HIV-2 Therapy Guidelines

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Dirk Berzow, Rolf Kaiser, Jean Ruelle, Joseph Eberle, Matthias Doering, Ninon Taylor, Björn Jensen, Martin Stuermer, Martin Obermeier, Lutz Guertler, Ricardo Camacho
Charlotte Charpentier, Diane Descamps, Kamal Mansinho, Isabel Aldir, Juergen Rockstroh
Why HIV-2 therapy guidelines?

• HIV-2 infection has a much slower progression than HIV-1. Only ~20% of the patients have a fast progression.

• HIV-2 viral load is often undetectable; when detectable, it is much lower than in matched HIV-1 controls.

• Not all ARVs are effective against HIV-2. (NNRTIs, T-20, fAPV, TPV: natural resistance; IDV, ATV: partial resistance. d4T, ddl: fast resistance selection)

• Resistance is selected much easier and much faster than in HIV-1 (e.g., PI/r are low genetic barrier drugs)
Diagnosis

• Patients from countries where the infection is present (Guinea-Bissau, Cape Verde, Ivory Coast, Cameroun, Angola, Portugal, France…) should be considered for a possible HIV-2 infection.

• Positive serological screening tests where no viral load is detected should be analyzed (or re-analyzed in case of older results) by specific antibody based confirmation assays (immunoblot, IB; westernblot, WB, antibody differentiation assay). Contact the reference laboratory in the case of unclear results.

• HIV-2 viral load assays are not useful for diagnosis
When to start therapy

• There are no clinical trials (2 ongoing) to support a specific recommendation for the best timing for starting therapy. However, taking into account:

1. That in most cases the disease progression is very slow;
2. There are less therapy options than in HIV-1;
3. Resistance is selected much faster than in the HIV-1 infection
• Therapy should be started when one or more of these facts are given:

1. Symptomatic patient
2. When CD4 < 350 cells/mm³

• Therapy can be considered when the CD4 count is 350 – 500 cells/mm³, particularly if there is:

1. A continuous decline of >50 CD4 cells/mm³ per year
2. Two consecutive detectable viral loads (>100 copies/ml); viral load should be tested in the same laboratory over time.
• **Prerequisite to therapy start**

Primary resistance test based on viral RNA or proviral DNA is highly recommended, as the occurrence of primary resistance might dramatically impair the treatment.

• **Monitoring during treatment**

Monitoring is according to the HIV-1 guidelines (monitor HIV-2 viral load).

Take into account that resistance in HIV-2 develops more rapidly and there are less treatment options than in HIV-1.
Which regimen to be used in first line?

- NRTIs:
  TAF/FTC or TDF/FTC; ABC/3TC
- PIs:
  LPV/r or DRV/r(*)
- INSTIs
  DTG, RAL, EVG (TAF/FTC/COBI/EVG)

(*) There is some conflicting data on the dosing od DRV for first line therapy. The standard 800/100 mg dose has been recommended, but for a small number of patients there are doubts about its efficacy. Twice daily 600/100 mg has proved efficient in all cases.
Subsequent regimens

• The above mentioned drugs can be combined with AZT, SQV/r or MVC (for R5 tropic viruses) according to the results of resistance/tropism testing

• NEVER USE: NNRTIs, T-20, fAPV, TPV, IDV, ATV, d4T, ddi
Pregnancy

• Proceed according to HIV-1 guidelines (HIV-2 viral load; use drugs recommended for first line treatment of HIV-2 infection).
  
  Exception: therapy can be delayed until 28-32 weeks if HIV-2 viral load is undetectable and CD4 count >500 cells/mm3
Post-exposure prophylaxis

• Proceed according with HIV-1 guidelines

PrEP

• PrEP is currently discussed in HIV-1 settings. The rate of sexual transmission for HIV-2 is roughly five to ten times less efficient than for HIV-1. To date there are no data available for the use in HIV-2 settings so that there is no statement to this topic currently possible.