## Accessing the future of HIV therapies

*continued from page 1*

clinical studies are TNX-355, which targets the CD4 receptors, and GW 873140 and SCH-D, which target the CCR5 receptors. These agents all have favourable safety and efficacy data.

Researchers are concerned that over time, the use of CCR5 receptor (R5 viruses) blocking agents will cause the emergence of more lethal viruses that use the CXCR4 receptor (X4 viruses) to get into the CD4 cell, hence the need for novel blocking agents.

Data providing proof-of-concept for a novel experimental oral attachment inhibitor, a potential new class of antiretrovirals, was also unveiled at the conference. BMS-488043 is a small molecule that binds to the HIV viral envelope protein gp120, preventing it from attaching to the CD4 receptor, thereby stopping infection of the CD4 cells.

With investigations underway on a variety of new drug approaches that prevent HIV from attaching itself and fusing into CD4 cells, optimism is growing that new, effective, non-toxic drugs will change the way HIV is treated. It is essential that development of new drug approaches continues and that these drugs are priced fairly and made available to people living with HIV/AIDS in a timely manner. CTAC will continue to monitor new drug developments and their pricing and approval in Canada. ■

*Adapted from an article originally printed in* Living + *magazine, Issue 30, May/June 2004, a publication of the BC Persons With AIDS Society, www.bcpwa.org*

# Hepatitis C Treatment *Now*!

*By Paula Braitstein*

**AS PEOPLE LIVING WITH HIV/AIDS** are living longer with their HIV disease, other problems are emerging, including side effects of antiretroviral drugs, and co-infections. Co-infection with viral hepatitis B or C is a big problem among HIV+ people because of shared routes of transmission. In fact, approximately 30% of all HIV+ people are co-infected with hepatitis C, and pretty much every individual who acquired HIV through injection drugs and most individuals who were infected via the blood supply are also infected with hepatitis C. It's estimated that about 1% of the entire population of Canada has hepatitis C – about 250,000-300,000 people. So hepatitis C is a big problem.

Unfortunately, so is accessing treatment for hepatitis C in most places in Canada.

Hepatitis C treatment is not easy to take – the combination of pegylated interferon and ribavirin has major toxicities that make people feel like they have a bad case of the flu for the entire treatment period, their saliva glands often dry up resulting in a painful mouth and loss of taste, and perhaps worst of all is the depression and suicidal tendencies that are biological reactions to the drugs. The good news, though, is that hepatitis C treatment can and does clear the virus in a lot of people, resulting essentially in a cure, and the treatment is not life long – both major differences compared to HIV care. The bad news for HIV+ people is that the current treatment for hepatitis C doesn't work as well for them as it does in HIV- people: overall, about 40% of HIV+ people will have a sustained virologic response, compared to 55% of HIV-. Hepatitis C genotype also is very important in terms of probability of treatment success, and in HIV- people with genotypes 2/3, 80% can expect to clear the virus, while in HIV+ people with genotypes 2/3, only about 60% will clear. In genotype 1, which is the predominant hepatitis C genotype in North America including among people living with HIV/AIDS, about 45% of HIV- people will clear the virus; whereas less than 30% of HIV co-infected people with hepatitis C genotype 1 can expect to clear.

Most provinces in Canada have pretty big restrictions on who can access hepatitis C treatment, and for how long.

*continued on next page*

## Hepatitis C Treatment *Now*!

*continued from page 2*

In general, people with genotypes 2/3 automatically get a maximum of 24 weeks of treatment once they qualify. People with genotypes 1/4 can get a maximum of 48 weeks of treatment, but virtually everywhere they are required to demonstrate a 2 log reduction in their hepatitis C RNA (viral load) by week 12. If they don't fit that Holy Grail, off of treatment they come. This has particular significance for HIV+ people: there is a growing body of evidence to suggest that the dynamics of viral clearance after treatment initiation in people who also have HIV are slower, and while they can achieve a 2 log reduction, it might take a bit longer than 12 weeks.

In many provinces, elevated liver function tests (ALT's mostly) are required on at least two separate occasions within a six month period. The fact that about 25% of people with cirrhosis of the liver will have normal ALT's and the fact that ALT's are a notoriously bad predictor of histologic liver disease appear to be irrelevant to the bureaucrats making these decisions.

**People don't die of a detectable hepatitis C viral load, they die of end stage liver disease.**

In Ontario, for those people with genotype 1, it seems you must have moderate fibrosis (scarring of the liver) that is biopsy proven. It's too bad for folks in Ontario that hepatitis C treatment is known to work best if you don't yet have any fibrosis.

And British Columbia gets the prize for the most stupid criteria of all: that you have to be treatment naïve. Never mind that people were forced into taking Rebetron because BC Pharmacare took so long to even cover pegylated interferon/ribavirin on a special authority basis; never mind that Rebetron and Pegetron cost exactly the same; and never mind that people who relapsed on previous treatment have at least a 35% chance of success, or that even people who didn't respond at all to interferon monotherapy have 35% chance of success. If you had the bad judgement to actually try to treat your hepatitis C before, you will pay for it now.

And then there's the issue of the Holy Grail, and what does it really mean anyway? People don't die of a detectable hepatitis C viral load, they die of end stage liver disease, including fibrosis and cirrhosis. The bottom line question is, will treatment stabilize or improve liver histology (i.e. scarring of the liver), and increasingly it appears that it does even in the absence of a complete virologic response. The big HALT-C trial which is looking at maintenance treatment will be years yet before providing answers. Hopefully most people who have hepatitis C will be around to benefit from the results. HIV co-infected people, however, since their hepatitis C disease will progress 2-3 times more rapidly, have less time to wait.

**It's estimated that approximately 1% of the entire population of Canada has hepatitis C – about 250,000-300,000 people.**

It seems like governments' *modus operandi* is something along the lines of 'Just say No'. What we really should be talking about is 'Getting to Yes'. So in addition to all the issues mentioned above, we should also be talking about – and health care policy-makers should be moving on – how to improve the access to and efficacy of the treatments. This means providing treatments for managing side effects, including growth factors like erythropoeitin, and anti-depressants. It involves regular psychiatric monitoring, organizing support groups, and instituting clinics that address HIV infection, hepatitis C infection, and all other health issues in a holistic and multidisciplinary way. I wonder how many people are going to die because they don't have access to any of this? Or because they don't 'fit the criteria'? ■

*Many thanks to Ken Thomson, Michelle Marchione, Ken Monteith, Patrick Hooey, and Richard Neron for their valuable contributions to this article.*

***Check out the internet pharmacies update on page 8***