Workshop to accelerate the implementation of the *Three I's for HIV/TB* and earlier initiation of ART

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**Reporting and M&E of ART uptake in PLHIV with TB**

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2010 WHO ART Guidelines

When to start?

1. All patients with CD4 counts ≤350 cells/mm³ irrespective of WHO clinical stage *(Strong recommendation)*
2. All patients in WHO clinical stage 3&4 irrespective of CD4 count *(Strong recommendation)*

HIV/TB co-infection

1. Start ART in all HIV-infected individuals with active TB, irrespective of CD4 count *(Strong recommendation)*
2. Start TB treatment first, followed by ART as soon as possible afterwards (and within first 8 weeks) *(Strong recommendation)*
Rationale

ART REDUCES TB INCIDENCE

Figure 2: Adjusted hazards of tuberculosis, comparing HIV-infected patients receiving antiretroviral therapy with patients not receiving antiretroviral therapy

Figure 3. Kaplan-Meier Estimates of the Probability of Remaining Free from Active Tuberculosis in the Early-Treatment and Standard-Treatment Groups.

Lawn et al, Lancet Infect Dis 2010

Severe et al, NEJM 2010 – CIPRA trial
Early ART reduces mortality and AIDS events

<table>
<thead>
<tr>
<th>Study</th>
<th>Setting</th>
<th>Key Enrollment criteria</th>
<th>Arms</th>
<th>Median CD4 (IQR)</th>
<th>Primary endpoint</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAMELIA</td>
<td>Cambodia</td>
<td>Smear +, CD4 &lt; 200</td>
<td>Imm vs. 8 weeks</td>
<td>25 (10 - 56)</td>
<td>Death</td>
<td>34% ↓ death (p=0.004)</td>
</tr>
<tr>
<td>STRIDE</td>
<td>Multi national</td>
<td>Clinical TB, CD4 &lt; 250</td>
<td>Imm vs. 8-12 weeks</td>
<td>77 (36 – 145)</td>
<td>AIDS or death</td>
<td>42% ↓ AIDS/death in &lt;50 CD4 (p=0.02)</td>
</tr>
<tr>
<td>SAPIT</td>
<td>South Africa</td>
<td>Smear +, CD4 &lt; 500</td>
<td>Imm vs. 8-12 weeks</td>
<td>150 (77 – 254)</td>
<td>AIDS or death</td>
<td>68% ↓ AIDS/death in &lt;50 CD4 (p=0.06)</td>
</tr>
</tbody>
</table>

Percentage of estimated HIV-positive incident TB cases that received treatment for TB and HIV (UNGASS 6)

Numerator: # of PLHIV with TB receiving ART and TB treatment in 2009:
- 173 000 in UA (HIV) report
- 140 000 in TB report

How to interpret the lower coverage of ART in TB patients with HIV compared to PLHIV?

### ART coverage

<table>
<thead>
<tr>
<th></th>
<th>in PLWH in need</th>
<th>in patients with TB/HIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>28%</td>
<td>16%</td>
</tr>
<tr>
<td>2009</td>
<td>36%</td>
<td>17%</td>
</tr>
</tbody>
</table>

How to explain this difference?
Number of people on ART – 2008, 2009
(numerator UNGASS 4 - coverage ART)
Number of HIV+ TB cases receiving ART and TB treatment (numerator UNGASS 6 - coverage ART/TB treatment)

- South Africa
- Zimbabwe
- Botswana
- Lesotho
- Swaziland
- Malawi
- Uganda
- Zambia
- Mozambique
- United Republic of Tanzania
- Kenya
- Ethiopia
- Nigeria

# of HIV+ incident TB cases receiving treatment for TB and HIV

<table>
<thead>
<tr>
<th>Country</th>
<th>Total # reported HIV dept</th>
<th>Total # reported Stop TB</th>
<th>Estimated # of TB/HIV patients in country</th>
<th>Coverage %</th>
<th>HIV data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>1,379</td>
<td>8,900</td>
<td></td>
<td>15</td>
<td>n/a</td>
</tr>
<tr>
<td>Lesotho</td>
<td>2,235</td>
<td>10,000</td>
<td></td>
<td>22</td>
<td>TB patient registers</td>
</tr>
<tr>
<td>Mozambique</td>
<td>5,622</td>
<td>62,000</td>
<td></td>
<td>9</td>
<td>ARV patient registers</td>
</tr>
<tr>
<td>Namibia</td>
<td>1,995</td>
<td>9,200</td>
<td></td>
<td>22</td>
<td>n/a</td>
</tr>
<tr>
<td>South Africa</td>
<td>42,576</td>
<td>280,000</td>
<td></td>
<td>15-17</td>
<td>Other tools</td>
</tr>
<tr>
<td>Swaziland</td>
<td>2,315</td>
<td>12,000</td>
<td></td>
<td>19</td>
<td>n/a</td>
</tr>
<tr>
<td>Zambia</td>
<td>6,951</td>
<td>38,000</td>
<td></td>
<td>18-26</td>
<td>TB patient registers</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td></td>
<td>73,000</td>
<td></td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>
Conclusions

- Low coverage of ART among TB patients with HIV: not initiated or not reported?
- Inconsistent reporting to WHO HIV dept and Stop TB
- Trends analysis impossible
- Reconciliation of data between HIV and TB programmes urgently needed