

# PROBLEM VIRUSES CAN'T HIDE FROM NEW TREATMENT

*BIOTRON'S lead product is a promising treatment for Hepatitis C, and the precursor to AIDS: HIV infection. These are two of the highest priority virus targets in the world, with major pharmaceutical companies channeling sizeable research funds into development of effective antiviral drugs or vaccines to treat or prevent these diseases.*

Data indicates that Biotron's lead product, BIT225, may represent a first-in-class opportunity to target

**“Biotron's drug is being specifically developed to target hard-to-eliminate, fugitive viruses.”**

the HIV virus, which until now has been able to “hide” from existing drug therapies.

The Biotron therapy involves a new antiviral that targets proteins in viruses identified by Biotron as key targets – thus shutting down the virus.

In addition to its BIT225 clinical program, Biotron has early-stage programs targeting other viruses including the mosquito-borne disease Dengue fever.

## MOVING ALONG TWO PATHS TO SUCCESS

Biotron's lead compound evolved from the company's internal drug discovery program, in which a library of therapies was designed, assembled and screened for activity.

During the past 12 months, Biotron's lead drug BIT225, has moved into a Phase 1b/2a clinical trial for HIV. The drug has also shown promise in the treatment of Hepatitis C.

Plans are advanced to launch a trial before the end of 2012 to study the effect of BIT225 in patients co-infected with both Hepatitis C and HIV.

Formulation studies to develop capsules of the drug are under way in the US with an international drug manufacturer currently producing clinical-grade BIT225 in large quantities.

Both of these activities are aimed at positioning BIT225 for larger, longer term clinical studies.

## STANDARD THERAPY IMPROVED IN TRIAL

The drug has shown good anti-Hepatitis C activity in a Phase 2a, 28-day clinical trial where patients also received the two standard therapies for this disease.

In the three-month follow-up after seven days of dosing in a phase 1b/2a study, 87 percent of patients who received Biotron's drug combined with standard treatment were cured, compared to a 63

percent cure rate in the control group receiving only standard treatment.

Combination therapies are a hot area for research, and being able to boost the effectiveness of common treatments can be the major value driver for a new drug.

The number of patients co-infected with both HIV and Hepatitis C is significant. In the US, between 25 and 40 percent of HIV patients also have Hepatitis C.

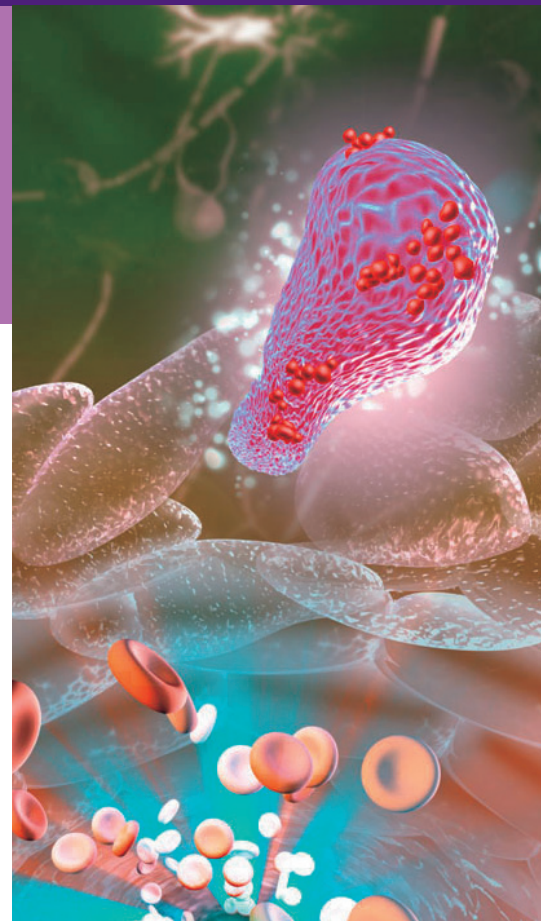
This group of patients does poorly, being mostly non-responsive to standard treatments, representing a significant unmet medical need.

While Biotron's partnering strategy remains flexible, it aims to develop its therapies through Phase 2a clinical trials before forming alliances for commercialisation.

## SMALL DRUG, BIG MARKETS

The size of the potential market for Biotron's therapies is huge.

It is estimated that about three percent of the world's population, or 170 million people are infected with Hepatitis C, which causes inflammation of the liver and can lead to fatal diseases such as cirrhosis and liver cancer.



It is estimated that the market for effective Hepatitis C drugs may reach US\$10 billion annually.

Currently, standard treatments for Hepatitis C see only half of patients recovering.

There is an unmet need for new classes of antiviral drugs such as those being developed by Biotron.

Current HIV therapies have little or no effect on HIV in the underlying reservoir of infected cells where the virus “hides” from the immune system.

The company's drug has the potential to eliminate this viral reservoir, which remains one of the “Holy Grails” of HIV treatment.

Biotron's approach is novel, relatively advanced and is being specifically developed to target hard-to-eliminate, fugitive viruses.

As infectious diseases come back into the acquisition limelight, small players with novel technologies like Biotron that have demonstrated clinical promise may be attractive targets for valuable deals with major pharmaceutical companies.

## COMPANY INFORMATION

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## LESSER KNOWN HEPATITIS COMMANDS HUGE INTEREST FROM PHARMA

FDA approval in the US last year for two drugs to treat chronic Hepatitis C infection - Vertex's Incivek and Merck's Victrelis - have begun a revolution in the treatment of this disease.

Unlike with traditional drugs for Hepatitis C, the thinking behind the two new drugs is that using direct-acting antivirals markedly improves cure rates. The race is on to put together the best drug regimen.

The global market for Hepatitis C drugs is expected to grow to US\$11 billion by 2018.

This year Gilead Sciences paid a massive US\$11 billion to acquire Pharmasset, while Bristol-Myers Squibb paid US\$2.5 billion for Inhibitex, both developers of Hepatitis C therapies.