Highlights from the seventh IAS Conference

Kuala Lumpur hosted the biennial International AIDS Society (IAS) Conference on Pathogenesis, Treatment and Prevention, where new guidelines hogged the limelight. Peter Hayward was there.

New WHO guidelines
1·6 million people started treatment with antiretrovirals in 2012, and 9·7 million people with HIV are now receiving treatment. Against this backdrop, WHO launched new treatment guidelines on the opening day of the conference.

The new guidance recommends treatment with a single, daily, fixed-dose combination of three antiretroviral drugs (tenofovir, lamivudine, and efavirenz) for all adults with HIV who have CD4 counts of fewer than 500 cells per μL (revised from 350 cells per μL in the 2010 guidance), for all infected children older than 3 years, and, irrespective of CD4 cell count, for all people with HIV in serodiscordant relationships and all pregnant and breastfeeding women. The revisions recognise the importance of early treatment and treatment as prevention.

The recommendations also call for treatment of all children aged 1-3 years, although the Drugs for Neglected Diseases Initiative highlighted that a practical formulation, which should include lopinavir-ritonavir, was not available. The Initiative is working with Cipla to develop granules that can be added to food for infants. Overall, the revisions increase the number of people eligible for antiretroviral therapy worldwide from around 17 million to almost 26 million.

Hepatitis C and HIV
In the rapidly evolving area of treatment for hepatitis C in patients with HIV, Barry Bernstein (AbbVie, North Chicago, IL, USA) reported results from a trial in which 247 patients were given three direct-acting antiretrovirals (DAAs)—a protease inhibitor (ABT-450), an NS5A inhibitor (ABT-267), and a non-nucleoside NS5B inhibitor (ABT-333)—in combination with ribavirin in an interferon-free regimen (abstr TUAB0103). More than 90% achieved sustained virological response at week 24 (SVR24); among 24 patients who reduced their ribavirin dose because of toxic effects, SVR24 was 100%.

Early antiretroviral therapy
The highest viral DNA concentrations in peripheral blood mononuclear cells are present during primary infection and after progression to AIDS. The OPTIPRIM study (abstr WEAB0101) is comparing standard three-drug treatment with intensified five-drug treatment early in patients with acute or early primary HIV infection. The study has yet to be unmasked, but early results suggest substantial decreases in both plasma and cellular HIV loads in the treatment population as a whole. Targeting of primary infection might be one route to a functional cure, suggested investigator Antoine Chéret (Paris Descartes Sorbonne-Paris-Cité University, Paris, France).

Peter Hayward

iPrEx open-label extension
The iPrEx trial showed that tenofovir was effective for treatment as prevention in men who have sex with men. Robert Grant (Gladstone Institutes, San Francisco, CA, USA) presented the first data from the open-label extension, in which trial participants were offered the opportunity to continue taking the drug or to start taking it if they had been on placebo (abstr WELBC02). 1451 patients were offered the drug at sites in Asia, South Africa, South America, and the USA. 46% of eligible participants chose to take the drug. Those who had taken tenofovir during the masked trial period were more likely to take the drug during the open-label phase, and adherence to treatment (as determined by drug concentrations) was higher in the extension than in the trial period.

Treatment for children
Treatment with lopinavir-ritonavir can be associated with dyslipidaemia, so Thanyawee Puthanakit (HIV Netherlands Australia Thailand Research Collaboration, Bangkok, Thailand) and colleagues investigated whether a reduced dose could be used for maintenance therapy in children with viral suppression (abstr MOAB0101). At 11 research sites across Thailand, 199 children (<18 years) with viral loads of fewer than 50 copies per mL were randomly assigned to receive either standard dose lopinavir-ritonavir (n=98) or 70% of the standard dose (n=101) as part of their antiretroviral therapy. By week 48, the proportions of children with viral loads of fewer than 50 copies per mL did not differ between groups, but dyslipidaemia was less common in children receiving the reduced dose.

Peter Hayward