

In the news

4-IN-1 SOLUTION

A new HIV regimen that combines four medications into one pill, known as Quad, has been shown to be safe and effective, and may increase adherence to anti-HIV treatment.

Quad, developed by Gilead, comprises three antiretrovirals and one booster. The drug was assessed in two clinical trials involving ~700 patients, comparing Quad with the gold-standard treatment, Atripla, or with a combination of two antiretrovirals. Quad was effective and had fewer neuropsychotic side effects than the other treatments, although one study found more kidney complications in patients on Quad.

HIV treatments involve taking multiple drugs to combat the virus, usually at different times of the day, so combining four anti-HIV medications into one pill should improve adherence. "Patient adherence to medication is vital, especially for patients with HIV, where missed doses can quickly lead to the virus becoming resistant to medication," commented Paul Sax, Harvard Medical School, USA, first author of one of the studies (bbc.co.uk, 29 Jun 2012). Although other regimens such as Atripla also involve taking one pill, Quad is the first to include an integrase inhibitor, which stops the virus replicating.

Quad is currently under review by the US Food and Drug Administration, and a final decision is expected by August 2012. If approved, Quad will be "a potentially important new treatment option for a wide range of HIV patients initiating therapy," according to author of the second study Brian Kearney, Gilead (medicalxpress.com, 28 Jun 2012).

However, in a commentary accompanying the two studies, Rik Schrijvers and Zeger Debyser, from the Katholieke Universiteit Leuven in Belgium, cautioned that further work is needed to establish the long-term safety of Quad, in particular regarding potential long-term toxic effects to the kidneys.

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