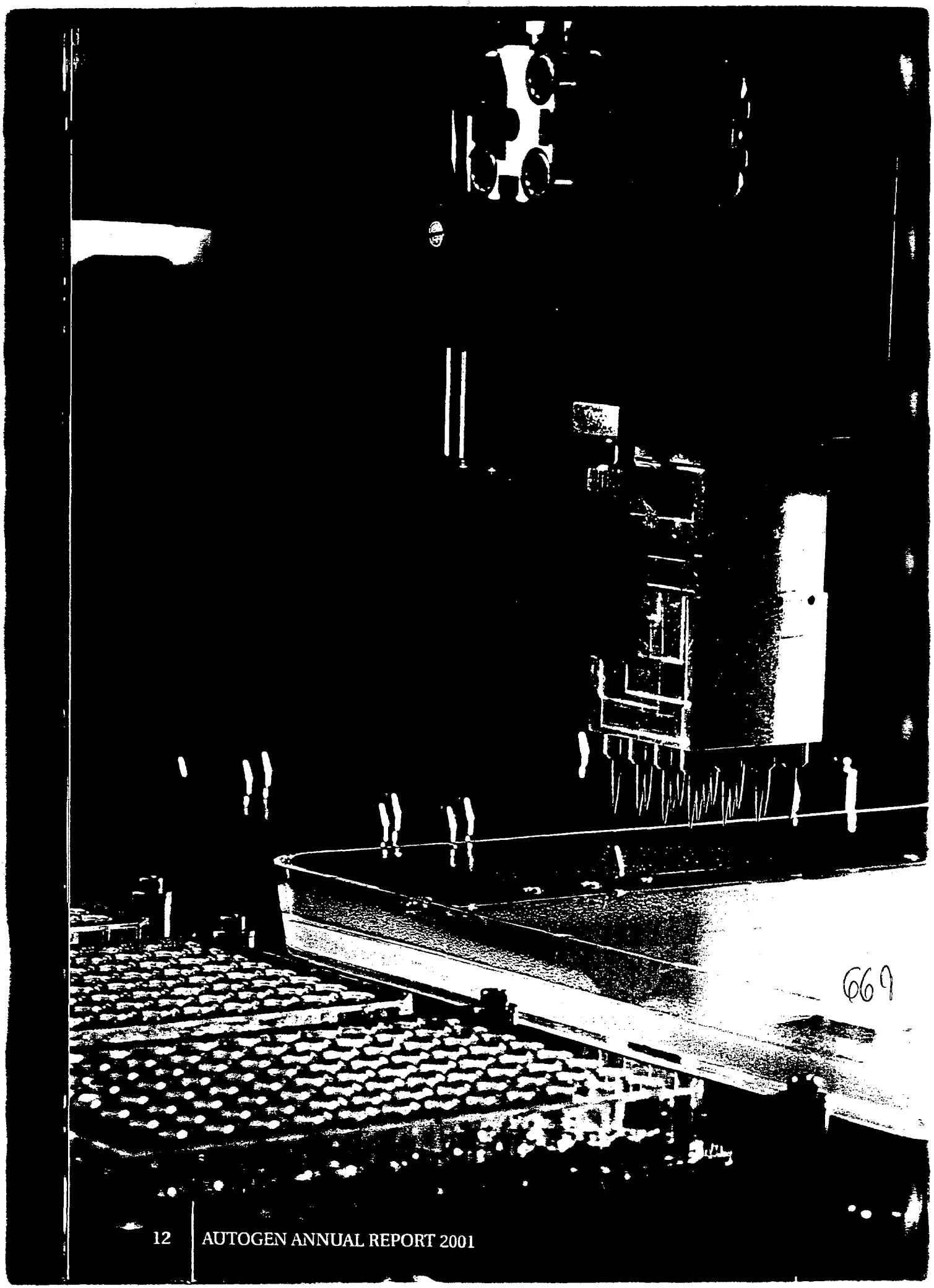


7. PROTEIN – PROTEIN INTERACTION
Information about protein function can be gained from identifying the binding partners using yeast 2-hybrid screening or BIACORE technology.

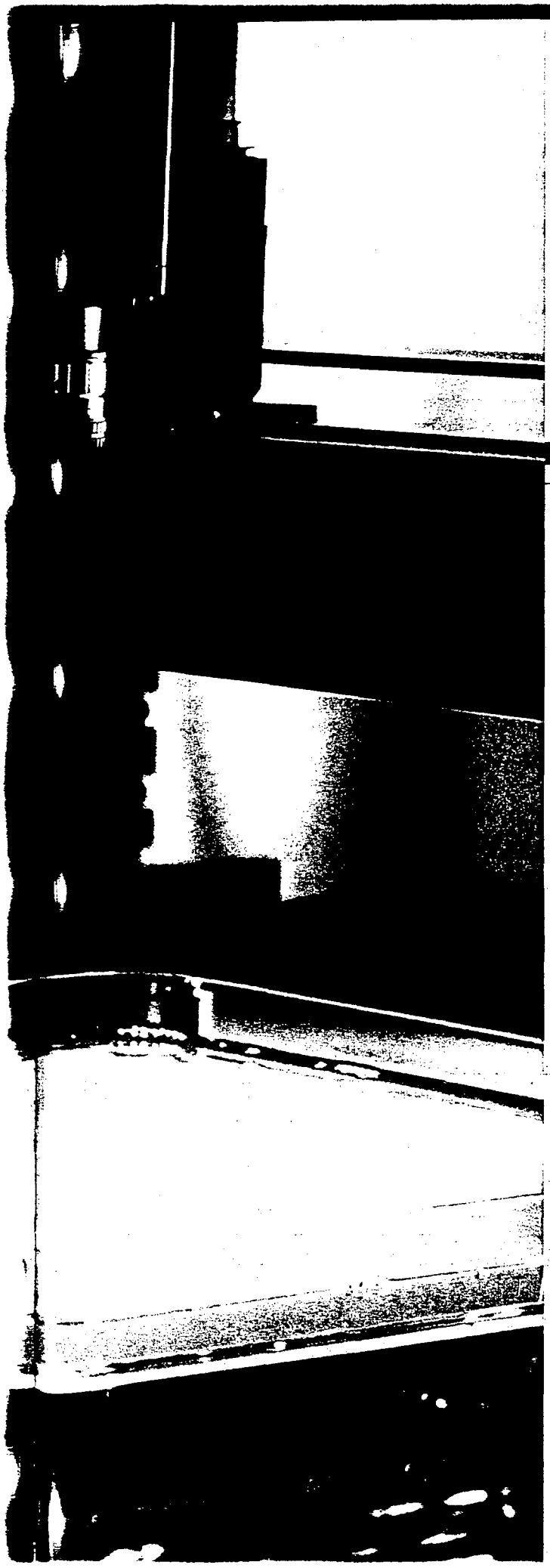


8. IMMUNOHISTOCHEMISTRY
Gene products, both RNA and protein, are localised in tissue slices using fluorescent antibodies.

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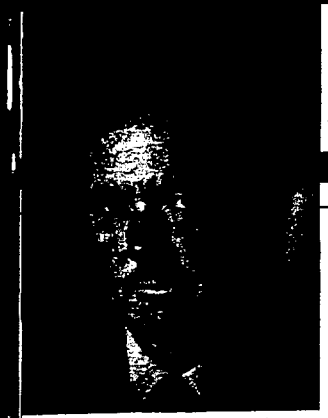


OUR RESEARCH STRENGTHS

Autogen's combination of rigorous science and the latest in technology has led to successful gene discovery and identification of new proteins as potential targets for therapeutic drug treatment.

- Two research facilities, one at Deakin University in Geelong and the other at the International Diabetes Institute in Melbourne
- eXpress Technology Platform, incorporating all the molecular methodology needed to discover a new gene of interest and then to prove that the gene's protein product is functionally significant in various human disease states
- Extensive collections of serum and DNA samples from human populations with a high prevalence of common diseases
- Animal models which mimic the multigene nature of human diabetes, obesity, depression and anxiety
- A team of scientists with high-ranking research credentials

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OUR SCIENTISTS

PROFESSOR GREG COLLIER BSc(Hons), PhD
CHIEF OPERATING OFFICER

Professor Collier holds a personal chair in the School of Health Sciences at Deakin University. He joined Autogen in March 2000, as an established international researcher on diabetes and obesity, having published more that 200 scientific papers in peer-reviewed journals. As Director of Research and Development, Professor Collier has responsibility for overseeing all gene discovery programs under way in Autogen's laboratories. His duties as Chief Operating Officer include identifying new opportunities in both research and business, and developing policy.

KEN WALDER BSc(Hons), PhD

Dr Walder joined Autogen's laboratories at Deakin University in May 1999 to manage the Gene Discovery Group. After gaining his PhD at Deakin in 1997, he held a post-doctoral position at the National Institutes of Health at Phoenix, Arizona in the USA where he joined the search for genes related to diabetes in Pima Indians, who have a high incidence of diabetes and obesity.

JEREMY JOWETT BSc(Hons), DPhil (Oxon)

Dr Jowett is the Director of Genetics Research at the International Diabetes Institute. Autogen has an agreement with IDI to study newly discovered genes in human populations who differ in racial background and susceptibility to disease. Dr Jowett completed a PhD at Oxford before spending five years at the University of California Los Angeles studying the molecular biology of HIV.

LAKSHMI KANTHAM BSc, MSc, PhD

Dr Kantham started in November 1999 with responsibility for the functional studies on new genes identified in the gene discovery program. She has a depth of expertise in areas of research with direct application to Autogen's programs. Dr Kantham has worked at Harvard University in the USA and in Germany and New Zealand.

DAVID SEGAL BSc(Hons), PhD

Dr Segal has been responsible for the use of microarray technology and its application to gene discovery since December 2000. In 1996 he completed his PhD at the John Curtin School of Medical Research at the Australian National University, then spent almost five years at the NIH National Institute of Allergy and Infectious Diseases at Bethesda, Maryland in the USA.

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ANDREA DE SILVA BSc, MHN, PhD

Dr de Silva has had primary responsibility for Bioinformatics for the past 18 months. Bioinformatics is the process of managing and analysing biological information. Maximum information is gained from international databases of gene sequences, whether for new genes or the proteins they encode. Dr de Silva has a strong background in both nutrition and the genetics of diabetes and obesity from previous research work at the International Diabetes Institute.



JANETTE TENNE-BROWN BSc, BSc(Hons), PhD

Dr Tenne-Brown moved to the University of Melbourne after completing her BSc at Deakin University. During her PhD in the area of developmental neuroscience, she gained the experience and skills needed to run the Immunohistochemical Laboratory where she applies the techniques needed to localise new genes and proteins in tissue sections. Dr Tenne-Brown took up her position early in 2000.



YUAN GAO BSc, MSc, PhD

Dr Gao has participated in the functional genomics component of the Gene Discovery Program since May 2001. He returned to Australia from a post-doctoral position studying aspects of diabetes at Johns Hopkins University School of Medicine in Baltimore, Maryland in the USA. Dr Gao attained his MSc at the University of Adelaide and his PhD at the Northern Territory University in Darwin.



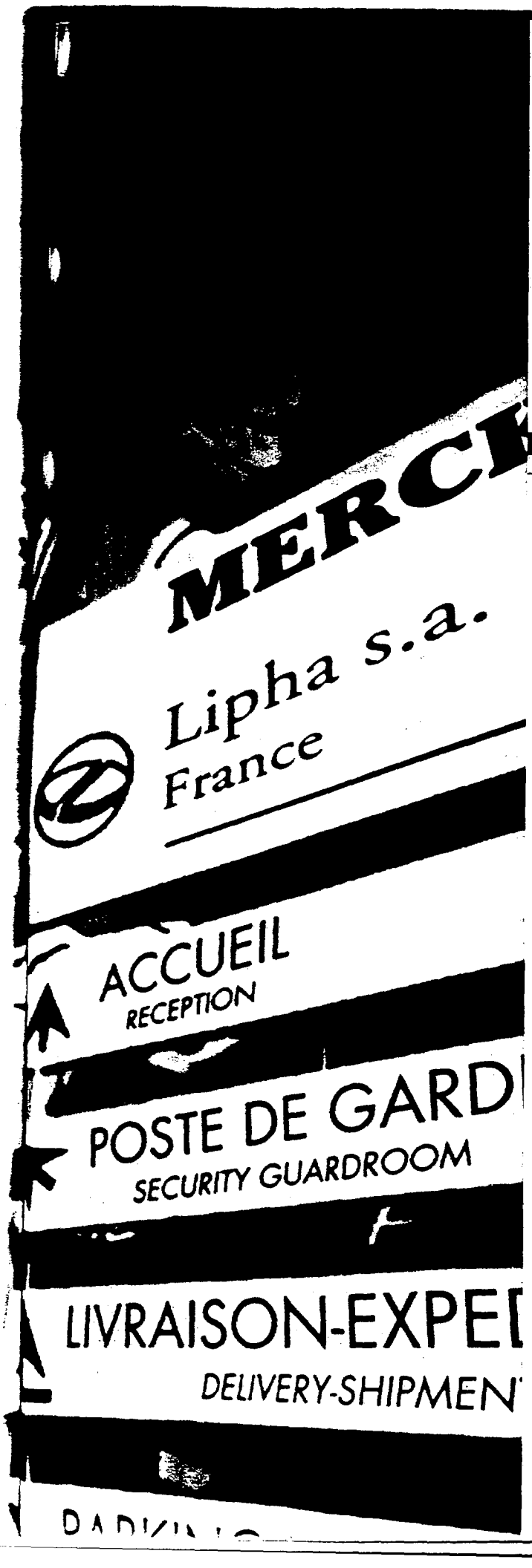
KELLY WINDMILL BSc(Hons), PhD

Dr Windmill completed her PhD at Deakin University before moving to the University of Queensland to carry out research involving the characterisation of novel drug metabolising enzymes. Since 1998, Dr Windmill has had a key role in supervising a wide range of molecular techniques crucial to the overall process of gene discovery.



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Rene Lemieux



OUR STRATEGIC COLLABORATIONS

Autogen has established a strategic collaboration with Merck-Lipha to commercialise the Beacon and Tanis discoveries.

Merck-Lipha is a major European pharmaceutical company and a subsidiary of Merck KGaA which is listed on the Frankfurt Stock Exchange.

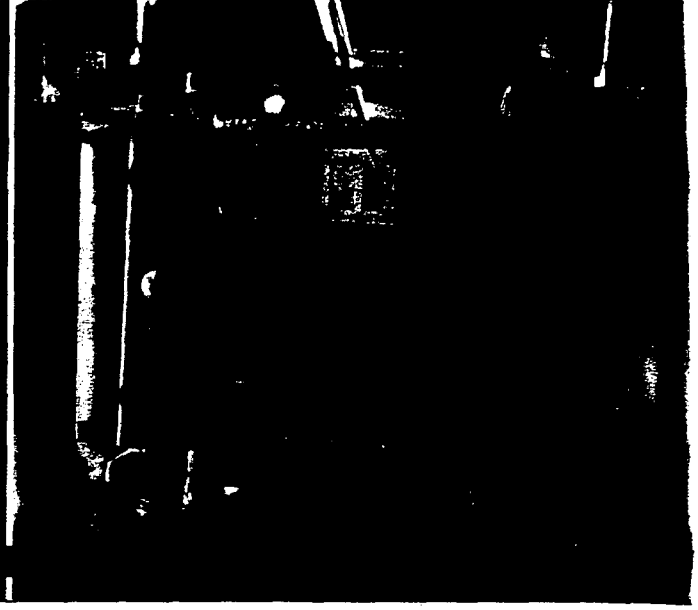
Merck manufactures Metformin – the world's top-selling drug for the treatment of Type 2 diabetes – for which it holds 50% of the market share in Australia.

The agreement between Autogen and Merck-Lipha involves:

- collaboration in diabetes and obesity research for more than $25 million between 1999 and 2005, including six years' research funding and equity investment in Autogen
- milestone payments of up to $5 million to Autogen for each target gene discovery
- royalty and commercialisation agreement to bring mutual benefit to the partners flowing from the development of products from our research.

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GENE DISCOVERY PROGRAMS

At the outset, Autogen recognised the enormous potential of commercialising biotechnology research. The Company's business is based on applying the latest technology to identifying new targets for the pharmaceutical treatment of common human diseases.

Autogen has developed a successful approach for finding new genes based on differential gene expression profiling. Advanced robotic microarray technology is applied to animal models that resemble human disease states and samples from human populations are subject to linkage mapping and positional cloning to identify the gene modifications associated with diseases.

Gene Discovery Strategy – an Overview

The programs are divided into four broad phases. These are:

1. **Gene Discovery**
   Microarray gene chip technology is used to identify genes with differential expression in healthy animals compared with diseased animals. Candidate genes are sequenced and their differential expression confirmed. The human counterparts are located and described.

2. **Bioinformatics**
   Application of bioinformatics to search international databases provides details of the gene structure, homologies with other published genes and information about the encoded protein. If this information is unavailable on existing databases, Autogen's scientists clone and sequence genes of interest. Only those genes with novel and relevant properties are advanced through the program.

3. **Validation**
   Gene discoveries are validated before studies of their function are commenced.

   The expression patterns in different tissues are analysed as well as changes in expression at different stages of the experimentally induced disease state. Studies on human tissue distribution are a component of the validation process.

4. **Functional Genomics**
   The genes that remain as candidates after validation are studied to determine more about the function or action of their protein products. Understanding the function of the protein is crucial to the assessment of how the newly identified gene can be targeted to treat or prevent a particular disease. These studies include:
   - producing the protein and the corresponding antibody;
   - determining the effect of increasing or decreasing gene transcription in vitro; and
   - determining the effect of increasing or decreasing protein levels in vitro and in vivo.

Drug Development Strategy – an Overview

Drug development is the second stage of the overall gene discovery program and involves the establishment of a suitable assay system to allow high throughput screening of agents with the potential to affect activity of the target. When this stage is reached, Autogen seeks partnerships with pharmaceutical companies.

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Diabetes & Obesity

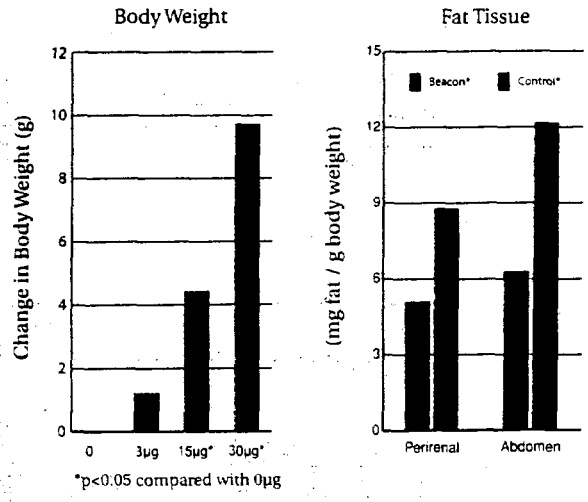
The facts:

- **Almost one in four Australians over age 25 has diabetes or impaired glucose metabolism**
- **Type 2 diabetes and obesity are two of the most common diseases of affluent nations**
- **Type 2 diabetes and obesity are metabolic disorders involving a number of genes**

The diabetes and obesity program was developed to take advantage of Autogen's head start in this research area. Autogen had access to the necessary scientific expertise and a proven animal model for diabetes and obesity. An agreement with the International Diabetes Institute gave Autogen access to one of the world's most comprehensive collections of human serum and DNA samples from isolated populations with very high prevalences of these conditions.

Like Type 2 diabetes, obesity is on the increase throughout the developed world. Evidence from twin and adoption studies suggests that genetic factors account for 40 – 80% of the variation in body fat content.

Autogen has provisional patent applications filed in Australia and the USA for 34 genes associated with diabetes and obesity. All of the newly identified genes are now in various stages of a rigorous validation process.



Effect of Beacon treatment on body weight and fat tissue in *P. obesus*

OBESITY DISCOVERY – BEACON

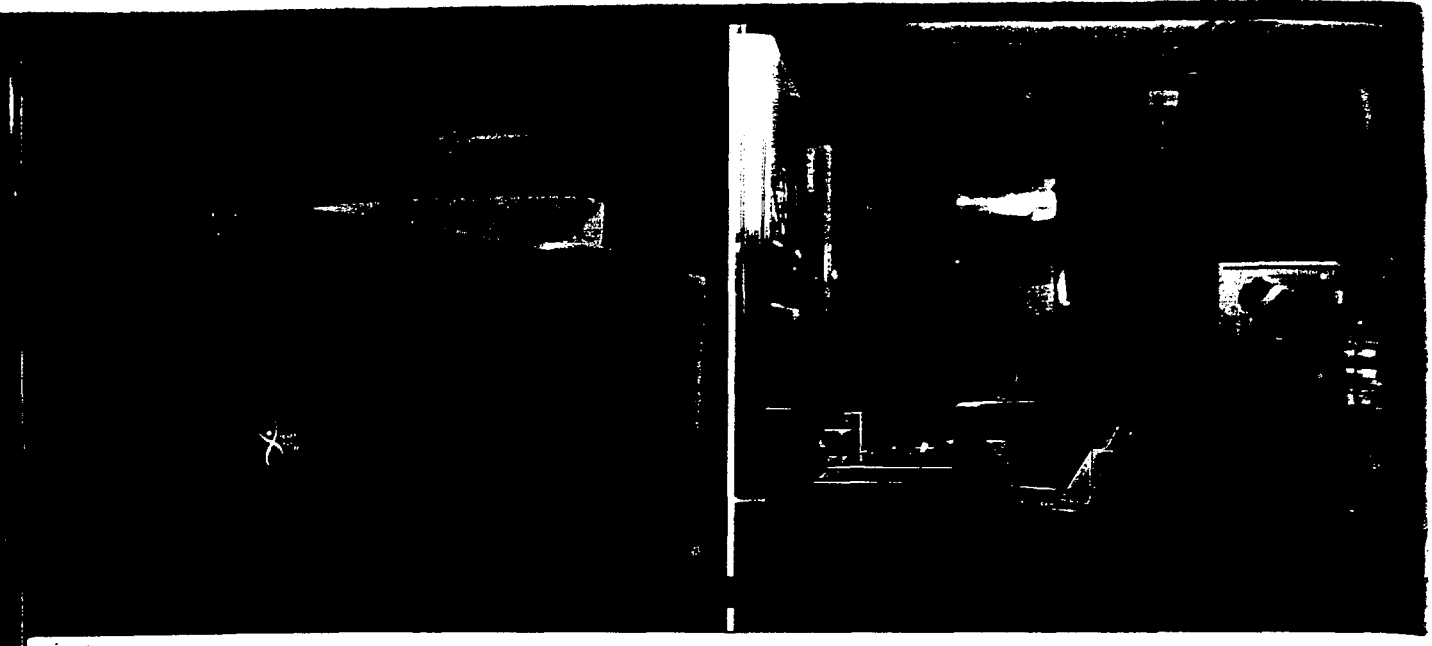
Summary:

- **High levels of Beacon are found in obese animals**
- **The Beacon gene is 2,194 base pairs long; the Beacon protein consists of 73 amino acids**
- **Injected Beacon increased body weight and food intake in Israeli sand rats**

Potential: Anti-Beacon agents to treat obesity

A paper published in 2000 in the research journal, *Diabetes*, entitled 'A Novel Gene Involved in the Regulation of Energy Balance' described Autogen's best-characterised gene discovery, Beacon. Studying *Psammomys obesus* (the sand rat) which is a very good model for human obesity, Autogen researchers found a small protein in the hypothalamus whose levels correlated with the percentage of body fat.

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The hypothalamus plays a major role in the control of energy balance via the coordination of several neuropeptides and their receptors.

When the Beacon protein was produced and used to treat *Psammomys obesus*, it caused a dose-dependent increase in food intake and body weight.

The conclusion from the study was that Beacon appears to have a role in the regulation of energy balance and body weight.

DIABETES DISCOVERY – TANIS

Summary:

- **Tanis is a cell receptor for serum amyloid A**
- **The Tanis gene is 1,155 base pairs long; the Tanis protein consists of 189 amino acids**
- **It is increased in adipose tissue and liver when food is restricted**
- **It responds to glucose, insulin and fats in cell culture**

Potential: Modulators of Tanis to treat diabetes

Tanis is the second well-characterised gene. It shows decreased expression in diabetes. Tanis gene products in the liver and adipose tissue increased in animals fasted for 24 hours or fed a low-energy diet for two weeks.

The regulation of the Tanis gene has been shown in cell culture studies to be affected by glucose, insulin and fatty acids.

From its structure, Tanis was predicted to be a receptor. Further research has confirmed this prediction, showing that Tanis is a cell receptor for serum amyloid A (SAA), an acute phase protein linked with a number of disease states, including diabetes.

SAA is a key protein produced by the liver as part of the body's 'acute phase response' to inflammation which can include fever, the release of stress hormones and increased levels of specific serum proteins.

SAA is produced at low levels in normal tissue and is increased in diabetes and coronary heart disease. The plaques of fatty material that build up in blood vessels due to atherosclerosis, inflamed joints in arthritis and the brains of patients with Alzheimer's disease are all sites of SAA synthesis.

High blood levels of SAA cause changes to the HDL particles which transport cholesterol back to the liver for removal from the body. If prolonged, these changes could increase the risk of heart disease.

The Autogen discovery appears to be the first report of a receptor molecule for SAA and could lead to major advances in the knowledge of how this protein is regulated, about which little information is currently available.

Depression & Anxiety

The Facts:

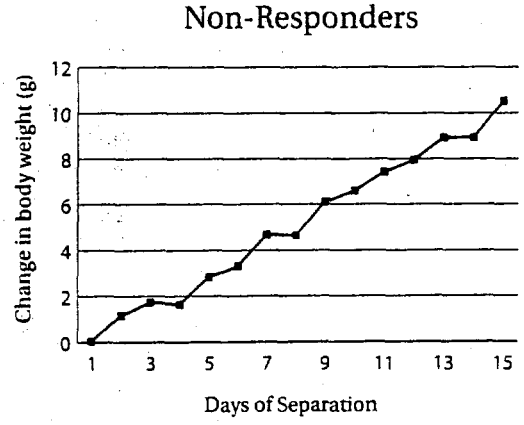
- **Antidepressants are the highest selling class of drugs**
- **Sales worldwide of US$7 billion in 1997 are expected to more than double by 2002**
- **Opportunities exist for new antidepressants**

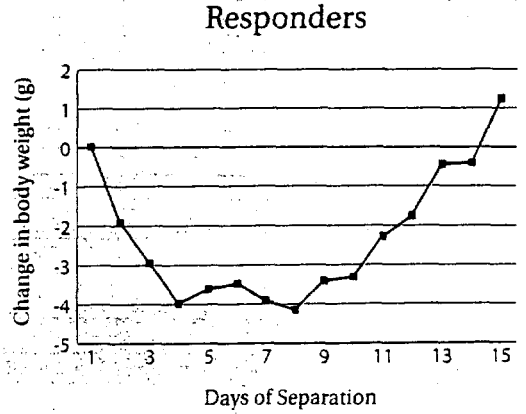
Autogen has commenced a program of gene discovery in depression and anxiety, a prevalent mental disease.

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As with the diabetes and obesity program, research into genetic causes of depression and anxiety is based on the search for genes which have different activity in the depressed or anxious state compared with a normal mental condition.





Estimated to affect up to 50% of the population at some time in their lives, depression affects people of all ages and is on the increase. 'Depression' describes various behavioural states related to feelings of sadness, apathy, futility and despair.

Depression is a complex disorder with both genetic and environmental contributing factors. It is thought that anxiety and depression share a number of biological processes. Susceptible people may respond to particular stresses with a spectrum of mood disorders.

There are three major drivers for this most recent program:

1. The market for new antidepressant drugs has enormous commercial potential.
2. Evidence suggests that depression and anxiety are genetic, at least in part, but more research is needed.
3. Autogen's animal model of diabetes and obesity, *Psammomys obesus*, displays symptoms of depression and anxiety on separation.

The Animal Model

Researchers at Autogen have found that *Psammomys obesus* shows a spectrum of responses to separation, making it a novel model of human depression. The onset of symptoms and time-course of recovery make the model an ideal candidate for Autogen's differential expression screening approach.

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THE BOARD OF DIRECTORS



MR JOSEPH GUTNICK FAusIMM FAIM MAICD CHAIRMAN AND MANAGING DIRECTOR

Mr Gutnick has been a Director of the Company since 1984 and is currently Chairman and Managing Director of five public listed companies in Australia, Executive Chairman of Tahera Corporation, a Canadian company listed on the Toronto Stock Exchange and President of Bay Resources Ltd, a Delaware Corporation listed on the over-the-counter market in the USA. He is a well-known businessman with interests in Australia and overseas and was directly responsible for introducing biotechnological research to the Company. Mr Gutnick has been responsible for overseeing the discovery, development and operation of a number of world-class gold and nickel mines in Australia. He is a Director of the World Gold Council and was awarded the Diggers Award at the 1997 Diggers and Dealers Industry Awards. Age 49.



THE HON. ROBERT HAWKE AC, BA LLB BLitt(Oxon) NON-EXECUTIVE DIRECTOR

Mr Hawke a former Prime Minister of Australia (1983-1991), has been a Director since 1999. Mr Hawke is a Business Consultant, Chairman of the Committee of Experts on Membership of The Education International and Chairman of the Sydney City Mission Fundraising Task Force. He is a former President of the Australian Council of Trade Unions (1970-1980) and former President of the Australian Labor Party (1973-1978). Mr Hawke entered Federal Parliament in 1980 and became Leader of the Opposition before being elected Prime Minister. He resigned from Parliament in February 1992. Mr Hawke was made a Companion of the Order of Australia (AC) in 1979. Age 71.



MR JEAN-NOËL TREILLES NON-EXECUTIVE DIRECTOR

Mr Treilles was appointed a Director of the Company in January 2000. Mr Treilles is Chairman and Chief Executive Officer of Holding Merck-Lipha France and President – Ethicals Merck. Prior to that appointment, he was Chairman and Chief Executive Officer of Group Lipha. Mr Treilles is a senior member of a number of pharmaceutical industry-based associations. Mr Treilles was awarded the Chevalier de l'Ordre National du Mérite in November 1995. Age 56.



DR JEFFREY JONAS MD NON-EXECUTIVE DIRECTOR

Dr Jonas was appointed a Director of the Company in December 2000.
He is former President and Chief Executive Officer of AVAX and has extensive experience in pharmaceutical development, including in the areas of biotechnology, pharmacoeconomics and psychopharmacology, as well as the acquisition and development of new cancer, antibiotic and immunological drugs. From 1991 to 1996, Dr Jonas held a number of senior positions at Upjohn Laboratory. Dr Jonas is the author of a book on Prozac™ and over 100 scientific articles, abstracts, and book chapters. Dr Jonas received his MD from Harvard Medical School in 1979 and a BA in Biology and English from Amherst College in 1975. Age 48.

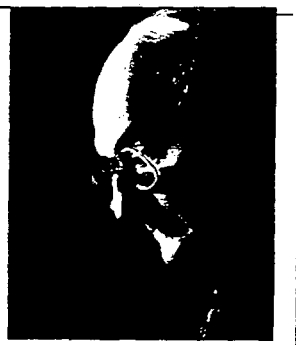


DR DAVID TYRWHITT PhD(Geology) BSc(Hons) Geology FSEG(USA) FAusIMM CPGeo FIMM(London) NON-EXECUTIVE DIRECTOR

Dr Tyrwhitt has been a Director of the Company since 1996 and has more than 40 years experience in the mining industry. He is currently a Director of six public listed companies of which five are primarily in the mining and exploration sector. He worked for over 20 years with Newmont Mining Corporation in Australia, South-East Asia and the United States. During that time he was responsible for the discovery of the Telfer Gold Mine in Western Australia. He was Chief Executive of Newmont Australia Limited between 1984 and 1988 and Chief Executive Officer of Ashton Mining Limited between 1988 and 1991. Age 63.

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SCIENTIFIC ADVISORY BOARD



PROFESSOR PAUL ZIMMET AO, MD FRACP FRCP FACN FACE

Professor Zimmet, Chairman of the Scientific Advisory Board, is a leading world authority in the fields of diabetes and obesity. He is Professor/Director of the International Diabetes Institute, Professor of Diabetes at Monash University and Professor in the Graduate School of Public Health University of Pittsburgh in the USA. He is actively involved with the World Health Organisation's Diabetes and Obesity Study Groups and is a member of the Federal Task Force on Diabetes, Victorian Ministerial Advisory Committee for Diabetes and the National Obesity Strategic Committee.



DR JOHN BLANGERO

Dr Blangero holds the rank of Scientist at the Department of Genetics at Southwest Foundation for Biomedical Research in San Antonio, USA. He is a leading international statistical geneticist. Dr Blangero has been appointed as an exclusive consultant to Autogen where he will lead the Human Statistical Genomics Program. He was responsible for developing new statistical software to increase greatly the amount of data that could be handled in genetic studies of families. Dr Blangero leads a number of government-funded research projects in the USA related to the genetics of common complex diseases.



PROFESSOR IAN GUST AO, MD FRCPA FRACP FTS

After establishing the MacFarlane Burnet Centre for Medical Research where he was the first Director, Professor Gust moved to CSL Limited ("CSL") in 1990 as Research and Development Director. During the ensuing decade he was responsible for managing a research and development budget of more than $20 million per annum. Recently retired from CSL, Professor Gust serves as a scientific advisor to the Bill and Melinda Gates Children's Vaccine Program, the International AIDS Vaccine Initiative and the World Health Organisation. He is a Non-Executive Director of Promics Pty Ltd and a member of the board of the Cooperative Research Centre for Vaccine Technology.



PROFESSOR IAN MACKAY AM, MD(MELB) FRCP FRACP FRCPA FAA

Professor Mackay is an international authority on autoimmune diseases. He is Principal Research Fellow in the Department of Biochemistry and Molecular Biology at Monash University. He was formerly Head of the Clinical Research Unit of the Walter & Eliza Hall Institute and Royal Melbourne Hospital. In September 1998, Professor Mackay and co-editor Dr N.R. Rose published their influential text, *The Auto-immune Diseases*, 3rd edition.



PROFESSOR ROBERT WILLIAMSON PhD FRCP FRS

Professor Williamson is an international authority on gene therapy. He has worked at major international research institutions that specialise in the areas of molecular biology. He currently holds the positions of Director, Murdoch Children's Research Institute; Executive Director, Victorian Clinical Genetics Service and Professor of Medical Genetics, University of Melbourne.

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CORPORATE GOVERNANCE

The main corporate governance practices that the Board of Autogen Limited had in place during the year were:

1. Board of Directors

(i) Board Responsibilities

The Board's role is to maximise wealth creation and shareholder value in the Company. It assumes responsibility for overseeing the affairs of the Company by ensuring that they are carried out in a professional and ethical manner and that business risks are effectively managed.

The Board oversees the Company's financial management including approving annual budgets and implementing strategic plans, policies, systems and procedures. Senior Management performance is reviewed to ensure that the Company has the most appropriate mix of skills to meet its business objectives.

(ii) Board Composition

While the Company's Constitution fixes the maximum number of Directors at twelve, the Board currently comprises one Executive Director and four Non-Executive Directors. Mr Gutnick is Executive Chairman and Managing Director. To ensure that it has the right mix of management skills and technical expertise to meet the challenges of its business, the Board regularly reviews its composition.

(iii) Appointment/retirement of Directors

The Company's Constitution requires that all Directors, other than the Managing Director, submit themselves for re-election every three years with not less than one-third of the Board retiring by rotation. Directors appointed during the period since the last Annual General Meeting of the Company must submit themselves for election at the next Annual General Meeting.

(iv) Board Meetings

The full Board meets formally to conduct appropriate business. The Board uses resolutions in writing signed by all Directors to deal with matters requiring decisions between meetings.

(v) Directors' Remuneration

Total remuneration for the Executive Director includes an annual salary and other entitlements. Attendance at and participation in Board and Committee meetings are considered among the duties of the Executive Director. Non-Executive Directors receive fees for attending Board and Committee meetings. Pro-rata fees are paid to Non-Executive Directors who serve for less than a full year.

(vi) External Advice to Directors

The Company recognises that in the exercise of their responsibilities there may be occasions when Directors may wish to seek independent professional advice. With the prior consent of the Chairman, advice can be obtained at the Company's expense and is to be made available to the whole Board.

2. Board Committees

The Board has Committees to address the areas of remuneration and audit.

(i) Remuneration Committee

The Remuneration Committee, chaired by Mr Gutnick meets to review remuneration policies and practices of the Company, to ensure that they meet current market conditions. The Committee draws on the experience of Senior Management and, where appropriate, seeks the advice of external consultants.

(ii) Audit Committee

The Audit Committee, under the Chairmanship of Mr Gutnick, meets to plan and review annual and half-yearly financial statements and reports prior to their release to the Australian Stock Exchange. The Committee also monitors the performance of the Company's Auditors and the adequacy and effectiveness of internal controls. The external Auditor is invited to attend and speak at these meetings.

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3. **Risk Management**

The Company continues to monitor its operations to identify the greatest areas of potential risk to minimise any adverse effects on the Company's strategic, operational and financial activities.

The Scientific Advisory Board was established by the Company's Board to assist with the Board's goal of establishing a portfolio of research programs covering diabetes, obesity and other major diseases with the aim of commercialisation.

The Scientific Advisory Board is responsible for identifying new research opportunities and monitoring existing projects. It meets no less than every four months and reviews the status of each project being undertaken. It also discusses, reviews and when appropriate, recommends new projects to the Autogen Board. All projects recommended have undergone rigorous review by a sub-committee of the Scientific Advisory Board and management as part of the due diligence process.

Senior Management of Autogen provides support to the Advisory Board and attends each meeting.

4. **Code of Conduct**

(i) **Ethical Standards**

Autogen Limited operates under a code of conduct that sets out the ethical standards under which the Company operates when dealing with internal and external parties. This code requires parties to act with integrity, fairness and honesty in all dealings and to treat other parties with dignity at all times. They are required to:

- not discriminate against any staff member or potential employee;
- carry out their duties in respect to the law at all times;
- use the Company's assets responsibly;
- respect the confidentiality of the Company's business dealings; and
- take responsibility for their own actions and for the consequences surrounding their own actions.

(ii) **Share Trading**

It is the Company's policy to encourage Directors, employees and related parties to own shares in the Company. The trading in shares policy strongly reinforces the obligations of Directors and employees, both of the Company and A.W.I. Administration Services Pty Ltd, under the *Corporations Act 2001* and the Australian Stock Exchange Listing Rules in relation to trading in Company shares. The acquisition and sale of Company shares by Directors and employees is restricted to periods of 14 days immediately following announcement of the Company's half-yearly and annual reports to the Australian Stock Exchange. Directors, employees and related parties can seek permission from the Chairman outside this 14-day period. Directors and employees are required to report share trading to the Company Secretary.

5. **Continuous Disclosure Compliance**

The Company's continuous disclosure compliance procedure enables it to meet its obligations and to ensure that all matters, which may require announcement to the Australian Stock Exchange, are brought to the attention of Directors immediately.

6. **Communicating with Shareholders**

The Board ensures that Shareholders are kept informed of all major developments that affects their shareholding or the Company's state of affairs through half-yearly, annual and ad hoc reports. All Shareholders are encouraged to attend the Annual General Meeting to meet the Chairman and Directors and to receive the most updated report on Company activities. The Company maintains a website at **http://www.autogenlimited.com.au** to provide shareholders with up-to-date information on the Company's activities. Shareholders may also communicate with the Company through its e-mail address **autogen@awi.com.au**

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DIRECTORS' REPORT

The Directors of Autogen Limited present their Report for the year ended 30 June 2001.

1. **Directors**
The Directors of the Company in office since 1 July 2000 and up to the date of this Report are:

Mr Joseph Gutnick FAusIMM FAIM MAICD, Chairman and Managing Director

The Hon. Robert Hawke AC, BA LLB Blitt(Oxon), Non-Executive Director

Mr Jean-Noël Treilles, Non-Executive Director

Dr Jeffrey M Jonas MD, Non-Executive Director, Appointed 19 December 2000

Dr David Tyrwhitt PhD(Geology) BSc(Hons) FSEG(USA) FAusIMM CPGeo FIMM(London), Non-Executive Director

Professor Claude Bouchard PhD, Non-Executive Director, Resigned 31 December 2000

Particulars of Directors' qualifications, experience and special responsibilities are set out separately in this Annual Report.

2. **Review and Results of Operations**
A review and results of operations is contained in the Chairman's Report and elsewhere throughout this Annual Report. The financial result of the operations was a loss of $3,417,971 after providing for income tax.

3. **Significant Change in State of Affairs**
During the financial year, the Company sold its interest in Topalite Resources Pty Ltd in order to focus on biotechnology activities. Other than this matter, the Directors are of the opinion that other than that disclosed in this Annual Report, there has not been any significant changes in the state of affairs of the Economic Entity during the year under review.

4. **Principal Activity**
The principal activity of the Economic Entity during the financial year was medical research. There has been no significant change in the nature of this activity during the financial year.

5. **Dividends**
The Directors do not recommend the payment of a dividend and no amount has been paid or declared by way of dividend since the end of the previous financial year and up to the date of this Annual Report.

6. **Events after the end of the Financial Year**
Other than previously referred to in this Annual Report, there has not arisen in the interval between the end of the financial year and the date of this Report any item, transaction or event of a material and unusual nature which, in the opinion of the Directors of the Economic Entity, has significantly affected or may significantly affect

- the operations of the Economic Entity
- the results of those operations, or
- the state of affairs of the Economic Entity

in financial years subsequent to this financial year.

7. **Future Developments and Results**
There are no likely developments of which the Directors are aware which could be expected to significantly affect the results of the Economic Entity's operations in subsequent financial years not otherwise disclosed in this Annual Report.

8. **Options**
At the date of this Report the Company had on issue the following listed and unlisted options over fully paid ordinary shares.

(i) **Listed**

Number	Maturity Date	Issue Price	Exercise Price	Exercise Period
22,159,749	12 March 2010	A$0.10	A$0.25	Anytime after 1 January 2001

As a result of the consolidation of shares effective 1 September 2000, one fully paid ordinary share will be issued for every five options exercised by an optionholder. Optionholders have no rights to participate in an issue of shares unless they exercise their options. During the year and up to the date of this Report, the Company issued 147,154 options over fully paid ordinary shares. In the period

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covered by this Report, 765 options have been exercised resulting in the allotment of 153 fully paid ordinary shares. The names of the persons who currently hold listed options are entered on a Register maintained for the Company by Computershare Investor Services Pty Limited. In accordance with the *Corporations Act 2001*, this Register may be inspected free of charge.

(ii) **Unlisted**

Number	Maturity Date	Issue Price	Exercise Price	Exercise Period
720,000	24 March 2010	A$0.108	A$1.16	Under terms and conditions of the Employee Share Option Plan

During the year and up to the date of this Report, 320,000 options have lapsed. In the period covered by this Report no options have been exercised.

Number	Maturity Date	Issue Price	Exercise Price	Exercise Period
335,000	24 March 2010	A$0.4186	A$0.8958	Under terms and conditions of the Employee Share Option Plan

During the year and up to the date of this Report, the Company issued 335,000 options over fully paid ordinary shares. Since issue, no options have lapsed. In the period covered by this Report, no options have been exercised.

Subsequent to year end, the Directors changed the name of the Senior Executive Share Option plan to the Employee Share Option Plan.

9. Directors' Interests in Shares and Options

The relevant interest of each Director in the number of fully paid ordinary shares and options over fully paid ordinary shares of the Company disclosed by that Director to the Australian Stock Exchange as at the date of this Report is:

Director	Relevant Interest	
	Shares	Options
J I Gutnick*	-	200,000**
R J L Hawke	-	-
J-N Treilles	-	-
J Jonas	-	-
D S Tyrwhitt	-	-

* Mr Gutnick is a Director and Shareholder of Edensor Nominees Pty Limited, which is a Substantial Shareholder of the Company.

** Allotted in accordance with the rules of the Employee Share Option Plan.

10. Meetings of Directors

The number of meetings of Directors held, including meetings of Committees of the Board, during the financial year and their attendance was as follows:

	Board		Audit Committee		Remuneration Committee	
	Eligible to Attend	Attended	Eligible to Attend	Attended	Eligible to Attend	Attended
J I Gutnick	3	3	2	2	1	1
R J L Hawke	3	3	-	-	-	-
J-N Treilles	3	1	-	-	-	-
J Jonas**	1	-	-	-	-	-
D S Tyrwhitt	3	3	2	2	1	1
C Bouchard*	2	-	-	-	-	-

* Resigned on 31 December 2000

** Appointed 19 December 2000

Note: Mr Gutnick and Dr Tyrwhitt are members of the Audit and the Remuneration Committees.

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11. Remuneration of Directors and Senior Management

Directors' remuneration is discussed in the Corporate Governance section of this Annual Report. Senior Management receives competitive remuneration packages which includes a base salary and superannuation. The Remuneration Committee regularly reviews these packages and other employment terms. The reviews are based on performance achievements, relevant market information and Company performance.

(i) **Directors**

	Salary/ Consulting Fees $	Directors' Fees $	Other Benefits	Super-annuation Contributions $	Total $
J I Gutnick	191,782	-	8,545	26,244	226,571
R J L Hawke	-	35,000	-	11,250	46,250
J-N Treilles	-	-	-	-	-
J Jonas	-	-	-	-	-
D S Tyrwhitt	-	16,250	-	1,300	17,550
C Bouchard	-	17,500	-	-	17,500

(ii) **Senior Management**

	Salary/ Consulting Fees $	Other Benefits $	Super-annuation Contributions $	Total $	Employee Options* Number
G Collier	221,999	-	10,145	232,144	100,000
I Currie	40,906	-	3,269	44,175	-
P Lee	32,132	-	2,568	34,700	60,000
P Harold	16,641	-	1,331	17,972	-
D Simcox	1,567	-	189	1,756	-

*At the date of issue of the options under the Employee Option Plan, the Company undertook a valuation of the options which gave rise to a nil value being attributed to the options.

12. Directors and Officers' Indemnity

The Company has entered into an Indemnity Deed with each of the Directors which will indemnify them against liability incurred to a third party (not being the Company or any related company) where the liability does not arise out of conduct including a breach of good faith. The Indemnity Deed will continue to apply for a period of 10 years after a Director ceases to hold office. The Company also entered into a Director's Access and Insurance Deed with each of the Directors pursuant to which a Director can request access to copies of documents provided to the Director whilst serving the Company for a period of 10 years after the Director ceases to hold office. There are certain restrictions on the Directors' entitlement to access under the Deed. In addition, the Company will be obliged to use reasonable endeavors to obtain and maintain insurance for a former Director similar to that which existed at the time the Director ceased to hold office.

13. Directors and Officers' Insurance

The Company has, during or since the end of the financial year, paid an insurance premium in respect of an insurance policy for the benefit of the Directors, Secretaries, Executive Officers and employees of the Company and any related bodies corporate as defined in the insurance policy. The insurance grants indemnity against liabilities permitted to be indemnified by the Company under the *Corporations Act 2001*. In accordance with commercial practice, the insurance policy prohibits disclosure of the terms of the policy, including the nature of the liability insured against and the amount of the premium.

Signed in accordance with a Resolution of the Board of Directors at Melbourne this 24th day of September 2001.

J. I. Gutnick

J I Gutnick

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for the Year Ended 30 June 2001

Autogen Limited and its Controlled Entity

STATEMENTS OF FINANCIAL PERFORMANCE

for the Year Ended 30 June 2001

	Note	CONSOLIDATED 2001 $	CONSOLIDATED 2000 $	PARENT ENTITY 2001 $	PARENT ENTITY 2000 $
Revenues					
Research revenue		**3,898,401**	2,054,210	-	-
Interest revenue	2	**654,353**	223,062	**1,635,886**	965,111
Other revenue	2	**130,000**	3,909,312	**130,000**	3,909,312
Total revenue		**4,682,754**	6,186,584	**1,765,886**	4,874,423
Costs and expenses					
Costs from ordinary activities					
Research and development expenditure		**(6,153,144)**	(5,114,212)	-	-
Administration		**(2,724,677)**	(1,368,343)	**(2,698,320)**	(1,297,633)
Depreciation		**(184,009)**	(19,762)	**(183,209)**	(17,405)
Borrowing costs		**(25,148)**	(114,545)	**(24,543)**	(112,195)
Cost of non-current assets sold		**(140,800)**	(3,908,662)	**(140,800)**	(3,908,662)
Provision for doubtful debts		-	-	**(3,344,984)**	(4,001,261)
Bad debt write-off		-	(33,376)	-	-
Provision for diminution of investments		**(1,997,911)**	(4,661,790)	**(1,997,911)**	(4,661,790)
Total expenses		**(11,225,689)**	(15,220,690)	**(8,389,767)**	(13,998,946)
Gain arising from disposal of Controlled Entity		**3,124,964**	-	-	-
Operating loss before income tax		**(3,417,971)**	(9,034,106)	**(6,623,881)**	(9,124,523)
Income tax attributable to ordinary activities	4	-	-	-	-
Operating loss after income tax		**(3,417,971)**	(9,034,106)	**(6,623,881)**	(9,124,523)
Non-owner transaction changes in equity					
Decrease in capital profits reserve on disposal of Controlled Entity		**(3,169,527)**	-	-	-
Total changes in equity other than those resulting from transactions with owners as owners		**(6,587,498)**	(9,034,106)	**(6,623,881)**	(9,124,523)
Basic earnings per share (cents)	5	**(9.04)**	(25.27)		
Diluted earnings per share (cents)	5	**(4.80)**	(13.34)		

The Statements of Financial Performance are to be read in conjunction with the attached notes to and forming part of these financial statements.

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Autogen Limited and its Controlled Entity

STATEMENT OF FINANCIAL POSITION

as at 30 June 2001

	Note	CONSOLIDATED 2001 $	CONSOLIDATED 2000 $	PARENT ENTITY 2001 $	PARENT ENTITY 2000 $
Current Assets					
Cash assets	6	**7,094,869**	11,197,461	**7,094,869**	11,181,083
Prepayments		**6,542**	6,542	**-**	-
Receivables	7	**312,661**	-	**312,661**	-
Total Current Assets		**7,414,072**	11,204,003	**7,407,530**	11,181,083
Non-Current Assets					
Receivables	7	**251,479**	160,603	**251,479**	115,013
Other financial assets	8	**293,702**	2,291,613	**293,704**	2,291,613
Property, plant and equipment	9	**345,144**	664,712	**344,687**	663,455
Total Non-Current Assets		**890,325**	3,116,928	**889,870**	3,070,081
Total Assets		**8,304,397**	14,320,931	**8,297,400**	14,251,164
Current Liabilities					
Payables	10	**1,075,839**	396,182	**994,373**	259,006
Interest bearing liabilities	11	**287,670**	348,418	**287,670**	304,975
Total Current Liabilities		**1,363,509**	744,600	**1,282,043**	563,981
Non-Current Liabilities					
Interest bearing liabilities	11	**15,679**	76,598	**15,679**	76,598
Total Non-Current Liabilities		**15,679**	76,598	**15,579**	76,598
Total Liabilities		**1,379,188**	821,198	**1,297,722**	640,579
Net Assets		**6,925,209**	13,499,733	**6,999,678**	13,610,585
Equity					
Contributed equity	12	**47,944,756**	47,944,266	**47,944,756**	47,944,266
Reserves	13	**11,666,476**	14,823,519	**11,666,476**	11,653,992
Accumulated losses	14	**(52,686,023)**	(49,268,052)	**(52,611,554)**	(45,987,673)
Total Equity	15	**6,925,209**	13,499,733	**6,999,678**	13,610,585

The Statements of Financial Position are to be read in conjunction with the attached notes to and forming part of these financial statements.

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Autogen Limited and its Controlled Entity

STATEMENT OF CASH FLOWS

for the Year Ended 30 June 2001

	Note	CONSOLIDATED 2001 $	CONSOLIDATED 2000 $	PARENT ENTITY 2001 $	PARENT ENTITY 2000 $
Cash Flows from Operating Activities					
Sundry income		-	650	-	650
Proceeds from research revenue		**3,898,401**	2,054,210	-	-
Payments in the course of operations		**(8,506,570)**	(6,443,931)	**(2,316,449)**	(1,129,706)
Interest received		**647,240**	223,062	**679,270**	965,111
Borrowing costs paid		**(25,148)**	(111,907)	**(24,543)**	(109,557)
Net Cash Used in Operating Activities	17	**(3,986,077)**	(4,277,916)	**(1,661,722)**	(273,502)
Cash Flows from Investing Activities					
Loans advanced		-	-	**(2,307,977)**	(4,001,260)
Payments for property, plant and equipment		**(2,621)**	(535,860)	**(2,621)**	(535,860)
Net Cash Used in Investing Activities		**(2,621)**	(535,860)	**(2,310,598)**	(4,537,120)
Cash Flows from Financing Activities					
Net proceeds from issue of options		**12,484**	10,855,005	**12,484**	10,855,005
Proceeds from borrowings		-	3,828,930	-	3,828,930
Repayments of borrowings		**(126,868)**	(5,180,914)	**(126,868)**	(5,180,914)
Proceeds from issue of shares		**490**	6,165,705	**490**	6,165,705
Net Cash Provided by (Used in) Financing Activities		**(113,894)**	15,668,726	**(113,894)**	15,668,726
Net increase/(decrease) in cash held		**(4,102,592)**	10,854,950	**(4,086,214)**	10,858,104
Cash at the beginning of the financial year		**11,197,461**	342,511	**11,181,083**	322,979
Cash at the End of the Financial Year	6	**7,094,869**	11,197,461	**7,094,869**	11,181,083

The Statements of Cash Flows are to be read in conjunction with the attached notes to and forming part of these financial statements.

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1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES

(i) Basis of Preparation

The financial report is a general purpose financial report and has been prepared in accordance with applicable Accounting Standards, other authoritative pronouncements of the Australian Accounting Standards Board, Urgent Issues Group Consensus Views and the *Corporations Act 2001*. The financial report has been prepared on the historical cost basis and except where stated, does not take into account changing money values or current valuations of non-current assets. Except where stated, the accounting policies are consistent with those of the previous year.

(ii) The following Accounting Policies have been adopted in preparing and presenting the Financial Report

Principles of Consolidation

The consolidated accounts of the Consolidated Entity include the financial statements of the Company, being the Parent Entity and its Controlled Entity.

The balances and effects of transactions between the Controlled Entity and the Parent Entity included in the consolidated accounts have been eliminated.

The financial statements of controlled entities are included from the date control commenced until the date control ceased.

Revenue Recognition

Revenue

Project support funding is recognised in the statements of financial performance when received. Project revenue received in advance is included as deferred revenue.

Interest Income

Interest income is recognised as it accrues.

Assets Sales

The gross proceeds of asset sales are included as revenue of the consolidated entity. The profit or loss on disposal of assets is brought to account at the date an unconditional contract of sale is signed.

The gain or loss on disposal is calculated as the difference between the carrying amount of the asset at the time of disposal and the net proceeds on disposal.

Other Revenue

Revenue recognition policies for investments are described in the relevant Accounting Policy Note.

Foreign Currency

Foreign currency transactions are translated to Australian currency at the rates of exchange ruling at the dates of the transactions. Amounts receivable and payable in foreign currencies at balance date are translated at the rates of exchange ruling on that date. Exchange differences relating to amounts payable and receivable in foreign currencies are brought to account as exchange gains or losses in the statement of financial performance in the financial year in which the exchange rates change.

Borrowing Costs

Borrowing costs include interest and lease finance charges. Borrowing costs are expensed as incurred.

Classification of Assets and Liabilities

Assets and liabilities are classified as current and non-current. Current assets are cash or other assets that would in the ordinary course of business be consumed or converted into cash within 12 months. Current liabilities are liabilities that would in the ordinary course of business be due and payable within 12 months.

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1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

Non-Current Assets

The carrying amounts of non-current assets are reviewed to determine whether they are in excess of their recoverable amounts at balance date. If the carrying amount of a non-current asset exceeds its recoverable amount, the asset is written down to the lower amount. In assessing recoverable amounts of non-current assets the relevant cash flows have not been discounted to their present values.

Income Tax

Income tax has been brought to account using the liability method of tax effect accounting whereby income tax expense/benefit for the period is calculated on the accounting result after adjusting for items which, as a result of their treatment under income tax legislation, create permanent differences between that result and the taxable result. The tax effect of timing differences which arise from the recognition in the accounts of items of revenue and expenses in periods different from those in which they are assessable or allowable for income tax purposes are represented as "Future income tax benefits" or "Provisions for deferred income tax" as the case may be at current tax rates.

Future income tax benefits are only carried forward as assets where realisation of the benefits can be regarded as being virtually certain.

The ultimate realisation of the benefits will depend upon:

(a) the ability of the Consolidated Entity to derive future assessable income and capital profits of the nature and of sufficient amount to enable the benefits to be realised;

(b) the ability of the Consolidated Entity to comply with the conditions for deductibility imposed by law; and

(c) an expectation that legislation will not change in a manner which would adversely effect the ability of the Consolidated Entity concerned to realise the benefits.

Investments

Controlled Entity

Investments in the Controlled Entity are carried in the Company's financial statements at the lower of cost and recoverable amount. Dividends and distributions are brought to account in statement of financial performance when they are declared by the Controlled Entity.

Other Companies

Investments have been valued at the lower of cost and net realisable value as determined in respect of each security holding.

Dividend revenue is recognised in the statement of financial performance when received.

Property, Plant and Equipment

Owned

Property, plant and equipment is carried at the lower of cost less accumulated depreciation or independent valuation and recoverable amount. The carrying amounts of plant and equipment valued on the cost basis are reviewed to determine whether they are in excess of their recoverable amounts at balance date. If the carrying amount exceeds the recoverable amount, the asset is written down to the lower amount.
The write-down is recognised as an expense in the net profit or loss on the reporting period in which it occurs. In assessing recoverable amounts of plant and equipment the relevant cash flows have not been discounted to their present values.

Items of property, plant and research equipment are depreciated on a straight line basis over their estimated useful lives.

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1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

Property, Plant and Equipment (Cont'd.)

The depreciation rates used for each class are as follows:

- Buildings 2.5%
- Research Equipment 20.0–33.3%

Assets are depreciated/amortised from the date of acquisition.

Leased Assets

A distinction is made between finance leases (under which the Company or its Controlled Entity assumes substantially all the risks and benefits incidental to ownership of the leased property) and operating leases (under which the lessor effectively retains substantially all the risks and benefits). Where assets are acquired by means of finance leases, the present value of the minimum lease payments is capitalised and amortised on a straight line basis over the asset's expected useful life. A corresponding liability is also established and each lease payment is allocated between such liability and interest expense. Operating lease payments are expensed as incurred.

Research and Development Expenditure

Research and development expenditure is expensed as incurred except to the extent that its recoverability is assured beyond any reasonable doubt. Expenditure deferred to subsequent accounting periods is amortised over the period in which the related benefits are expected to be realised.

Employee Share Option Plan

The Company has granted options to certain employees under an Employee Share Option Plan. Further information is set out in Note 23. The receivable and the option premium reserve have not been recognised as the probability that the economic benefits embodied in the asset will eventuate, cannot be reliably determined due to the terms of the Option Plan. These amounts will be recognised when options are exercised. Other than the costs incurred in administering the Plan which are expensed as incurred, the Plan does not result in any expense to the Company.

Early Adoption of Accounting Standard

The revised Accounting Standard AASB 1041 "Revaluation of Non-Current Assets" has been adopted early with effect from 20 June 2001.

(iii) Comparative Figures

Where necessary, comparative figures have been restated to be consistent with current year presentation.

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	CONSOLIDATED		PARENT ENTITY	
	2001	2000	**2001**	2000
	$	$	**$**	$
2. REVENUE				
Interest received or due and receivable				
Controlled Entities	-	-	**981,046**	750,164
Other Entities	**16,151**	790	**16,151**	790
Other	**638,202**	222,272	**638,689**	214,157
	654,353	223,062	**1,635,886**	965,111
Other revenue				
From operating activities				
Sundry revenue	-	650	-	650
From outside operating activities				
Proceeds on sale of land and buildings	**120,000**	-	**120,000**	-
Proceeds on sale of investment	**10,000**	3,908,662	**10,000**	3,908,662
Total other revenue	**130,000**	3,909,312	**130,000**	3,909,312
3. LOSS FROM ORDINARY ACTIVITIES				
The loss from ordinary activities has been arrived at after charging/crediting:				
Profit on sale of controlled entity	**3,134,964**	-	**10,000**	-
Net foreign exchange gain (loss)	**105,600**	(71,919)	-	-
Borrowing costs				
Related Party	-	19,358	-	19,358
Other Entities	**5,711**	13,361	**5,106**	11,011
Finance leases	**19,281**	2,638	**19,281**	2,638
Other	**156**	79,188	**156**	79,188
	25,148	114,545	**24,543**	112,195
Provision for doubtful debts				
Wholly owned Controlled Entities	-	-	**3,344,984**	4,001,261
Other	-	33,376	-	-
Loss on disposal of land and buildings	**20,800**	-	**20,800**	-
Increase in provision for diminution in the value of investments				
Other Entities	**1,997,911**	4,661,790	**1,997,911**	4,661,790
Auditors' remuneration				
Audit services	**20,000**	17,000	**11,000**	10,000
Other services	-	-	-	-

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	CONSOLIDATED		PARENT ENTITY	
	2001	2000	**2001**	2000
	$	$	**$**	$
4. TAXATION				
(a) Income tax expense				
Prima facie income tax benefit calculated at 34% (2000: 36%) on the loss from ordinary activities	**(1,162,110)**	(3,252,278)	**(2,252,120)**	(3,284,828)
Decrease in income tax benefit due to:				
Provision for diminution of investment	**679,290**	1,678,244	**679,290**	1,678,244
Research and development allowance	**(374,000)**	(358,298)	**-**	-
Increase in provision for non-recovery of loan to Controlled Entity	**-**	-	**1,137,295**	1,440,454
Gain on disposal of controlled entity	**(1,062,488)**	-	**-**	-
Sundry Items	**11,445**	20,611	**10,605**	17,684
	(1,907,863)	(1,911,721)	**(424,930)**	(148,446)
Future income tax benefits not recognised	**1,907,863**	1,911,721	**424,930**	148,446
Income tax expense on loss from ordinary activities	**-**	-	**-**	-
(b) Future income tax benefit not recognised				
The future income tax benefit in respect of from tax losses and timing differences for the year has not been recognised as an asset in the financial statements as the realisation of the benefit is not virtually certain.				
Future income tax benefit has been calculated at the rate of 30% (2000: 30%)				
Revenue losses	**6,634,469**	4,743,000	**1,702,241**	1,293,705
Capital gains tax losses	**43,537**	27,143	**24,556**	8,162
	6,678,006	4,770,143	**1,726,797**	1,301,867

	CONSOLIDATED	
	2001	2000
	Number of Shares	Number of Shares
5. EARNINGS PER SHARE		
Weighted average number of ordinary shares on issue used in the calculation of basic earnings per share	**37,816,968**	35,748,706
Weighted average number of potential ordinary share used in the calculation of diluted earnings per share	**59,974,670**	59,050,990

Options

22,159,749 options to purchase ordinary shares not exercised at 30 June 2001 have not been included in the determination of basic earnings per share but have been included in the determination of diluted earnings per share.

1,055,000 options issued under the Employee Share Option Plan have not been included in determining the weighted average number of potential ordinary shares.

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	Note	CONSOLIDATED 2001 $	CONSOLIDATED 2000 $	PARENT ENTITY 2001 $	PARENT ENTITY 2000 $
6. CASH ASSETS					
Cash at bank		**221,731**	33,983	**221,731**	17,605
Bank short-term deposits maturing within 90 days		**6,873,138**	11,163,478	**6,873,138**	11,163,478
		7,094,869	11,197,461	**7,094,869**	11,181,083
7. RECEIVABLES					
Current					
Other debtors		**312,661**	-	**312,661**	-
Non-Current					
Loan to other corporation		**100,000**	100,000	**100,000**	100,000
Less provision for doubtful debts		**(100,000)**	(100,000)	**(100,000)**	(100,000)
		-	-	-	-
Loans to wholly owned Controlled Entities	24	-	-	**11,605,152**	9,496,639
Less provision for doubtful debts	24	-	-	**(11,605,152)**	(9,496,639)
		-	-	-	-
Other debtors – Other Entities		**144,593**	8,320	**144,593**	8,320
Deposits in respect of bank guarantees		**106,886**	152,283	**106,886**	106,693
		251,479	160,603	**251,479**	115,013
8. OTHER FINANCIAL ASSETS					
Non-Current					
Investment in controlled entities:					
Unlisted shares at cost		-	-	**2**	2
Unlisted shares at valuation		-	-	-	58,217
Less provision for diminution in value		-	-	-	(58,217)
		-	-	**2**	2
Investments in other entities:					
Listed shares at cost					
Other Entities		**3,908,660**	3,908,660	**3,908,660**	3,908,660
Less provision for diminution in value		**(3,614,958)**	(1,617,049)	**(3,614,958)**	(1,617,049)
		293,702	2,291,613	**293,702**	2,291,611
		293,702	2,291,613	**293,704**	2,291,613

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	CONSOLIDATED		PARENT ENTITY	
	2001	2000	**2001**	2000
	$	$	**$**	$
9. PROPERTY, PLANT AND EQUIPMENT				
Non-Current				
Freehold land				
At independent valuation - 1999	-	44,000	-	44,000
Freehold buildings				
At independent valuation - 1999	-	101,000	-	101,000
Less accumulated depreciation	-	(2,520)	-	(2,520)
	-	98,480	-	98,480
Plant and equipment at cost	**10,204**	7,583	**2,621**	-
Less accumulated depreciation	**(7,415)**	(6,326)	**(289)**	-
	2,789	1,257	**2,332**	-
Leased research equipment at cost	**535,860**	535,860	**535,860**	535,860
Less accumulated depreciation	**(193,505)**	(14,885)	**(193,505)**	(14,885)
	342,355	520,975	**342,355**	520,975
	345,144	664,712	**344,687**	663,455
Reconciliations				
Freehold land				
Carrying amount at the beginning of the year	**44,000**	44,000	**44,000**	44,000
Disposals	**(44,000)**	-	**(44,000)**	-
Carrying amount at the end of the year	-	44,000	-	44,000
Freehold buildings				
Carrying amount at the beginning of the year	**98,480**	101,000	**98,480**	101,000
Depreciation	**(1,680)**	(2,520)	**(1,680)**	(2,520)
Disposals	**(96,800)**	-	**(96,800)**	-
Carrying amount at the end of the year	-	98,480	-	98,480
Plant and equipment				
Carrying amount at the beginning of the year	**1,257**	3,614	-	-
Additions	**2,621**	-	**2,621**	-
Depreciation	**(1,089)**	(2,357)	**(289)**	-
Carrying amount at the end of the year	**2,789**	1,257	**2,332**	-
Leased research equipment				
Carrying amount at the beginning of the year	**520,975**	-	**520,975**	-
Additions	-	535,860	-	535,860
Depreciation	**(178,620)**	(14,885)	**(178,620)**	(14,885)
Carrying amount at the end of the year	**342,355**	520,975	**342,355**	520,975

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		2001 Number of shares	2000 Number of shares	2001 $	2000 $
10. PAYABLES					
Trade creditors and accruals		**1,013,123**	396,182	**994,373**	259,006
Deferred revenue		**62,716**	-	-	-
		1,075,839	396,182	**994,373**	259,006
11. INTEREST BEARING LIABILITIES					
Current					
Unsecured borrowing					
Other Entity	24	**163,649**	158,448	**163,649**	115,005
Lease liability		**124,021**	189,970	**124,021**	189,970
		287,670	348,418	**287,670**	304,975
Non-Current					
Lease liability		**15,679**	76,598	**15,679**	76,598
12. CONTRIBUTED EQUITY					
Issued and paid up capital					
Ordinary shares fully paid		**37,817,171**	189,081,644	**47,944,756**	47,944,266
Movement in ordinary share capital					
Balance at the beginning of the financial year		**189,081,644**	164,418,824	**47,944,266**	41,778,560
Share consolidation 1:5		**(151,264,753)**	-	-	-
Options exercised		**280**	-	**350**	-
Transfer from option premium reserve		-	-	**140**	-
Shares issued for cash		-	24,662,820	-	6,165,706
Balance at the end of the financial year		**37,817,171**	189,081,644	**47,944,756**	47,944,266

Holders of ordinary shares' are entitled to receive dividends as declared from time to time and are entitled to one vote per share at shareholder meetings. In the event of winding up of the Company, ordinary shareholders rank after all other shareholders and creditors and are fully entitled to any proceeds of liquidation.

In accordance with a Strategic Alliance with Lipha s.a. ("Lipha"), signed in November 1999, 24,662,820 fully paid ordinary shares were issued (15% of Autogen's existing share base) to Lipha on 3 December 1999 at 25 cents per share. On 6 March 2000, the Company made a renounceable rights offer of options to shareholders on the basis of nine options for every 10 fully paid ordinary shares held. A maximum of 170,173,482 options were offered and 110,673,304 were issued at an issue price of 10 cents per option.

The exercise price is 25 cents per option. As a result of the share consolidation, the options on issue were consolidated on a 1:5 basis and there are now 22,159,749 options on issue. The exercise price of these options was reconstructed in accordance with ASX Listing Rules and the exercise price is now $1.25.

5,200,000 options expiring 24 March 2010 were allotted to employees under the terms contained in the Employee Share Option Plan prospectus dated 3 March 2000, at an issue price of $1.16. At 30 June 2001, 720,000 options were outstanding (refer Note 23).

350,000 options expiring 24 March 2010 were allotted to employees under the terms contained in the Employee Share Option Plan prospectus dated 6 March 2001, at an issue price of 89.58 cents. At 30 June 2001 335,000 options were outstanding.

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	CONSOLIDATED		PARENT ENTITY	
	2001	2000	**2001**	2000
	$	$	**$**	$
13. RESERVES				
Asset revaluation	**150,447**	150,447	**150,447**	150,447
Capital profits	**648,540**	3,818,067	**648,540**	648,540
Option premium	**10,867,489**	10,855,005	**10,867,489**	10,855,005
	11,666,476	14,823,519	**11,666,476**	11,653,992
Option premium reserve				
Balance at the beginning of the financial year	**10,855,005**	-	**10,855,005**	-
Options exercised	**(140)**	-	**(140)**	-
Renounceable rights issue of options (126,362 options, 2000: 110,673,304 options)	**12,624**	11,067,330	**12,624**	11,067,330
Less Issue costs	**-**	*(212,325)*	**-**	*(212,325)*
Balance at the end of the financial year	**10,867,489**	10,855,005	**10,867,489**	10,855,005
Capital profits reserve				
Balance at the beginning of the financial year	**3,818,067**	3,818,067	**648,540**	648,540
Decrease on disposal of Controlled Entity	**(3,169,527)**	-	**-**	-
Balance at the end of the financial year	**648,540**	3,818,067	**648,540**	648,540

Nature and purpose of reserves

Asset revaluation

Balance arising from revaluations of non-current assets prior to the introduction of Accounting Standard AASB 1041.

Capital profits

Balance arising from disposals of non-current assets prior to the introduction of Accounting Standard AASB 1041.

Option premium

Amounts contributed for the future right to acquire shares at a pre-determined price.

14. ACCUMULATED LOSSES				
Accumulated losses at the beginning of the year	**(49,268,052)**	(40,233,946)	**(45,987,673)**	(36,863,150)
Net loss for the year	**(3,417,971)**	(9,034,106)	**(6,623,881)**	9,124,523)
Accumulated losses at the end of the year	**(52,686,023)**	(49,268,052)	**(52,611,554)**	(45,987,673)

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	CONSOLIDATED		PARENT ENTITY	
	2001	2000	**2001**	2000
	$	$	**$**	$
15. TOTAL EQUITY RECONCILIATION				
Total equity at the beginning of the year	**13,499,733**	5,513,128	**13,610,585**	5,714,397
Total changes in equity recognised in Statement of Financial Performance	**(6,587,498)**	(9,034,106)	**(6,623,881)**	(9,124,523)
Transactions with owners as owners				
Contribution of equity	**350**	6,165,706	**350**	6,165,706
Transactions with potential owners				
Subscription for options	**12,624**	10,853,005	**12,624**	10,855,005
Total equity at the end of the year	**6,925,209**	13,499,733	**6,999,678**	13,610,585

16. ADDITIONAL FINANCIAL INSTRUMENTS DISCLOSURE

(a) Interest rate risk exposures

The Consolidated Entity's exposure to interest rate risk and the effective weighted average interest rate for classes of financial assets and financial liabilities is set out below:

				Fixed interest maturing in:				
	Note	Weighted average interest rate	Floating interest rate	1 year or less	Between 1 and 5 years	More than 5 years	Non-interest bearing	Total
2001			**$**	**$**	**$**	**$**	**$**	**$**
Financial assets								
Cash assets	6	**5.05%**	**7,094,869**	-	-	-	-	**7,094,869**
Receivables	7	**3.01%**	**7,480**	**106,886**	**127,113**	-	**322,661**	**564,140**
Prepayments		-	-	-	-	-	**6,542**	**6,542**
Investments	8	-	-	-	-	-	**293,702**	**293,702**
Total			**7,102,349**	**106,886**	**127,113**	-	**622,905**	**7,959,253**
Financial liabilities								
Payables	10	-	-	-	-	-	**1,075,839**	**1,075,839**
Interest-bearing liabilities	11	**10.73%**	**163,649**	**139,700**	-	-	-	**303,349**
Total			**163,649**	**139,700**	-	-	**1,075,839**	**1,379,188**
2000								
Financial assets								
Cash assets	6	6.32%	11,197,461	-	-	-	-	11,197,461
Receivables	7	5.92%	53,910	106,693	-	-	-	160,603
Prepayments		-	-	-	-	-	6,542	6,542
Investments	8	-	-	-	-	-	2,291,613	2,291,613
Total			11,251,371	106,693	-	-	2,298,155	13,656,219
Financial liabilities								
Payables	10	-	-	-	-	-	396,182	396,182
Interest-bearing liabilities	11	11.88%	158,448	189,970	76,598	-	-	425,016
Total			158,448	189,970	76,598	-	396,182	821,198

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16. ADDITIONAL FINANCIAL INSTRUMENTS DISCLOSURES (Cont'd)

(b) Net fair values of financial assets and liabilities

Valuation approach Net fair values of financial assets and liabilities are determined by the Consolidated Entity on the following basis:

Cash, cash equivalents and short-term investments: The carrying amount approximates fair value because of their short-term to maturity.

Trade receivables and payables: The carrying amount approximates fair value.

Long-term loans receivable and payable: The fair value of long-term loans receivable and payable are estimated using discounted cash flow analysis, based on current incremental lending rates for similar types of lending arrangements.

Non-current investments/securities: For financial instruments traded in organised financial markets, fair value is the current quoted market bid price for an asset or offer price for a liability, adjusted for transaction costs necessary to realise the asset or settle the liability. For investments where there is no quoted market price, a reasonable estimate of the fair value is determined by reference to the current market value of another instrument which is substantially the same or is calculated based on the expected cash flows or the underlying net asset base of the investment/security.

The carrying amounts and net fair values of financial assets and liabilities as at the reporting date are as follows:

	CONSOLIDATED		CONSOLIDATED	
	2001 Carrying Amount $	**2001 Net Fair Value $**	2000 Carrying Amount $	2000 Net Fair Value $
Recognised financial instruments				
Financial assets				
Cash assets	**7,094,869**	**7,094,869**	11,197,461	11,197,461
Receivables	**564,140**	**564,140**	160,603	160,603
Prepayments	**6,542**	**6,542**	6,542	6,542
Investments:				
Shares in other corporations – listed	**293,702**	**293,702**	2,291,613	2,291,613
	7,959,253	**7,959,253**	13,656,219	13,656,219
Financial liabilities				
Payables	**1,075,839**	**1,075,839**	396,182	396,182
Interest bearing liabilities	**303,349**	**303,349**	425,016	425,016
	1,379,188	**1,379,188**	821,198	821,198

Investments have been valued at the lower of cost and net realisable value where the Directors consider a permanent diminution in value has occurred.

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	CONSOLIDATED		PARENT ENTITY	
	2001	2000	**2001**	2000
	$	$	**$**	$
17. STATEMENTS OF CASH FLOWS				
(a) Reconciliation of operating (loss) after income tax to net cash used in operating activities.				
Operating (loss) after income tax	**(3,417,971)**	(9,034,106)	**(6,623,881)**	(9,124,523)
Add (less) non-cash items				
Gain on disposal of controlled entity	**(3,124,964)**	-	**(10,000)**	-
Increase in provision for diminution of investments	**1,997,911**	4,661,790	**1,997,911**	4,661,790
Loss on disposal of land and buildings	**20,800**	-	**20,800**	-
Borrowing costs capitalised	**-**	2,638	**-**	2,638
Depreciation	**184,009**	19,762	**183,209**	17,405
Increase in provision for doubtful debts	**-**	33,376	**2,108,213**	4,001,261
Net cash used in operating activities before change in assets and liabilities	**(4,340,215)**	(4,316,540)	**(2,323,748)**	(441,429)
Changes in assets and liabilities:				
Decrease/(increase) in receivables	**(320,141)**	6,849	**828,933**	(1,482)
(Increase)/decrease in interest receivable	**(7,113)**	-	**(956,616)**	-
Increase/(decrease) in payables	**681,392**	38,317	**789,709**	169,409
Increase in prepayments	**-**	(6,542)	**-**	-
Net cash provided by (used in) operating activities	**(3,986,077)**	(4,277,916)	**(1,661,722)**	(273,502)
(b) Reconciliation of cash				
For the purpose of the Statements of Cash Flows, cash includes cash on hand and in banks and short-term investments in commercial paper.				

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	CONSOLIDATED		PARENT ENTITY	
	2001	2000	**2001**	2000
	$	$	**$**	$

18. COMMITMENTS

(i) Land management

A former Controlled Entity, Topalite Resources Pty Ltd ("Topalite"), has to perform minimum exploration work and expend minimum amounts of money on its tenements. The overall expenditure requirement tends to be limited in the normal course of Topalite's tenement portfolio management, through expenditure exemption approvals and expenditure reductions, through relinquishment of parts or the whole of tenements deemed non-prospective. Should Topalite wish to preserve interests in its current tenements, the amount which may be required to be expended is as follows:

Not later than one year	-	37,000	-	-
Later than one year but not later than five years	-	222,000	-	-
Later than five years but not later than twenty-one years	-	777,000	-	-
	-	1,036,000	-	-

The terms and conditions under which Topalite has title to its various mining tenements obliges it to meet its tenement rentals and minimum levels of exploration expenditure as gazetted by the Department of Mineral Resources of New South Wales, as well as Local Government rates and taxes.

The "Later than five years but not later than twenty one years" component, represents commitments starting from five years hence for the following sixteen years in respect of Mining Licences which are granted for a period of twenty-one years, but in common with Prospecting Licences and Exploration Licences may be relinquished or sold by Topalite before the expiry of the full term of the Licence.

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	CONSOLIDATED		PARENT ENTITY	
	2001	2000	**2001**	2000
	$	$	**$**	$

18. COMMITMENTS (Cont'd.)

(ii) Research and development

A Controlled Entity, Autogen Research Pty Ltd ("Autogen Research"), has agreed to provide certain monies for research and development projects covering the areas of diabetes, obesity, allergic diseases, autoimmune disorders and depression and anxiety with the objective of long-term commercialisation. Research agreements have been undertaken with The International Diabetes Institute, Monash University, Deakin University, South Eastern Sydney Area Health Service and Flinders University.

Committed and Contracted				
Due not later than one year	**5,010,975**	5,128,184	-	-

Autogen Research has the option to continue funding these research agreements subject to annual reviews which are dependent upon research milestones being met. Autogen Research has the right to benefit from the commercialisation of any resulting products.

Under the alliance with Lipha, Lipha provides funding towards the commitments made by Autogen Research to the relevant research institutions. Lipha will provide approximately $4.0 million during the next year (2000: $3.6 million)

(iii) *Finance lease commitments*

Finance lease rentals are payable as follows:				
Not later than one year	**129,596**	211,149	**129,596**	211,149
Later than one year but not later than five years	**16,149**	80,746	**16,149**	80,746
	145,745	291,895	**145,745**	291,895
Less: Future lease finance charges				
Not later than one year	**(5,732)**	(19,282)	**(5,732)**	(19,282)
Later than one year but not later than five years	**(313)**	(6,045)	**(313)**	(6,045)
	139,700	266,568	**139,700**	266,568
Lease liabilities provided for in the financial statements:				
Current	**124,021**	189,970	**124,021**	189,970
Non-current	**15,679**	76,598	**15,679**	76,598
Total lease liability	**139,700**	266,568	**139,700**	266,568

The Consolidated Entity leases research equipment under a finance lease expiring in the 2003 financial year. At the end of the lease term the Consolidated Entity has the option to purchase the equipment at a zero residual.

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	CONSOLIDATED		PARENT ENTITY	
	2001	2000	**2001**	2000
	$	$	**$**	$

19. CONTINGENT LIABILITIES

Cash deposits as outlined in Note 7 have allowed external financiers to provide various guarantees to the Department of Mineral Resources of New South Wales ("the Departments") for the purposes of guaranteeing the former Consolidated Entity's performance in accordance with New South Wales mining law.

The performance relates to the requirement that the Consolidated Entity adheres to the terms and conditions of its mining leases which, inter alia, requires site restoration. However, the Directors do not anticipate the Departments will exercise these guarantees as the Consolidated Entity adheres to all conditions of their leases.

These are secured by deposits held by external financiers (refer Note 7)	-	152,283	-	106,693

The Company is a party to an action commenced by the liquidator of Cambridge Gulf Investments Pty Ltd ("CGI"). In December 1996, the Company, together with other shareholders of CGI received shares held by CGI in a publicly listed company. The liquidator alleges that the assignment of these shares amounted to conduct prohibited by the law on various grounds. The Company has denied the claims. Soon after it received the shares in December 1996, the Company sold them on the open market. If the Company is unsuccessful in its defence of the claim, the Company's maximum potential liability is likely to be the value for which the shares were sold by the Company on the open market, being $1.5 million and legal costs of the action. In the current financial year, interlocutary proceedings have continued and the matter is awaiting a trial date, likely to be in the first half of 2002.

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		CONSOLIDATED 2001 $	2000 $
20. SEGMENT INFORMATION			
INDUSTRY SEGMENTS			
Operating revenue			
Investments	Proceeds on sale of investments	**10,000**	3,908,662
Biotechnology research	Interest received from Outside Entities	**654,353**	220,243
	Proceeds from research agreements	**3,898,401**	2,054,210
	Sundry revenue	-	650
	Other Interest received from Outside Entities	-	2,819
	Proceeds on sale of land and buildings	**120,000**	-
		4,682,754	6,186,584
Operating loss after tax			
(No income tax payable by segments)			
Investments		**1,137,053**	(4,661,790)
Biotechnology research		**(4,555,024)**	(4,266,365)
Other		-	(105,951)
		(3,417,971)	(9,034,106)
Total Assets			
Investments		**293,702**	2,291,613
Biotechnology research		**8,010,695**	11,967,350
Other		-	61,968
		8,304,397	14,320,931

GEOGRAPHICAL SEGMENTS

The Consolidated Entity operates within Australia.

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21. CONTROLLED ENTITIES

Name	Class of Shares	Investment Owned 2001	Investment Owned 2000
Parent Entity			
Autogen Limited			
Wholly owned Controlled Entities			
Topalite Resources Pty Ltd	Ord	-	100%
Autogen Research Pty Ltd	Ord	100%	100%

The Parent Entity and Controlled Entities carry on business and are incorporated in Australia. During the year the Parent Entity sold its entire interest in Topalite Resources Pty Ltd.

Details of the disposal are:

	CONSOLIDATED 2001 $	CONSOLIDATED 2000 $	PARENT ENTITY 2001 $	PARENT ENTITY 2000 $
Consideration (Receivable)	10,000	-	10,000	-
Net assets of entity disposed of				
Non-current receivables	44,757	-	44,757	-
Exploration expenditure	9,580	-	9,580	-
Trade creditors and accruals	(9,774)	-	(9,774)	-
	44,563	-	44,563	-

22. REMUNERATION OF DIRECTORS

The Directors of Autogen Limited in office at any time during the year were:

J.I. Gutnick – Executive

The Hon. R.J.L. Hawke AC – Non-Executive

Dr D.S. Tyrwhitt – Non-Executive

J.N. Treilles – Non-Executive

J. Jonas - Non-Executive
(Appointed 19/12/00)

Prof. C. Bouchard – Non-Executive
(Resigned 31/12/00)

The remuneration of Mr J.I. Gutnick was paid by A.W.I. Administration Services Pty Ltd.

	CONSOLIDATED 2001 $	CONSOLIDATED 2000 $	PARENT ENTITY 2001 $	PARENT ENTITY 2000 $
Total income paid or payable or otherwise made available to all Directors of the Company and to all Directors of each entity in the Consolidated Entity from the Parent Entity or any related party	307,870	534,006	307,870	534,006

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	PARENT ENTITY	
	2001	2000
	Number	Number

22. REMUNERATION OF DIRECTORS (Cont'd)

Number of Directors of the Parent Entity whose total income falls within the following bands:

$0	-	$9,999	**2**	1
$10,000	-	$19,999	**2**	1
$30,000	-	$39,999	**-**	1
$40,000	-	$49,999	**1**	-
$70,000	-	$79,999	**-**	1
$190,000	-	$199,999	**-**	1
$210,000	-	$219,999	**-**	1
$220,000	-	$229,999	**1**	-

In the 2000 year, 1,500,000 options under the Employee Share Option Plan were issued to two Directors at a value in accordance with the *Income Tax Assessment Act*. No additional benefits resulted to the Director and no additional costs resulted to the Company. As a result of the 1:5 share consolidation, the abovementioned options were restructured on the same basis and now equate to 300,000 options.

	CONSOLIDATED		PARENT ENTITY	
	2001	2000	**2001**	2000
	$	$	**$**	$

23. REMUNERATION OF EXECUTIVES

Total income received or due and receivable from the Company, entities in the Consolidated Entity or related parties by Executive officers (including Directors) of the Company and of Controlled Entities whose income exceeds $100,000	**458,715**	407,956	**458,715**	407,956

The number of executives of the Company and of Controlled Entities, whose remuneration from the Company or related parties and from entities in the Consolidated Entity, falls within the following bands:

			Number	Number	**Number**	Number
$190,000	-	$199,999	**-**	1	**-**	1
$210,000	-	$219,999	**-**	1	**-**	1
$220,000	-	$229,999	**1**	-	**1**	-
$230,000	-	$239,999	**1**	-	**1**	-

In the 2000 year, 5,200,000 options under the Employee Share Option Plan were issued to executives at a value in accordance with the *Income Tax Assessment Act*. No additional benefits resulted to the executives and no additional costs resulted to the Company. As a result of the 1:5 share consolidation, the abovementioned options were restructured on the same basis and now equate to 1,040,000 options.

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	PARENT ENTITY	
	2001	2000
	$	$

24. RELATED PARTY AND OTHER INFORMATION

Disclosure relating to Directors

The names of the Directors and their remuneration are disclosed in Note 22.

Aggregate number of shares and share options held directly, indirectly or beneficially by the Directors of the Parent Entity are as follows:		
Shares	**10,189,137**	50,840,653
Options	**7,642,887**	29,448,468
Executive Share Options	**200,000**	1,000,000

Terms of the options are disclosed in Note 25.

	CONSOLIDATED		PARENT ENTITY	
	2001	2000	**2001**	2000
	$	$	**$**	$
Chevas Pty Ltd ("Chevas") is a Director Related Entity of Mr J.I. Gutnick.				
Transactions during the year				
Interest payable	-	19,358	-	19,358
Amounts repaid	-	(1,635,272)	-	(1,635,272)
Pursuant to the loan agreement, interest could be charged at a rate of 13% or 11% if interest is repaid in cash. The actual interest rate for 2000 was 7.95%.				
Kimberley Gardens Boutique Hotel and Conference Centre Director Related Entity – Mr J.I. Gutnick				
Transactions during the year				
Hotel services provided	**8,102**	4,058	**8,102**	4,058
Amount paid	**(8,102)**	(3,404)	**(8,102)**	(3,404)
Services provided were on normal commercial terms				
Transactions with wholly owned Controlled Entities				
Interest is charged at 1% above corporate overdraft rates. The actual interest rate for 2001 was 8.75% to 9.95% (2000: 9.75% to 10.75%)				
Interest revenue	-	-	**981,046**	750,164
Aggregate receivable	-	-	**11,605,152**	9,496,639
Provision for doubtful debts	-	-	**(11,605,152)**	(9,496,639)

Transactions with Other Entities

Some of the Directors of the Parent Entity are also Directors of the following companies ("Other Entities"):

A.W.I. Administration Services Pty Ltd ("AWI")

Bay Resources Ltd ("Bay")

Gutnick Resources N.L. ("GKR")

Quantum Resources Limited ("QUR")

Topalite Resources Pty Ltd ("TOP")

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	Note	CONSOLIDATED 2001 $	CONSOLIDATED 2000 $	PARENT ENTITY 2001 $	PARENT ENTITY 2000 $
24. RELATED PARTY AND OTHER INFORMATION (Cont'd)					
Transactions with AWI were:					
Balance at year end					
Other creditor – unsecured (current)	11	**163,649**	158,448	**163,649**	115,005
Receivable non-current		**7,480**	8,320	**7,480**	8,320
During the year					
Fees for management services and other services		**3,471,384**	932,116	**3,514,827**	811,943
Borrowing costs payable		**5,710**	13,361	**5,710**	11,011
Interest is charged at 1% above corporate overdraft rates.					
The actual interest rates for 2001 were 9.75% to 10.75% (2000: 9.75% to 10.75%).					
Transactions with QUR were:					
Balance at year end					
Receivable non-current		**10,000**	-	**10,000**	-
During the year					
Sale of shares in Controlled Entity on deferred payment terms		**10,000**	-	**10,000**	-
Transactions with TOP were:					
Balance at year end					
Receivable non-current		**127,113**	-	**127,113**	-
The receivable including accrued interest at 8.33% is repayable on 30 November 2002					
During the year					
Sale of freehold land and buildings		**120,000**	-	**120,000**	-
Interest receivable		**7,113**	-	**7,113**	-
The Parent Entity is one of a number of public companies that hold all the issued shares in AWI.					
Ownership interest		**%**	%	**%**	%
Ordinary shares		**20.45**	20.45	**20.45**	20.45
Preference shares		**10.29**	10.29	**10.29**	10.29
The Parent Entity has the following ownership interests:					
Bay		**0.74**	0.74	**0.74**	0.74
GKR		**4.67**	5.66	**4.67**	5.66

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25. EMPLOYEE SHARE OPTION PLAN

On 24 March 2000 the Company granted unlisted options over 5,200,000 unissued ordinary company shares to Senior Executives at an issue price of 10.8 cents under the Senior Executive Share Option Plan and on 8 March 2001 the Company granted a further 335,000 unlisted options at an issue price of 89.58 cents. As a result of the 1:5 share consolidation, the options on issue were restructured on the same basis.

(i) The options are exercisable from 25 March 2003 until the earlier of their expiry date on 24 March 2010 or the termination of the Executive's employment.

(ii) The options may only be exercised if the price on the ASX of the ordinary shares in the Company has increased by a factor of 20%, after adjustments for rights issues, bonus issues and dividends, from the date that the options were acquired.

(iii) The exercise price for the options will be equal to the weighted average market price of the ordinary shares on the five business days prior to and including the date of acquisition, less the issue price.

Off Balance Sheet Items	**2001**	2000
Unissued ordinary shares of the Company under option	**1,040,000**	5,200,000
Exercise price	**$1.16**	$0.23
The market value of the shares under these options at 30 June was	**$0.79**	$0.30
Interest-free option loans provided to Employees	**$529,031**	$561,600

Interest-free loans were made available to Employees who subscribed for options. The option loans are repayable if the Employee disposes of any ordinary shares acquired as a result of the exercise of the options or on the termination of the Employee's employment, however, in these circumstances the Company will buy back the options and use the proceeds to repay the loan.

The Company may at the discretion of the Board, make loans to participants to fund the exercise price of the options. These loans are likely to be interest-free and repayable with "after tax" dividends or on the earlier of the disposal of the ordinary shares or the termination of the Employee's employment.

Subsequent to 30 June 2001, the Directors changed the name of the Plan from the Executive Share Option Plan to the Employee Share Option Plan.

26. NUMBER OF EMPLOYEES

The Economic Entity is managed by A.W.I. Administration Services Pty Ltd ("Admin") pursuant to a Service Agreement dated 25 November 1988. Accordingly, the Economic Entity has no employees. At 30 June 2001 Admin had 56 employees who manage a number of public companies including the Economic Entity.

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Directors' Declaration

In the opinion of the Directors of Autogen Limited

(a) The financial statements and notes, set out in pages 25 to 48, are in accordance with the *Corporations Act 2001*, including:

  (i) giving a true and fair view of the financial position of the Company and the Consolidated Entity as at 30 June 2001 and of their performance, as represented by the results of their operations and their cash flows for the year ended on that date: and

  (ii) complying with Accounting Standards and the Corporations Regulations 2001.

(b) There are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

Signed in accordance with a Resolution of the Board of Directors at Melbourne this 24th day of September 2001.

J. I. Gutnick

J.I. Gutnick
Director

Independent Audit Report to the Members of Autogen Limited

Scope

We have audited the financial report of Autogen Limited for the financial year ended 30 June 2001 as set out on pages 29 to 53. The financial report includes the consolidated financial statements of the Consolidated Entity comprising the Company and the entities it controlled at year's end or from time to time during the financial year. The Company's Directors are responsible for the financial report. We have conducted an independent audit of this financial report in order to express an opinion on it to the members of the company.

Our audit has been conducted in accordance with Australian Auditing Standards to provide reasonable assurance whether the financial report is free of material misstatement. Our procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial report, and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion whether, in all material respects, the financial report is presented fairly in accordance with Accounting Standards and other mandatory professional reporting requirements and statutory requirements in Australia so as to present a view which is consistent with our understanding of the Company's and the consolidated entity's financial position and performance as represented by the results of their operations and their cash flows.

The audit opinion expressed in this report has been formed on the above basis.

Audit Opinion

In our opinion, the financial report of Autogen Limited is in accordance with:

(a) the *Corporations Act 2001*, including:

  (i) giving a true and fair view of the Company's and consolidated entity's financial position as at 30 June 2001 and of their performance for the year ended on that date; and

  (ii) complying with Accounting Standards and the Corporations Regulations; and

  other mandatory professional reporting requirements.

PKF

PKF
Chartered Accountants
A Victorian Partnership

24 September 2001
Melbourne

Michael Phillips

M J Phillips
Partner

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AUSTRALIAN STOCK EXCHANGE INFORMATION

As at 31 August 2001 the following information applied:

1. SUBSTANTIAL SHAREHOLDERS

Substantial shareholders disclosed in substantial shareholder notices to the Company:

Name	Number of Fully Paid Ordinary Shares held
Edensor Nominees Pty Limited (*)	7,547,132
Normandy Mining Finance Limited	6,089,002
Lipha s. a.	5,668,750
Charterbank Corporation	2,880,000

(*) Mr J I Gutnick is a Director and Shareholder of Edensor Nominees Pty Limited.

2. SECURITIES

(a) Fully Paid Ordinary Shares

The number of holders of fully paid ordinary shares in the Company is 3,641. On a show of hands every holder of fully paid ordinary shares present or by proxy, shall have one vote. Upon a poll, each fully paid ordinary share shall have one vote.

The distribution of holders of fully paid ordinary shares is as follows:

Category			Number of Shareholders
Holding between	1 -	1,000 Shares	2,561
Holding between	1,001 -	5,000 Shares	851
Holding between	5,001 -	10,000 Shares	127
Holding between	10,001 -	100,000 Shares	83
Holding more than	100,001	Shares	19

The number of holders with less than a marketable parcel of 495 fully paid ordinary shares is 1,970. The Company's fully paid ordinary shares are quoted on the Australian Stock Exchange using the code AGT.

The top 20 shareholders are as follows:

Name	Number of Shares Held	Percentage
Edensor Nominees Pty Limited	5,577,724	14.75
ANZ Nominees Limited	5,134,590	13.58
Lipha s.a.	4,932,564	13.04
Accounting Concepts Limited	2,880,000	7.62
BB Nominees Pty Ltd	2,387,849	6.31
Edensor Nominees Pty Ltd <SM A/C>	2,000,000	5.29
Queensland Investment Corporation	1,800,193	4.76
Ravkin Pty Limited	1,488,752	3.94
Moniton Proprietary Limited	1,351,346	3.57
Mr Harris Toibb	1,220,000	3.23
Lipha s.a.	736,186	1.95
Australian Gold Resources Limited	640,000	1.69
Carstock Nominees Pty Ltd	425,000	1.12
Grenfell Securities Limited	320,000	0.85
Beneficial Insurance Company Limited	308,111	0.81
National Nominees Limited	276,906	0.73
LJ Morey Holdings Pty Ltd	127,887	0.34
Merrill Lynch (Australia) Nominees Pty Ltd	116,154	0.31
Emperor Crest Pty Ltd <Naran Family A/C>	110,000	0.29
Quantum Resources Limited	95,554	0.25
Total	31,928,816	84.43

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(b) **Options maturing 12 March 2010 over Fully Paid Ordinary Shares**

The number of holders of options maturing 12 March 2010 over fully paid ordinary shares in the Company is 1,031. Proxyholders may attend and speak at general meetings of the Company. However they do not have an entitlement to vote upon the business before the meeting either by show of hands nor by proxy or at a poll.

The distribution of holders of options maturing 12 March 2010 over fully paid ordinary shares is as follows:

Category		Number of Shareholders
Holding between	1 - 1,000 Shares	2,561
Holding between	1 - 1,000 Options	535
Holding between	1,001 - 5,000 Options	289
Holding between	5,001 - 10,000 Options	84
Holding between	10,001 - 100,000 Options	105
Holding more than	100,001 Options	18

The number of holders with less than a marketable parcel of 2,500 options over fully paid ordinary shares is 714. The Company's Options maturing 12 March 2010 over fully paid ordinary shares are quoted on the Australian Stock Exchange using the code AGTO. The top 20 optionholders are as follows:

Name	Number of Shares Held	Percentage
Edensor Nominees Pty Limited	7,362,744	33.23
Lipha s.a.	4,439,308	20.03
ANZ Nominees Limited	820,000	3.70
BB Nominees Pty Ltd	762,125	3.44
PEP Nominee Pty Ltd	742,960	3.35
Mr Mordechai Gutnick	596,626	2.69
VAGG Investment Management Services Pty Limited	455,944	2.06
Reef Securities Limited	420,739	1.90
Jagen Nominees Pty Ltd	420,100	1.90
Mr Mustafa Shail & Mrs Nuriye Shail <Shail Super Fund A/C>	300,000	1.35
Handelsfinanz-CCF Banh	167,871	0.76
Queensland Investment Corporation	151,832	0.69
Colluceo March Nominees Pty Ltd	143,837	0.65
Irvay Nominees Pty Ltd <Trading Account>	140,000	0.63
Mrs Deanne Goldschmidt	120,000	0.54
Jewish Family Community Centre Inc.	120,000	0.54
FNL Investments Pty Limited <Super A/C>	106,137	0.48
Advance Publicity Pty Ltd	104,000	0.47
Mr Nicholas Kolesovs	100,000	0.45
Mr Stephen John Roberts	100,000	0.45
Total	17,574,223	79.31

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CORPORATE INFORMATION

Corporate Information

Directors

Joseph Gutnick

The Hon. R J L Hawke

Jean-Noel Treilles

Jeffrey Jonas

David Tyrwhitt

Company Secretary

Peter Lee

Senior Management

Professor Greg Collier,
Chief Scientific Officer

Peter Lee,
General Manager Corporate
& Company Secretary

Scientific Advisory Board

Professor Paul Zimmet AO

Dr John Blangero

Professor Ian Gust AO

Dr Ian Mackay AM

Professor Robert Williamson

Registered Office and Domicile

210 Kings Way
South Melbourne
Victoria 3205 Australia
Telephone: +61 3 9234 1188
Facsimile: +61 3 9234 1189
E-mail: autogen@awi.com.au
Internet: http://www.autogenlimited.com.au

Legal Form

A public company limited by shares

County of Incorporation

Australia

Share Registry

Computershare Investor Services
Pty Limited
Level 12
565 Bourke Street
Melbourne Victoria 3000 Australia
Telephone: +61 3 9615 5970
Facsimile: +61 3 9611 5710

Shareholder Information

Manager Investor Relations
Telephone: +61 3 9234 1188
Facsimile: +61 3 9234 1189
E-mail: autogen@awi.com.au
Internet: http:/www.autogenlimited.com.au

Australian Stock Exchange Listing Codes

AGT
AGTO

Auditors

PKF
Level 11, CGU Tower
485 LaTrobe Street
Melbourne Victoria 3000

Solicitors

Clayton Utz
Level 18
333 Collins Street
Melbourne Victoria 3000

Gadens Lawyers
Level 10
40 St George's Terrace
Perth Western Australia 6000

Bankers

The Bank of Melbourne
360 Collins Street
Melbourne Victoria 3000

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