

May 9, 2007

Mail Stop 6010

Simon Chin, President
Iris BioTechnologies Inc.
5201 Great America Parkway, Suite 320
Santa Clara, California 95054

**Re: Iris BioTechnologies Inc.
Registration Statement on Form SB-2
Filed April 12, 2007
File No. 333-142076**

Dear Mr. Chin:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Prospectus

1. Please provide the disclosure required by Regulation S-B Item 506.

Prospectus Summary, page 5

2. Eliminate the technical jargon such as “gene expression kit” and “informatics” from the forepart of your prospectus. Instead, explain these concepts in concrete, everyday language. See Rule 421(d) of Regulation C.
3. Please balance your summary to clearly highlight the stage of development of your products and hurdles to commercialization.

Risk Factors, page 6

4. Please add risk factor disclosure discussing the risks associated with the hurdles you need to overcome to bring a product to market, including but not limited to, research and development, FDA approval and manufacturing the product.

5. Please add a prominent risk factor to describe the effect of section 11.1 of your bylaws.

Market for Securities, page 11

6. Please disclose the number of your shares that could be sold pursuant to rule 144.

Business, page 17

7. Please avoid reliance on technical terms that are not clear from context. If you must include technical terms in the body of your prospectus that are understood only by industry experts, you must make every effort to concisely explain these terms where you first use them. In addition, do not use technical terms or industry jargon in your concise explanations. For example and not as a complete list, we note your use of the following terms:

embedded arrays	steric hindrance
test probes	bioinformatics
genetic signature	piezo-electric
disease biomarker	terminal moiety
diagnostic guided therapy	solid-phase chemical synthesis
microfluidics	

If you elect to retain terms like this and add concise explanations where you first use them, please tell us why you cannot replace the terms with disclosure that can be understood by investors who do not work in your industry. Please also ensure that your revised disclosure permits investors who do not work in your industry to be able to understand clearly how your product works and how it achieves the advantages you mention.

8. Please provide us independent, objective support for the statements on page 17 of “widespread scientific validation of gene expression profiling” and that your product will “revolutionize the way medicine will be practiced.”
9. We note your reference to the education section of your web site at the end of the third paragraph and to the national cancer institute at the bottom of the sixth paragraph. Please file the hyperlinked information. See Footnote 41 of Release Nos. 33-7856.
10. We note your risk factor disclosure about your current clinical collaborations on page 10. Please describe these collaborations here and tell us why you have not filed these agreements as exhibits.

Our Solution, page 18

11. Please state clearly the stage of development of your product and the technological and other hurdles that must be resolved before you can commercialize the product.
12. Please clarify the status of your database. Does it currently have all information required to perform the functions disclosed? If not, what portion is complete and what hurdles remain to obtain the missing data?

Sales and Marketing, page 24

13. Please reconcile the statement in the first sentence that reimbursement exists with your risk factor disclosure that reimbursement is uncertain.
14. We note your disclosure that your customer base includes identified entities. If you have not yet sold your product or entered into binding purchase agreements, please revise your disclosure to remove any implication that these entities have purchased your product or have agreed to do so.

Intellectual Property, page 24

15. Please disclose the duration of the four patents. Also, please clarify whether you own them.

Government Regulation, page 25

16. Please describe the process that you will need to go through to obtain your FDA approval. Include a discussion of approvals to begin studies not using human subjects, approvals to begin human studies, and approvals to begin marketing. Also disclose the status of your product within this process.

Board of Directors, page 27

17. Please provide the disclosure required by Regulation S-B Item 407(a).

Certain Relationships and Related Transactions, page 28

18. We note you reference “the above transactions” yet have not provided disclosure of any transactions in this section. Please provide the disclosure required by Item 404 of Regulation S-B. For example, we note the related-party notes payable mentioned in your discussion of liquidity and capital resources.

Description of Securities, page 29

19. Please reconcile your statement regarding cumulative voting with section 7.10 of your bylaws.

20. Please tell us when a public offering of your stock will have occurred for purposes of section 12.6 of your bylaws. Will such a public offering be deemed to have been consummated upon the effectiveness of this registration statement?

Selling Stockholders, page 30

21. Where the selling shareholder is offering only a portion of its shares, please clarify which of the shares mentioned in the footnotes are the ones that are offered for sale.
22. Please identify the individuals with beneficial ownership of the shares held by the entities described in the selling stockholder table, for example, see note 1 and note 15.
23. Please tell us whether any of the selling stockholders are broker-dealers or affiliates of broker-dealers. A selling shareholder who is a broker-dealer must be identified in the prospectus as an underwriter. In addition, a selling stockholder who is an affiliate of a broker-dealer must be identified in the prospectus as an underwriter unless that selling stockholder is able to make the following representations in the prospectus: the selling shareholder purchased the shares being registered for resale in the ordinary course of business, and at the time of the purchase, the selling shareholder had no agreements or understandings, directly or indirectly, with any person to distribute the securities. Please revise as appropriate.
24. Please ensure reconcile the beneficial ownership reported in this table with the disclosure in your table disclosing the beneficial ownership of management.

Recent Sales of Unregistered Securities, page II-1

25. Please ensure that the information in this section is reconcilable to the footnotes in your table of selling security holders. For example, we note that the footnotes refer to a February 14, 2007 transaction that you have not disclosed in this section.
26. Please ensure that your disclosure in this section is reconcilable to your Statement of Deficiency in Stockholders' Equity. For example, we note the reference to March 2006 transactions in that statement. Where you disclose in this section securities issued for services, please disclose the nature and duration of the services.

Undertakings, page II-3

27. Please provide the undertaking required by Regulation S-B Item 512(g)(2).

Exhibits

28. Please file the related-party notes mentioned on page 16.

Exhibit 5.1

29. Please clearly identify the shares covered by your opinion of counsel.

30. Please ask your counsel to tell us the reason for the “when issued” condition in the third paragraph of this exhibit. It appears from your table of selling security holders that the shares are already issued.

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed decision. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

Simon Chin, President
Iris BioTechnologies Inc.
May 9, 2007
Page 6

We will consider a written request for acceleration of the effective date of the registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Kevin Kuhar at 202-551-3668 or in his absence, Jay Webb at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. Please contact Jay Mumford at (202) 551-3637 or me at (202) 551-3617 with any other questions.

Sincerely,

Russell Mancuso
Branch Chief

cc: Jeff Fessler, Esq.
Yoel Goldfeder, Esq.