

## SAHCS Guidelines for Antiretroviral Therapy (ART) in Adults: 2023 Update

Southern African HIV Clinicians Society Guidelines for ART in Adults: 2023 update Masterclass

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### Introduction/Background

- Our guidelines are developed to address issues relevant to Southern Africa.
- The guidelines consider World Health Organisation (WHO) advisory or recommendations.
- The guidelines also consider the economic status of the countries in Southern Africa (Affordability), and the need to bridge the gap between private and public sectors.
- The SAHCS 2023 ART guidelines reflect the changing treatment paradigm of the current era, specifically the consolidation towards dolutegravir- and darunavir-based.
- In this talk we look at key updates.



#### **Key Updates: SAHCS 2023 Guidelines**

- Recommendations to shift most patients to a dolutegravir (DTG)-based regimen if possible.
- For patients requiring a protease inhibitor (PI), recommendation for darunavir as the PI of choice, and for lopinavir/ritonavir to only be considered where PI is required to be coadministered with rifampicin-based TB treatment.
- Recommendations to move away from routine use of zidovudine (AZT) in second line therapy in favour of recycling tenofovir disoproxil fumarate (TDF) or, in patients with renal dysfunction, the use of abacavir.
- The advice on assess the increase in serum creatinine seen with use of DTG/TDF.
- Guidance on the role tenofovir alfenamide (TAF).
- Inclusion on enhanced baseline screening for TB and STIs.
- Expansion of the module on HIV and mental health.



### **UPDATE 1: Shifting patients to TDF**

- Patients currently on TDF/FTC/3TC and EFV or NVP regimens should be switched to TLD (Tenofovir/Lamivudine/Dolutegravir) regardless of whether their VL is supressed or not.
- Rationale: In the single Trial, DTG was superior to EFV in first line ART, DTG has a higher barrier to resistance than NNRTIs which improves likelihood of sustained virological suppression.
- In patients who have unsuppressed VL and have developed NRTI mutations, there is evidence that DTG-based regimen is virologically superior to an LPV/r based regimen.
- A subset of patients switched from EFV to DTG may experience weight gain.
- The benefit of switching from NVP based regimen to DTG based regimen is switching from twice daily regimen to once daily regimen.
- In patients where TDF cannot be used the options are TAF + FTC + DTG or ABC + 3TC + DTG
- There is a recommendation. of switching virologically supressed patients receiving rilpivirine (RPV) + 2 NRTI, to TLD.



## **UPDATE 2:** Recommendation for darunavir as the PI of choice

- Three protease inhibitors (PIs) are registered for use in SA: lopinavir (LPV), atazanavir (ATV) and darunavir (DRV), each with low-dose ritonavir (RTV indicated as r).
- DRV has the highest barrier to resistance than any PI, and for this reason it is a preferred PI.
- DRV/r is also better tolerated than LPV/r.
- DRV and rifampicin coadministration is contraindicated as there will significant reduction of DRV blood concentration levels.
- DRV and TB treatment co-administration results in high risk of hepatotoxicity.
- In patients on TB treatment, DRV/r should be replaced by LPV/r (doubled dose)



# **UPDATE 3:** Move away from routine use of AZT in second line therapy in favour of TDF

- Based on the findings of the NADIA Trial, patients on AZT + 3TC + DTG second line therapy should be switched to TLD.
- NADIA demonstrated that at 96 weeks TDF/3TC was superior AZT/3TC as NRTI backbone in second line in terms of viral suppression.
- The superiority of TDF/3TC over appears to be the case regardless of NRTI mutational profile present at first line failure.
- If a patient has been on AZT + 3TC + DTG for over 2 years and has had 2 or 3 VLs > 1000 copies/mL then an integrase resistance should be considered before switching to TLD to ensure there is still susceptibility to DTG.



# **UPDATE 4:** Assessing the increase in serum creatinine seen with use of DTG/TDF

- DTG may cause a mild increase in serum creatinine due to interference with tubular secretion.
- The mild increase in serum creatinine secondary to DTG does not represent renal damage (not an indication to switch the drug).
- The rise secondary to DTG occurs in the first week and then plateaus, so there is a need to evaluate the cause rise in serum creatinine in DTG/TDF combination.
- The rise in creatinine caused by DTG should be less than 30 µml, it occurs within the first month of initiation and does not progress after the first month.
- If eGFR is < 50 mL/min/1.73m² stop TDF, and switch to 3TC + ABC + DTG, then do workup for renal disease.



#### **UPDATE 5:** Guidance on the role tenofovir alfenamide (TAF).

- Tenofovir is available on oral prodrug forms: tenofovir disoproxil fumarate (TDF) & tenofovir alafenamide (TAF).
- TDF and TAF share the the same active ingredient, tenofovir, but differ on their formulations and pharmacokinetics.
- TAF has reduced renal toxicity profile compared to TDF and is preferred in patients with pre-existing renal impairment.
- TAF is way more expensive compared to TDF.
- If there is renal impairment at baseline (eGFR is < 50 mL/min/1.73m²) the recommended regimen is: TAF + 3TC + DTG.



## **UPDATE 6:** Inclusion on enhanced baseline screening for TB and STIs.

- Patients should be asked about TB symptoms prior ART initiation, with a positive symptom screen an indication for GXP/NAAT, and workup for TB if GXP is negative
- Targeted Universal TB Testing (TUTT) is recommended in patients pre-ART initiation (and on close contacts of person with TB, pregnant women who are HIV positive, & people who have received TB treatment in the past 2 years).
- In patients with positive TB symptom screen, ART is delayed until TB is excluded, whilst in TUTT there is no delay in initiating ART.
- STI symptom screen: Patients should be asked about urethral/vaginal discharges and genital ulcers. If present, investigate further and follow the syndromic approach.



#### **UPDATE 7:** Expansion of the module on HIV and mental health.

- Common Mental Disorders (CMDs) affect 26-38% of People Living With HIV (PLWH) in South Africa compared to 12.6% of the population. About 75% not diagnosed or on treatment.
- CMDs in PLWH include depression, anxiety and substance use disorder (about 75% not
- HIV Clinicians should be familiar with tools used for screening CMDs and be able to treat and refer appropriately.
- DTG may cause insomnia, headache and neuropsychiatric symptoms, whilst EFV Significantly impairs cognition. Avoiding EFV and RPV based regimens in patients with a psychiatric illness.
- It is no necessary to delay ART initiation while providing mental healthcare in patients with psychiatric disorders.
- Fluoxetine and Citalopram are safe in managing depression in PLWH.



#### THE END!

#### THANK YOU FOR YOUR ATTENTION

**QUESTIONS/INPUTS**