

On December 1, 2009, the *Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents* were revised to reflect the following changes. You can find the complete, [revised guidelines](#) on the [AIDSinfo](#) web site..

What's New in the Adults and Adolescent Guidelines Document?

The following key changes were made to update the November 3, 2008, version of the guidelines.

New Section

Based on interests and requests from HIV practitioners, a new section entitled "Considerations in Managing Patients with HIV-2 Infection" has been added to the guidelines. This new section briefly reviews the current knowledge on the epidemiology and diagnosis of HIV-2 infection and the role of antiretroviral therapy in the management of patients with HIV-2 mono-infection and HIV-1/HIV-2 coinfection.

Key Updates

Drug Resistance Testing

In this revision, the Panel provides more specific recommendations on when to use genotypic versus phenotypic testing to guide therapy in treatment-experienced patients with viremia while on treatment.

- Genotypic testing is recommended as the preferred resistance testing to guide therapy in patients with suboptimal virologic responses or virologic failure while on first or second regimens (AIII).
- Addition of phenotypic testing to genotypic testing is generally preferred for persons with known or suspected complex drug resistance mutation patterns, particularly to protease inhibitors (BIII).

Initiation of Antiretroviral Therapy

In this updated version of the guidelines, the Panel recommends earlier initiation of antiretroviral therapy with the following specific recommendations:

- Antiretroviral therapy should be initiated in all patients with a history of an AIDS-defining illness or with CD4 count < 350 cells/mm³ (AI).
- Antiretroviral therapy should also be initiated, regardless of CD4 count, in patients with the following conditions: pregnancy (AI), HIV-associated nephropathy (AII), and hepatitis B virus (HBV) coinfection when treatment of HBV is indicated (AIII).
- Antiretroviral therapy is recommended for patients with CD4 counts between 350 and 500 cells/mm³. The Panel was divided on the strength of this recommendation: 55% of Panel members for strong recommendation (A) and 45% for moderate recommendation (B) (A/B-II).
- For patients with CD4 counts >500 cells/mm³, 50% of Panel members favor starting antiretroviral therapy (B); the other 50% of members view treatment as optional (C) in this setting (B/C-III).

Patients initiating antiretroviral therapy should be willing and able to commit to lifelong treatment and should understand the benefits and risks of therapy and the importance of adherence (AIII). Patients may choose to postpone therapy, and providers may elect to defer therapy, based on clinical and/or psychosocial factors on a case-by-case basis.

What to Start in Antiretroviral-Naïve Patients

Increasing clinical trial data in the past few years have allowed for better distinction between the virological efficacy and safety of different combination regimens. Instead of providing recommendations for individual antiretroviral components to use to make up a combination, the Panel now defines what regimens are recommended in treatment naïve patients.

- Regimens are classified as "Preferred," "Alternative," "Acceptable," "Regimens that may be acceptable but more definitive data are needed," and "Regimens to be used with caution."
- The following changes were made in the recommendations:
 - Raltegravir + tenofovir/emtricitabine" has been added as a "Preferred" regimen based on the results of a Phase III randomized controlled trial (AI).
 - Four regimens are now listed as "Preferred" regimens for treatment-naïve patients. They are:
 - efavirenz/tenofovir/emtricitabine;
 - ritonavir-boosted atazanavir + tenofovir/emtricitabine;

- ritonavir-boosted darunavir + tenofovir/emtricitabine; and
 - raltegravir + tenofovir/emtricitabine.
- Lopinavir/ritonavir-based regimens are now listed as "Alternative" (B1) instead of "Preferred" regimens, except in pregnant women, where twice-daily lopinavir/ritonavir + zidovudine/lamivudine remains a "Preferred" regimen (A1).

Additional Updates

The following sections and their relevant tables have been substantially updated:

- What Not to Use
- Management of Treatment-Experienced Patients
- Treatment Simplification
- Hepatitis C Coinfection
- Antiretroviral-Associated Adverse Effects
- Antiretroviral Drug Interactions
- Preventing Secondary Transmission of HIV

The significant updates are highlighted throughout the document at <http://aidsinfo.nih.gov/contentfiles/AdultandAdolescentGL.pdf>.