Eligibility for long acting cabotegravir/rilpivirine in youth aged 12-25 living with perinatally acquired HIV

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Eligibility for long acting Cabotegravir/Rilpivirine in youth aged 12-25 living with Perinatally-acquired HIV

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Conflict of Interest

In relation to this presentation, I declare that I have no conflict of interest
Background

Long acting cabotegravir/ rilpivirine (LA-CAB/RPV) is a licensed recommended switch option for adults (18+years) living with HIV on suppressive antiretroviral therapy as per the British HIV Association.

As long-acting injectable therapy, it is appealing for patients who find oral daily medication challenging, including some youth living with perinatally acquired HIV (YLWPaHIV).

This review aimed to identify YLWPaHIV potentially eligible for LA-CAB/RPV and describe reasons for ineligibility as compared to the BHIVA Feb 2022 interim guidedance.
BHIVA guidance on long-acting cabotegravir/rilpivirine (LA-CAB/RPV) for antiretroviral therapy. Feb 2022

Summary of key recommendations for the use of LA-CAB/RPV We recommend that LA-CAB/RPV can be used in people who:

1. Have a significant need for injectable antiretroviral therapy (ART) and
2. Have been virally suppressed to less than 50 copies/ml for at least 6 months and
3. Have no known or suspected non-nucleoside reverse transcriptase inhibitor (NNRTI) or integrase inhibitor (INSTI) resistance and
4. Have no history of virological failure or unplanned treatment interruption on NNRTI- or INSTI-containing ART and
5. Have no history of INSTI monotherapy and
6. Can tolerate and commit to 2-monthly attendance for injections and
7. Accept the risk of virological failure despite complete adherence (approximately 1 in 70 at year 1 and 1 in 60 at year 2) and
8. Have a BMI <30 and non-A1/6 subtype if baseline resistance is unavailable and
8. Do not need a tenofovir-containing regimen for the treatment or prevention of hepatitis B
Youth HIV Service 2006-22

- 2006: Perinatal HIV, age 16-25 years
- 2010: Peer support funded
- 2016: Life long PaHIV follow up
- 2018: Adolescent CNS

Paediatrics 0-20yrs

Adult: Dr, CNS, Psychology, Dietician, Pharmacist
Peer support worker, CHIVA support worker
Adolescent: Dr, CNS
Youth service approach to adherence

Non-judgmental MDT Adherence Support
- Clinical Nurse specialist, Psychology, Peer counsellor,
- Dietician, Pharmacist, Social Services, Community
- Motivational Interviewing communication style
- Walk in access to Youth Friendly Service
- Transport costs supported

ART
- Resistance, Simplification,
- Virtual Clinic Referral
- High genetic barrier regimen
- Pill size/number/formulation,
- Pill Glide

SMS support, Hypnosis,
- Community DOT
- Financial Incentives,
- Food chain
- Gastrostomy

LA-ART

Foster, Ayres, Fidler. Ther Adv Inf Dis 2020
DOT directly observed therapy; LA-ART long acting antiretroviral therapy
Method

All YLWPaHIV aged 12-25 years old by 1st January 2023 attending transition services in a London centre were deemed eligible.

Data collected from electronic case records and anonymised in excel included: BMI, viral load, CD4 count, ART and history including adherence, hepatitis B coinfection and HIV subtype.

Virological failure on integrase inhibitors (INSTI) or Non-nucleoside reverse transcriptase inhibitors (NNRTI) and cumulative resistance mutations were also recorded.
## Results

Table 1: Demographic Details of YLWPaHIV

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<thead>
<tr>
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<tbody>
<tr>
<td><strong>N</strong></td>
<td>121 (100%)</td>
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<tr>
<td><strong>Median Age</strong></td>
<td>20yrs (IQR 18 - 23yrs)</td>
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<tr>
<td><strong>Under 18 Years</strong></td>
<td>25 (21%)</td>
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<tr>
<td><strong>Female</strong></td>
<td>69 (58%)</td>
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<tr>
<td><strong>Black African / Caribbean</strong></td>
<td>89 (74%)</td>
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</table>
Results

34% Eligible under BHIVA Guidelines

40% Ineligible

26% Further discussion

Table 1: Eligibility by age grouping

<table>
<thead>
<tr>
<th>Age years (n)</th>
<th>12-17 (25)</th>
<th>18-25 (96)</th>
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<tbody>
<tr>
<td>Eligible %</td>
<td>32</td>
<td>34</td>
</tr>
<tr>
<td>Ineligible %</td>
<td>36</td>
<td>42</td>
</tr>
<tr>
<td>Discussion %</td>
<td>32</td>
<td>24</td>
</tr>
</tbody>
</table>
Further Discussion

71% Previous LLV on INSTI or NNRTI no resistance

- 29% BMI 30+
- 32% Irregular attendance
- 34% mental Health
- 10% Substance misuse
- 10% Adherence
- 19% toxicities

Multiple Factors in 67%
19% 2+ factors
42% 3+ factors
6% 4+ factors
IMPAACT 2017 (MOCHA)

- IM CAB-LA or RPV-LA in 12-17 year olds achieved target exposure compared to that in adults
- Good acceptability and tolerability
- No new Safety concerns
- Eligible youth preferences are being sought however LA-CAB/RPV is as yet unlicensed <18 years.
Conclusions

1. Only one third of YLWPaHIV met all of the BHIVA eligibility criteria.

2. Only 2 of eligible patients were currently established on LA-CAB/RPV

3. A further quarter may be eligible but half of those have 3 or more factors that potentially add to their risk of VF and require further MDT discussion
Conclusions

4. A flexible and creative approach is necessary to successfully implement long-acting injectable therapies in services for YPWPaHIV, such as offering access to medications out of hours, different locations, settings and an MDT approach.
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