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12 January 2011

The Manager Companies  
ASX Limited  
20 Bridge Street  
SYDNEY NSW 2000

(18 pages by email)

Dear Madam,

### **US BIOTECH SHOWCASE PRESENTATION**

Biotron's Managing Director, Dr Michelle Miller, has presented an update of the Company's activities to an international audience at the Biotech Showcase 2011 in San Francisco, USA.

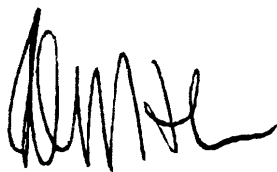
In addition, Dr Miller has given briefings to US institutional investors and pharmaceutical company representatives as part of activities surrounding the annual JP Morgan Healthcare Conference currently underway in San Francisco.

The Biotech Showcase features corporate presentations by 195 innovative life science companies to an audience of public and private investors, business development executives and professional advisors who are interested in investment opportunities and collaboration. The showcase takes place during the week of one of the most important healthcare investor conferences which annually attracts thousands of healthcare and life science business executives to San Francisco.

### **About Biotron**

Biotron Limited is engaged in the research, development, and commercialisation of drugs targeting significant viral diseases with unmet medical need, with a major focus on HIV and HCV. The Company has BIT225 in clinical development for both HIV and HCV, and also has several earlier stage preclinical and research programs for several other viral infections including influenza, Dengue and Hepatitis B.

Yours faithfully



Peter J. Nightingale  
Company Secretary

pjn5802

*Biotron*

**BIOTRON LIMITED**

**ASX:BIT**

January 2011

**Michelle Miller**

**CEO & Managing Director**

# Forward Looking Statements

This presentation may contain forward-looking statements with respect to the financial condition, results and business achievements/performance of Biotron Limited and certain of the plans and objectives of its management. These statements are statements that are not historical facts. Words such as “should”, “expects”, “anticipates”, “estimates”, “believes” or similar expressions, as they relate to Biotron Limited, are intended to identify forward-looking statements. By their nature, forward-looking statements involve risk and uncertainty because they reflect Biotron’s current expectations and assumptions as to future events and circumstances that may not prove accurate. There is no guarantee that the expected events, trends or results will actually occur. Any changes in such assumptions or expectations could cause actual results to differ materially from current expectations.

# Biotron Ltd Overview

- Established in 1999 as a spin-out from the Australian National University, Canberra; Currently based in Sydney, Australia
- IPO on ASX in Jan 2001 (ASX:BIT)
- Focus on developing novel small molecule antiviral drugs
  - Hep C, HIV, Dengue and others
- Key highlights
  - Successful implementation of clinical trials for the Hep C and HIV programs
  - Successful capital raisings in challenging market conditions
    - A\$2.7 m (net of costs) in 2010
    - A\$20.75 m since foundation



# Capital Structure & Financials

Shares on issue	121.8 m
Listed options	108 m
No. Shareholders	~1500
Top 20	42.51% (30 June 2010)
Current S/P	A\$0.12
52 wk high/ low	A\$0.15/ 0.051
Market cap	A\$14.6 m (10 Jan 11)
Cash at 30 Sept 10	A\$1.44 m

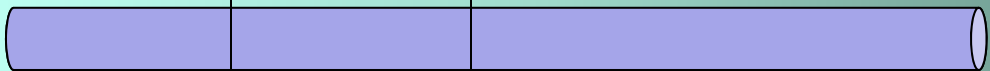



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# Core Technology

- Identification of new class of viral proteins called viroporins
  - Small hydrophobic proteins with ion channel activity
  - Key roles in production and release of infectious virus
  - Present in influenza (M2), HIV (Vpu), Hep C (p7), Dengue (M) , SARS (E) and others
- Ongoing need for new drugs to overcome viral resistance; patients are treated with cocktails of antiviral drugs
- Designed library of new drugs to target these viral targets
  - >350 compounds designed , synthesised and screened
- Developed proprietary bacterial screening assays for HIV-1 Vpu, HCV p7, Coronavirus E, Influenza M2, and Dengue M protein.
- Generating first-in-class drugs to treat these diseases
  - Initial focus on HIV and Hep C

# Pipeline

- Two clinical phase programs:
  - Hepatitis C virus (BIT225) and HIV
  - Both have very large, expanding world markets
- Current status of pipeline:

Project	Target	Discovery	Preclinical	Clinical Trials		
				Phase I	Ph Ib/IIa	Ph II
Hep C	p7					
HIV	Vpu					
Dengue	M protein					
+ other targets						

# Hepatitis C Virus – The Silent Killer

- 170 m people infected worldwide; 4 m patients in US (2.7m chronic infection)
- Majority remain asymptomatic for decades before developing cirrhosis or liver cancer
- US surgeon general considers hepatitis C is one of the most significant public health threats facing US.
  - 40 – 50% of liver transplants are due to HCV
- Existing therapies ineffective and toxic
  - Documented need for new, safer drugs

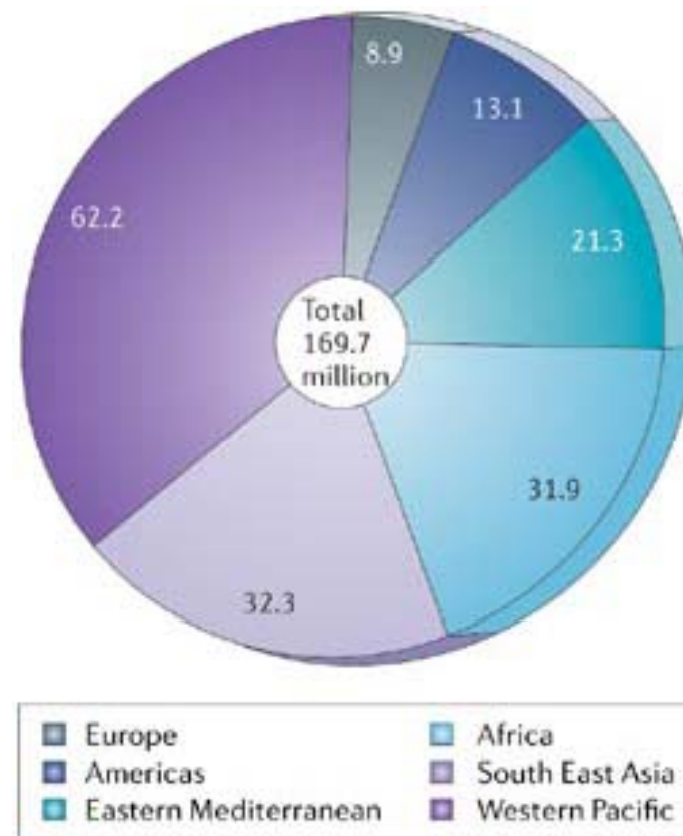


# Hep C – An Expanding Market

Worldwide market ~US\$2.8 billion;  
predicted to expand to >US\$10 billion  
as new, safer drugs enter the market.

Only small percentage currently receive  
treatment.

USA and Europe represent major  
markets but other, larger markets are  
emerging.



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Nature Reviews | Drug Discovery

Smith Nature Reviews Drug Discovery 5, 715–716 (September 2006)

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# Hep C Lead Product – BIT225

- BIT225 is a new investigational oral small molecule drug in development for treating Hep C infection
- Completed two clinical trials:
  - **Phase Ia** – 48 patient, single dose safety study in healthy volunteers; Status - completed
  - **Phase Ib** - 18 patient, 7-day multiple dose study in patients with Hepatitis C Virus infection; Status - completed
- **Phase IIa** – 24 patient, 28-day multiple dose study in patients with Hepatitis C infection (genotype 1)
  - Combination with pegylated Interferon and Ribavirin.
  - Status - trial commenced Sept 2010 and due to complete late 1Q 2011.

# BIT225 Clinical Information

- First-in-class drug targeting p7 protein of Hep C virus
  - p7 - Critical role in production of infectious Hep C virus in infected cells
  - Proposed as new target for therapeutic intervention
- Phase Ia results
  - BIT225 was well-tolerated at doses up to 600mg with no dose-limiting toxicities
- Phase Ib results
  - 200 mg BIT225 significantly reduced virus levels compared to placebo (p=0.0002)
  - On an individual level, 3 of the 6 subjects receiving 200 mg of BIT225 had significant reductions in viral loads
  - Results were first indication that a p7-inhibitor has therapeutic potential

# Rationale for Phase II Hep C Trial

- Focused on developing saleable product to a pharmaceutical partner(s)
- Future Hep C therapies expected to be a cocktail of drugs
  - In short-term new drugs to be used with current approved drugs interferon (IFN) and ribavirin
  - Industry focus on developing new, specific antiviral drugs to use in combination
  - P7-inhibitors e.g. BIT225 are potential new additions to this mix
  - **Biotron is well positioned to partner with either current OR future therapies as synergistic with BOTH**
- BIT225 expected to have **significantly higher potency** in combination with interferon and ribavirin on basis of preclinical data
- Phase II trial is a **combination study** of BIT225 with interferon and ribavirin

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# Hep C Phase II Combination Trial

Ph II Trial Period			<i>Trial design</i>	
0	2	4	Weeks	44 wks
8 pts	Placebo		Interferon + Ribavirin	
8 pts	BIT225 (200 mg) + IFN/rib		Interferon + Ribavirin	
8 pts	BIT225 (400 mg) + IFN/rib		Interferon + Ribavirin	

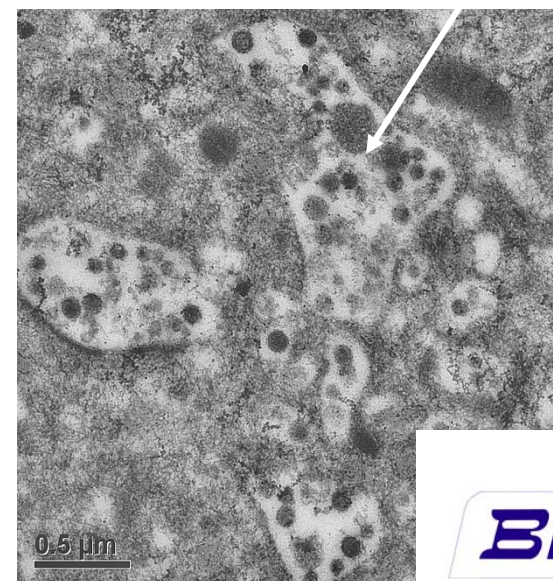
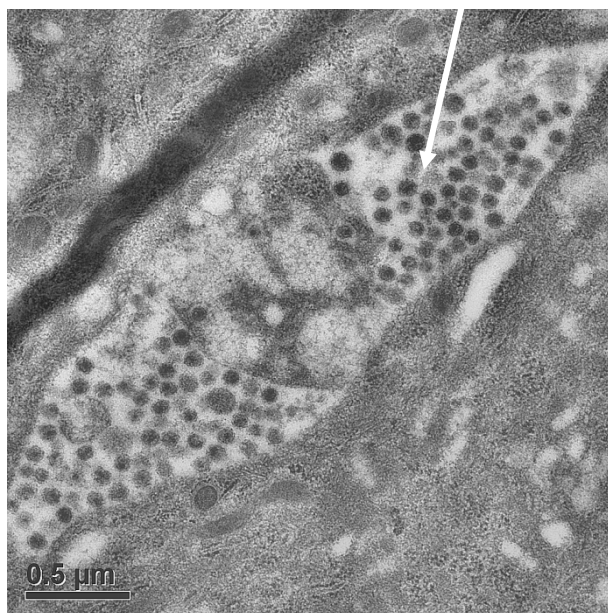
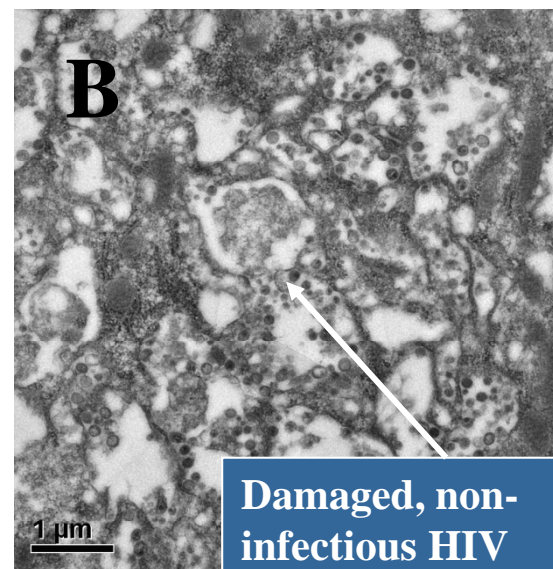
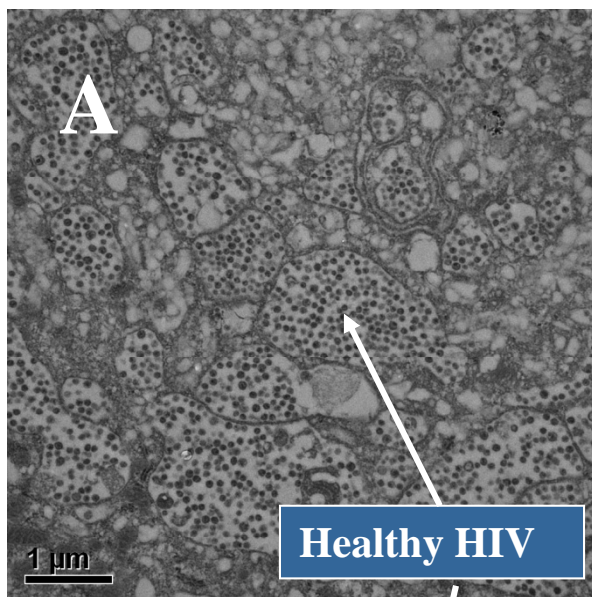
- Pts randomly assigned to receive either placebo or BIT225 twice daily for 28 days commencement of standard combination therapy for Hep C (IFN/ribavirin)
- Patients continue after 28 days just on IFN/ribavirin as part of their standard treatment (external to Phase II trial)
- 24 patients, genotype 1
- Trial commenced Sept 2010 in Thailand
- Clinical phase expected to be complete Q1 2011

# Biotron's HIV Clinical Program

- First-in-class new anti-HIV drug targeting HIV-Vpu protein
  - New mode of action – inhibits budding of virus from infected cells
  - Targets HIV in viral reservoirs *in vivo*
    - ***Reservoirs are last of the holy grail in HIV***
    - ***No existing drugs target this source of HIV in the body***
    - ***Eradication of reservoirs is essential for “cure” of HIV***
- Completed Phase I safety trial in healthy volunteers



## Human Reservoirs cells infected with HIV – Untreated (A) and Treated with BIT225 (B)



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# HIV Phase Ib/IIa Proof-of-Concept Trial

- Phase Ib/IIa trial protocols finalised
- 20 subject trial in HIV+ patients
- Trial designed to demonstrate proof-of-concept
  - i.e. can reduce HIV loads in HIV-infected reservoir cells in man
- Commencement is subject to funding availability



# Investment Summary

- Developing first-in-class antiviral drugs
- Successfully completed two human trials of BIT225
  - Good safety and promising efficacy results
- Pivotal Phase IIa Hep C trial results anticipated early 2Q 2011
- Potential to combine BIT225 with current or next generation Hep C drugs
- Biotron has back-up drugs and proprietary assays to facilitate development of 2<sup>nd</sup> generation drugs
- Novel approach to treating HIV reservoirs anticipated to commence Phase Ib/IIa trial subject to funding
- Additional early stage drug discovery projects for Dengue and others
- Strong patent protection – 5 patent families filed worldwide

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