ARVs

ARV REGIMENS in patients with DRTB
Initiating ARVs the newly diagnosed HIV positive Patient

WHEN TO INITIATE ARVs

- Start ARVs within 2- 8 weeks after RR therapy initiation
  - CD4 <50 cells/mm3: 2 weeks
  - TB Meningitis: 4-6 weeks
  - Cryptococcal meningitis: 4-6w after antifungal Rx initiated
- Always initiate CTX, regardless of CD4 count

PRINCIPLES

- DO not use BDQ and Efavirenz together
- Use TDF only if adequate renal function. Use appropriate eGFR calculation as per age.
- If TDF C/I use ABC
- There is a small possible risk of neural tube defects in women that conceive whilst on DTG. There are also risks to conceive on DRTB treatment.

Women should be advised to not conceive whilst on DRTB treatment and contraception must be provided.

Key: LZD: Linezolid / BDQ: Bedaquiline /VL = Viral load / TDF = Tenofovir/ FTC = Emtricitabine / 3TC = Lamivudine / EFV = Efavirenz / DTG = Dolutegravir / LPV/r = lopinavir/ritonavir / ATV/r = atazanavir / ritonavir NVP – Nevirapine / AZT = Zidovudine / NCAC: National Clinical Advisory Committee

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ARV REGIMEN for MEN and WOMEN NOT WISHING to CONCEIVE ≥ 10 years & ≥ 35kg

TDF + 3TC + DTG

- Use as a fixed dose combination tablet
- Women of child bearing potential must sign an informed consent form and be provided with contraception

ARV REGIMEN for Children ≥ 20kg and <35kg

CHILD 20-35kg

ABC + 3TC + DTG

Where possible use ABC+3TC as a fixed dose combination tablet

Dolutegravir is available as a 50mg tablet once a day

ARV REGIMEN for children <20kg

CHILD <20kg

Abacavir + Lamivudine + LPV/r

Age	Measure	Level for TDF use
≥ 10 & < 16 yrs	eGFR: CB formula*	> 80ml/min
≥ 16 years	eGFR: MDRD*	> 50ml/min
Pregnant	Absolute creatinine	< 85umol/l

Counahan Barratt Formula = height (cm)x40 / Creatinine (umol/l)
MDRD formula as used by NHLS

ARVs

LTFU ARVS

ARV Modifications in HIV infected persons
Re-starting ART during RRTB Treatment after ARV Interruption

Baseline assessment

- DO a baseline CD4 and Viral load
- Use most recent viral load result to decide on appropriate regimen

PRINCIPLES

- Address reasons for interruption of ARVs
- DO not use BDQ and Efavirenz together
- Do not use AZT and LZD together (risk anaemia)
- Do not use DTG in patients who have interrupted as TDF or ABC may have been compromised
- Patients on 2nd line: AZT must be changed to TDF or D4T (or ABC if TDF C/I) until LZD completed.
- If side-effects on LPV/r is an issue: consider atazanavir/ ritonavir
- Discuss all children <10 years and less <35kg with NCAC / Local expert
- Patients who interrupted on 2nd line: repeat VL after 3 months. If unsuppressed follow guidance on genotyping.

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Patient on TDF / FTC / EFV prior to interruption

TDF + 3TC + LPV/r (first line)

Once LZD is completed & HB >10g/dl – change to

AZT + 3TC + DTG (2nd Line)

Repeat VL in 6 months

Patient on TDF/ FTC/ DTG prior to interruption

TDF + 3TC+ DTG

Patient on AZT /3TC /LPV/r prior to interruption (2nd line)

TDF + FTC + LPV/r (2nd Line)

Switch back to AZT once LZD completed and HB >10g/dl

Child on ABC/3TC/EFV prior to interruption (<10yrs / <35kg)

ABC + 3TC + LPV/r (1st Line)

Repeat VL in 6 months & Discuss with NCAC

CHILD <10yrs

Child AZT/3TC/LPV/r (2nd) prior to interruption (<10yrs / <35kg)

Stavudine (D4T) + 3TC + LPV/r (2nd Line).

Switch D4T to AZT when HB normalised and LZD completed

CHILD <10yrs

ARVs

ARV Modifications in HIV infected persons ≥ 10yrs + ≥ 35kg
Modifications of ART regimens of pt on ART when RRTB Rx started

Baseline assessment

- All patients known to be HIV positive and on ARVs when diagnosed with DRTB must have a CD4 and VL taken.
- Use most recent viral load result to decide on appropriate regimen (preferably taken in last 6 months)

PRINCIPLES

- DO not use BDQ and Efavirenz together
- Do not use AZT & LZD together (risk anaemia)
- Patients on 2nd line: AZT must be changed to TDF (or ABC if TDF C/I) until LZD completed.
- Patients on TDF /FTC/LPV/r or ABC/3TC/LPV/r can continue on those regimens.
- VL 50-1000: discuss with NCAC/ local experts
- There is a small possible risk of neural tube defects in women that conceive whilst on DTG. There are also risks to DRTB treatment. Women should be advised to not conceive whilst on DRTB treatment and contraception must be provided.
- Patients who are completing Bedaquline and is on First line TDF/FTC/LPV/r: DO NOT CHANGE TO 1TLD. First give TDF / FTC/EFV and only if VL is LDL switch to TLD

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Patient on TDF / FTC / EFV and VL =LDL

TDF + 3TC + DTG (FDC)

Patient on TDF/ FTC/ EFV and VL ≥1000copies/ml

TDF + 3TC + LPV/r (1st Line regimen)

Careful adherence counselling

Once LZD is completed & HB >10g/dl – change to

AZT + 3TC + DTG (2nd line regimen)

Patient on ABC / 3TC / EFV and VL =LDL

ABC + 3TC + DTG (1st Line)

Patient on ABC/ FTC/ EFV and VL ≥1000copies/ml

ABC + 3TC + LPV/r (1st line)

Careful adherence counselling

Once LZD is completed & HB >10g/dl – change to

AZT + 3TC + DTG (2nd line)

Patient on AZT /3TC /LPV/r (regardless of VL) 2nd Line

TDF + 3TC + LPV/r (2nd Line)

Switch back to Zidovudine once linezolid completed and HB >10g/dl

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CHILD <10

ARV Modifications in HIV infected persons< 10yrs + <35kg
Modifications of ART regimens of pt on ART when RRTB Rx started

ARVs

Baseline assessment

- All patients known to be HIV positive and on ARVs when diagnosed with DRTB must have a CD4 and VL taken.
- Use most recent viral load result to decide on appropriate regimen

PRINCIPLES

- DO not use BDQ and Efavirenz together
- Do not use AZT & LZD together (risk anaemia)
- In children <10yrs and <35kg – cannot use TDF
- Patients on 2nd line: AZT must be changed to Stavudine until LZD completed. Note the increased risk of hyperlactataemia on LZD and Peripheral neuropathy on INH and TZD
- Patients on ABC /3TC/LPV/r or ABC/3TC/DTG can continue on those regimens.
- VL 50-1000: discuss with NCAC/ local experts
- For all VL >1000: give adherence support and repeat VL in 3 months as per National ARV guidelines

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Patient on ABC / 3TC / EFV and VL =LDL 20=35 kg

ABC + 3TC+ DTG (1st Line)

ABC/3TC/ EFV (1st line) 20-25 kg and VL ≥1000copies/ml

ABC + 3TC+ LPV/r (1st Line)

Careful adherence counselling

Once LZD is completed & HB >normal for age change to

AZT + 3TC + DTG (2nd Line)

ABC / 3TC / EFV and VL =LDL <20kg

ABC + 3TC + LPV/r (1st Line)

ABC/ FTC/ EFV <20kg and VL ≥1000copies/ml

Stavudine + 3TC + LPV/r (2nd Line)

Careful adherence counselling

Once LZD is completed & HB >in normal range – change to

AZT + 3TC + LPV/r (2nd Line)

AZT /3TC /LPV/r <35kg (2nd line)

Stavudine (D4T) + 3TC + LPV/r

Switch back to AZT once linezolid completed and HB normal range for age