



in the news

The 5th International Conference on HIV Pathogenesis, Treatment and Prevention took place in Cape Town, South Africa from July 19-22, 2009. *Relay's* Co-Editor-in-Chief Dr. Harold Dion was there and reports some of the highlights from the meeting.



Can fewer drugs work as well in resistant HIV?

A study presented by the team at Montreal's Clinique médicale l'Actuel demonstrated that it might be possible to reduce the number of different medications needed by people who have developed resistance to triple therapy. In some people whose previous combinations have failed due to drug resistance, nucleoside reverse-transcriptase inhibitors (NRTIs) have little antiviral activity but are used anyway, despite the lack of scientific data showing their effectiveness in this setting.



The research team therefore analyzed the records of 101 patients in order to see whether the effectiveness of salvage therapy depended on the number of NRTIs. On average, these patients had been treated for 12 years and were taking about four medications each, though only about two of these were considered active. All patients had already taken drugs from the NRTI, NNRTI and PI classes and, at the time of the study, were taking at least one of the most recently approved new drugs (etravirine [Intelence®], maraviroc [Celsentri®] or raltegravir [Isentress®]).

The researchers observed that taking a greater number of NRTIs, especially those considered inactive on resistance testing, didn't lead to an improved virologic response. More thorough analysis in a clinical trial will be undertaken in the Fall of 2009 to determine more precisely which medications could be withdrawn without having an impact on patients' health.

These results were of great interest to the international scientific community. Even the World Health Organization paid attention, as they're well aware that reducing the number of medications required by people living with HIV would influence side effects, drug interactions and the cost of therapy, potentially increasing the availability of treatment in poorer countries.

Epidemiology

South Africa has the greatest number of people living with HIV of anywhere in the world. An estimated 5.7 million people out of a total population of 46 million are seropositive, and there are 1000 deaths due to HIV each day. The epidemic affects all groups in South African society, but women are the hardest hit. Currently, about 600,000 people have access to antiretroviral therapy (ARVs); the national strategic plan for HIV/AIDS aims to make treatment available to 80% of people who need it by 2011 — a tall order for a country with limited resources.

New treatments

A phase 2 trial of a new integrase inhibitor (S/GSK1439572) showed remarkable activity at a dose of 50 mg taken as monotherapy once a day. Seventy percent of the 35 patients included in the trial reached a viral load less than 50 copies/mL and the drug was well tolerated. Some effectiveness was also seen against virus with resistance to first generation integrase inhibitors (raltegravir and elvitegravir). These impressive findings support the start of phase 2b clinical trials using this agent.

Among other promising treatments at the phase 3 clinical trial stage:

- TMC 278 (rilpivirine), under development as a fixed-dose combination with tenofovir (Viread®) and FTC (emtricitabine)
- Elvitegravir (another integrase inhibitor)
- Vicriviroc (another anti-CCR5 molecule in the same category as maraviroc) **R**

We include here only a small sample of the presentations at the conference. You can find a complete list of abstracts at the conference website: www.ias2009.org.

