**REVIEW ARTICLE** 

## HIV Infection: **Current Treatment Options**



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Citation: Snopková, S., Havlíčková, K., Polák, P., Husa, P. (2011). Aktuální možnosti léčby HIV infekce. Adiktologie, (11)3, 172–178.

SUMMARY: Twenty-nine virostatics with antiretroviral activity, divided into several groups, are currently available for clinical practice in the treatment of HIV/AIDS. The individual drugs inhibit different sites of the HIV replication cycle or target certain receptors on host cells. The current treatment regimen, with a combination of antiretrovirals, consists of at least three drugs from at least two different groups. The strategy of combination regimens has achieved profound viral suppression and subsequent recovery of immunological functions. This has led to an extraordinary reduction in morbidity and mortality and a fundamental change in the disease prognosis. The patient's adherence to treatment and compliance are absolute necessities for successful treatment. This is a particular problem in relation to drug users and patients with the HIV/hepatitis C virus (HCV) or HIV/hepatitis B virus (HBV) co-infections. Such conditions may make the HIV treatment much more complicated because of possible interactions, side effects, and/or toxicity. Significantly, the effect of properly managed and maintained antiretroviral therapy is perfectly comparable to the effect achieved in other patient groups. Despite the number of difficulties and problems associated with the treatment of HIV/AIDS, the studies that have been performed thus far provide grounds for two obvious conclusions applicable to each and every patient: 1) The early initiation of HAART (highly active antiretroviral therapy) leads to the restoration and regeneration of the immune system, with the consequent benefits for the functioning of all the tissues and organs, and 2) The tendency to initiate HAART at the earliest stage possible, when the number of cells infected with HIV is minimal, rather than at the stage of immunodeficiency being actually present.

KEY WORDS: HAART - ADDICTIVE SUBSTANCES - HIV/HCV CO-INFECTION - HIV/HBV CO-INFECTION -SIDE-EFFECTS

**Submitted:** 29 / JULY / 2011 Accepted: 11 / OCTOBER / 2011

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