

Bionomics Limited

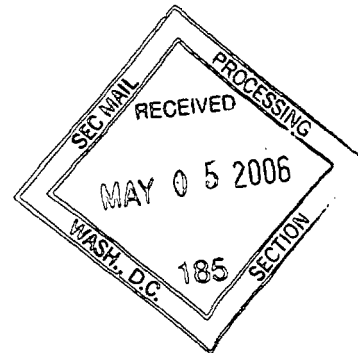


Friday 21 April 2006

Securities and Exchange Commission
Judiciary Plaza,
450 Fifth Street,
Washington DC 20549



06013188



SUPPL

Re: Bionomics Limited - File number 82-34682

Please see attached provided pursuant to Section 12g3-2(b) file number 82-34682.

Yours sincerely


Stephen Birrell
CFO & Company Secretary

✓ PROCESSED

MAY 09 2006

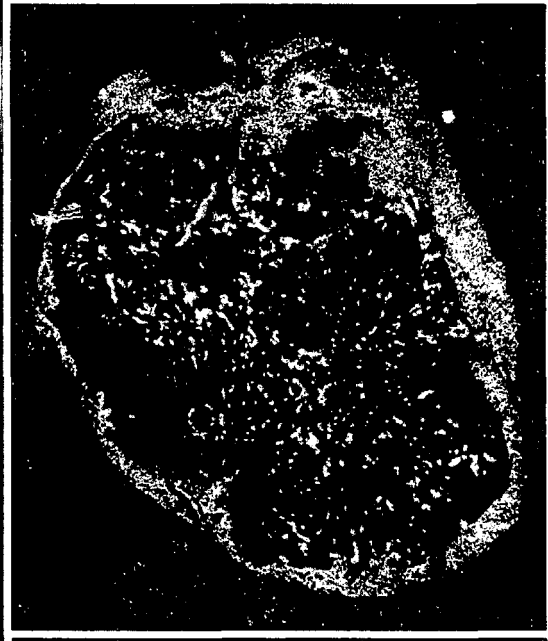
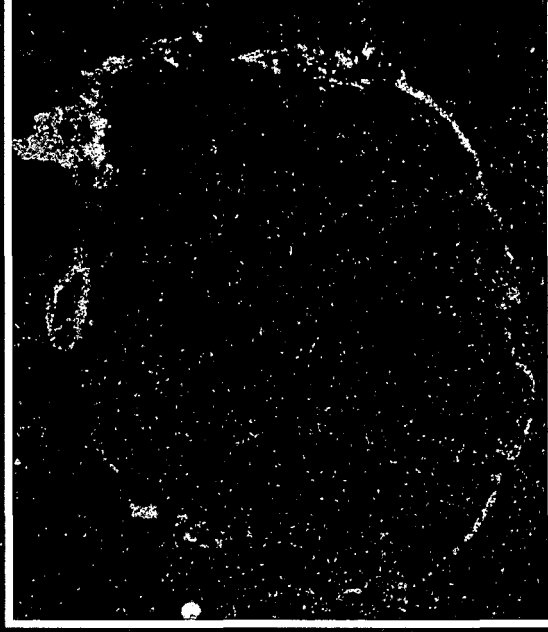
THOMSON
FINANCIAL

dlw 5/8

Bionomics

April 2006

BNC105:
A powerful vascular disrupting agent (VDA)
and next generation treatment for cancer



Safe Harbour Statement



Factors Affecting Future Performance

This presentation contains "forward-looking" statements within the meaning of the United States' Private Securities Litigation Reform Act of 1995. Any statements contained in this presentation that relate to prospective events or developments, including, without limitation, statements made regarding Bionomics' development candidate BNC105, its drug discovery programs and pending patent applications are deemed to be forward-looking statements. Words such as "believes," "anticipates," "plans," "expects," "projects," "forecasts," "will" and similar expressions are intended to identify forward-looking statements.

There are a number of important factors that could cause actual results or events to differ materially from those indicated by these forward-looking statements, including risks related to our available funds or existing funding arrangements, a downturn in our customers' markets, our failure to introduce new products or technologies in a timely manner, regulatory changes, risks related to our international operations, our inability to integrate acquired businesses and technologies into our existing business and to our competitive advantages, as well as other factors. Results of studies performed on competitors products may vary from those reported when tested in different settings.

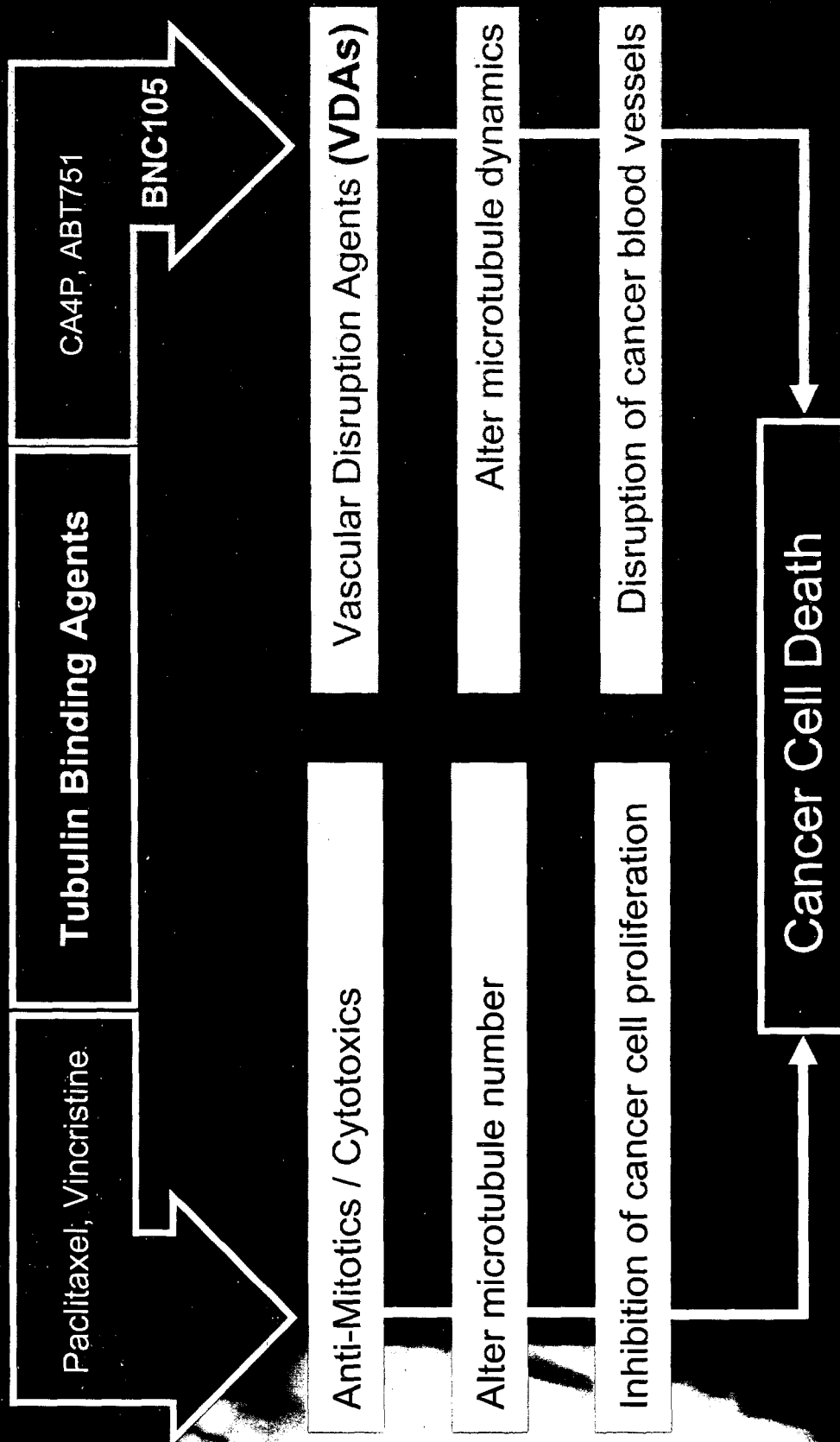
Subject to the requirements of any applicable legislation or the listing rules of any stock exchange on which our securities are quoted, we disclaim any intention or obligation to update any forward-looking statements as a result of developments occurring after the date of this presentation.

Introduction



- Vascular Disrupting Agents (VDAs) shut down the blood supply of cancers
- Bionomics drug candidate **BNC105**
 - selectively shuts down cancer blood vessels
 - inhibits the growth of tumours in preclinical tests
 - significantly enhances the efficacy of chemotherapeutics doxorubicin and 5-fluorouracil
 - exhibits a broad therapeutic window in mice
- The market potential for a successful drug with the product profile of **BNC 105** is significant

Anti-cancer compounds target Tubulin VDAs promise more effective treatment



BNC105 Target Product Profile



A treatment which shuts down blood vessels and promotes cell death in solid tumours, when added to chemotherapy or radiotherapy in patients with advanced cancers.

Increased selectivity for cancer blood vessels
is a key competitive advantage of **BNC105**



Cancer blood vessels are more fragile than
normal blood vessels

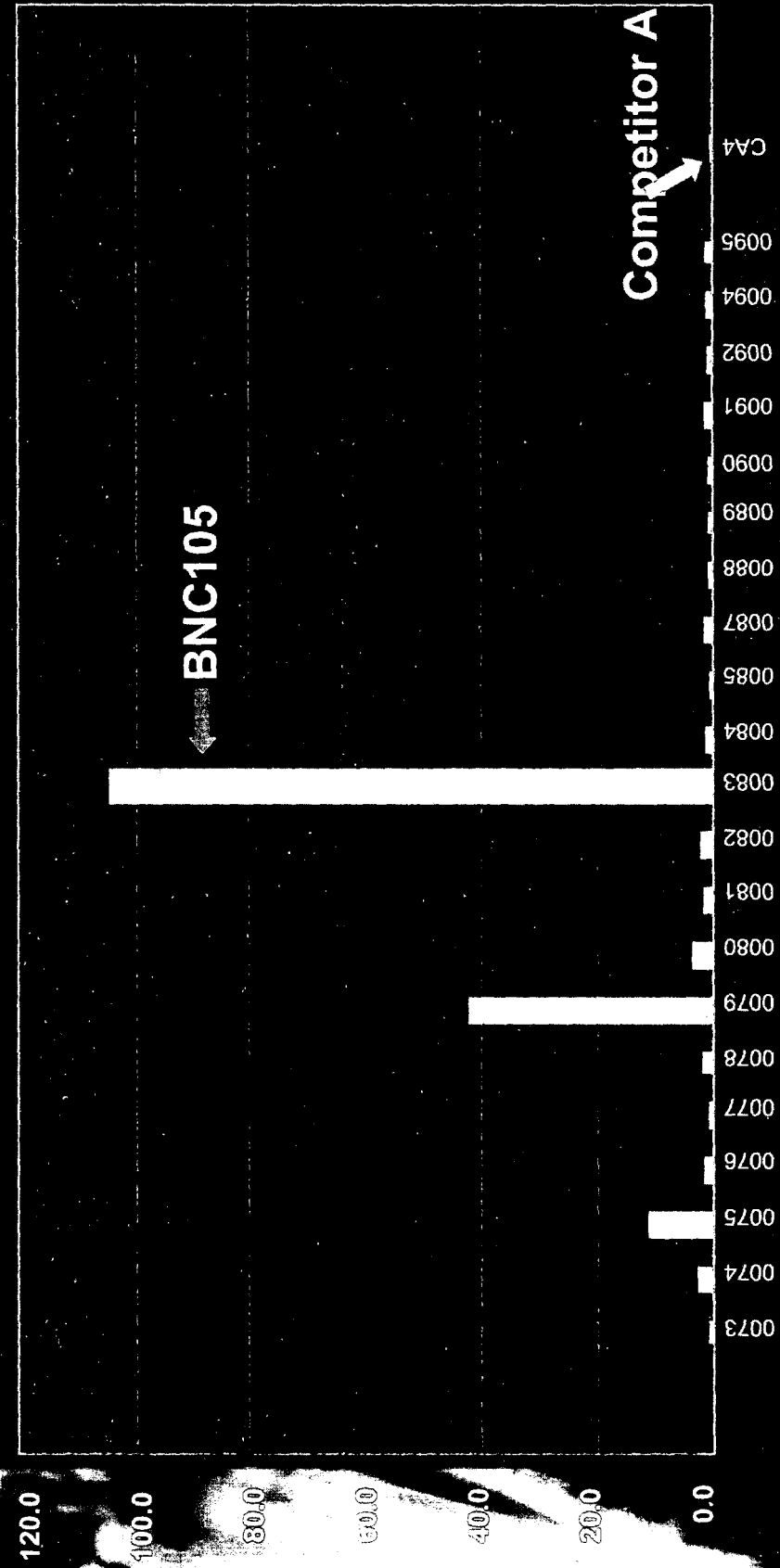
CA4P (Oxigene) Phase III
ABT-751 (Abbott) Phase III
AVE8062 (Sanofi-Aventis) Phase III
ZD6126 (Astra-Zeneca) No longer in development
MIN-029 (Mediclinova) Phase I

Competitors show limited selectivity for cancer
blood vessels leading to a narrow therapeutic
index



BNC105 exhibits 100-fold selectivity for activated blood vessel cells
This selectivity is not displayed by a leading competitor

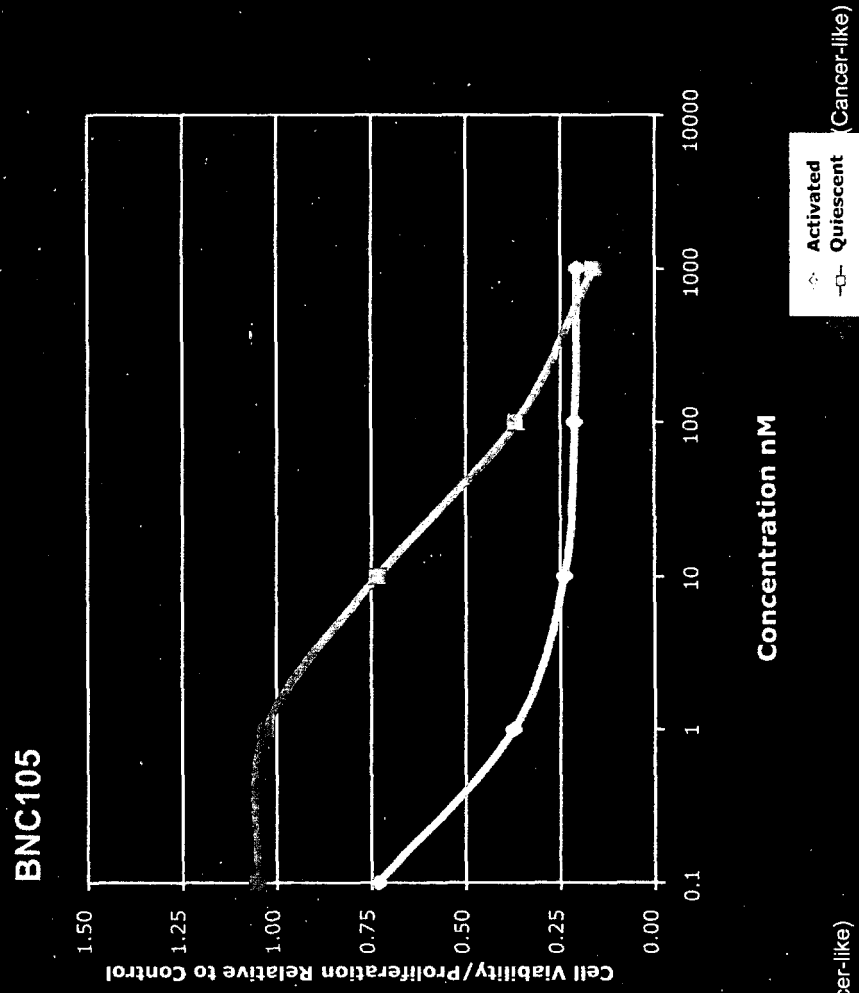
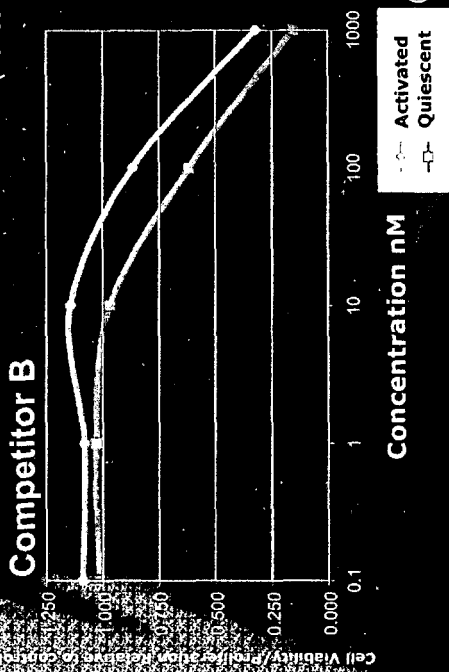
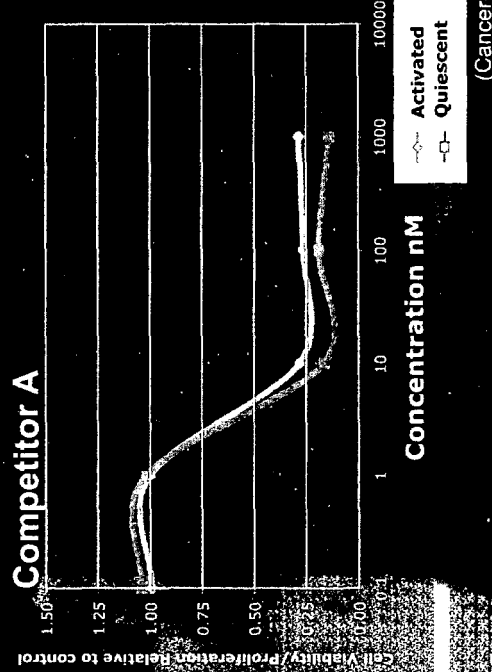
Selectivity Index



Compounds Screened

82-34682

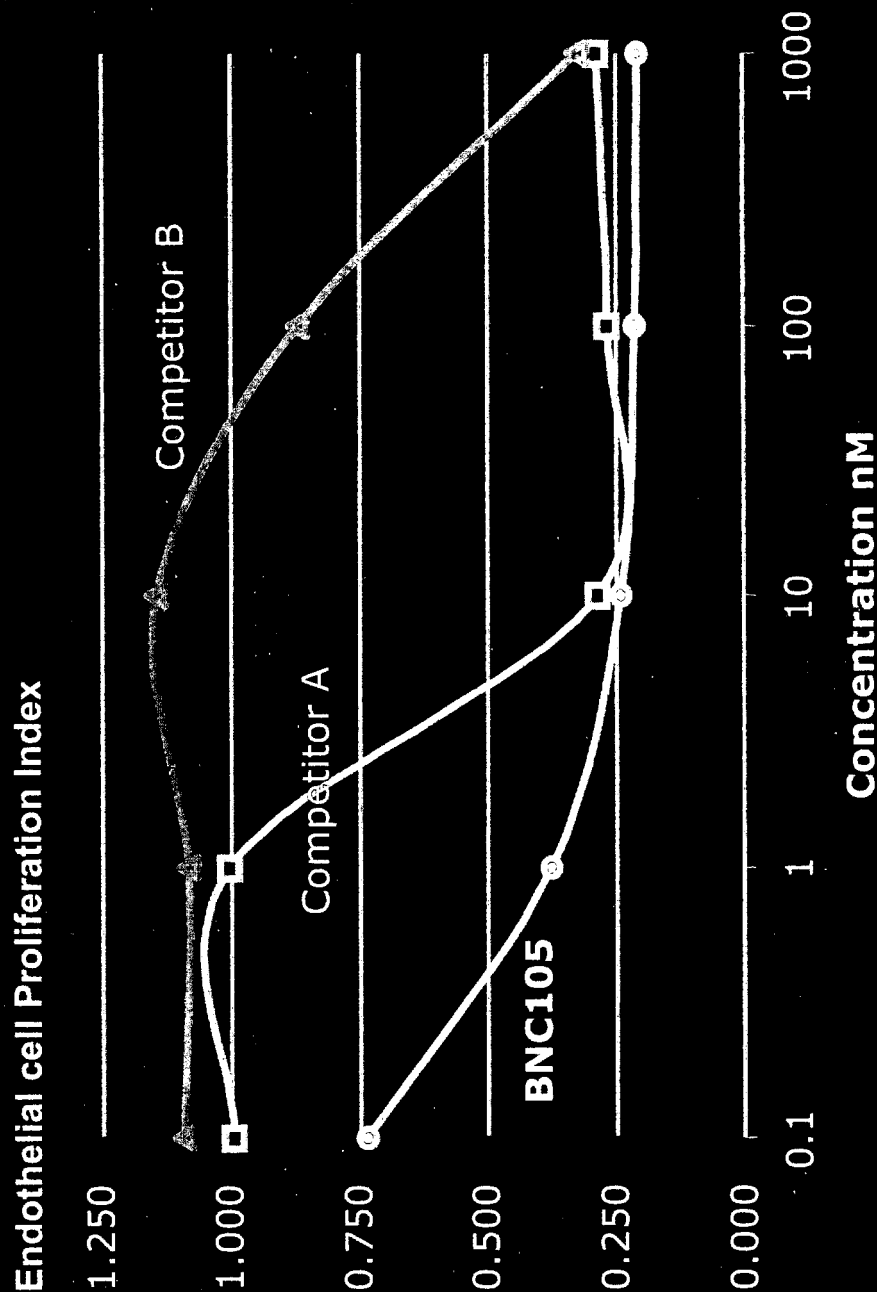
BNC105 more selectively targets the activated blood vessel cells found in cancer



82-34682

BNC105

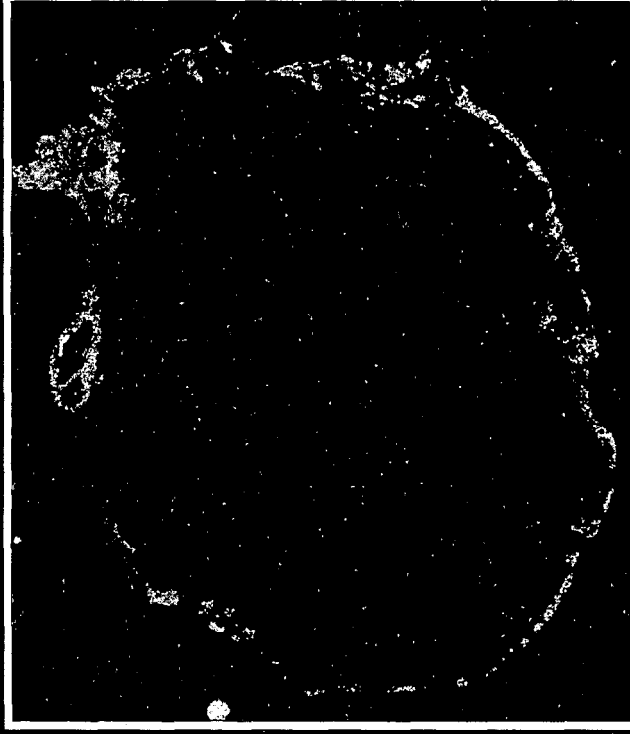
is more potent than leading competitors



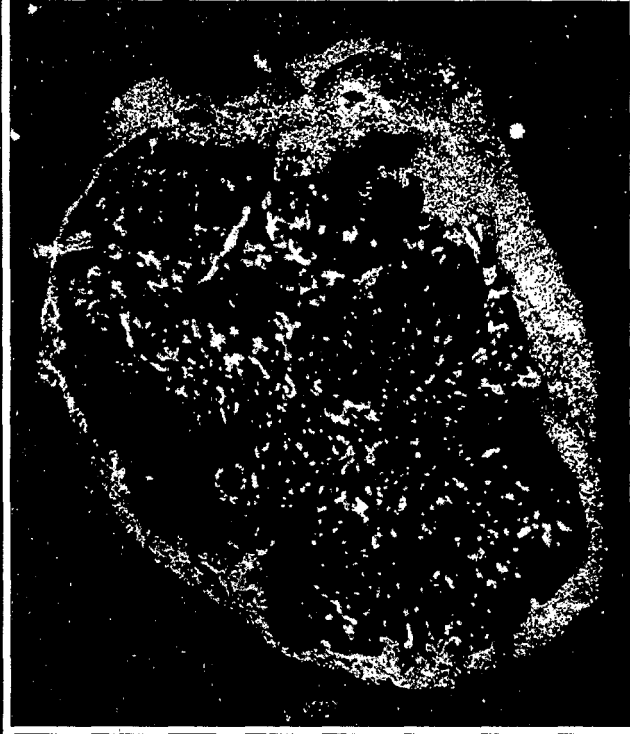
BNC105 shuts down the blood supply of human breast cancer in preclinical trials



BNC105 (10mg/kg)



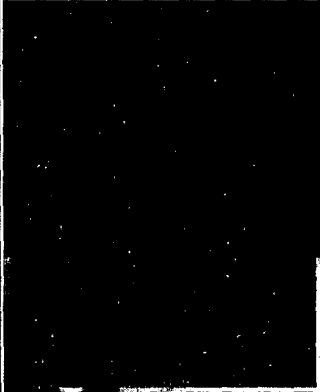
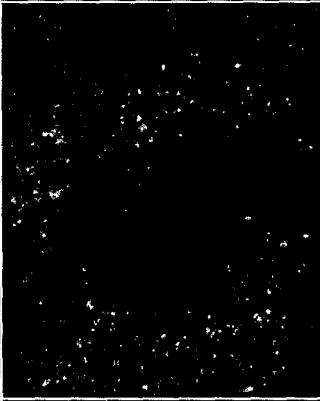
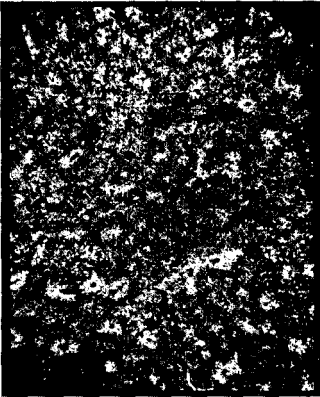
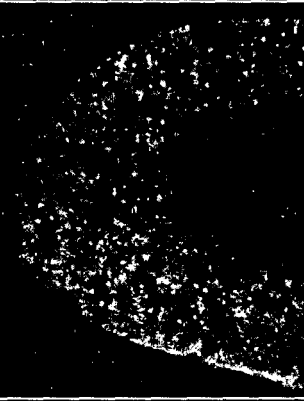
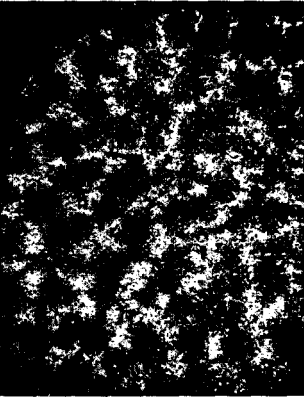
Saline



82-34682

BNC105 does not affect the blood supply of normal organs



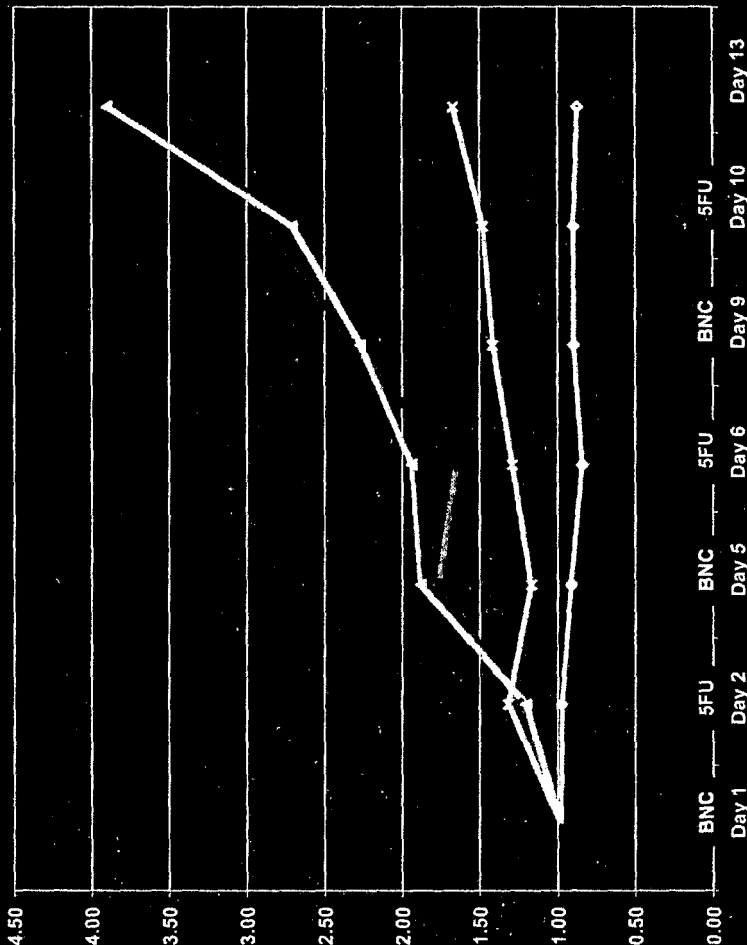
Heart	Kidney	Liver	Spleen	
				BNC105 10mg/kg
				Saline



BNC105 enhances the anti-cancer effect of 5-FU in model systems of human breast cancer

Bionomics

Tumor Growth relative to Day 1



BNC105 - 10mg/kg

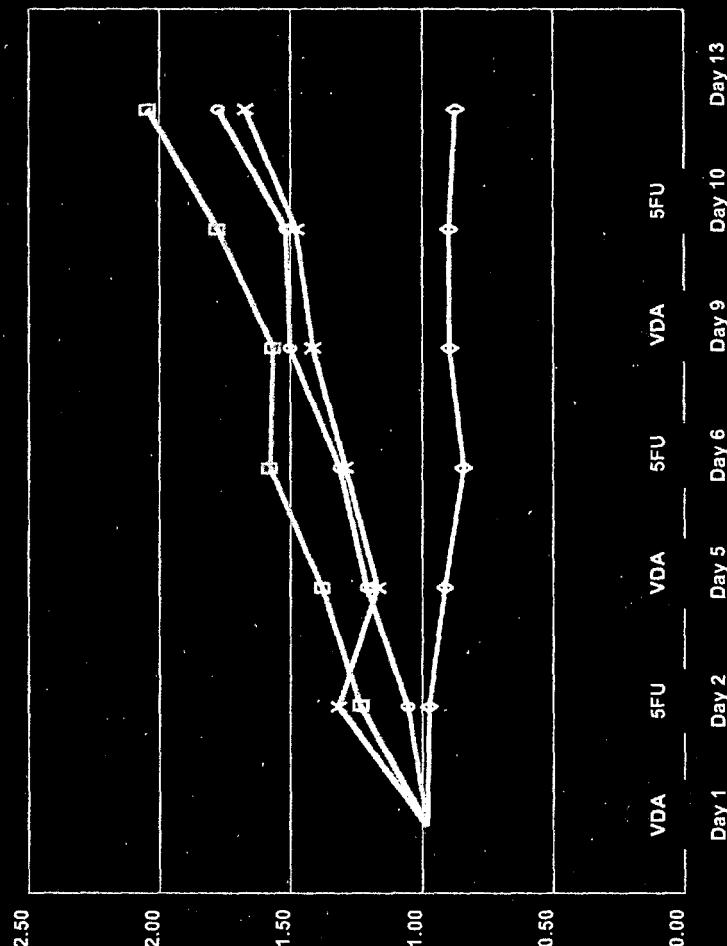
- BNC105+saline
- BNC105+ 5-FU
- Saline+5-FU
- Saline+saline



Bionomics

In human cancer models BNC105 performs better than a leading competitor

Tumor Growth relative to Day 1



Competitor A - 150mg/kg

BNC105 - 10mg/kg

—x— BNC105+saline

—o— BNC105+ 5-FU

—□— CompA+saline

—◇— CompA +5-FU

The market potential for BNC105



- VDAs and angiogenesis have an estimated market potential of ~US\$12 billion
(Scripps Reports 2002; ASInsights 2003)
- The worldwide market for anti-cancer therapeutics is ~US\$25 billion
(Scripps Reports 2002; Deutsche Bank 2001; UBS Warburg 2001)
 - 93% is for treatment of solid tumours
 - Cytotoxic chemotherapy represents ~US\$10 billion in cancer related therapy expenditures
- Cancer accounts for ~600,000 annual deaths in the US, each of these represents a treatment failure (Scripps Reports 2002)
 - US figures suggest the annual treatment cost in the US for cancer is US\$40 billion

BNC105: Key Points



- selectively shuts down cancer blood vessels. It targets cancer blood vessels at concentrations that leaves normal blood vessels intact
- is 150 times more potent than its closest competitor in achieving tumor blood vessel shut down in animal models of breast cancer
- inhibits tumor growth at a dose which is 15 times lower than its closest competitor in animal models of human breast cancer
- significantly enhances the efficacy of chemotherapeutics doxorubicin and 5-fluorouracil

BNC105: Key Points



- In mice **BNC105** exhibits a therapeutic window that is approximately 20 times better than its closest competitor
- **BNC105** exhibits appropriate physicochemical properties which allow it to be used as a drug
- There exists a strong market potential for a successful drug with the product profile of **BNC 105**

BNC105: Next Steps



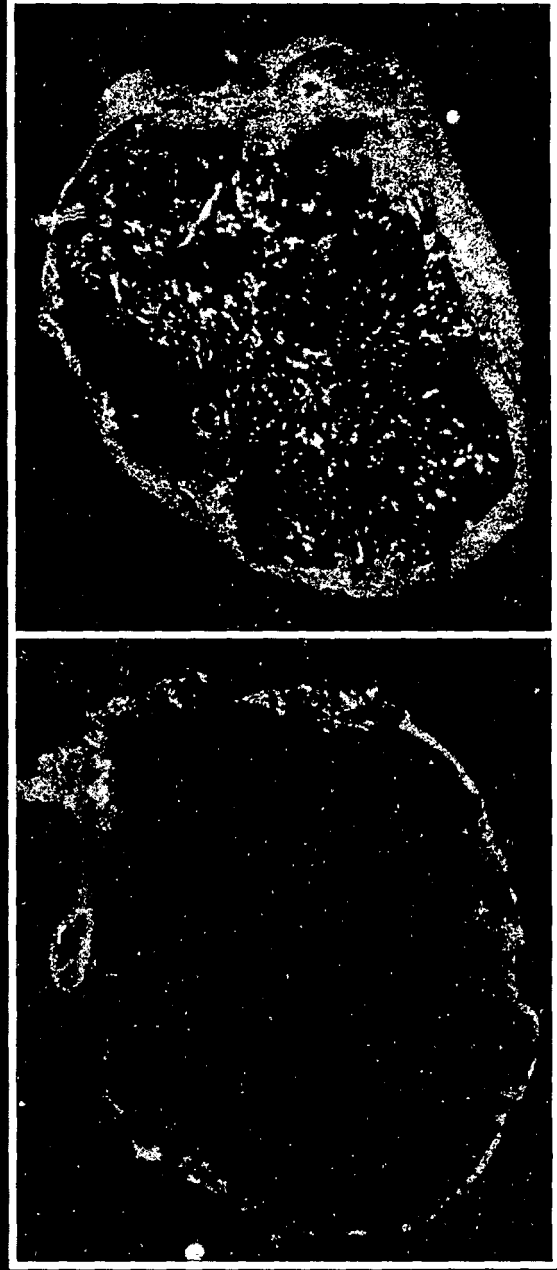
- Next 12 months
 - Scale-up synthesis and manufacture
 - Formal toxicology
- Late 2007
 - Investigational New Drug (IND) filing with US FDA
 - Approval to commence clinical trials

82-34681



BNC105

*A powerful vascular disrupting agent
(VDA) and next generation
treatment for cancer*



21 April 2006

82-34682



Bionomics

*Developing revolutionary therapies
for cancer and CNS diseases*