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14 October 2009

The Manager Companies  
ASX Limited  
20 Bridge Street  
Sydney NSW 2000

(3 pages by email)

Dear Madam

**SHAREHOLDER UPDATE**

In accordance with Listing Rule 3.17, I attach a copy of a document, being an update on the successful Phase Ib/IIa trial of BIT225 in Hepatitis C virus infected patients, as sent to the Company's shareholders.

Yours sincerely



Peter J. Nightingale  
Company Secretary

pjn5017

The date "October 2009" is located in the top right corner, below the newsletter name, in a black font.

Dear Shareholder

Welcome to this edition of Biotron's newsletter, *BITNews*. We're pleased to be able to report on the outcome of the trial of BIT225 in Hepatitis C virus (HCV)-infected patients. This was the first trial of Biotron's lead antiviral drug in patients infected with HCV (the previous trial had been in healthy volunteers) and its completion marks a major milestone for the Company.

This newsletter is to update shareholders on what the results of the trial mean for Biotron and to outline the next stage of development.

Biotron's HCV program is developing a new way to treat this serious infection, with a new drug that works in a different way to other existing HCV treatments. To date no one has developed and clinically tested a drug of this class (HCV p7 inhibitor) – BIT225 is a world first. While we had previously shown that the drug works in cell-based models of infection, we needed to show that the drug can lower the level of HCV in the blood of infected people to show proof-of-concept i.e. that this new class of drug has the potential to be used to treat HCV infection.

The trial was designed primarily to test the safety of BIT225 but also to provide this proof-of-concept.

During the trial, 18 HCV-infected people were randomly assigned to receive either 35 mg or 200 mg of BIT225, or placebo; they took the drug twice daily for 7 days. Before, during and after

the trial blood samples were taken and analysed to see how much virus was in their bodies.

The assessment of safety was the prime concern in this trial as this was the first time that any humans had received more than one dose of the drug – at this stage of development of a new drug, regulatory authorities and human ethics committees that oversee and approve such trials are more concerned about safety aspects of new drugs than whether they work. We recognise that this is not the key concern for shareholders who want to know if the drug works, but it should be noted that the HCV drug graveyard is littered with drugs that "worked" but had unacceptable safety profiles, and that clinical trials and their endpoints are dictated by external authorities to ensure patient safety. There are always heightened safety concerns with HCV-infected patients as toxicity problems can be amplified if they have liver damage. During Biotron's trial patients were closely monitored to determine if the drug passed stringent safety guidelines.

Results from the trial indicate that at the lower dose of drug (35 mg) there was no effect on virus levels. However, at the higher dose (200 mg) half of the subjects had a significant reduction in virus levels. This is an excellent finding in a small, first-in-patient trial, and shows that increasing the dose of drug improves the result. We would expect, therefore, that if we further increased the dose then virus levels may drop further.

Now that we have demonstrated that BIT225 can reduce virus levels in patients at 200 mg, with no serious adverse events, the next step is to see if a higher dose can have a greater effect. This can most easily be done by extending the recently completed trial to include another group of patients to receive a higher dose of drug. We also know from preclinical cell culture assays that the potency of BIT225 appears to be significantly increased in combination with the current drugs used to treat HCV infection, interferon/ribavirin, so we are currently preparing protocols for a combination study of BIT225 with interferon and ribavirin, which is how BIT225 would be most likely to be used in a clinical setting – antiviral drugs cannot be used on their own to treat chronic infections due to development of drug resistance.

Results from the trial were only available after the end of the study, at which time they were unblinded and analysed. It was important to take the necessary time to perform a complete analysis of all the data. This is not something that can be rushed and the fact that Biotron completed its analysis, with full review of all safety data by an external Data Safety Monitoring Committee, within 2 months of the end of the trial is an excellent achievement.

The aim of therapy for HCV using the current standard of care treatment (interferon with or without ribavirin) is to achieve a sustained virologic response (SVR) – defined as undetectable HCV 6 months post treatment. Unfortunately, overall response rate to interferon/ribavirin treatment is not high, with less than 50% of treated patients achieving SVR. There are several different HCV genotypes – the most common is genotype 1, and this form has the highest resistance to treatment, with less than 45% of genotype 1 subjects who complete treatment achieving SVR. This is why new treatments such as BIT225 are needed.

There are other new HCV antiviral drugs in development worldwide, which work in a different way to BIT225. Some have been shown to be very effective at reducing HCV viral loads; the problem has been that drugs in these other classes have been dogged by toxicity problems, and several have failed in Phase II trials due to issues with liver, kidney, etc toxicities. None are yet approved. In the future, treatment for HCV is likely to involve a cocktail of specific antiviral drugs of different classes, similar to how HIV is treated.

In our trial of BIT225, the maximum reduction in virus levels was relatively modest. It needs to be remembered, however, that this was the first patient trial of BIT225, and that 200 mg is a relatively low dose of drug. We were limited to this level in this trial for safety reasons.

Biotron's development of BIT225 is being undertaken with one very clear, focused aim – to secure a suitable partner for the HCV program, thus ensuring a commercial outcome and financial return to shareholders. New drugs such as BIT225, which are first-in-class, provide challenges in that they are forging new territory, but traditionally have shown better returns than “me-too” drugs. We continue to engage with potential partners, but believe it is important to proceed with the next stage of development of BIT225 to ensure we keep increasing the value of the program.

Thank you for your continued support. We have appreciated the phone and email messages from shareholders, and we look forward to providing further updates.

Sincerely



Michelle Miller  
CEO & Managing Director