



April 2014

Dear Shareholders,

Welcome to the latest edition of BITNews. This is an important year for Biotron and the next 12 months are critical to commercialisation plans for the Company's lead antiviral drug, BIT225.

By the end of this year, we expect to have released data from the Phase 2 three month dosing trial (BIT225-008) of BIT225 for Hepatitis C virus (HCV) currently underway at a number of trial sites in Thailand.

This follows the successful completion of a Phase 2 trial (BIT225-006) of BIT225 in patients co-infected with HIV and HCV in late 2013. The Company recently released encouraging interim data from the six month time point of this trial, which demonstrated that all HCV genotype 3 subjects who completed dosing and continued on the trial were Hepatitis C virus-free 28 weeks into the study.

Response to treatment at this time point is generally a good indication of final outcome at 48 weeks. Preliminary data from patients who have completed 48 weeks of treatment indicate that they remain virus free at this key time point.

Data from the trial has also shown that HCV levels declined at a significantly faster rate after addition of BIT225 to the treatment regimen in these patients. End-of-treatment data at 48 weeks is expected to be released mid-2014.

The interim results from the BIT225-006 trial are important as they demonstrate that BIT225 has activity against HCV genotype 3 (we have previously shown that BIT225 has activity against the predominant

Western population genotype 1 variant). Extending the activity spectrum to include this additional genotype, which comprises the main variant of HCV in many Asian populations, broadens the potential utility of BIT225 in additional markets.

## **Three Month Dosing Study**

Biotron's lead anti-viral drug BIT225 has been tested in several early-stage trials in healthy volunteers and in HCV and HIV patient populations.

To date, results have been overwhelmingly positive, with favourable safety, efficacy and tolerability outcomes. The focused, diligent and strategic step-bystep clinical program for BIT225 underpins the Company's commercialisation strategy, and has been designed with the aim of ensuring that Biotron is a credible and attractive partnership prospect.

At this stage of development, it is important to show safety of BIT225 with three month dosing. It is anticipated that BIT225, if approved, will be used in combination with other new classes of direct-acting antiviral (DAA) drugs. Currently, these other DAA drugs require a minimum dosing period of 12 weeks, so BIT225 has to be shown to be safe over this length of time for it to be used in any future drug combination. Trials to date have had up to 28 days dosing with BIT225, with no major safety issues.

In the current BIT225-008 trial, sixty subjects infected with HCV genotypes 1 or 3 are receiving 12 weeks of treatment with BIT225, in combination with the standard treatment of interferon and ribavirin (IFN/RBV).

Three trial sites in Bangkok, Khon Kaen and Chiang Mai, Thailand, have commenced screening and dosing, and an additional site in Bangkok will be added shortly.

We expect the trial to be full enrolled by mid-year and preliminary interim results are expected to be released later in the year (Q4 2014).

Chronic viral diseases such as HCV and HIV cannot be treated with one drug, due to the potential for drug resistance. At the time of commencement of the BIT225-008 trial, no new classes of DAA drugs had been approved for use. For this reason, we were limited to using the existing standard treatment of IFN/RBV in combination with BIT225 for the trial. However, we anticipate BIT225's future lies in combination with other new classes of DAA drugs.

Biotron anticipates filing an Investigational New Drug (IND) application for BIT225 with the USA Food & Drug Administration (FDA) in mid-2014. This will be a key milestone in the Company's path towards successful commercialisation of its technology.

Based on advice received from international advisors, the three month dosing trial and the anticipated IND filing will best position BIT225 for licensing to a major pharmaceutical company.

## **Global Interest in HCV**

Last December, the FDA gave a green light to US drug developer Gilead to market sofosbuvir for HCV. This was one of the most eagerly anticipated new drug approvals of the year, as sofosbuvir (marketed as Sovaldi) is the first in a new class of DAA drugs known as nucleotide polymerase inhibitors.

This new therapy opens the door to a new generation of treatments that don't require interferon injections. However, at this time, ribavirin remains a necessary addition to sofosbuvir treatment, which is not ideal due to unpleasant side effects. Additional, new classes of anti-HCV drugs are required to further optimise treatment of HCV infection.

Investors should note that BIT225 is synergistic *in vitro* with polymerase inhibitors but has a different and novel mechanism of action.

BIT225 has shown clinical benefit in patients infected with HCV genotypes 1 and 3, and has shown pangenotypic activity in *in vitro* studies. BIT225 is being developed for use in combination with DAAs such as the polymerase inhibitors. While new drugs such as sofosbuvir have reduced the treatment period from 48 weeks (for IFN/RBV) to 12 weeks for HCV genotype 1, treatment of HCV genotype 3 requires 24 weeks of treatment with sofosbuvir to clear virus in ~80% of patients.

There is a clear unmet need for additional anti-HCV drugs to add into new DAA combinations to shorten treatment time and improve outcome for patients, especially those infected with HCV genotype 3.

## **Patent Update**

Biotron recently announced that its patent application for BIT225 has been allowed in the USA. The patent application 11/922,281 entitled "Antiviral Compounds and Methods" protects the composition and use of, and methods of treatment with, the Company's lead antiviral compound BIT225.

This is a valuable addition to the Company's existing intellectual property portfolio and enabled broad protection for the current clinical and commercial opportunity presented by BIT225. To date, Biotron has had its patent for BIT225 granted or accepted in eight other jurisdictions, including Europe and China.

We look forward to providing on-going updates on the trials in coming months. Don't forget to subscribe to receive emailed updates and announcements at <a href="https://www.biotron.com.au">www.biotron.com.au</a>.

Thank you for your continued support as we progress development and commercialisation plans for BIT225.

Sincerely,

Dr Michelle Miller

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**CEO & Managing Director**