Is rapid ART right for all?

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HIV i-Base

www.i-Base.info
Disclosure

No personal financial conflict of interest
Introduction

- Community perspective
- No personal link to this research
- Rapid = same-day, next day, within a week
- Right for all = right for most people (better definition with listed exceptions)
- Individual not population-based
Individual vs population-based medicine

• Healthcare in the UK is still largely based on individualised medicine – even when economic costs govern access to treatment and care.
• Rapid-ART is different to public health policies: Test & Treat \(^1,^2\) and Option B+ \(^3\).
• Urgent ART: late pregnancy, newborns, late dx

Background

Treatment guidelines have varied over the last 20 years with thresholds linked to better ART. [1]

<500   <350   <200   <350   <500   All (any CD4)

START study

More effective, convenient and safer ART.
Greater clinical concern for unsuppressed viral load.

1. US DHHS guidelines; archive at aidsinfo.nih.gov
San Francisco – 2015

Same-day ART vs historical control. Enrolled 2013–14.
- N=39 (92% men)
- Same day referral – compressing timeline for care.
- Complex issues: housing, drug use etc

Pilcher et al, IAS 2015
Engagement Timeline, SFGH

Timeline for CD4-guided ART, universal ART, and Rapid ART.

- **Referral**
  - CD4-guided (2006-9)
  - Universal (2010-3)
  - RAPID

- **First Clinic Visit**
  - RED = diagnosis with immediate concerns about disclosure and referrals for follow up care
  - ORANGE = sorting out issues of medical insurance, counselling, housing advice and first lab results: CD4, viral load, resistance test, HBV, HLA testing (abacavir) etc

- **First Primary care (PCP) Visit**
  - Yellow = first follow-up medical visit and chance to discuss ART, “readiness for ART”, and choice of ART – waiting for CD4 threshold

- **ART Prescribed**
  - GREEN = First ART prescription and taking

- **Viral load suppressed**
  - DARK BLUE = Reaching and sustaining undetectable viral load

Pilcher et al, IAS 2015
High engagement and acceptance. Integrase-based ART.

Pilcher et al, IAS 2015
56 Dean St – Pilot 2017

- <48 hours for first apt (vs 14 day)
- Offer same day ART - before CD4, VL, resistance, HLA, RITA, STI/HBV etc.
- PI/b + TDF/FTC but switch away from PI/b asap.

Whitlock G et al, BHIVA 2017
### 127 new HIV diagnoses

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
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<tbody>
<tr>
<td>Age (mean, y)</td>
<td>34</td>
</tr>
<tr>
<td>Sex: Male of which, MSM</td>
<td>100% (127/127) 98% (125/127)</td>
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<tr>
<td>Recent infection (RITA) %</td>
<td>50% (58/116)</td>
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<tr>
<td>Baseline CD4 (median, IQR) cells/mm³</td>
<td>466 (310 - 578)</td>
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<tr>
<td>Baseline VL (median, IQR) cpm</td>
<td>72,000 (24,000 – 290,000)</td>
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<td>VL &gt; 1million cpm</td>
<td>14%</td>
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### Time to start ART

<table>
<thead>
<tr>
<th>Time to start ART</th>
<th>N* (%)</th>
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<tr>
<td>Within 48h</td>
<td>28 (24%)</td>
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<tr>
<td>48h – 7d</td>
<td>30 (26%)</td>
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<tr>
<td>7d – 14d</td>
<td>20 (17%)</td>
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<tr>
<td>&gt;14d</td>
<td>37 (32%)</td>
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*Includes the 26 who do not start at 1st appt and subsequently start ART initiation*
75% (89/118) started ART at first apt.
26/28 deferrals started within 1 month
ART: 24% <48 h and 28% <7 days
54% - PI/b, 29% INSTI; 10% NNRTI
But 28/118 - > 1 primary resistance
54/55 (with 3 mo data) - <200 c/mL
Med. 61 days (44-117) to undetectable.

Whitlock G et al, BHIVA 2017
Community views 1

- HIV still has a life-changing impact.
- Most calls to i-Base – even in 2015 want ART – esp in primary HIV infection.
- ART can normalise HIV – single pill.
- Experience with PrEP and PEP is common.
- U=U reduces worry about risk to partners.
Community views 2

- Shock of diagnoses – high engagement.
- Period of stress.
- High level of interest and motivation.
- Reduce viral load >1 log in 2 days.
- Options to change and modify.
- Clinical benefits at all HIV stages.
San Francisco – 2013-2017

N=216 (92% men)
CD4: 441 (3 to 1905)
VL: 37,000 (0 to >10 million)
51% with substance use
48% major mental health dx
30% homeless or unstable housing

Coffey et al, CROI 2019
San Francisco – 2013-2017

Med, 1 year f/u (0 to 3.9)
92% <200 c/mL at 1 year
96% <200 c/mL over time
14% rebound >200 c/mL
but most (78%) resuppressed.

Coffey et al, CROI 2019
Cautions

• Both examples restructured services.
• BHIVA standards include comprehensive assessment with referral to other services.
• HIV nurse, HIV health advisor, doctor and peer support.
• Sexual health and mental health.
• Latent TB, CVD, BMI, fracture risk etc.

Figure 1: Continuum of HIV care, UK: 2017

- 100% People living with HIV
- 92% People diagnosed with HIV
- 90% On treatment
- 98% Virally suppressed

UNAIDS 90:90:90 target

- 92%
- 81%
- 73%

PHE report, 2018
Exceptions to uptake

• Very few – perhaps side effects with a high CD4 count (pipeline - injections, BNAbs ?)
• Perhaps other serious complications? (TB)
• Perhaps social circumstances: time to process information, discuss with partners, fear of negative reactions.
• Benefits: signposting to support services
Informed choice

• Personal choice – but an informed choice?
• Clinic as point of care for accurate info
• Treatment literacy.
• Uptake linked to community knowledge.
• Access to peer support
• Who is left out? [1]

Conclusion

• Rapid ART can be an option for all.
• Acceptable and feasible in a high-income country with public health.
• ART is just part of care – other services are still essential.
• Integrase inhibitors overcome drug resistance and can have fewer side effects.
# Thanks

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<thead>
<tr>
<th>Polly Clayden</th>
<th>Julie Fox</th>
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<tbody>
<tr>
<td>Angelina Namiba</td>
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<td>Michelle Ross</td>
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Questions?