



Florida/Caribbean AIDS Education and Training Center

HIV CareLink

A Newsletter for HIV/AIDS Primary Care Providers

ABOUT US

The Florida/Caribbean AIDS Education and Training Center provides state-of-the-art HIV education, consultation, and resource materials to health care providers in Florida, Puerto Rico and the US Virgin Islands.

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Updated Adult/Adolescent Department of Health and Human Services (DHHS) Antiretroviral Guidelines Released-January 10, 2011

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The Department of Health and Human Services released updated *Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents* on January 10, 2011. These Guidelines, developed by the DHHS Panel-a working group of the Office of AIDS Research Advisory Council, provide updates to the prior version released in December of 2009. This edition of *HIV CareLink* summarizes the key changes to the Guidelines. The reader is encouraged to access the full Guidelines available online at:

www.aidsinfo.nih.gov/ContentFiles/AdultandAdolescentGL.pdf.

CD4 Cell Count

- In patients with a consistently suppressed HIV viral load and a CD4 count well above the threshold for opportunistic infection risk, the CD4 count may be monitored every 6 to 12 months in the absence of change in the patient's clinical status, such as new HIV-associated symptoms or initiation of immunosuppressive agents (e.g. interferon, corticosteroids or anti-neoplastic agents) (CIII). See changes in Table 3, Laboratory Monitoring Schedule for Patients Prior to and After Initiation of Antiretroviral Therapy (updated January 10, 2011).

Plasma HIV RNA Testing

- While optimal viral suppression is generally defined as a viral load below the limit of detection (<20-75 copies/mL), isolated low level viremia (<200 copies/mL) may occur in successfully treated patients and is not considered to represent viral replication nor subsequent virologic failure.
- The Panel has defined virologic failure as a confirmed viral load > 200 copies/mL.
- There is no consensus regarding managing patients with HIV RNA levels >48 copies/mL and < 200 copies/mL.
- Recommendation for frequency of HIV viral load testing remains the same (every 3-6 months) for adherent patients with suppressed viral load and stable clinical and immunologic status for >2 to 3 years.

Drug Resistance Testing

- As the use of integrase strand transfer inhibitor (INSTI)-based regimens increases, the potential for transmission of INSTI resistant virus may also increase. Standard genotype tests

detect mutations in the reverse transcriptase (RT) and protease (PR) genes. Additional genotypic testing for resistance to INSTIs should be done in a treatment-naïve patient if there is a concern for transmitted resistance to this drug class (CIII).

- In those failing INSTI-based regimens, genotypic testing including tests for INSTI resistance should be considered to determine whether a drug from this class can be included in future regimens (BIII).

Coreceptor Tropism Assays

- A coreceptor tropism assay is recommended prior to the use of a CCR5 antagonist (AI).
- Consider repeating the coreceptor tropism assay in patients who are failing a CCR5 antagonist-containing regimen (CIII).
- Phenotype assay (Trofile) for coreceptor tropism is recommended over genotypic assays by the panel.

Prevention of Mother-to-Child Transmission

- Combination antiretroviral therapy is recommended for all HIV-infected pregnant women to prevent mother-to-child transmission of HIV, even if the mother does not otherwise meet criteria for treatment of her HIV infection (AI).
- Pregnant women on a fully suppressive antiretroviral regimen that does not contain ZDV do not need to have their regimen changed (AIII).
- After delivery, considerations regarding continuation of ART for the mother are the same as for other nonpregnant individuals.

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Changes in What to Start: Initial Combination Regimens for the Antiretroviral-Naïve Patient

- Maraviroc (MVC) + zidovudine/lamivudine (ZDV/3TC) is now listed as an “Acceptable Regimen” (CI).
- MVC + tenofovir/emtricitabine (TDF/FTC) and MVC + abacavir (ABC)/3TC have been added as “Regimens that may be acceptable, but more definitive data are needed”(CIII).
- Ritonavir-boosted saquinavir (SQV/r) based regimens have been moved from “Alternative PI-based Regimens” to “Regimens that are Acceptable but Should be Used with Caution” due to reported significant PR and QT interval prolongations in a healthy volunteer study.

Changes in Antiretroviral Components Not Recommended

- The dual NRTI combination of didanosine (ddI) + TDF is now listed as “Antiretroviral Components NOT Recommended as Part of an Antiretroviral Regimen” due to drug interaction leading to increased ddI concentrations and serious ddI associated toxicities, potential for immunologic nonresponse and/or CD4 cell count decline, high rate of early virologic failure and rapid development of resistance (BII). The panel recommends that clinicians with patients on TDF + ddI should consider changing to an alternate NRTI backbone.

Considerations for Antiretroviral Use in Patients with Coinfections

Hepatitis B (HBV)/HIV Coinfection

- Emtricitabine (FTC), lamivudine (3TC) and tenofovir (TDF) have activity against both HBV and HIV. If HBV or HIV treatment is needed, the antiretroviral regimen should include the combination of (TDF+FTC) or (TDF+3TC) as the NRTI backbone of a fully suppressive ARV regimen (AI).
- If HBV treatment is needed and TDF cannot safely be used, the alternative regimen is entecavir + a fully suppressive ART regimen. Entecavir has activity against HIV and should be used in combination with a fully suppressive ART regimen to avoid selection of the M184V mutation. If 3TC resistance is present, entecavir dose should be increased to 1 mg/day (BII).
- Other HBV treatment regimens include peginterferon alfa monotherapy (if non-cirrhotic) or adefovir in combination with 3TC or FTC or telbivudine in addition to fully suppressive ART (BII).
- If a patient has HBV suppression, but has HIV virologic failure, the ARV drugs active against HBV should be continued for HBV treatment in combination with other ARVs suitable to achieve HIV suppression (AIII).

Mycobacterium tuberculosis (TB) Disease with HIV Coinfection

- All HIV-infected patients with diagnosed active TB should be started on TB treatment immediately.

- All HIV/active TB coinfecting patients should receive ART (AI). The following recommendations regarding the timing of initiation of antiretroviral therapy were made by the Panel:
 - CD4 < 200 cells/mm³: start ART within 2-4 weeks of starting TB therapy (AI).
 - CD4 200-500 cells/mm³: start ART within 2-4 weeks or at a minimum by 8 weeks after initiation of TB therapy (AIII).
 - CD4 > 500 cells/mm³: start ART within 8 weeks of TB therapy (recommended by most panel members) (BIII).
- If a PI-based regimen is used, rifabutin is preferred over rifampin since it has less potential for significant interactions with PIs (AII).
- Coadministration of rifampin and PIs (with or without ritonavir boosting) is not recommended (AII).
- Immune reconstitution inflammatory syndrome (IRIS) might occur after initiation of ART. While managing IRIS, it is important to continue ART and TB therapy (AIII).

Other Updates

- [Table 4. Recommendations for Using Drug-Resistance Assays.](#) Updated to include:
 - Urinalysis every 6 months if on TDF
 - Fasting lipid profile to be considered 4-8 weeks after starting new ART
 - CD4 q 6-12 months in clinically stable patients with suppressed viral load
- [Table 13. Antiretroviral Therapy-Associated Common and/or Severe Adverse Effects.](#) A new table format provides a list of the most common and/or severe known antiretroviral (ARV) associated adverse events listed by ARV drug class. Selected highlights:
 - ABC and ddI associated MIs seen in some but not all cohort studies. PIs associated with MI and stroke in some cohort studies. Risk for cardiovascular events greatest in those with traditional CVD risk factors.
 - Diabetes/insulin resistance is associated with ZDV, d4T, ddI and some PIs (IDV, LPV/r). ATV +/- RTV not found to alter insulin sensitivity.
 - Dislipidemia associated with some NRTIs, EFV, and all RTV-boosted PIs.
 - Nephrotoxicity/urolithiasis associated with TDF may be increased with concurrent use of PI.
 - Osteopenia/osteoporosis (loss of bone mineral density) seen with use of NRTIs, NNRTIs, and PIs.
- Significant Updates were made to [Table 14. Drugs That Should Not Be Used With PI, NNRTI or CCR5 Antagonists,](#) and [Table 15a. Drug Interactions between PIs and Other Drugs.](#) Selected highlighted interactions:

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- o Nelfinavir (NFV) and indinavir (IDV) have been removed from the drug interactions tables and the guidelines refer readers to the FDA package inserts for these agents.
- o Pitavastatin is listed as a lipid-lowering agent that should not be used with PIs due to increased risk of rhabdomyolysis.
- o Clopidogrel should not be used with etravirine (ETR).
- o Fluticasone (inhaled or intranasal) should not be used with ritonavir-boosted PIs unless the potential benefit outweighs risk of systemic corticosteroid adverse effects (including Cushing's syndrome).
- o Buprenorphine should not be used with unboosted atazanavir (ATV).
- o Refer to the tables for complete listings.

References

1. Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. January 10, 2011. Available at <http://www.aidsinfo.nih.gov/ContentFiles/AdultandAdolescentGL.pdf>. Accessed January 10, 2011.

Non-ARV Generic/Trade Name Drugs
(for medications listed in article or contained in linked Table(s))

- Entecavir (Baraclude®)
- Adefovir (Hepsera®)
- Pitavastatin (Livalo®)
- Clopidogrel (Plavix®)
- Buprenorphine (Buprenex®, Subutex®)
- Lovastatin (Mevacor®, Altoprev®)
- Simvastatin (Zocor®)
- Fluticasone (Flonase®)

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May 13-14, 2011

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Hilton Orlando

CHOOSE FROM FOUR HIV/AIDS CONCURRENT CLINICAL SESSIONS:
Fundamentals • Advanced • Nursing Issues • Pediatrics
Pharmacy and Medical Case Management Related Topics Available

KEYNOTE SPEAKERS

Friday, May 13
Mario Stevenson, Ph.D.
Obstacles to Eradication of HIV through Antiretroviral Therapy

Saturday, May 14
Julie Cross
Health Care Reform and the National AIDS Strategy

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