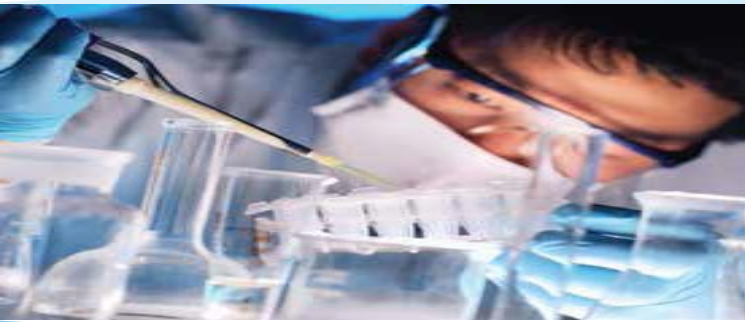


Biotron

Annual General Meeting 22 November, 2016



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 Snap Shot

- Biotron's core expertise is design and development of new 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
 - Focused library of compounds that target these viral proteins
 - Pipeline of first-in-class small molecule viroporin inhibitors for key markets

BIT225 clinical program *continues* to demonstrate that Biotron's viroporin-targeting approach to drug development works

Biotron



Strategy Update

- Continue to position Biotron as Clinical Stage Anti-viral Development Company with:
 - Clinical programs for HIV-1 and Hepatitis C virus (HCV)
 - A lead program, BIT225, as “First in Class” therapy for HIV-1 eradication
 - Valuable HCV clinical program, with a new class of direct-acting antiviral agent
 - Early stage collaboration opportunities for preclinical targets such as:
 - Dengue
 - Zika
 - Hepatitis B virus
 - Additional development collaboration potential for “other” Pharma target(s)



BIT225 – Phase 2 Asset for Two Indications

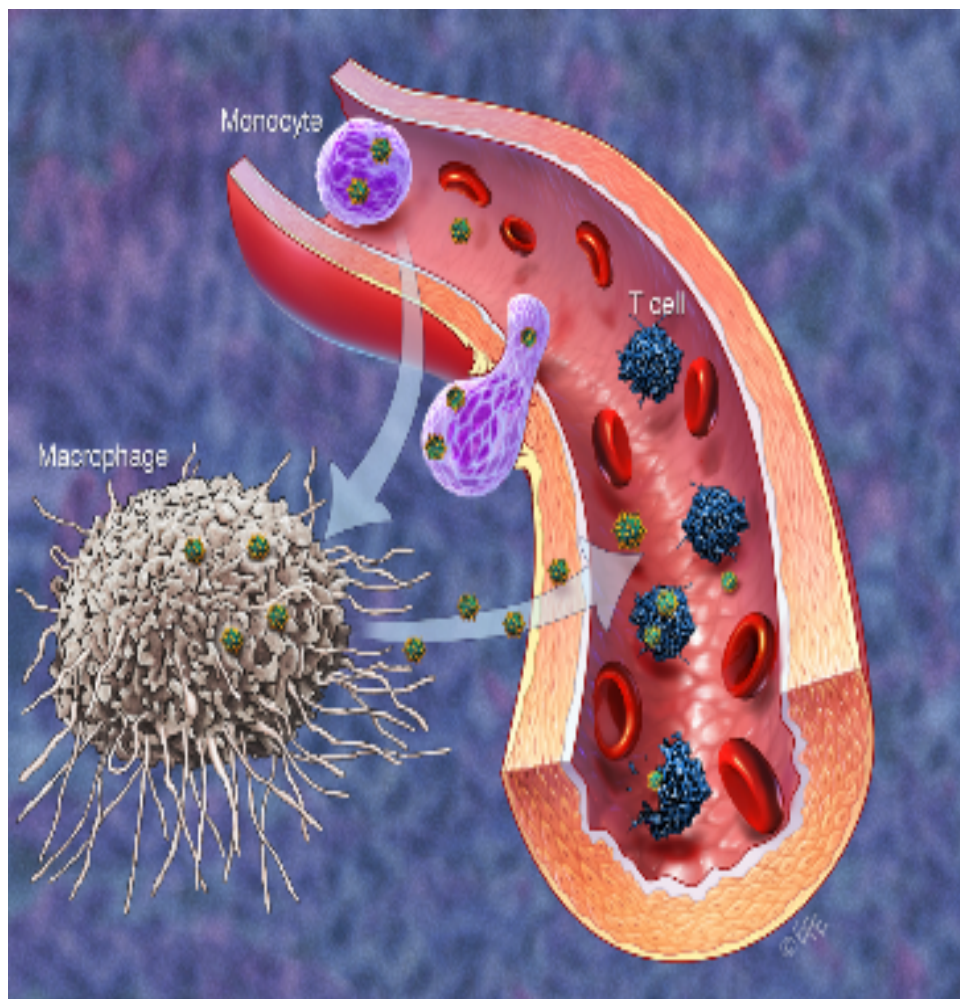
- Demonstrates robustness of Biotron's approach
- BIT225 is a valuable Phase 2 asset with two indications – HIV-1 and HCV
 - Both are multi-billion dollar markets
- Over 200 individuals dosed (healthy, HCV, HIV-1 and HIV-1/HCV co-infected) in trials
 - 7 clinical trials completed - **positive data recorded in all trials**
 - Demonstrated clinical activity against HCV GT1 and GT3
 - Positive data readout from BIT225-008 GT1 data earlier in year
- Comprehensive data package on BIT225 completed (manufacturing, safety profile, PK, efficacy, dosage, etc)
 - For regulatory filings
 - To support combination studies with potential partners" HCV drugs

Data generated in HCV trials is also applicable to HIV-1 program

Biotron



HIV-1 Eradication – Towards a “Cure”



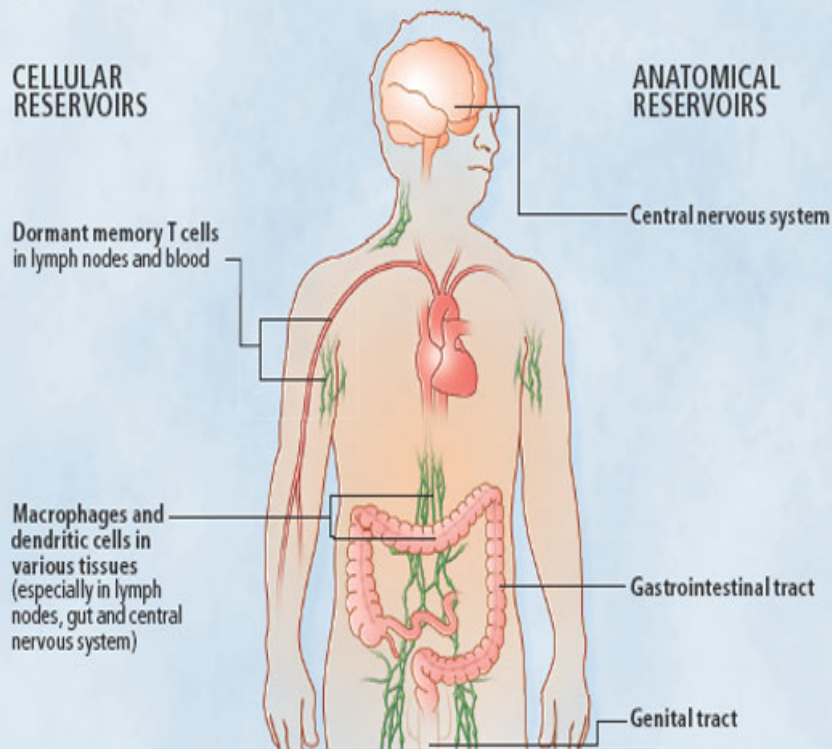
- Key market opportunity – significant unmet medical need
 - E.g. BIT225 @ US\$100,000 per dose with 25% market penetration:
 - Potential US\$60 billion current infected market
 - Potential US\$2.25 billion new infections
- Long-term health implications even in patients on antiretroviral drugs e.g. HAND, immune activation, etc
- New mode of actions drugs are needed:
 - To improve health outcomes in patients
 - To eradicate or cure HIV-1 infection
- Area of real interest to international pharmaceutical industry

HIV-1 Reservoirs

[WHERE THE VIRUS HIDES]

HIV'S MANY RESERVOIRS

Beyond lying in wait in dormant memory T cells, HIV may reproduce at a low rate in certain other immune system cells—particularly macrophages and dendritic cells that seem inherently able to ward off immune defenses and anti-HIV drugs to some extent. Further, HIV-infected cells in a few parts of the body may be physically shielded to a degree from the immune system and certain drugs. HIV made in cellular and anatomical reservoirs does not reach the blood readily in aggressively treated patients but might generate a vigorous infection if treatment stops.



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 has potential to impact immune response AND reduce HIV-1 in macrophage reservoir cells

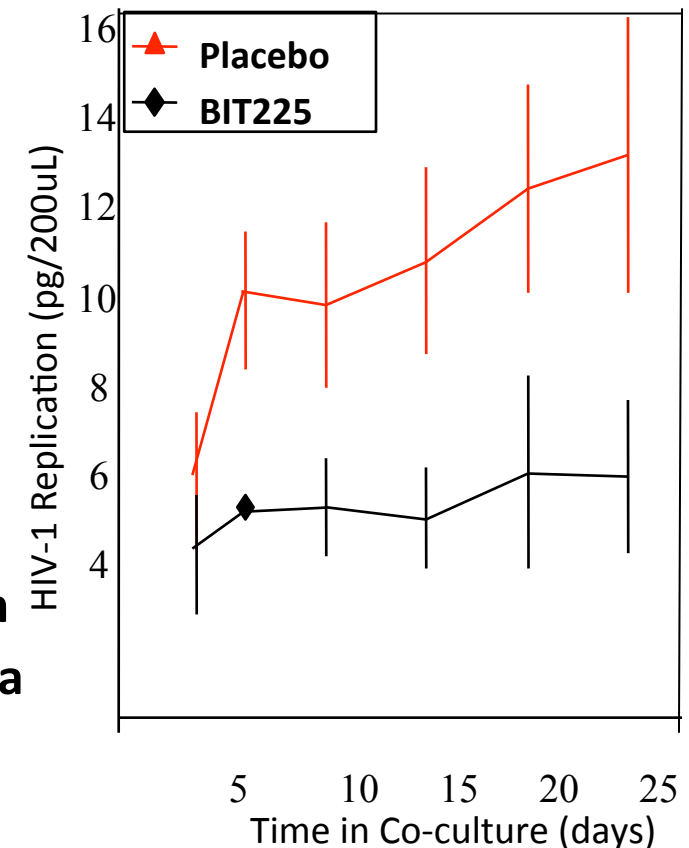
Biotron

BIT225 – Proven Clinical Activity Against HIV-1

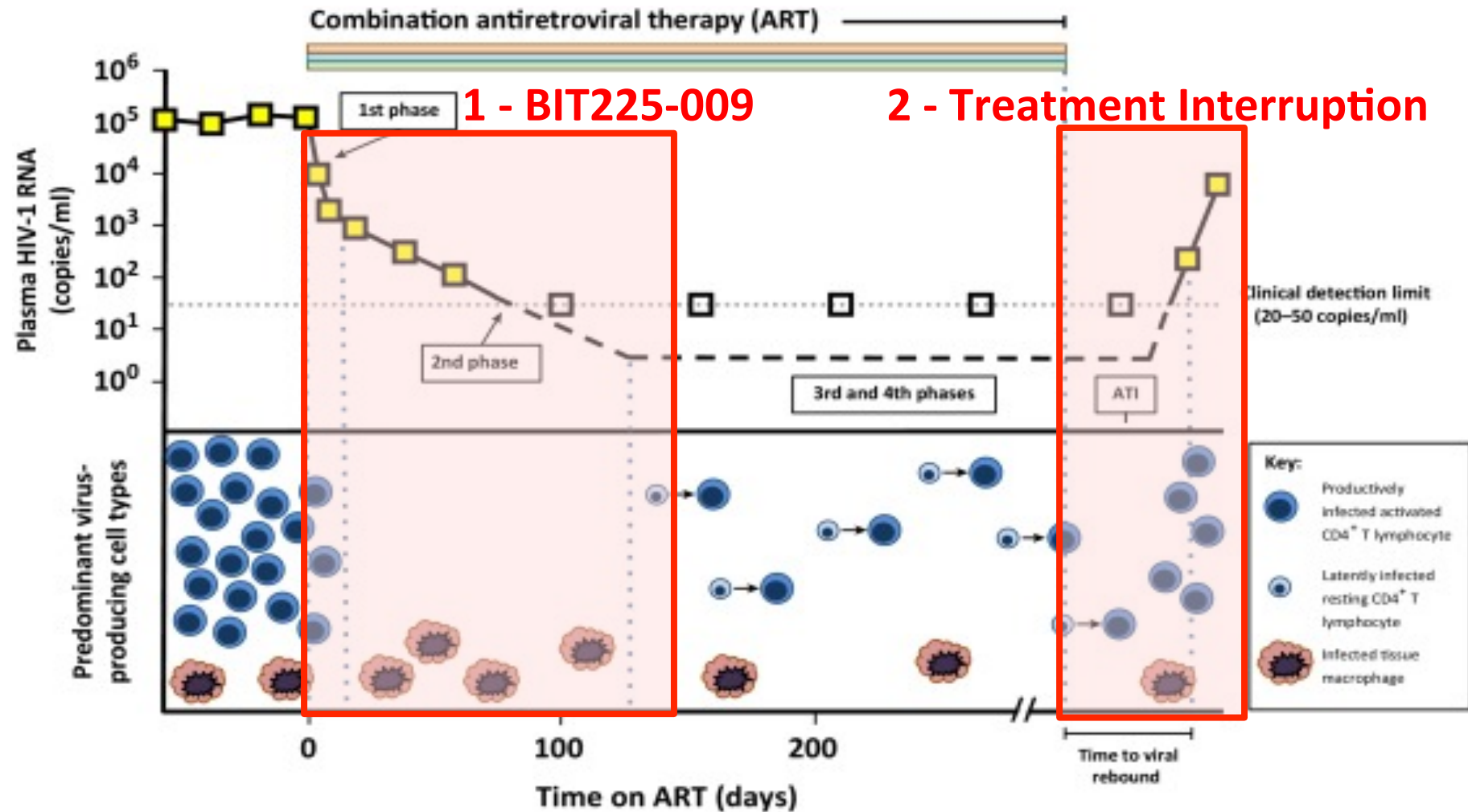
- **BIT225-004:** Phase 1b/2a randomised, placebo controlled, double-blind trial
 - 21 patients, HIV-1 positive, treatment-naïve; 10 days dosing with BIT225 (monotherapy)

Results demonstrated that:

1. **BIT225 significantly reduced HIV-1 levels in the macrophage (reservoir) cells; BIT225 crossed blood-brain barrier, 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**
 - **Final step is to show efficacy in combination with current HIV-1 treatment**



BIT225 HIV-1 Trials Designed to Show Clinical Benefit in Combination with ART



Biotron

HIV-1 Program Trials - I

- ***BIT225-009 Overview***
 - Phase 2 human clinical trial
 - 12 weeks BIT225 in combination with current antiretroviral treatment (ART)
 - Patient population is commencing ART treatment for first time
 - Double blind, placebo controlled study
 - Measuring BIT225 impact on:
 - HIV-1 second phase of decay
 - Immune activation
 - Intracellular HIV-1 in reservoir lineage cells
 - Specifically designed to show a clinical benefit with BIT225 over and above ART



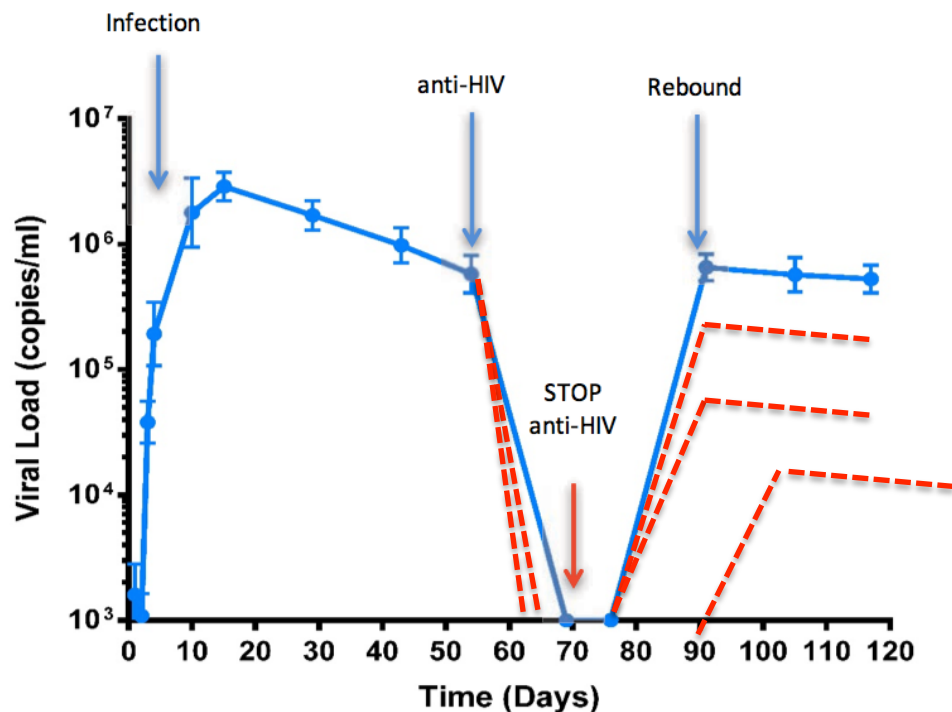
HIV-1 Program Trials - II

- ***Treatment Interruption Study (ATI)***
 - To look at impact on viral reservoir:
 - Treat with current ART drugs, with and without BIT225
 - Take away drugs
 - Measure impact on viral rebound
 - Delay, change in dynamics, etc
 - Difficult to do in patients as they would need to go off treatment
 - BUT Recent advances in models of HIV-1 infection allow us to do this in a new animal model:
 - Significantly faster and more cost-effective than a human trial
 - Directly mimics human ATI
 - Validated in discussions with potential partners



Human Treatment Interruption Model

- Mice with human immune system
 - Can be infected with HIV-1 and treated with human drugs
 - Mimic Treatment Interruption trial in humans



ADVANTAGES:

- *Less cost, risk, time*
- *Provide data to:*
 - *Guide for potential clinical use*
 - *Support outcome of 009 trial*
 - *Handle on time to rebound*
 - *Data is key to bedding down partnership*

POTENTIAL Effect of addition of BIT225

Biotron

Creating Clear Value Inflection Points in HIV-1 Program

- Studies very carefully designed in conjunction with Key Opinion Leaders with industry feedback
- Specifically designed to show potential partners how BIT225 can be used in combination with current ART
- Phase 2 HIV-1 Trial (BIT225-009) -
 - Expect trial commencement shortly – Headline data expected in 3Q17
 - *Expected outcome(s) – change of viral load in blood indicating impact on underlying viral reservoir, also impact on immune activation*
- Analytical Treatment Interruption (ATI) Study –
 - Trial is underway evaluating BIT225 in HIV-1 Infected Humanised Mice - Data expected Q1/17
 - *Expected outcome(s) – impact on viral rebound once ART is stopped*

Both study approaches validated in discussions with potential partners

Biotron



HCV Program Update

- Data package prepared for regulatory filings in US or elsewhere
- Partner-ready for combination studies with other HCV drugs
 - BIT225 is pan-genotypic, new class of HCV drug
- China remains a significant opportunity for HCV therapy
 - 30 – 50 million people infected (compared to 3 – 5 million in USA)
- Identified and initiated discussions with a number of China based companies with interest in licensing BIT225 (for HCV)
- Pricing of latest HCV drugs from the USA is strong incentive for China to commercialise therapies for its domestic market
- Licensee would undertake development, regulatory, manufacturing & marketing in China for its domestic market

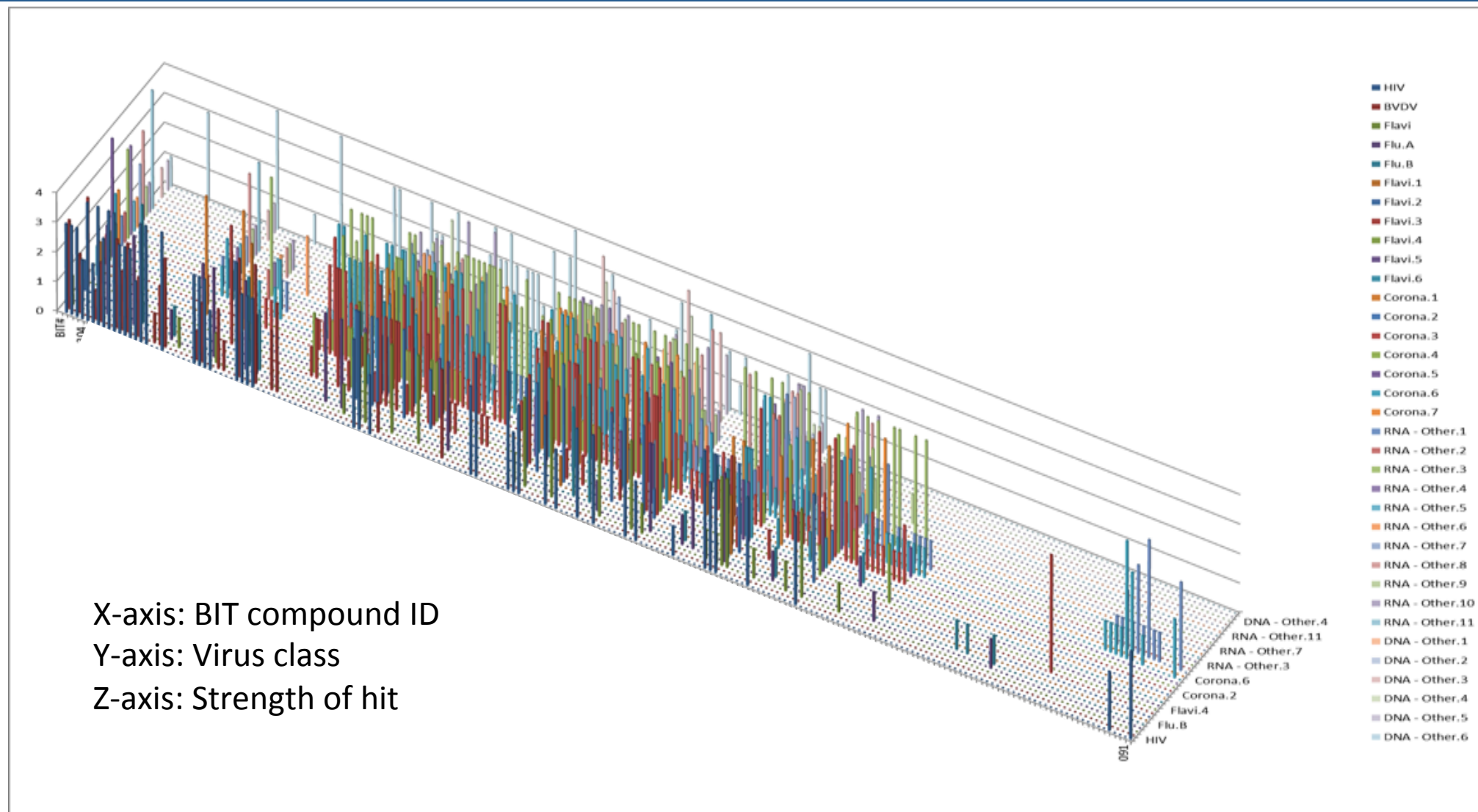


Unlocking Value in Compound Library

- 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, MERS-CoV and Zika 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
- 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



Library is valuable to Biotron and potential partners as it is a new chemical space that has not been exploited in drug development to date

Preclinical – Early Stage Opportunities

- Technology core is an antiviral platform with new class of small molecules with broad range of activity against different viruses
 - Extending earlier stage programs for other key viruses:
 - Identifying hits for other viruses including RSV, Zika, BK, and others
 - Developing leads for programs including Dengue and HBV
 - Dengue virus – Applying for non-equity funding from US organisations
 - Hepatitis B Virus (HBV) - Early stage, but key target of interest to potential partners
 - **Screening activities are KEY to demonstrating value of our platform**
- Seeking collaborations for individual programs or entire platform



Summary

Biotron well positioned for value growth in 2017:

- Strong clinical program in HIV-1
 - Defined value infection points based on potentially positive data from BIT225-009 trial and ATI Study making Biotron “Partner Ready”
- Regional HCV licensing strategy enabling additional value optimisation
- Extensive safety, etc data package for BIT225 supporting both HIV-1 and HCV programs
- Multiple preclinical collaboration opportunities including high value HBV approach
- Commercialisation of drugs and platform remains the key focus and aim of the company, and basis of all activities

Biotron



Contact

Dr Michelle Miller
CEO & Managing Director
+61 412 313329
mmiller@biotron.com.au
www.biotron.com.au

Biotron

