Interactive ART Cases From the Clinic(ians): Case-Based Panel Discussion

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Financial Relationships With Ineligible Companies (Formerly Described as Commercial Interests by the ACCME) Within the Last 2 Years:

Dr Saag has received research grants and support awarded to his institution from Gilead Sciences, Inc and ViiV Healthcare. (Updated 3/30/22)

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Learning Objectives

After attending this presentation, learners will be able to assess and select antiretroviral therapy in patients who:

- Are starting initial therapy
- Have ARV-associated weight gain
- Are/ plan to become pregnant
- Have a virologic blip
- Are at risk for anal carcinoma

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Question

What regimen should I use as initial therapy?

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Case 1

- 48 yo man presents with newly diagnosed HIV infection
- Asymptomatic
- **Initial:** HIV RNA 280,000 c/ml
  CD4 count 65 cells/ul
- Other labs are normal
- Genotype is Wild-type virus
- No prior medical history. Normal renal function
- Okay to start therapy

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ARS Question 1: Which regimen would you choose?

1. ABC/ 3TC / DTG (fdc)
2. TDF/ FTC (fdc) + DTG
3. TAF/ FTC (fdc) + DTG
4. TAF / FTC/ ELV / cobi (fdc)
5. TAF/ FTC / BIC (fdc)
6. 3TC/DTG (fdc)
7. Cabotegravir + RPV IM every 8 weeks (Direct to Inject)
8. TAF/ FTC (fdc) + DRV/r (or cobi / fdc)
9. Some other option (e.g., DRV/r + DTG or …)

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ARS Question 1: Which regimen would you choose?

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Question

What regimen should I use as initial therapy (3 years from now)?

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ARS Question 2: Which regimen would you choose?

1. TAF/ FTC (fdc) + DTG
2. TAF/ FTC / BIC (fdc)
3. Cabotegravir + RPV IM every 8 weeks
4. Islatravir + Lenacapavir SQ q 6 mon
5. bNAB + (Leronlimab or Albuvirtide) SQ QOW
6. Some other option….

- 48 yo man newly dx HIV
- Asymptomatic
- HIV RNA 280,000 c/ml CD4 65 cells/ul
- Other labs are normal
- Wild-type virus
- No prior medical history
- HBV immune
- Normal renal function
- Ok to start therapy

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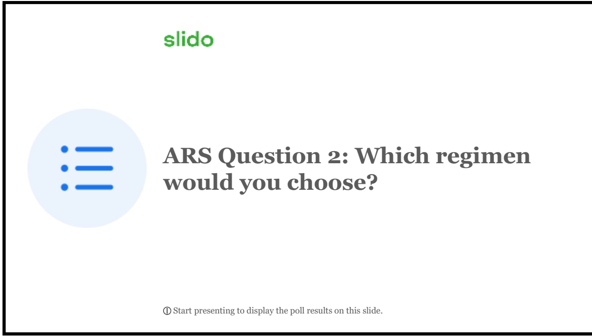

Question

How do I manage 'blips'?

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Case 2

- 48 yo man presents with newly diagnosed HIV infection
- Asymptomatic
- **Initial:** HIV RNA 280,000 c/ml
  CD4 count 65 cells/ul
- He is started on Bic/TAF/FTC 2 years ago
- HIV RNA remained undetectable until:
  - 4 months ago: HIV RNA 91 c/ml
  - 2 months ago: HIV RNA 185 c/ml
  - 1 week ago: HIV RNA 220 c/ml

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ARS Question 3: He claims full adherence. Which of the following is the most likely cause of the virologic failure?

1. Intermittent adherence to his regimen (despite his claims otherwise)
2. Occult recreational drug use
3. Recent Initiation of a Multi-vitamin
4. De novo emergence of viral resistance
5. Interference with lab results by a Russian Bot

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ARS Question 3: He claims full adherence. Which of the following is the most likely cause of the virologic failure?

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Question

How should ARV associated weight gain be managed?

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Case 3

- 47 yo woman started BIC/FTC/TAF 12 months ago as her first regimen
- **Initial:** HIV RNA 28,000 c/ml (Wild-type virus)
  CD4 count 450 cells/ul
- **Current:** HIV RNA <20 c/mL / CD4+ count 930 /uL
- Since starting her current regimen her weight has increased from **145 lbs to 171 lbs**

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ARS Question 4: At this point you would

1. **Keep her on her current Rx** (TAF/FTC/BIC)
2. Switch her to TDF / FTC (fdc) + DTG
3. Switch her to DTG / RLP (fdc)
4. Switch her to TDF / FTC / DOR
5. Switch her to TAF / FTC / DOR
6. Switch her to TAF/ FTC / DRV/c (fdc)
7. Some other option

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ARS Question 4: At this point you would

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Question

What regimen should I use as initial therapy in a pregnant patient?

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Case 4

- 30 yo woman presents with newly diagnosed HIV infection
- Asymptomatic, 6 weeks pregnant
- **Initial:** HIV RNA 28,000 c/ml
  CD4 count 650 cells/ul
- Other labs are normal; HLA-B*5701 neg
- Genotype is Wild-type virus
- No prior medical history. First pregnancy
- Ok to start therapy

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ARS Question 5: At this point which regimen would you choose?

1. TDF / FTC / EFV (fdc)
2. ABC/ 3TC / DTG (fdc)
3. TAF / FTC/ ELV / cobi (fdc)
4. TDF / FTC / RPV (fdc)
5. TDF/ 3TC (fdc) / DTG (fdc)
6. TAF/ FTC (fdc) / DRV/r
7. 3TC / DTG
8. TDF / FTC / ATV/r
9. Some other option

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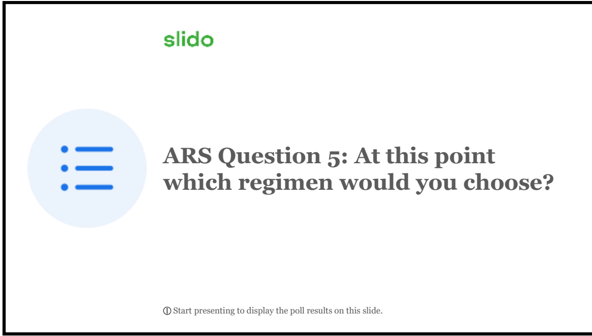

DHHS Guidelines Dec 30, 2021: What to Start in Pregnancy

Two NRTIs

Abacavir/3TC or
TAF/FTC, TAF/3TC or
TDF/FTC, TDF/3TC

Plus

Integrase inhibitor:
Raltegravir (twice daily) or
Dolutegravir

or

Protease inhibitor:
Darunavir/ritonavir (twice daily) or
Atazanavir/ritonavir

Bictegravir (limited data)
Elvitegravir/cobi (PK concerns)
DRV/cobi (PK concerns)
ATV/cobi (PK concerns)
DOR (no data)
Fostemsavir (limited data)
Oral or IM CAB/RPV (insufficient data)

Slide per Dr. Raj Gandhi

Pregnancy https://clinicalinfo.hiv.gov/en/guidelines/perinatal/whats-new-guidelines

Question

How do I simplify a complex regimen?

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Case 5

- 55 yo man referred to you for evaluation
- Diagnosed 24 years ago with HIV infection
- **Initial:** HIV RNA 936,000 c/ml
  CD4 count 70 cells/ul
- **Current:** HIV RNA < 20 c/ml
- CD4 count 525 cells/ul
- Started on NEL/D4T/3TC; subsequently treated with
  - LOP-r / TDF/FTC
  - EFV/ FTC/ TDF (fdc)
  - Now **DTG / DRV/c / TAF / FTC**
- No historical resistance tests are available

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ARS Question 6: Should the Regimen be Changed?

1. **No. Don't change the regimen**
2. Yes. Change the regimen to DTG + TAF/FTC
3. Yes. Change the regimen to BIC / TAF / FTC
4. Yes. Change the regimen to DRV/cobi/TAF/FTC
5. Some other choice

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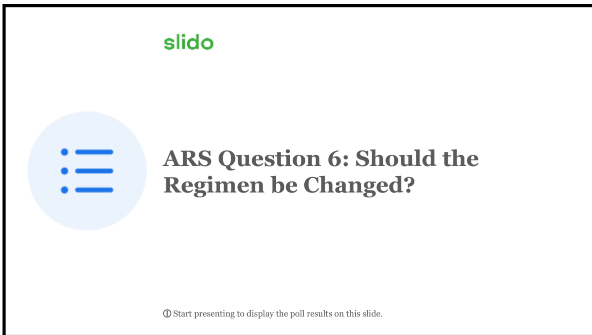

Question

What do I do with a patient who has persistently detectable viremia?

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Case 6

- 55 yo man referred to you for evaluation
- Diagnosed 18 years ago with HIV infection
- **Initial:** HIV RNA 936,000 c/ml
  CD4 count 70 cells/ul
- **Current:** HIV RNA 85 c/ml (prior value 62 c/ml)
  CD4 count 525 cells/ul
- Started on NEL/D4T/3TC; subsequently treated with
  - LOP-r / TDF/FTC
  - EFV/ FTC/ TDF (fdc)
  - Now **DTG / DRV/c / 3TC**
- No historical resistance tests are available

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ARS Question 7: Should you change ARV therapy now?

1. Yes
2. No
3. Not sure

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ARS Question 7: Should you change ARV therapy now?

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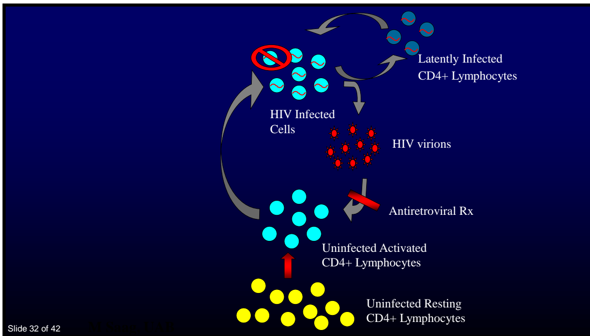

Question

How and when do I check for anal dysplasia?

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Case 7

- 35 yo MSM is followed by you
- Diagnosed 10 years ago with HIV infection
- **Current:** HIV RNA < 20 c/ml
  CD4 count 525 cells/ul
- On BIC/ TAF / FTC
- Has a history of receptive anal intercourse
- Anal Pap smear is abnormal
- Referred for High Resolution Anoscopy (HRA)
- Noted to have High Grade Squamous Intraepithelial lesion (HSIL)

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ARS Question 8: What do you recommend at this point?

1. Treat the anal lesion (electrocautery)
2. Monitor for 6 months and repeat HRA
3. Not sure

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ARS Question 8: What do you recommend at this point?

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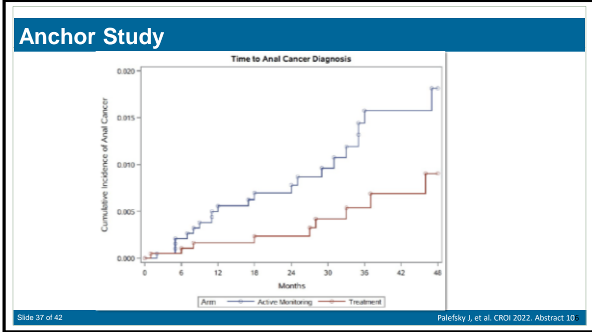

Conclusions

- ARV therapy should be initiated with an InSTI-based regimen (unless otherwise indicated), as close to time of Dx as possible
- Watch out for divalent cation intake in PWH taking InSTIs
- Weight gain is associated with initiation of ARV Rx, with more weight gain observed in InSTI- and TAF-containing regimens
- DTG is a drug of choice in pregnant women (GIVE FOLATE)
- Simplification of complex regimens is 'do-able'
- Screen MSM patients for anal cancer; treat early lesions

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Question-and-Answer Session