MDR HIV and Chronic HCV

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History

- 48 yo male with hemophilia, HIV infection, and chronic hepatitis C
- HAART includes tenofovir/emtricitabine (Truvada), raltegravir (Isentress) and ritonavir/darunavir (Norvir/Prezista)
- CD4 cell count 550/cmm
- VL< 40 copies/mL
- HIV is CCR5 tropic
- Hepatitis C genotype 1b
  - HCV RNA 310,000 IU/mL
  - Alb 3/2 g/dl; bili 1.7 mg/dL; ALT 210 IU/L; plts 130,000
  - Previously treated with Peg-interferon alfa 2a and ribavirin
  - End of treatment response, but not a sustained response
  - Desires retreatment with HCV protease inhibitor
HCV PI Drug Interactions

- PK data usually comes from healthy volunteer studies
- Data on PK interactions of telaprevir (Incivek) with other ARVs, including NNRTIs other than EFV and with maraviroc (MVC), are not available, so coadministration of telaprevir with other ARVs cannot be recommended (DHHS Guidelines Feb. 12, 2013).
- Telaprevir (Incivek) and boceprevir (Victrelis) interactions have been studied and may be acceptable with the NNRTIs rilpivirine (Edurant) and etravirine (Intelen
cence), though Cmin (trough) of etravirine dropped 29% with boceprevir. (1,2,3)

3. Rhee EG. Absence of a significant interaction between the HCV protease inhibitor boceprevir and HIV-1 NNRTI rilpivirine. March 2013, CROI, Atlanta. Abstract 537.

HCV PIs and Maraviroc

- Maraviroc interaction has been more recently studied, with recommended dose of 150 mg twice daily, with HCV PIs telaprevir (Incivek) and boceprevir (Victrelis).

Take-Home Points

- Increasingly, the need to change HAART is for reasons other than virologic failure:
  - Simplification
  - Lipid concerns/coronary artery disease
  - HCV protease inhibitor interactions
  - Other drug interactions concerns, such as QTc prolongation

- New PK data in healthy volunteers suggests:
  - Telaprevir (Incivek) and boceprevir (Victrelis) may be considered with rilpivirine (Edurant) or etravirine (Intelence) at standard doses, though Cmin (trough) of etravirine dropped 29% with boceprevir.
  - Maraviroc (Selzentry) may be considered with either telaprevir (Incivek) or boceprevir (Victrelis) at a dose of 150 mg twice daily.