**Routine Monitoring of Mother**

### First ANC Visit: Patients Whose HIV Status is Unknown/Unconfirmed
- **HIV Rapid Test and CD4**, if HIV-positive: To establish/confirm HIV status. 
  - CD4 < 200: initiate co-trimoxazole prophylaxis (CPT).
  - CD4 < 100: do CrAg or CLAT.
  - CD4 > 250: do NOT use NVP.
- **WHO Clinical Staging**, if HIV-positive: To assess risk.
- **Hb or FBC**: To detect anaemia and/or neutropaenia.
- **Creatinine**: To assess renal function (and eligibility for TDF).
- **ALT**, if requiring NVP: To exclude liver dysfunction.

### First ANC Visit: All Patients (Already on ART and Newly-Diagnosed)
- **Screen for Chronic Diseases**: To identify high-risk pregnancy.
- **Nutritional Assessment**: To detect deficiency and provide necessary nutritional support. All pregnant women should get calcium, folate and iron supplementation.
- **Family Planning**: Provide counselling on safer sex, post-natal contraception, partner testing and cervical cancer screen.
- **TB Screening**: To identify TB suspects and assess IPT/INH eligibility. If TB is suspected in patients not yet on ART, do not start ART and refer for urgent diagnosis/exclusion of TB:
  - TB excluded: start ART.
- **STI and Syphilis Screening (RPR)**: To identify and treat STIs.
- **CrAg (Cryptococcal Antigen)**, if CD4 < 100: To treat/provide prophylaxis for cryptococcal meningitis.
- **Hb or FBC**: To detect anaemia and/or neutropaenia.

### Patients on ART
- **CD4 Count**: At initiation, at 12 months, then yearly, if clinically indicated.
- **Viral Load**: Be sure to check results and respond quickly! To detect treatment failure. **Repeat VL on confirmation of pregnancy** if on ART > 3 months, then after 3, 6, 12, 18 and 24 months throughout pregnancy and breastfeeding.
- **ALT**, if on NVP, and symptomatic (rash, hepatitis): To identify NVP toxicity.
- **FBC**, if on AZT: Month 3, 6, then yearly. To identify AZT toxicity.
- **Creatinine**, if on TDF: Month 3, 6, 12, then yearly. To identify TDF toxicity.

*Please note that calculated eGFR is not accurate during pregnancy. Serum creatinine and not the eGFR should be used.*

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**ART FOR MOTHER**

**FIRST ANC VISIT**

<table>
<thead>
<tr>
<th>All pregnant and breastfeeding women not on ART</th>
<th>FDC is given immediately, regardless of trimester of pregnancy. If TB is suspected, delay initiation of ARVs until TB is excluded or patient is established on TB treatment</th>
<th>TDF + 3TC (or FTC) + EFV given as FDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant women already on ART</td>
<td>Continue on ART. Check VL as soon as pregnancy is diagnosed, regardless of when it was last done</td>
<td>Patients on TDF + 3TC + EFV: Change to FDC (if weight &gt; 40 kg). Patients on other first line regimens: If VL LDL and no contraindications, change to FDC</td>
</tr>
<tr>
<td>Contraindications to EFV (active psychiatric illness) or TDF (history of renal disease)</td>
<td>Initiate AZT if Hb ≥ 7g/dL</td>
<td>Review CD4 result a week later to choose alternate ART regimen</td>
</tr>
</tbody>
</table>

**SECOND ANC VISIT (1 WEEK LATER)**

<table>
<thead>
<tr>
<th>Creatinine &gt; 85 µmol/L* or TDF is contraindicated</th>
<th>Stop FDC. Initiate AZT if Hb ≥ 7g/dL</th>
<th>Refer urgently for alternate triple therapy (within 2 weeks) and renal investigation. Dose adjust according to renal function. Suggested regimen: ABC + 3TC + EFV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active psychiatric illness or EFV is contraindicated</td>
<td>Continue AZT until initiated on triple therapy</td>
<td>TDF + 3TC + NVP or LPV/r CD4 &lt; 250: NVP CD4 ≥ 250: LPV/r</td>
</tr>
</tbody>
</table>

**SECOND LINE REGIMENS**

<table>
<thead>
<tr>
<th>Pregnant women failing first line on AZT/d4T + 3TC + EFV/NVP</th>
<th>Check Cr*: Cr ≤ 85 µmol/L</th>
<th>TDF + 3TC + LPV/r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant women failing first line on TDF + 3TC + EFV/NVP</td>
<td>Check Hb: Hb ≥ 7 g/dL</td>
<td>AZT + 3TC + LPV/r If hepatitis B +ve (HBV co-infected): AZT + TDF + 3TC + LPV/r</td>
</tr>
<tr>
<td>Pregnant women currently on second line</td>
<td>Check VL</td>
<td>VL LDL: Continue on current ART Raised VL: follow VLT guidelines</td>
</tr>
<tr>
<td>Dyslipidaemia or diarrhoea associated with LPV/r</td>
<td></td>
<td>Switch LPV/r to ATV/r</td>
</tr>
</tbody>
</table>

**UNBOOKED/PRESENTS IN LABOUR**

<table>
<thead>
<tr>
<th>Women not on ART, who test HIV-positive in labour</th>
<th>Check creatinine* and CD4. Review results at 3-6 day visit and adapt ART accordingly</th>
<th>sdNVP + sdTruvada (TDF+FTC) + AZT 3-hourly in labour Start FDC next day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency caesarean section in an unbooked woman not on ART</td>
<td></td>
<td>sdNVP + sdTruvada (TDF+FTC) prior to caesarean section Start FDC next day</td>
</tr>
</tbody>
</table>

**DIAGNOSED WITHIN 1 YEAR POST-PARTUM**

| Women diagnosed within 1 year post-partum or still breastfeeding beyond 1 year | ART is given lifelong, regardless of CD4 | TDF + 3TC (or FTC) + EFV as FDC. If contraindications (renal, psych), follow guidelines |

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*Please note that calculated eGFR is not accurate during pregnancy. Serum creatinine and not the eGFR should be used.

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**BREASTFEEDING ADVICE**

- All breastfeeding, HIV-positive women should be on ART, regardless of CD4 count.
- Initiate breastfeeding immediately after delivery, preferably within one hour.
- Intensive counselling should be given on the benefits of exclusive feeding and the importance of adherence to ART.
- Exclusive breastfeeding for the first six months.
- Complementary (mixed) feeding from 6 months onwards only.
- Encourage breastfeeding:
  - If infant HIV-negative: breastfeed until 12 months old.
  - If infant HIV-positive: breastfeed until at least 2 years old.
- Mothers with confirmed second or third line ART failure should NOT breastfeed unless exclusive formula feeding will be unsafe for that infant e.g. no facilities to sterilise bottles. These women should be managed at a tertiary referral site.

**WHAT DOES EXCLUSIVE BREASTFEEDING MEAN?**

For the first six months of life, the baby only gets mother’s milk and medication. This means NO water, formula, other foods or fluids.

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**需要帮助吗？**

联系TOLL-FREE全国HIV & TB
健康照护工作者热线
0800 212 506 / 021 - 406 6782
或发送SMS或“请叫我”到071 840 1572
www.mic.uct.ac.za

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