



Symposium 5.3

Approach to the Treatment of Heavily Antiretroviral Therapy-Experienced HIV-Infected Patients

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The year 2006 marked the 10th anniversary of the introduction of highly active antiretroviral therapy (HAART), a treatment paradigm that has led to significant declines in HIV-associated morbidity and mortality. In spite of this, a significant number of HIV- infected patients receiving HAART are unable to achieve sustained levels of plasma HIV RNA below contemporary limits of detection. Response rates achievable with subsequent regimens prescribed after failure of primary HAART therapy are considerably lower. Thus, a portion of these patients end up with multi antiretroviral class failure with limited options for future therapy. Practices in the pre-HAART era, such as serial ineffective monotherapy regimens or stepwise additions of single new agents to a failing antiretroviral regimen are partially responsible for these failures. Issues such as tolerability, adherence, and broad cross resistance within each class of antiretroviral drugs have further complicated the situation.

Data relevant to constructing an antiretroviral therapy regimen in heavily treatment-experienced HIV-infected adults with multiply resistant virus will be reviewed. While identifying and addressing the causes that led to the development of drug resistance and treatment failure in the first place, such as adherence, drug-related toxicity, and pharmacokinetics, is important, the focus of this presentation will be on the process of selection of an appropriate antiretroviral regimen with a reasonable chance of success. The issues discussed will include the utility of HIV drug resistance testing, viral fitness, residual antiviral activity, double-boosted protease inhibitors, incorporation of new antiretroviral drugs into a salvage treatment regimen, structured treatment interruption, therapeutic drug monitoring and inhibitory quotient.

Drug resistance and antiretroviral treatment failure are a common dilemma in clinical HIV practice. Fortunately, the evolution of knowledge in HIV medicine and the development of new drugs and technology have led to a paradigm shift in the management of heavily treatment-experienced patients. As a result, virologic undetectability has become an attainable goal for many treatment-experienced patients with multi class drug resistance.