virology education

AIDS 2016

Global HIV Clinical Forum: Clinical cases

Pedro Cahn

HOSPITAL FERNANDEZ HF

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Stronger Together

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en acción contra el sida

Case 1: Newly diagnosed patient

- MSM, 24 years old
- HIV-1 RNA: 187,000 c/mL; CD4+:448 cells/mm^3
- Genotype: No mutations detected, HBV immune, HCV Ab negative; CrCl: 120 mL/min; AST/ALT normal; HLA-B*5701 negative
- No significant past medical history, frequently consumer of migraine-relief pills, occasional alcohol and marijuana use, sexually active with 1 steady HIV-negative partner
- Has attended several clinic visits and is interested in starting HIV therapy; prefers to take as few pills as possible but wants what you think is best

Your choice for the 3rd drug is:

1. Efavirenz
2. Rilpivirine
3. A boosted PI
4. Elvitegravir/cobi
5. Dolutegravir
6. Raltegravir

Many options…

- Many options are available for initial therapy
- Most pts opt for a single-tablet regimen over a multitablet regimen, given the choice
  - Simpler dosing, fewer copays in some countries
- A variety of single-tablet regimens would be appropriate choices for the case pt
  - He is young and healthy and has no comorbidities

Which one is OK for this case?

- Efavirenz: extensive clinical experience with this agent, but CNS adverse events may persist. A baseline genotype is required as NNRTI is rising.
- Rilpivirine: not recommended for this pt due to HIV-1 RNA > 100,000 copies/mL
- Elvitegravir/cobi and b-PIs: Consider drug interactions
- Dolutegravir: data are supportive of this option, including in pts with high HIV-1 RNA
- Raltegravir: Also a popular choice as it is well tolerated and trials have demonstrated noninferior efficacy vs PI-based or NNRTI-based therapy

Let's make more complicated…

- What if the pt were a woman with HIV-1 RNA 87,000 c/mL who is considering pregnancy in the near future
  - Would this change your approach?

- 24-yr-old black woman recently diagnosed HIV positive
- HIV-1 RNA: 87,000 c/mL; CD4+ count: 448 cells/mm^3
- HIV GT: WT, HBV immune, HCV Ab-; CrCl: 120 mL/min; AST/ALT normal; HLA-B*5701-
- No comedications, occasional alcohol/marijuana use, steady HIV-negative partner
- Starting HIV therapy, prefers few pills as possible

Your choice for the 3rd drug is:

1. Efavirenz
2. Rilpivirine
3. A boosted PI
4. Elvitegravir/cobi
5. Dolutegravir
6. Raltegravir

Considerations

- Most data on ART in pregnancy concerns boosted PIs, particularly ATV/RTV, LPV/RTV
  - Most NRTI data with ZDV/3TC, increasingly with TDF/FTC
- Some care providers would not choose an EFV-based regimen for a woman planning pregnancy; however, therapy should not be switched if a woman receiving EFV-based therapy becomes pregnant. WHO and other guidelines include EFV as an option
- Rilpivirine: No evidence of teratogenicity in rats or rabbits. Insufficient data to assess for teratogenicity in humans.
- Boosted PIs are recommended in PW
- Elvitegravir/cobi: No data in PW
- Raltegravir is now recommended for PW
- Dolutegravir is an alternative. Data are been collected among participants in the ARIA trial.

Case 2: 28-Yr-Old MSM With Advanced HIV Infection

- 28-yr-old HIV-infected MSM, previously refused ART, now referred to you for specialist care
- HIV-1 RNA: 78,300 c/mL; CD4+ count: 70 cells/mm^3
- HIV GT: WT RT/pro; HBV Ag+; HBV DNA: 34 million IU/mL, HCV neg; ALT: 78 IU/L; Cr: 0.8 mg/dL (70.7 µmol/L); CBC: normal
- Physical exam reveals woody edema of right leg with some discoloration at the ankle, no palpable adenopathy; subsequent biopsy shows **KS**
- Binges on alcohol; denies other drug use or sexual activity
- He will try ART if you recommend it

Your choice for the 3rd drug is:

1. Efavirenz
2. Rilpivirine
3. A boosted PI
4. Dolutegravir
5. Raltegravir

Considerations

- Nonadherence is a concern in this pt
- Some care providers would choose a boosted PI due to low risk of resistance at failure
- RPV-based therapy is not recommended for this pt due to CD4+ cell count < 200 cells/mm^3
- RAL-based therapy may be a good choice for coadministration with chemotherapy due to lack of drug–drug interactions
- DTG may be another option, as it is well tolerated and convenient, and available data suggest risk of resistance at failure is also very low