OBJECTIVES

- To evaluate the MSF programme in Savannakhet Hospital
- To assess immune recovery on HAART
- To estimate the mortality on HAART
- To explore determinants of the CD4 reconstitution
- To identify typical latent trajectories of the CD4 reconstitution, and
- To point out the determinants of the CD4 evolution
- Survival analysis using Kaplan-Meier estimates to assess the mortality on HAART

RESULTS

- 955 patients included in the programme, 672 (70.4%) put on HAART and half of them started their treatment in the first month after their enrollment
- Lost to follow-up proportion on HAART: 3.6%

Baseline characteristics of the patients by gender

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Women (n=291)</th>
<th>Men (n=381)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years) median [IQR]</td>
<td>31.7 [27.5 – 37.0]</td>
<td>33.1 [29.0 – 38.0]</td>
</tr>
<tr>
<td>Body Mass Index (kg/m²) median [IQR]</td>
<td>17.8 [16.2 – 20.3]</td>
<td>18.4 [16.9 – 20.2]</td>
</tr>
<tr>
<td>WHO clinical stage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage 4</td>
<td>n=291</td>
<td>n=381</td>
</tr>
<tr>
<td>Stage 3</td>
<td>n=261</td>
<td>n=346</td>
</tr>
<tr>
<td>Stage 2 or 1</td>
<td>n=21</td>
<td>n=25</td>
</tr>
</tbody>
</table>

* p = 0.003  ** p = 0.002

Typical latent trajectories of the CD4 reconstitution by gender

1st latent trajectory (A)

- 75% of the patients
- Low immune recovery
- After 30 months: fitted mean = 300 cells/µL

2nd latent trajectory (B)

- 25% of the patients
- Good immune recovery
- After 30 months: fitted mean = 500 cells/µL

Within each of these latent trajectories:

- A high baseline CD4 cell count was associated with a better CD4 reconstitution.
- Women achieved a better immune reconstitution

Mortality on HAART

- High early mortality: 7.2% (5.4 – 9.5) at 4 months
- Mortality at 12 months: 10.6% (8.3 – 13.4)
- Higher mortality for patients with low immune recovery (A) (log-rank test: p=0.001)

Mortality on HAART by gender

<table>
<thead>
<tr>
<th>Time</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>At 8 months</td>
<td>8.5 (5.7 – 12.5)</td>
<td>8.5 (6.0 – 12.0)</td>
</tr>
<tr>
<td>At 12 months</td>
<td>8.5 (5.7 – 12.5)</td>
<td>12.2 (9.0 – 16.3)</td>
</tr>
<tr>
<td>At 24 months</td>
<td>10.4 (7.1 – 15.0)</td>
<td>17.7 (13.6 – 22.8)</td>
</tr>
</tbody>
</table>

DISCUSSION

- The low lost to follow-up proportion and the good monitoring of the cohort ensure the good quality of the data
- Patients severely immunocompromised at HAART initiation and men had lower CD4 cell count
- Two patterns of CD4 reconstitution over time are identified: a quarter of the patients achieves a good immune recovery on HAART
- Women experienced a better immune recovery on HAART, which suggests a better adherence and/or a better use of health care facilities
- High early mortality but similar at 12 months to the one generally observed in other low-income countries
- Mortality higher among patients with low immune recovery, and after 8 months, mortality seems lower among women
- Effort needed to enrol men earlier in HAART programmes
- Limits of the study: lack of adherence assessments and viral load measurements

Correspondance: Mathieu Bastard, mathieu.bastard@epicentre.msf.org