



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.

Major funding is provided by the US Public Health Service's Health Resources Services Administration (HRSA) DHHS-HAB Grant No. H4AHA00049 through the University of South Florida Center for HIV Education and Research, Michael Knox, PhD, Director.

EDITORS

Jeffrey Beal, MD, AAHIVS (239) 839-4645
aetcbear@embarqmail.com

Joanne J. Orrick, PharmD, AAHIVE (352) 273-7845
orricj@ufl.edu

PEDIATRIC EDITOR

Belinda Beauchamp, MD (787) 281-8501
belinda.beauchamp@upr.edu

MANAGING EDITOR

Kimberly Molnar, MAcc (813) 974-4430
alfonso@fmhi.usf.edu

Volume 11 - Issue 2

April 26, 2010

Conference Update: The 17th Conference on Retrovirus and Opportunistic Infections (CROI 2010)

Iván Meléndez-Rivera, MD, FAAFP, AAHIVS

Assistant Professor, Family Practice Department, University of Puerto Rico, Ponce School of Medicine

The 17th Conference on Retrovirus and Opportunistic Infections took place in San Francisco, CA, Feb. 16-19, 2010. The mission of the Conference was to provide a forum for basic scientists and clinicians to present, discuss, and critique their investigations into the biology and epidemiology of human retroviruses and the diseases they produce with the ultimate goal of translating laboratory and clinical research into progress against the AIDS epidemic. Conference abstracts can be downloaded by clicking on the hyperlinks within the text or click on [CROI 2010](#) to connect to the conference website. Click on [Clinical Care Options](#) to view conference summaries and highlights.

New Data Supporting Benefit of Early Start on ARV Treatment

- Low CD4+ nadir associated with:
 - Increased rates of HIV-associated neurocognitive disorders [Ellis R, et al. CROI 2010. Abstract 429](#)
 - Arterial stiffness contributing to CV risk [Ho J, et al. CROI 2010. Abstract 707](#)
 - Increased risk of fracture [Dao C, et al. CROI 2010. Abstract 128.](#)

CDC Survey Update: Patterns of Transmitted Drug Resistance

[Kim D, et al. CROI 2010. Abstract 580](#)

- CDC surveillance for transmitted drug resistance in 2007 Survey included 10,496 with new HIV Dx; 2,480 with genotype. No demographic risks factors associated with presence of resistance.
 - 16% with any type of resistance
 - One of every 6 newly diagnosed contained ≥ 1 mutation
 - NNRTI mutations more common than NRTI and PI with K103N found most common

News About Old Friends

- ACTG 5202: First-line Therapy With ABC/3TC vs. TDF/FTC + EFV vs. ATV/RTV [Daar E, et al. CROI 2010. Abstract 59LB](#)
 - Similar time to VF with ATV/r vs. EFV + either ABC/3TC or TDF/FTC when VL < 100,000. (Note: prior analysis reported shorter time to VF with ABC/3TC + ATV/r or EFV if VL > 100,000)
 - Major resistance mutations at VF more frequent with EFV vs. ATV/RTV plus either ABC/3TC or TDF/FTC ($P < .001$ for both NRTI arms)
 - Higher median CD4⁺ increases at Wk 48 & 96 with ATV/RTV vs. EFV + TDF/FTC but no difference with ABC/3TC
 - Greater lipid increases with EFV vs. ATV/RTV ($P < .05$)

- Similar proportion of patients without VF at Wk 96
- ODIN: QD vs. BID DRV/r + OBR in Treatment-Experienced Patients [Cahn P, et al. CROI 2010. Abstract 57.](#)
 - Non-inferiority in response (72% QD vs. 71% BID DRV/r HIV-1 RNA <50 copies/mL)
 - Similar CD4⁺ cell count increase between arms (QD +100 & BID + 94 cells/mm³)
 - VF not statistically different between arms.
 - Significantly \downarrow rate lipid abnormalities with DRV/r QD

New Friends on the Road

- Cobicistat (GS-9350) Boosted Elvitegravir + FTC/TDF Noninferior to EFV/FTC/TDF in Naive Pts [Cohen C, et al. CROI 2010. Abstract 58LB](#)
- GS-9350-boosted ATV Virologically similar to ATV/r in Naive
- GS-9350 \rightarrow Nauseas and creatinine \uparrow (grade 1)
- VICTOR-E3 and VICTOR-E4: Use of Vicriviroc Does Not Improve Virologic Efficacy in CCR5-Tropic HIV-Infected Patients Receiving a PI-Based Optimized Background Regimen [Gathe J, Diaz R, Fatkenheuer G, et al, Abstract 54LB](#)
 - Phase 3 trials of vicriviroc in treatment-experienced subjects \rightarrow safety but not superior efficacy over OBR
 - Pts with VL < 50 copies/mL at Wk 48 similar with vicriviroc plus OBR vs. placebo plus OBR
 - Mean CD4⁺ \uparrow from baseline similar between tx arms
 - Diarrhea, nausea, headache most frequent
 - Malignancy incidence 1% in both tx arms
- TBR-652: Potent CCR5 inhibitor with characteristics and potential for CCR2 Inhibition [Cohen C, et al. 17th CROI Abstract 53](#)
 - For all doses > 25 mg there is > 1 log₁₀ median VL \downarrow
 - Nausea, fatigue & diarrhea most common AE
 - Appears to have activity against CCR2 and anti-inflammatory effects

19th Annual HIV CONFERENCE

of the Florida/Caribbean AIDS Education and Training Center

May 14-15, 2010 • Rosen Shingle Creek • Orlando

REDUCED REGISTRATION OPTIONS

\$190 RYAN WHITE PROGRAM RATE for clinicians working in RWTHAP funded clinics
\$100 SATURDAY-ONLY RATE for those only available to travel on Saturday

www.FCAETC.org/Conference

Intensification of Stable HAART in Patients with Suboptimal CD4+ Cell Counts

- ACTG 5256: Maraviroc added for 24 wks in 34 pts with HIV-1 RNA < 50 copies/mL for ≥ 48 wks on stable HAART but CD4+ count < 250 cells/mm³^[1] [Wilkin TJ, et al. CROI 2010. Abstract 285](#)
 - Maraviroc intensification not associated with clinically significant CD4+ gain
 - Median CD4+ count ↑ at Wk 22/24: +12 cells/mm³ (90% CI: 1-22)
 - ↓ in CD4+/CD8+ activation and improvements in markers of apoptosis, but not correlated with change in CD4+ cell count
- Raltegravir intensification also not associated with significant CD4+ cell count ↑s in suppressed pts with low CD4+ cell counts^[2] [Hatano H, et al. CROI 2010. Abstract 101LB](#)

HIV Disease and Treatment Complications

- D:A:D Study: Smoking Cessation Reduces Risk of CVD in HIV-Infected Patients. Cessation of tobacco smoking ↓risk of MI, coronary heart disease, and CVD in HIV-infected patients. No association of time since smoking cessation and mortality risk. [Petoumenos K, et al. CROI 2010. Abstract 124](#)
- Low CD4+ Count Nadir Associated with HIV-Associated Neurocognitive Disorders. Risk of HIV-associated neurocognitive disorders associated with lower CD4+ nadir, but not current CD4+ cell count. Association remained significant after adjusting for other predictors: HIV-1 RNA, age, sex, race, duration of infection. [Ellis R, et al. CROI 2010. Abstract 429](#)

HIV Disease and Treatment Complications

- High Prevalence of Vitamin D Deficiency in HIV Infection: [Mueller N, et al. Abst. 752](#)
 - Retrospective seasonal analysis of Vitamin D deficiency within Swiss cohort
 - Started ARV in: Fall (n=108); Spring (n=103), 75% men; median age = 37; White = 87%; CD4+ 227; BMI = 22.9 (ARVs: TDF – 17%; NNRTIs – 43%; PI –56%)
 - Conclusions
 - Vitamin D deficiency is common, but seasonal
 - Blacks are at ↑ risk
 - NNRTI use a risk factor
 - Vitamin D levels have been associated with a myriad of other complications including osteoporosis, ↑ cardiovascular risk, and ↑ risk of metabolic syndrome, diabetes, insulin resistance, immune dysfunction and senescence.

References

17th Conference on Retroviruses and Opportunistic Infections (CROI 2010). San Francisco, CA.

1. Ellis R, et al. Higher CD4 Nadir is Associated with Reduced Rates of HIV-associated Neurocognitive Disorders in the CHARTER Study: Potential Implications for Early Treatment Initiation. Abstract 429.
2. HO J, et al. Earlier Initiation of ART in HIV-infected Individuals Is Associated with Reduced Arterial Stiffness. Abstract 707.
3. Dao C, et al. Higher and Increasing Rates of Fracture among HIV-infected Persons in the HIV Outpatient Study Compared to the General US Population, 1994 to 2008. Abstract 128.
4. Kim D, et al. Prevalence of Transmitted Antiretroviral Drug Resistance among Newly-diagnosed HIV-1-infected Persons, US, 2007. Abstract 580.
5. Daar E, et al. ACTG 5202: Final Results of ABC/3TC or TDF/FTC with either EFV or ATV/r in Treatment-naïve HIV-infected Patients. Abstract 59LB.
6. Cahn P, et al. Efficacy and Safety at 48 Weeks of Once-daily vs. Twice-daily DRV/r in Treatment-experienced HIV-1+ Patients with No DRV Resistance-associated Mutations: The ODIN Trial. Abstract 57.
7. Cohen C, et al. Single-tablet, Fixed-dose Regimen of Elvitegravir/Emtricitabine/Tenofovir Disoproxil Fumarate/GS-9350 Achieves a High Rate of Virologic Suppression and GS-9350 Is an Effective Booster. Abstract 58LB.
8. Gathe J, et al. Phase 3 Trials of Vicriviroc in Treatment-experienced Subjects Demonstrate Safety but Not Significantly Superior Efficacy over Potent Background Regimens Alone. Abstract 54LB.
9. Cohen C, et al. Safety and Efficacy of TBR 652, a CCR5 Antagonist, in HIV-1-infected, ART-experienced, CCR5 Antagonist-naïve Patients. Abstract 53.
10. Wilkin TJ, et al. Maraviroc Intensification for Suboptimal CD4+ Cell Response Despite Sustained Virologic Suppression: ACTG 5256. Abstract 285.
11. Hatano H, et al. Raltegravir Intensification in Antiretroviral-treated Patients Exhibiting a Suboptimal CD4+ T Cell Response. Abstract 101LB.
12. Petoumenos K, et al. Rates of Cardiovascular Disease following Smoking Cessation in Patients with HIV Infection: Results from the D:A:D Study. Abstract 124.
13. Mueller N, et al. High Prevalence of Severe Vitamin D Deficiency in cART-naïve and Successfully Treated Swiss HIV Patients. Abstract 752.
14. Glesby M. Pathogenesis and Management of Visceral Fat Accumulation. Abstract 68
15. Capeau J. Hepatic Steatosis, Pathogenesis, and Management. Abstract 69.
16. Douglas Bruce^{*1}, F Altice¹. Pharmacokinetic Interactions between Buprenorphine/Naloxone and Once-daily Lopinavir/ritonavir. Abstract 620.

For more information,
 please visit our website:

www.FCAETC.org

To request clinical consultation, please call the
 National Clinicians' Consultation Hotline:

1-800-933-3413