Single centre review of rapid antiretroviral therapy initiation during the COVID-19 pandemic

M. Ewens, M.M. Aung, E. Wrench, S. Schoeman, E. Page
Leeds Teaching Hospitals NHS Trust

Introduction
BHIVA released interim guidance on first line anti-retroviral therapy (ART) initiation during the COVID-19 pandemic, when investigations or follow-up was restricted.

Our HIV service didn’t restrict follow-up but suspended in-house resistance testing due to laboratory capacity.

Having prescribed ‘rapid ART’ based on the Northern Algorithm, from 1st August 2020 to 1st January 2022, we wanted to evaluate our prescribing during the pandemic.

Methods
All new HIV diagnoses from 1st August 2020 to 31st December 2021 were identified via Leeds Teaching Hospitals NHS Trust’s HARS dataset.

Retrospective case note review identified antiretroviral therapy prescribed, and switches that occurred upon baseline resistance test (RT) availability, to more suitable and/or cost-effective regimes.

Results
32 new diagnoses were identified for case note review.

Gender assigned at birth: 11 female, 21 male

Median age at diagnosis: 41 years (17-81)

Sexuality: 10 MSM, 22 Heterosexuals

Nationality: ➢ 14 White British ➢ 9 African ➢ 7 Other

Median time to ART initiation: 10 days (0-210)

Median CD4 count: 359 (2-1251), 8 had CD4<200

7/32 (22%) had Primary HIV infection, 5 of these (71%) initiating ART at 1st visit.

30/32 (94%) started ART within our service, 1 relocated, 1 initiated abroad.

28/30 (93%) started algorithm compliant rapid ART. Of the 2 that delayed, 1 had significant resistance, the other patient choice.

8/30 (27%) ‘rapid ART’ initiations switched post resistance test availability.

Conclusions
All patients initiating antiretroviral therapy in our service during the COVID-19 pandemic were algorithm compliant and fulfilled BHIVA recommendations.

7/10 starting Darunavir/r-based therapy switched to Delstrigo post resistance test availability, a more cost-effective single-tablet regime.

Zero patients on Biktarvy switched post resistance test, implying it is difficult to switch patients from integrase-based single-tablet regimens.

Future work includes comparing our results with other centres and reviewing antiretroviral therapy switches following the HIV National Prescribing Guide implementation.

Table 1: Antiretroviral therapy initiation and switches

<table>
<thead>
<tr>
<th>ART initiated</th>
<th>Number</th>
<th>Algorithm compliant?</th>
<th>Virology MDT referral post RT result</th>
<th>ART switch?</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/TDF &amp; Darunavir/r</td>
<td>10</td>
<td>Yes</td>
<td>4/6</td>
<td>4/4 referred switched to Delstrigo. 3 non-referred switched to Delstrigo, 3 no change.</td>
</tr>
<tr>
<td>F/TDF &amp; Dolutegravir</td>
<td>8</td>
<td>Yes</td>
<td>1/7</td>
<td>Referred patient didn’t switch. 1/7 non-referred switched to Delstrigo.</td>
</tr>
<tr>
<td>Biktarvy</td>
<td>7</td>
<td>Yes</td>
<td>0/7</td>
<td>No - High barrier single tablet regime (STR) required or research participant</td>
</tr>
<tr>
<td>Symtuza</td>
<td>3</td>
<td>Yes</td>
<td>2/1</td>
<td>No - High barrier single tablet regime (STR) required or research participant</td>
</tr>
<tr>
<td>Genovya</td>
<td>1</td>
<td>No</td>
<td>0/1</td>
<td>F/TAF &amp; Dar (initiated in The Netherlands)</td>
</tr>
<tr>
<td>Symtuza &amp; Dolutegravir</td>
<td>1</td>
<td>Yes</td>
<td>0/1</td>
<td>No, multi-class resistance</td>
</tr>
<tr>
<td>Delstrigo</td>
<td>1</td>
<td>Yes</td>
<td>0/1</td>
<td>No, initiated post RT</td>
</tr>
</tbody>
</table>

References