Biotron Limited
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13 January 2017

The Manager Companies
ASX Limited
20 Bridge Street
Sydney NSW 2000 (22 pages by email)

Dear Madam

BIOTRON LIMITED PRESENTS AT BIOTECH SHOWCASE™ 2017

Biotron Limited advises that Dr Michelle Miller, Managing Director, will be giving the attached presentation to the Biotech Showcase™ 2017 Conference being held this week in San Francisco, California, USA.

In addition, Dr Miller will give briefings to USA institutional investors and pharmaceutical company representatives as part of activities surrounding the annual JP Morgan Healthcare Conference. This is one of the most important annual healthcare investor conferences, attracting thousands of healthcare and life science business executives, as well as investors and analysts, to San Francisco.

The Biotech Showcase™ features corporate presentations by 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 collaborations. Now in its ninth year, it expects to attract upwards of 2,800 attendees.

Yours sincerely

Peter J. Nightingale
Company Secretary

pjn8740

BIOTRON LIMITED
(ASX:BIT)

Update – January 2017

Forward Looking Statements

This presentation may contain forward-looking statements with respect to the financial condition, results and business achievements/performance of Biotron Limited (ACN 086 399 144) 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.

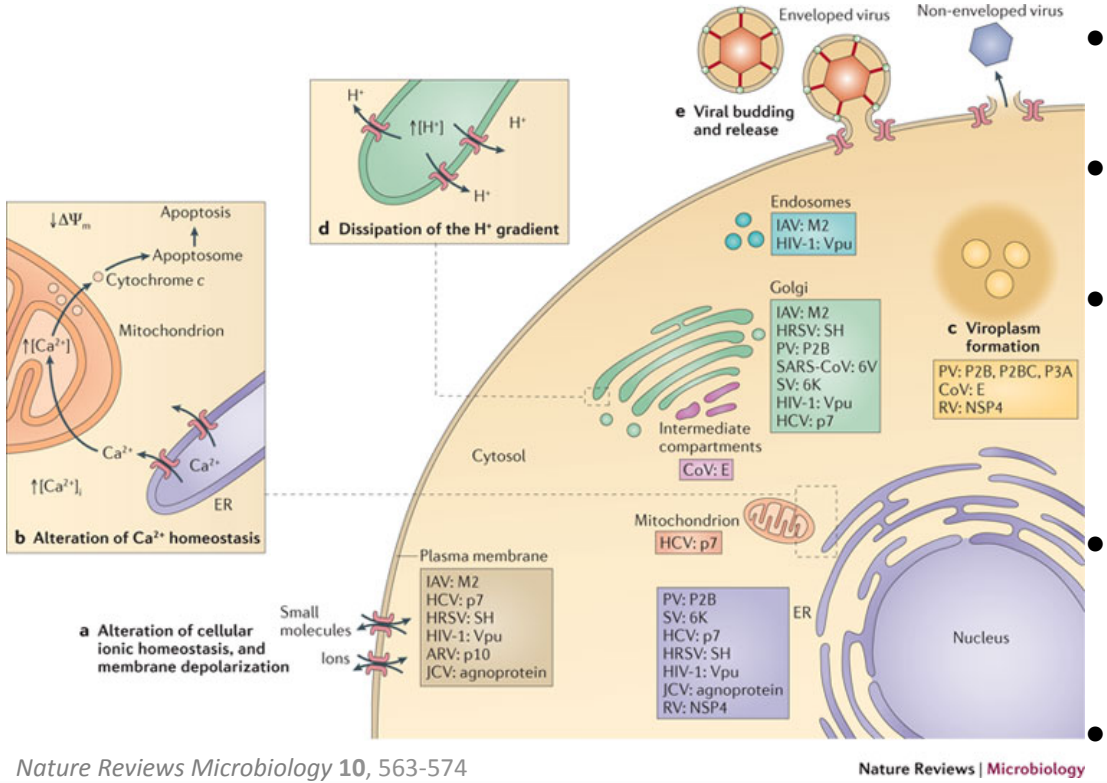
Biotron Limited

- Spun out from John Curtin School of Medical Research at the Australian National University in 1999
- Listed on ASX in Jan 2001 (ASX:BIT)
- Headquartered in Sydney, Australia
- Directors
  - Michael Hoy — Chairman
  - Michelle Miller — CEO & Managing Director; ex-Johnson & Johnson Research; ex-Start-up Australia biotech fund
  - Denis Wade — Independent non-executive director; ex-J&J (Chairman and MD Johnson & Johnson Research); Director of Heartware Inc (NASDAQ:HTWR)
  - Susan Pond — Independent non-executive director; ex-J&J (Chairman and MD Johnson & Johnson Research)
  - Rob Thomas — Independent non-executive director; Director of Heartware Inc (NASDAQ:HTWR); Starpharma (ASX:SPL), REVA Medical Limited (ASX:RVA); Virgin Australia Limited (ASX:VAH)

Biotron – Leader in Viroporin-Targeting Drug Development

- Biotron's core expertise is based on design and development of a new class of antiviral drugs targeting viral ion channel proteins (viroporins)
  - Viroporins are present in broad range of viruses:
    - Influenza (M2), HIV-1 (Vpu), Hep C (p7), Dengue and West Nile (M protein), SARS (E protein) and others
- Broad platform:
  - Rapid, proprietary primary bacterial cell-based screening assays for target proteins
  - Targeted library of compounds that target these viral proteins
  - Pipeline of internally-generated, first-in-class small molecule viroporin inhibitors for key markets

Viroporins



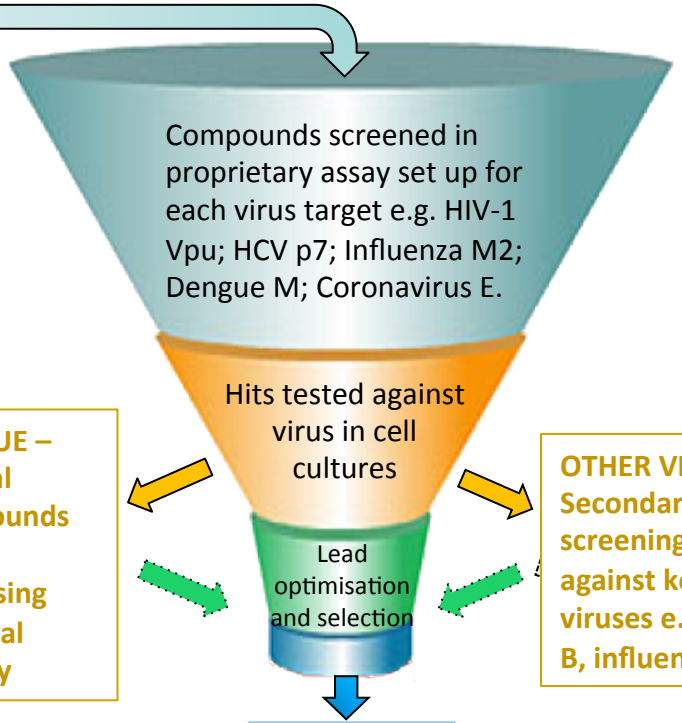
- Small hydrophobic proteins with ion channel activity
- Form hydrophilic pores in host cell membranes
- Key stages of the viral cycle such as virus uncoating, transport and maturation are ion-influenced processes in many viral species
- Crucial for viral pathogenicity due to involvement in various steps of virus life cycles
- Ideal therapeutic targets

Nature Reviews Microbiology **10**, 563-574

Biotron's Core Technology

Designed library of compounds to target **viroporins**:

Initially >250 compounds designed and synthesised; library now ~350



DENGUE – Several compounds with promising antiviral activity

OTHER VIRUSES – Secondary screening of hits against key viruses e.g. Hep B, influenza, Zika

BIT314 (HCV)

BIT225 (HIV-1 and HCV)

OTHER "HITS" IN LIBRARY include:

- **Influenza A and B**
- **Coronaviruses**
  - **Including SARS**
- **Epstein-Barr virus (EBV)**
- **Hepatitis B virus (HBV)**
- **Zika virus**
- **others**

BIT225:

- **Representation of the value that resides within Biotron's core expertise;**
- **Valuable, Phase 2 clinical asset**

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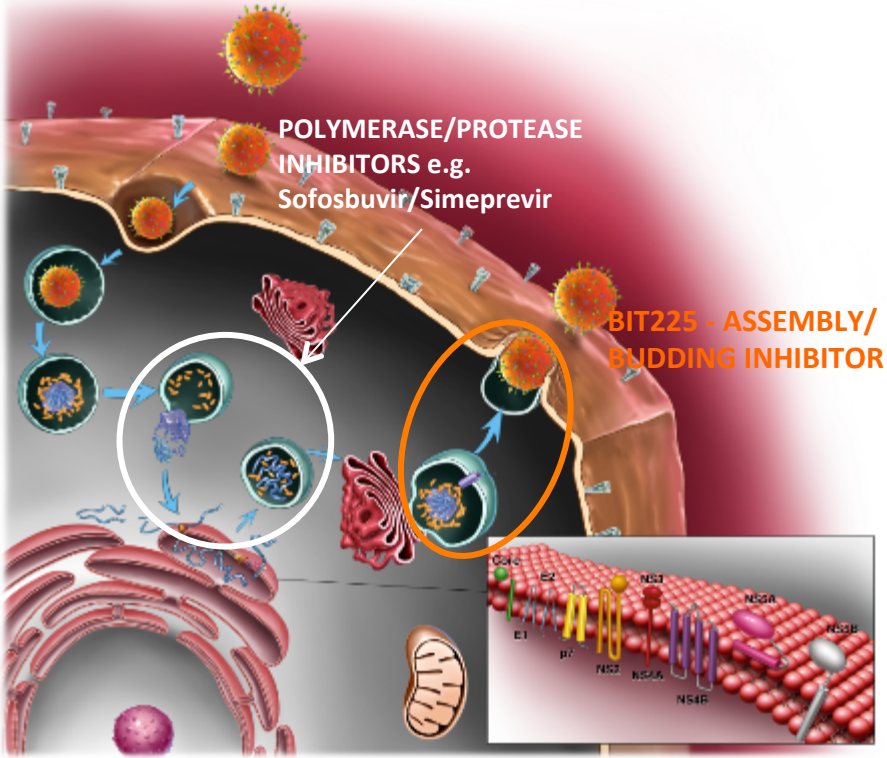
BIT225 Snapshot

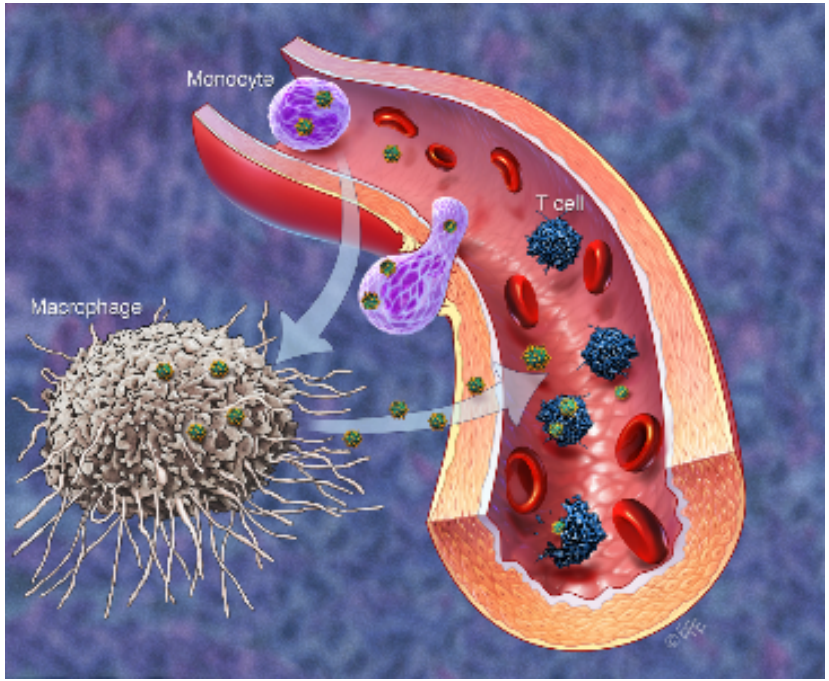
- First in class drug and new drug target for treatment of HIV-1 and Hepatitis C virus (HCV)
- Seven clinical trials completed; another is fully recruited with data expected 1Q16
  - Over 200 subjects dosed in trials to date
- Promising clinical efficacy against HIV-1 and HCV
  - HCV GT1 (BIT225-005) – 100% receiving 400mg BID for 28 days in combination with 48 weeks IFN/RBV (per protocol) were virus-free at 48 weeks
  - HIV-1/HCV GT3 (BIT225-006) – 100% receiving 300mg BID for 28 days in combination with 48 weeks IFN/RBV (per protocol) achieved SVR12 i.e. cured of HCV infection
  - BIT225 increases the rate at which HCV is cleared
  - BIT225 efficiently inhibits HIV-1 replication in macrophage reservoir cells *in vitro* and *in vivo* (BIT225-004)

BIT225 – First of a New Class of HCV DAA Drugs



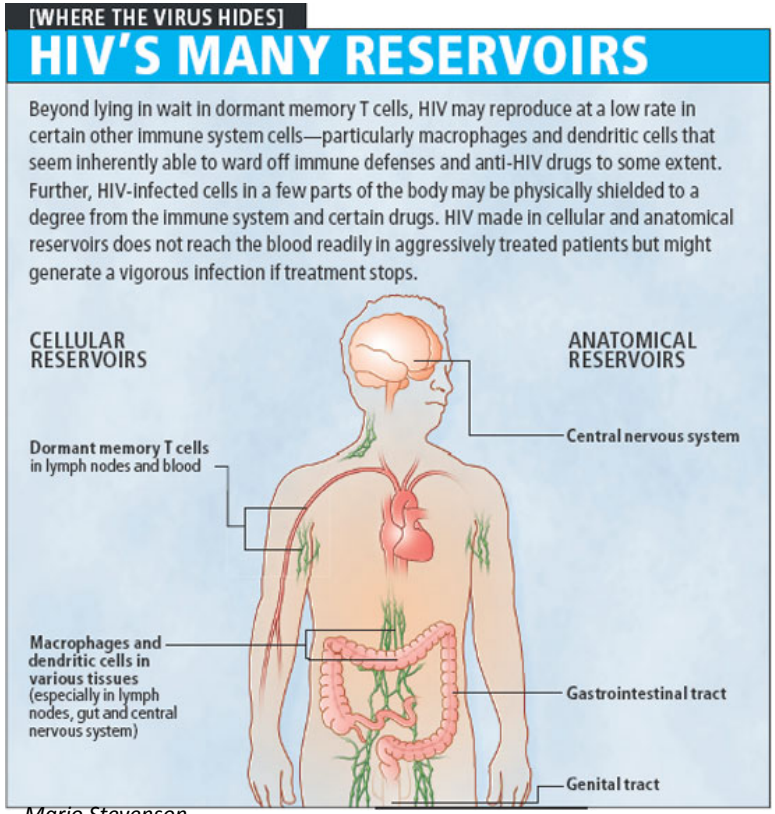
- ✓ Novel, oral, small molecule compound
- ✓ Only one of its class (p7 inhibitor) in clinical trials
- ✓ Inhibits viral assembly and infectivity
- ✓ Pan-genotype activity:
  - ✓ Active *in vitro* against all main genotypes
  - ✓ Clinically active against hard-to-treat HCV GT 1 (1a and 1b) and GT 3
- ✓ Seeking partnerships for further development, in particular in Asia

HIV-1: Towards a Cure



- Over 1.1 million people living with HIV-1 in the USA, with 1 in 6 unaware of diagnosis
- US$11.9 bn sales in US, Europe and Japan in 2013; expected to grow to US$16.8 bn by 2020
- HIV-1 patients need to stay on antiretroviral drugs (ART) to keep virus levels under control
- Long-term health implications even in patients on antiretroviral drugs e.g. HAND, immune activation, etc
- New mode of actions drugs are needed to eradicate or cure HIV-1 infection

HIV-1 Reservoirs

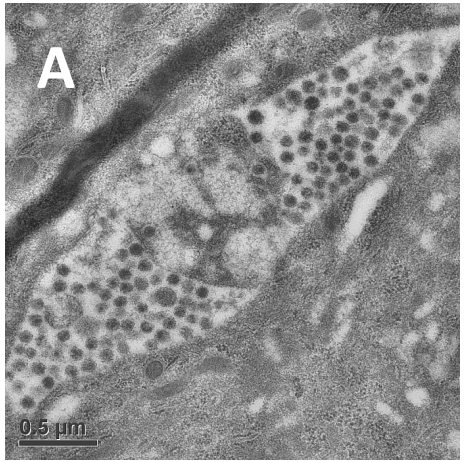


Mario Stevenson
Scientific American ***299****, 78 - 83 (2008)*

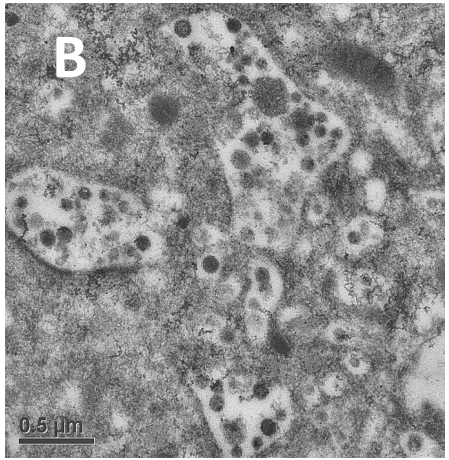
- HIV-1 remains hidden in reservoirs, leading to chronic, life-long infection
  - Invisible to body's immune defenses
  - Not sensitive to anti-HIV-1 drugs
- Eradication will require multiple approaches; approaches include:
  - Anti-latency agents for latently-infected T cells
  - Drugs to modify immune response
  - Drugs targeting HIV-1 in macrophage lineage cells

BIT225 Targets HIV-1 in Reservoir Cells

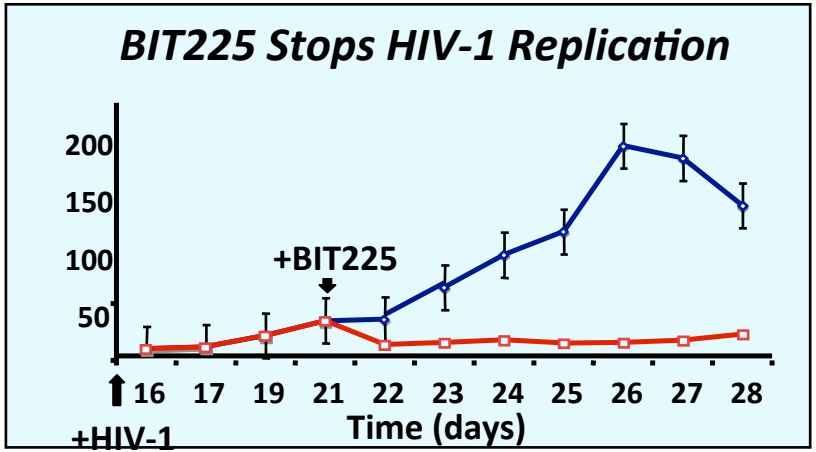
- BIT225 inhibits assembly and budding of new virus in macrophages
- Phase 2a trial (004) demonstrated that BIT225 can reduce HIV-1 levels in macrophage cells *in vivo*, paralleling *in vitro* studies (Wilkinson *et al*, J Antimicrob Chemother. 2015 Nov 29. pii: dkv389. [Epub ahead of print])
- Potential benefits on immune aging and HIV-associated dementia
- Potential for use in future virus eradication treatment



(A) Untreated Controls

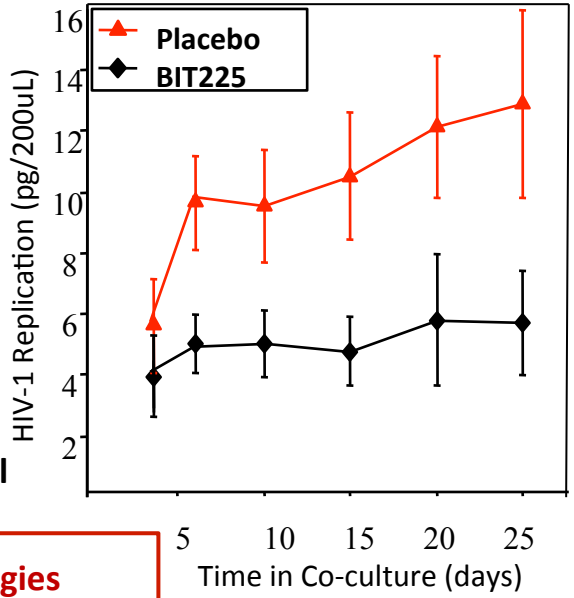


(B) BIT225 treated cells



BIT225 – Proven Clinical Activity Against HIV-1

- BIT225-004: Phase 1b/2a randomised, placebo controlled, double-blind trial
  - 21 patients, HIV-1 positive, treatment-naïve; 10 days dosing with BIT225 (monotherapy)
- **Results demonstrated that:**
  1. **BIT225 significantly reduces HIV-1 levels in the macrophage (reservoir) cells BIT225 can cross the blood-brain barrier, opening up the possibility of treatment of AIDS-related dementia**
  2. **BIT225 reduced myeloid-specific immune activation markers during trial**



Results support a potential role for BIT225 in cure/eradication strategies

Phase 2 HIV-1 trial of BIT225 in combination with current anti-HIV-1 drugs scheduled to commence early 2017

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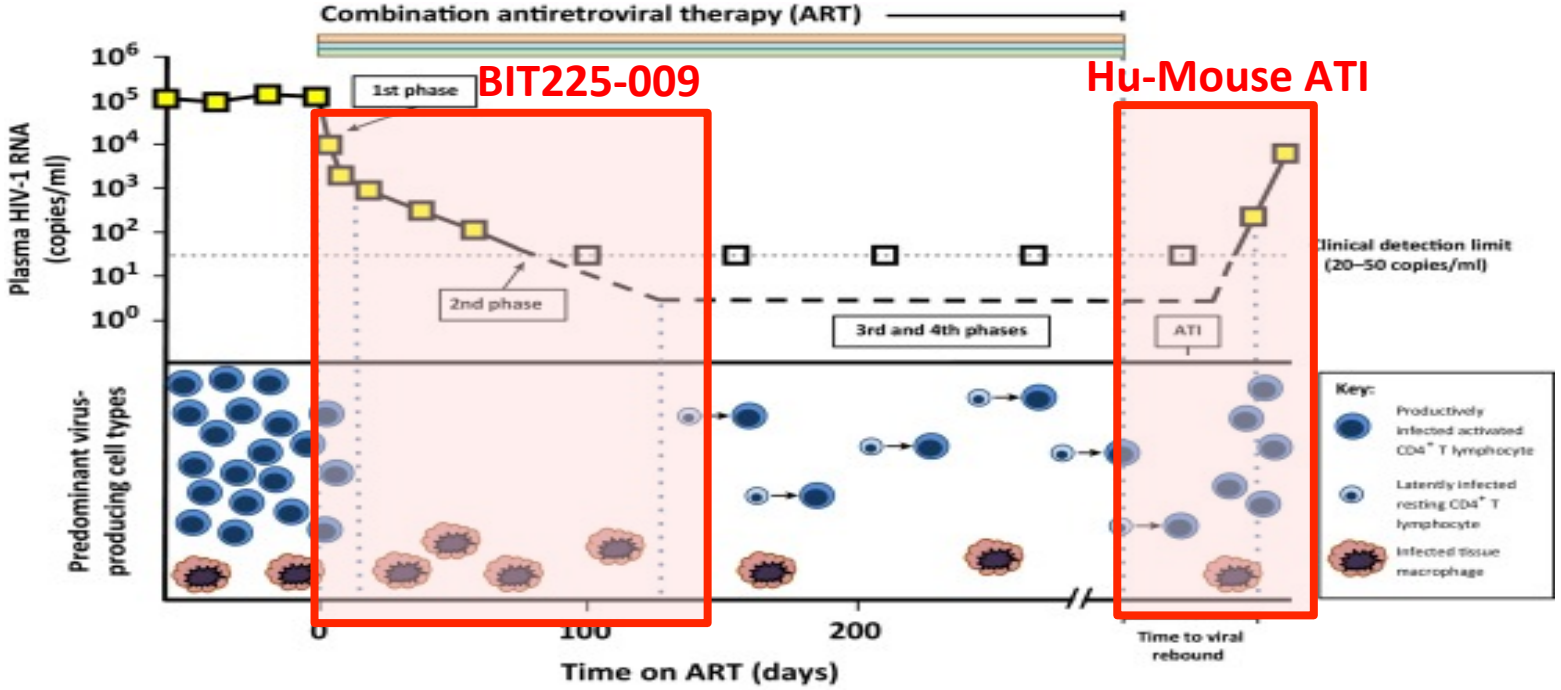
HIV-1 Viral Dynamics



Trends in Molecular Medicine

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Current HIV-1 Program Trials

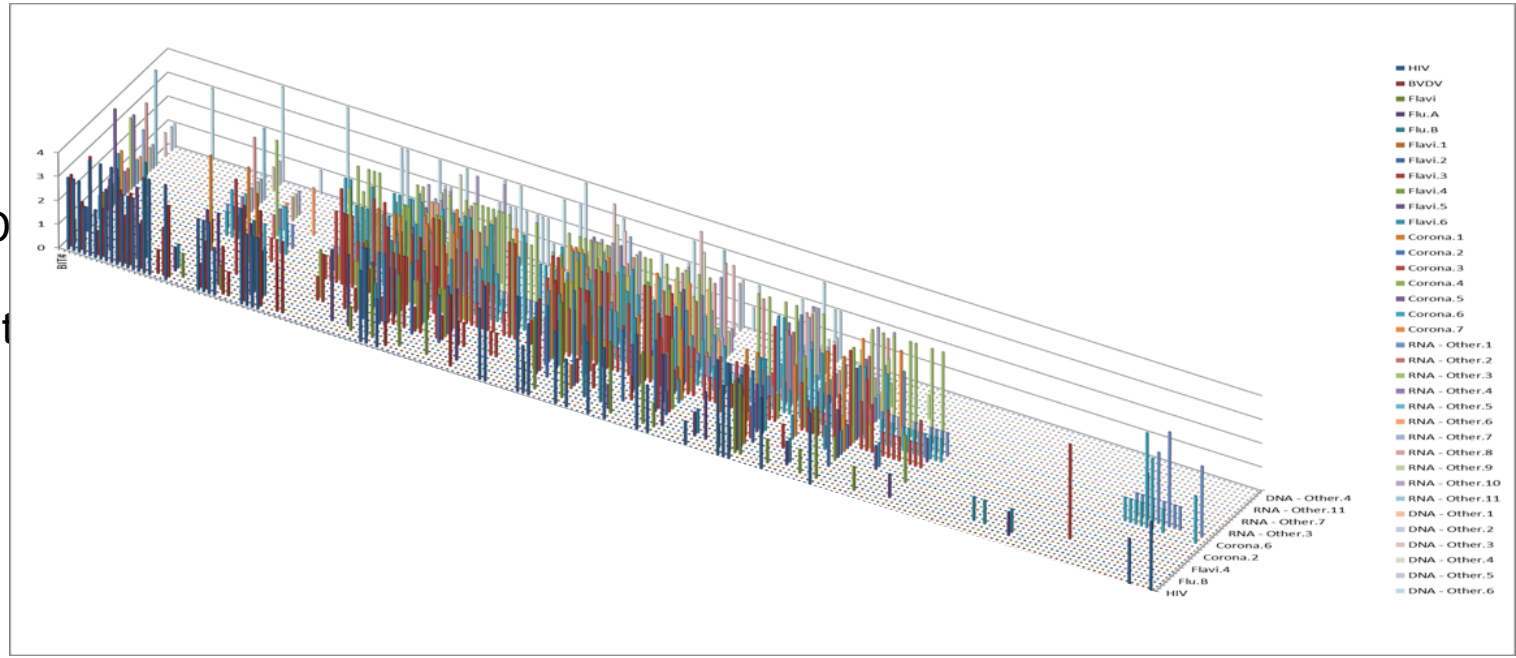
- Phase 2 trial anticipated to commence early 2017
  - 12 weeks BIT225 in combination with cART
    - ***Expected outcome(s) – Impact on kinetics of viral load decay in combination with ART indicating impact on underlying viral reservoir, also impact on immune activation***
  - Headline data 3Q17
- Humanised Mouse Study
  - Modelling treatment interruption (ATI)
  - In progress
    - ***Expected outcome(s) – impact on viral kinetics in combination with ART, plus potential impact on rebound once ART is stopped***
  - Data 1Q17

Unlocking Value in Compound Library

- Renewed industry interest in targeting viral diseases including
  - Respiratory syncytial virus (RSV)
  - Hepatitis B virus
  - Tropical diseases including Dengue
  - Influenza (in particular drug resistant strains)
- Ebola and MERS-CoV outbreaks have caused public health issues worldwide
- **BIT225 has demonstrated the robustness of Biotron's approach with targeting viroporin proteins**
- Compounds with activity against other key viruses have been identified; secondary screening is in progress, with the aim of identifying potential candidates to progress into IND-enabling studies
- Main focus remains on commercialising the Company's HIV-1 and HCV programs, but essential that other opportunities are developed

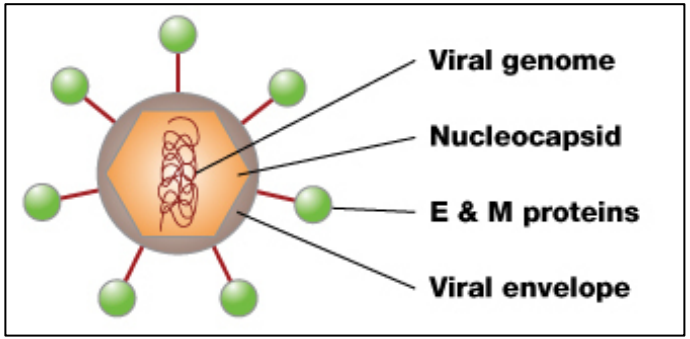
Compound Library is Rich Source of Hits

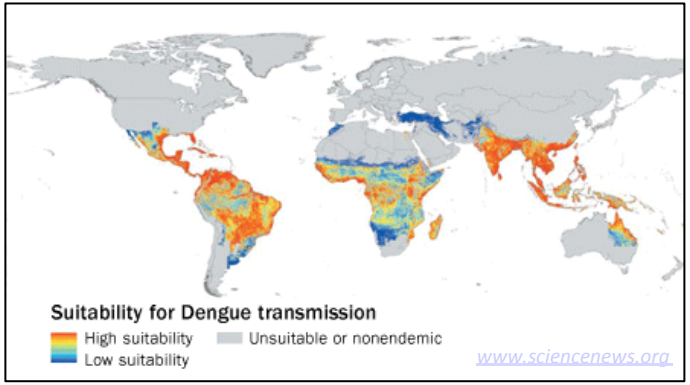
X-axis: compound ID
Y-axis: virus
Z-axis: strength of hit



Dengue Virus Program

- 2.5 billion people (40% world population) live in areas at risk of Dengue
- ~100 million people infected yearly
- A leading cause of illness and death in tropics and subtropics
- Transmission is by mosquito; most prevention programs target the vector
- No approved Dengue-specific therapeutic drug
- Vaccine trials have had disappointing results
- Biotron is targeting Dengue M protein – Similar target to HIV-1/Vpu and HCV/p7
  - Several compounds with promising activity have been generated; tests are on-going
  - Potential for pan-Flavi therapeutic





Hepatitis B Virus

- Limited screening of Biotron compound library has generated interesting data
- Hits identified
- Very experienced scientific advisory and operational team in place for HBV
- Seeking collaboration to explore hits and develop program

Summary I

- Unique core expertise against novel viral targets
- Demonstrated proof of concept of successful targeting of viroporins with BIT225
- BIT225 is a novel approach with demonstrated promising efficacy in Phase 2a/2 clinical trials
  - HCV and HIV-1 are high growth, multi-billion dollar markets
  - Treatment gaps remain
  - Represents a new class of direct-acting HCV drugs
  - Potential to fill significant HCV treatment gaps, shorten treatment and reduce costs
  - Potential to eradicate important HIV-1 reservoirs, plus may impact on immune activation
  - Robust data package has been generated to support combination studies with potential partners

Summary II

- Technology core is an antiviral platform with new class of small molecules with broad range of activities
    - Extending earlier stage programs for other key viruses:
        - Developing leads for programs including Dengue and HBV
        - Identifying hits for other viruses including RSV, Zika, BK, and others
        - Dengue virus – applying for non-equity funding from US organisations
        - Potential to expand to areas of potential partner interest
- Seeking collaborations for individual programs or entire platform

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