

## New drugs and treatment options for HIV infection

Gerd Fätkenheuer, Klinik I für Innere Medizin, Universitätskliniken Köln, Köln, Germany  
g.faetkenheuer@uni-koeln.de

### Summary

During the last few years the advent of new antiretroviral drugs has greatly changed our current treatment strategies and paradigms. Reduced toxicity and increased efficacy of drug regimens, as well as results of clinical trials have led to recommendations of treatment guidelines to start antiretroviral therapy (ART) in asymptomatic patients when CD4+ cells fall below 350/ $\mu$ L. Long-term virologic suppression can be achieved in the vast majority of patients initiating ART. With new drugs, even treatment-experienced patients with virologic failure and resistance mutations in existing drug classes can be successfully treated. Among these new drugs are potent protease inhibitors (PI) with enhanced activity against HIV with PI-resistance mutations (darunavir, tipranavir) and the new generation non-nucleoside reverse transcriptase inhibitor (NNRTI) etravirine. First drugs in their class are the integrase inhibitor raltegravir and the CCR5 antagonist maraviroc. Both drugs have shown unprecedented activity in treatment-experienced patients when combined with optimized background therapy. These new drugs should preferentially be administered together with two or more other active drugs in order to achieve long-term virologic suppression.

### Recommended reading

Clotet B, Bellos N, Molina JM, Cooper D, Goffard JC, Lazzarin A, Wöhrmann A, Katlama C, Wilkin T, Haubrich R, Cohen C, Farthing C, Jayaweera D, Markowitz M, Ruane P, Spinosa-Guzman S, Lefebvre E; POWER 1 and 2 study groups. Efficacy and safety of darunavir-ritonavir at week 48 in treatment-experienced patients with HIV-1 infection in POWER 1 and 2: a pooled subgroup analysis of data from two randomised trials. *Lancet*. 2007 Apr 7;369(9568):1169-78.

Lazzarin A, Campbell T, Clotet B, Johnson M, Katlama C, Moll A, Towner W, Trottier B, Peeters M, Vingerhoets J, de Smedt G, Baeten B, Beets G, Sinha R, Woodfall B; DUET-2 study group. Efficacy and safety of TMC125 (etravirine) in treatment-experienced HIV-1-infected patients in DUET-2: 24-week results from a randomised, double-blind, placebo-controlled trial. *Lancet*. 2007 Jul 7;370(9581):39-48.

Madrugá JV, Cahn P, Grinsztejn B, Haubrich R, Lalezari J, Mills A, Pialoux G, Wilkin T, Peeters M, Vingerhoets J, de Smedt G, Leopold L, Trefiglio R, Woodfall B; DUET-1 study group. Efficacy and safety of TMC125 (etravirine) in treatment-experienced HIV-1-infected patients in DUET-1: 24-week results from a randomised, double-blind, placebo-controlled trial. *Lancet*. 2007 Jul 7;370(9581):29-38

Hirschel B, Perneger T. No patient left behind--better treatments for resistant HIV infection. *Lancet*. 2007 Jul 7;370(9581):3-5.

Grinsztejn B, Nguyen BY, Katlama C, Gatell JM, Lazzarin A, Vittecoq D, Gonzalez CJ, Chen J, Harvey CM, Isaacs RD; Protocol 005 Team. Safety and efficacy of the HIV-1 integrase inhibitor raltegravir (MK-0518) in treatment-experienced patients with multidrug-resistant virus: a phase II randomised controlled trial. *Lancet*. 2007 Apr 14;369(9569):1261-9.

Guidelines for the Clinical Management and Treatment of HIV-infected Adults in Europe / Version 2 - Dec. 2007

<http://www.eacs.eu/guide/index.htm>

Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents -  
January 29, 2008

<http://www.aidsinfo.nih.gov>