

2 August 2006

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



**SUPPL**

**Re: Bionomics Limited - File number 82-34682**

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

Yours sincerely

**PROCESSED**

**AUG 14 2006**

**J THOMSON  
FINANCIAL**

*per [signature]*  
Stephen Birrell  
CFO & Company Secretary

*[Handwritten signature]*

82-346

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# **Rapid Pipeline Advancement: Investor Update**

## **Bionomics Limited**

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**Revolutionary therapies for cancer and  
Central Nervous System (CNS)  
diseases**

# Safe Harbor 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' developments 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.*

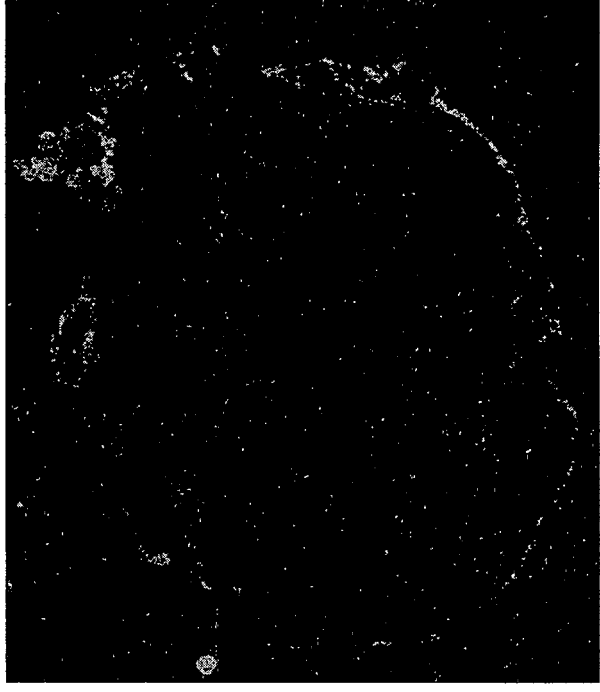
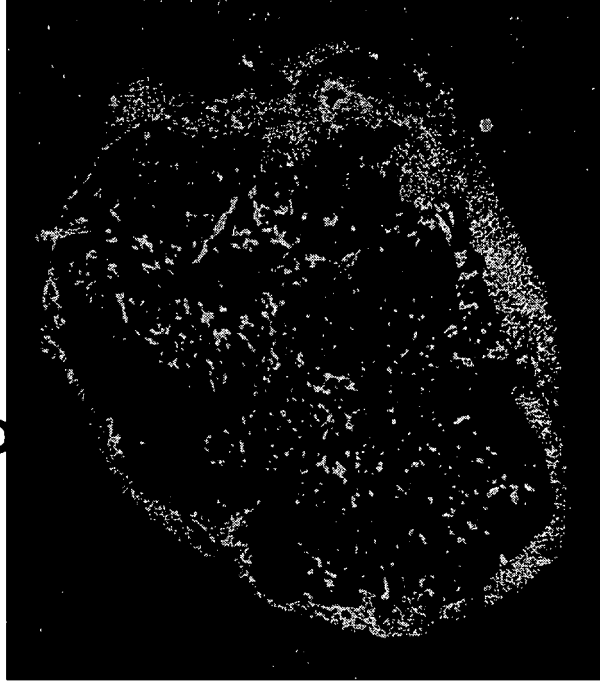
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# Bionomics Overview

- **4 drug development programs**
    - Cancer – flagship product BNC105 for treatment of solid cancers
    - Central Nervous System (CNS) diseases
      - Epilepsy
      - Anxiety
      - Multiple Sclerosis
  - **Income from licensing deals**
    - Genmab: Antibody-based cancer drugs
    - LabCorp: Childhood epilepsy test
    - Athena: Childhood epilepsy test
  - **Drug discovery technology - MultiCore® for the generation of new product opportunities**
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## Cancer: BNC105

- Powerful vascular disrupting agent (VDA)
- Shuts down cancer blood vessels
- Does not shut down normal blood vessels
- Next generation treatment for cancer

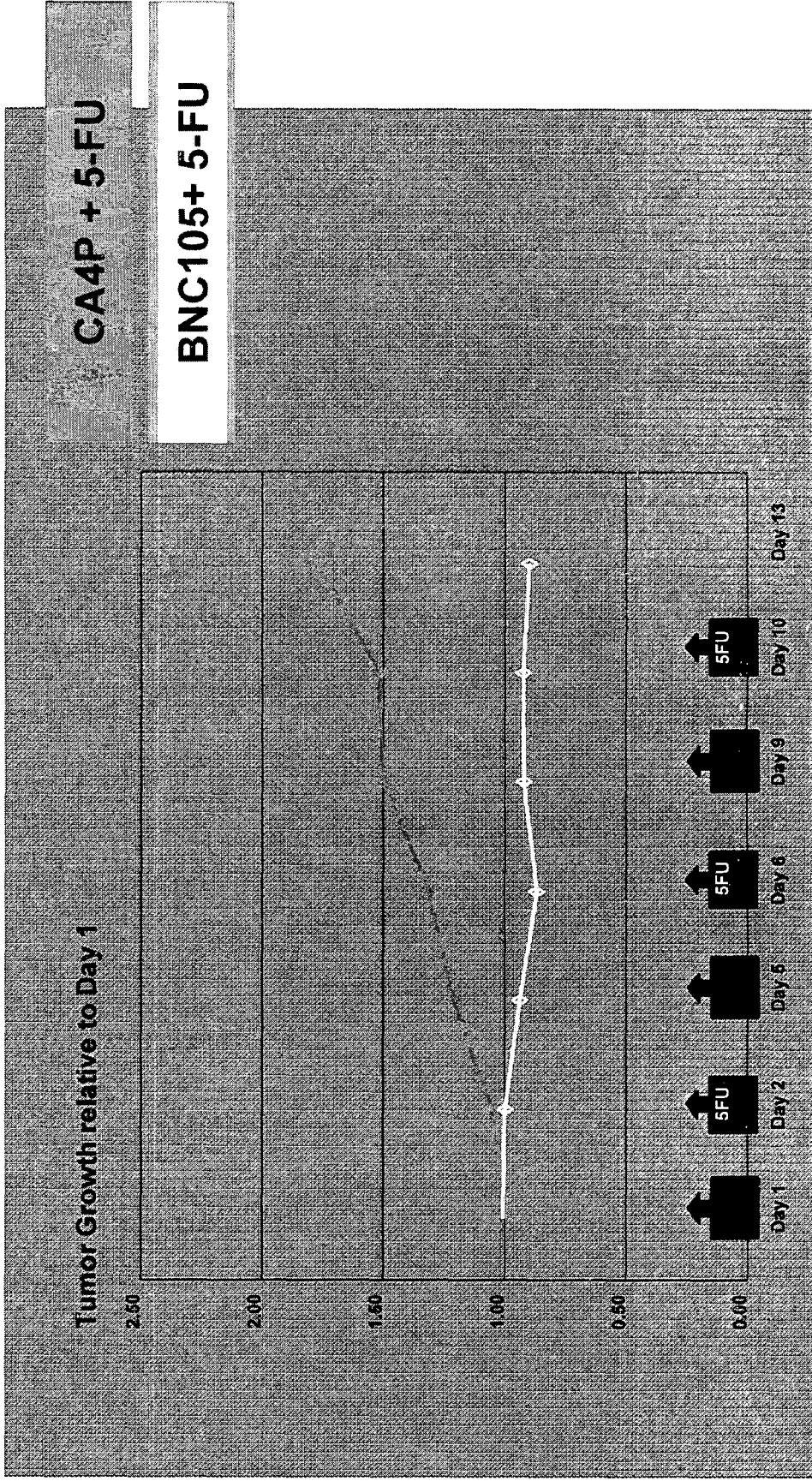


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## **BNC105: Radically outperforms its competitors**

- Several VDAs are in development worldwide
  - Most advanced is Oxigene's CA4P (Phase III trials)
  - BNC105 outperforms CA4P
    - ✓ Safer: 20 times broader therapeutic window (ratio of effective dose to dose at which side-effects are seen)
    - ✓ More effective in enhancing the efficacy of chemotherapies
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# BNC105: Radically outperforms its competitors



# BNC105: Significant market potential

- Estimated market for VDAs is US\$5 billion  
(ASInsights 2003)
- Anticipated market share: 10-20%
- Indicative value of BNC105 with Phase II data
  - License fees: US\$100m to US\$500m
  - Royalty: 10-20% (US\$50m to US\$200m pa)



# BNC105: Milestones and Strategy

## Milestones

- Manufacture completed Q4, 2006
- Approval for Phase I clinical trial Q4, 2007
- Phase I completed Q3, 2008
- Phase II commenced Q4, 2008

## Strategy

- Licensing activity in progress
- Evaluate offers vs net benefit from further development

# Epilepsy

- Need for drugs that stop seizures without side-effects
  - Current market dominated by old, off-patent medicines
  - 30% of patients can't control seizures with any medication
  - Other 70% tolerate occasional seizures and significant side effects
- Bionomics GABA-A modulators prevent seizures
  - More effective in seizure models than marketed drugs
- No significant side-effects noted
  - Class of molecules have a long history of safe pharmaceutical use

## **Epilepsy: Significant market potential**

- Estimated market is US\$6 billion and growing at 17% pa
- Indicative value of drug chosen for clinical trials
  - License fees: US\$50m
  - Royalty: ~7.5% (~US\$22m to US\$37m pa)
- Indicative value of epilepsy drug with Phase I data
  - License fees: US\$150m
  - Royalty: ~10% (US\$30m to US\$45m pa)

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# Epilepsy: Milestones and Strategy

## Milestones

- Drug chosen for clinical development Q1, 2007
- Seek approval for Phase I clinical trial Q1, 2008
- Phase I clinical trial Q2, 2008

## Strategy

- Licensing activity in progress
- Evaluate offers vs net benefit from further development
- Consider progress of other assets

## Anxiety: Significant market potential

- Estimated market is \$5 billion
- Indicative value of drug chosen for clinical trials
  - License fees: US\$50m – US\$100m
  - Royalty: ~7.5% (US\$20m – US\$60m, pa)
- Indicative value of anxiety drug with Phase I data
  - License fees: US\$150m – US\$300m
  - Royalty: ~15% (US\$40m – US\$120m, pa)

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# Anxiety: Milestones and Strategy

## Milestones

- Drug chosen for clinical development Q2, 2007
- Seek approval for Phase I clinical trial Q3, 2008
- Phase I clinical trial Q4, 2008

## Strategy

- Licensing activity in progress
  - Evaluate offers vs net benefit from further development
  - Consider progress of other assets
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# Multiple Sclerosis

- Current treatments only partly effective
- Most have major side-effects
- Latest drugs are injected
- Market need for safe, effective, oral drug

Bionomics' drugs target new mechanism of action

- Highly selective and potent = effective without side-effects
- Properties consistent with orally acting drug

## Multiple Sclerosis: Market potential

- Estimated market is US\$2 billion
- Indicative value of drug chosen for clinical trials
  - License fees: US\$50m-100m
  - Royalty: 5 – 10% (US\$25m – US\$100m, pa)
- Indicative value of MS drug with Phase I data
  - License fees: US\$150m -250m
  - Royalty: ~ 15% (US\$75m – US\$150m, pa)



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## Multiple Sclerosis: Milestones and Strategy

### Milestones

- Drug chosen for clinical development Q4, 2007
- Seek approval for Phase I clinical trial Q4, 2008
- Phase I clinical trial Q3, 2009

### Strategy

- Licensing activity in progress
  - Evaluate offers vs net benefit from further development
  - Consider progress of other assets
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# Capital Structure

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- ASX:BNO
  - ~ 155 million shares on issue
  - Top 20 70%
  - BNOOA options: 31 July 2007, exercise price 50 cents
  - BNOOB options: 31 January 2009, exercise price 22 cents
  - Market cap ~ \$30 million
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# Executive Management

Management team has a long track record of accomplishment and commercial success



**Dr. Deborah Rathjen**  
*Managing Director and CEO*

Inventor of Peptech TNF technology,  
responsible for significant licensing deals



**Dr. Alex Szabo**  
*VP, Business Development*

Affymetrix, Beckman Coulter, Pharmacia  
Biotech



**Dr. Bernard Flynn**  
*VP, Chemistry*

Inventor of MultiCore® chemistry  
platform



**Dr. Gabriel Kremmidiotis**  
*VP, Cancer Research*

Founding Bionomics scientist  
Creator of Angene® platform



**Dr. Ian Street**  
*VP, Drug Discovery*

Merck, Amrad, Walter and Eliza Hall  
Institute



**Dr. Frank Sams-Dodd**  
*GM, Neurofit, VP Preclinical Research*

Former Director of CNS Preclinical  
Research, Boehringer-Ingelheim

**Stephen Birrell**  
*CFO, Company Secretary*

20 years experience in financial services,  
high-tech, luxury goods

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# Bionomics

- 4 potential blockbuster drugs
    - Licensing and development strategy to maximise value
  - Income from existing licensed assets
    - Inc licensing deal with Genmab with blockbuster potential
  - New product opportunities will be created
    - Core capabilities and proprietary technologies
  - Experienced management team
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# **Bionomics Limited**

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**Revolutionary therapies for cancer and Central  
Nervous System (CNS) diseases**

[www.bionomics.com.au](http://www.bionomics.com.au)