A Continuing Medical Education Activity

The 18th Conference on Retroviruses and Opportunistic Infections (CROI):

Online Expert Poster Review and Discussion

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Interim Analysis of a Phase 2a Double-Blind Study of Telaprevir in Combination with Peginterferon Alfa-2a and Ribavirin in HIV/HCV Coinfected Patients

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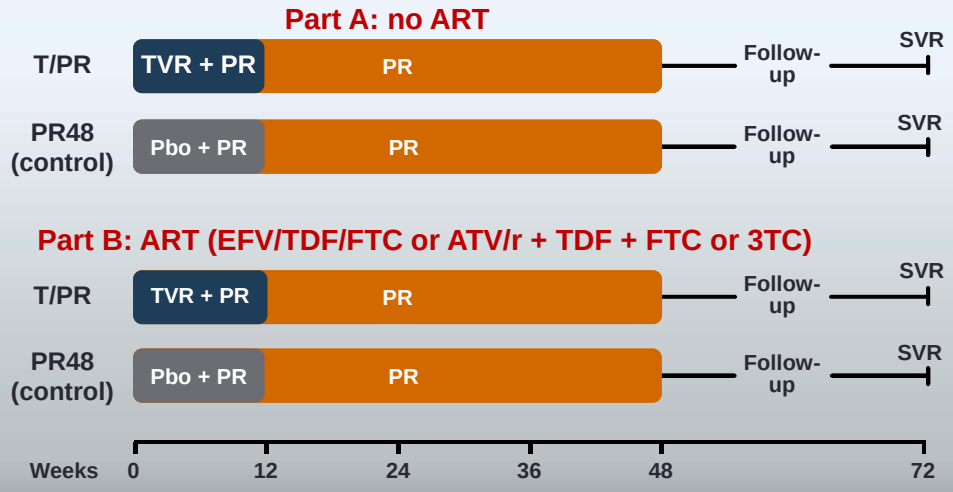
On behalf of the Study 110 Team

Telaprevir: An Orally-Available HCV Protease Inhibitor

- Telaprevir is a selective inhibitor of NS3/4A HCV serine protease
- In genotype 1 mono-infected patients, telaprevir with peginterferon alfa-2a/ribavirin (TPR) led to substantial improvements in SVR in phase 3 studies[1-3]:
  - In treatment-naïve patients, SVR rates of 75% and 69% in T12PR and T8PR vs 44% in PR48 (control) in the ADVANCE trial (N=1088)[1]:
  - Significantly higher SVR rates were observed in all types of treatment-experienced patients in the REALIZE trial (N=662)[3]:
    - 31% vs 5% in control (prior null responders)
    - 57% vs 15% in control (prior partial responders)
    - 86% vs 24% in control (prior relapsers)
- Small changes in EFV and tenofovir exposure have been observed, higher TVR dose (1125 mg q8h) partly offsets this interaction[4]
- No interaction with ATV has been observed[4]

[1]Jacobson et al 2010, Hepatology 52 (Suppl 4) 427A; [2]Sherman et al 2010, Hepatology 52 (Suppl 4) 401A-402A; [3]Foster et al 2011; [4]Sherman et al. CROI 2011; Abstract XXXLB; 5Van Heesink et al. CROI 2011; Abstract 146LB

Study 110: Telaprevir in HIV/HCV Co-Infected Patients



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Principal Eligibility Criteria

- Male and female patients, 18 to 65 years of age with chronic HCV genotype 1/HIV-1 co-infection, and treatment-naïve for HCV
- Part A: patients not receiving ART, with CD4 count ≥500 cells/mm^3, and HIV RNA ≤100,000 copies/mL
- Part B: patients receiving a stable ART regimen
  - TDF/EFV/FTC, or
  - ATV/r with TDF and FTC or 3TC, with CD4 count ≥300 cells/mm^3, and HIV RNA ≤50 copies/mL

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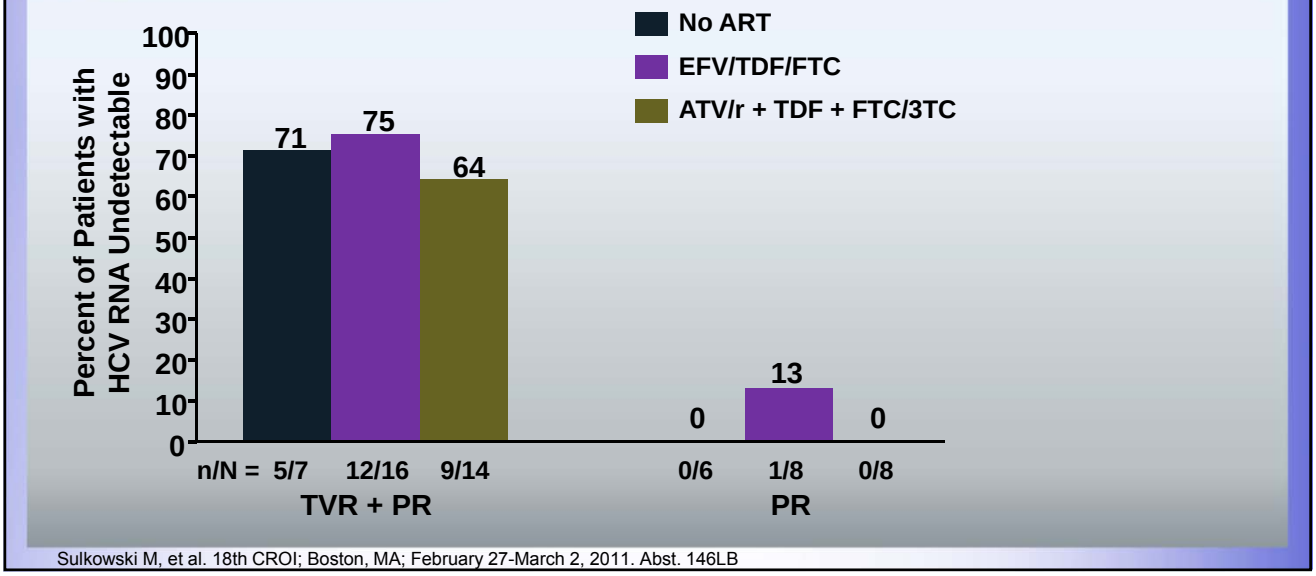
Study 110: Undetectable HCV RNA at Week 4 (RVR)



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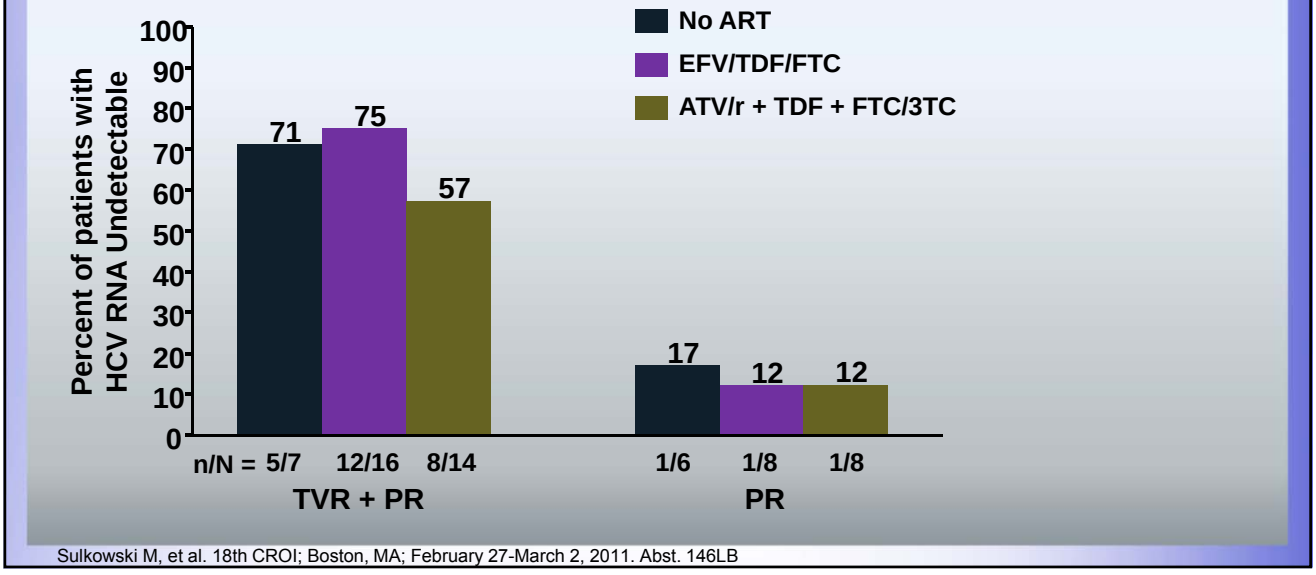
Study 110: Undetectable HCV RNA at Week 12 (cEVR)



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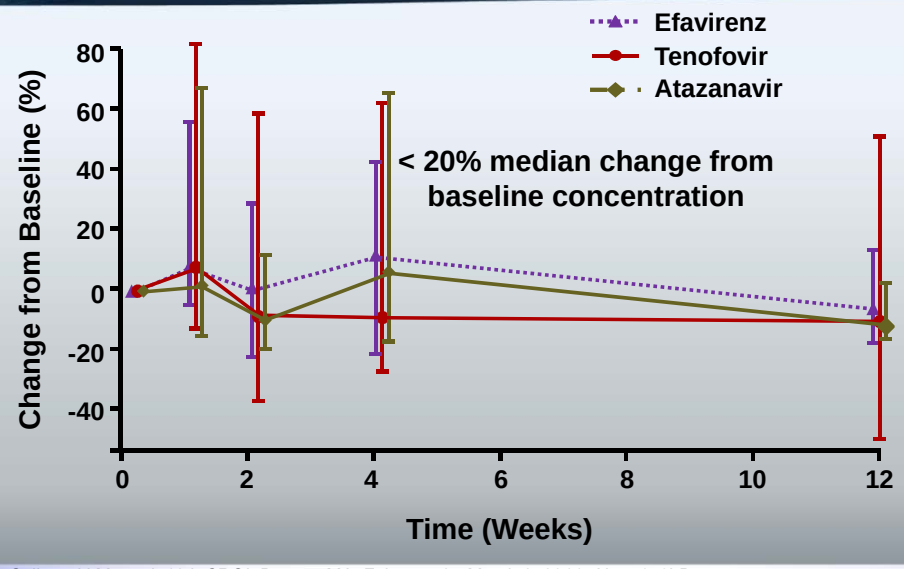
Change in Median Through Plasma Concentrations after T/PR Initiation



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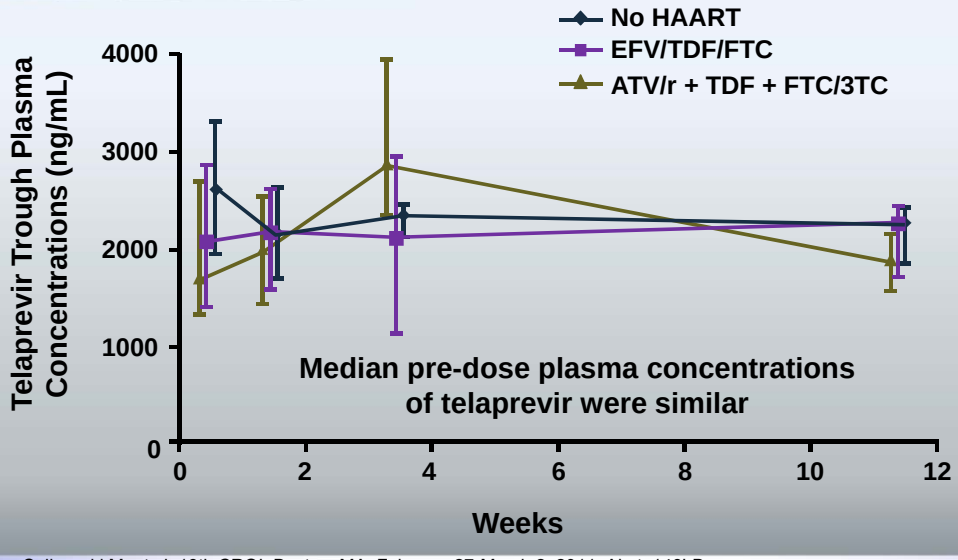
Median Through Plasma Telaprevir Concentrations



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Interim Analysis Summary

- In this interim analysis, the most common adverse events in telaprevir patients with or without concurrent ART were fatigue, nausea, and headache; no severe rash and/or pruritus events were reported
- Patients in the T/PR arms in both parts exhibited a rapid decline in HCV RNA levels, with 26 of 37 patients (70%) having RVR, compared to 1 of 22 patients (5%) in the PR groups
- No unexpected changes in HIV viral load and/or CD4 counts were observed
- No clinically significant PK interactions were observed

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