Is rapid ART right for all?

Simon Collins
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

1. Velasco-Hernandez et a. Lancet Inf Dis (2002); 2. Granich et al. Lancet (2008); 3. WHO (2012).

1. US DHHS guidelines; archive at aidsinfo.nih.gov

Background

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

1998	2000	2002	2005	2009	2015
<500	<350	<200	<350	<500	All (any CD4)
					START study

More effective, convenient and safer ART.

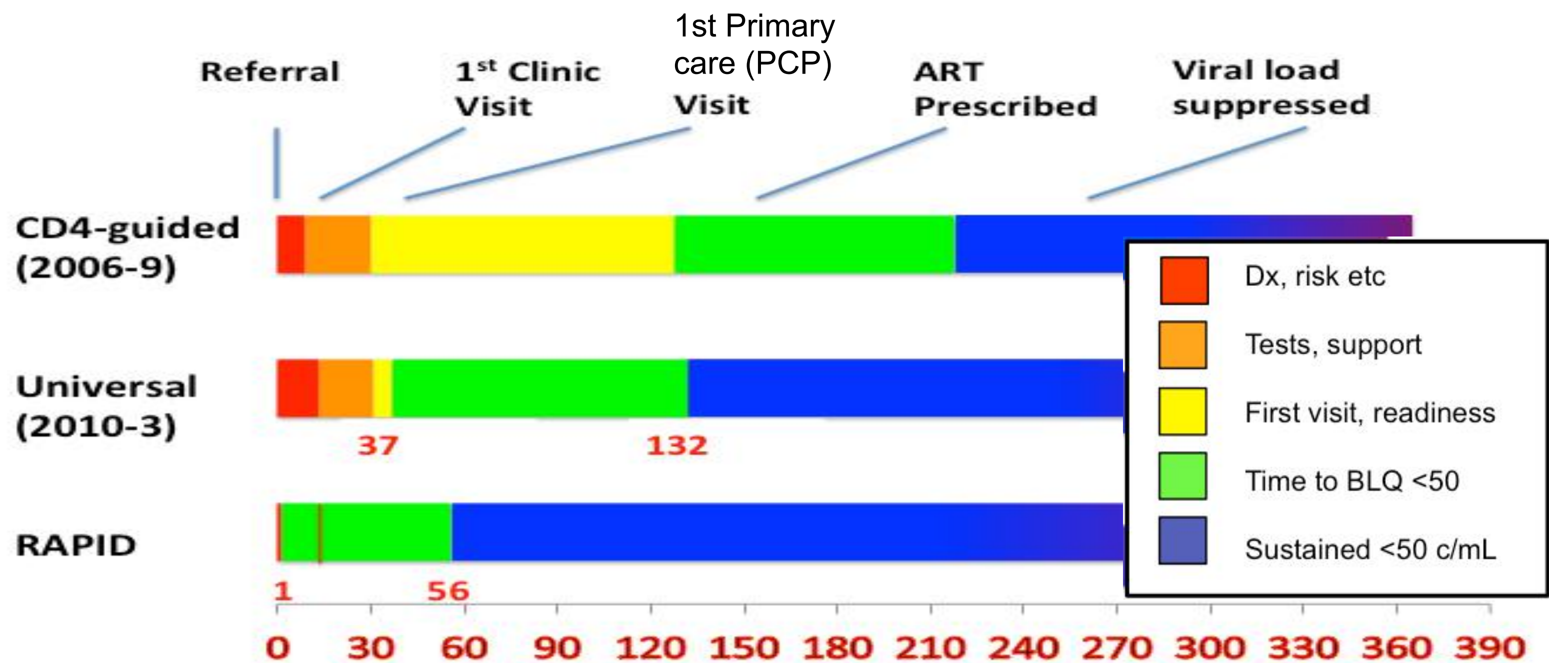
Greater clinical concern for unsuppressed viral load.

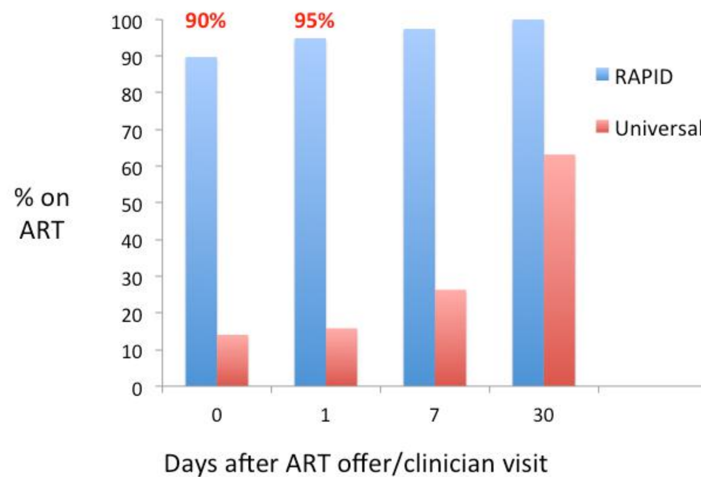
San Francisco – 2015

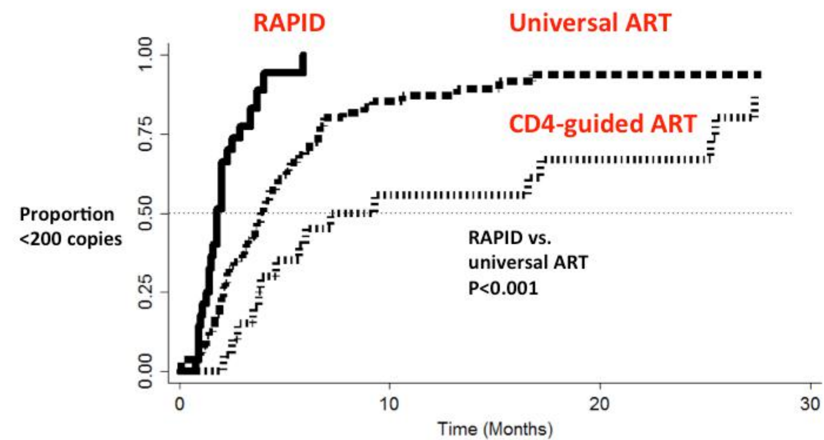
Same-day ART vs historical control. Enrolled 2013–14.

- 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
Referral
1st Clinic Visit
1st Primary care (PCP) Visit
ART Prescribed
Viral load suppressed
CD4-guided (2006-9)
Universal (2010-3)
RAPID
37
132
1
56
Dx, risk etc
Tests, support
First visit, readiness
Time to BLQ <50
Sustained <50 c/mL
0 30 60 90 120 150 180 210 240 270 300 330 360 390
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

56 Dean St - 2017

127 new HIV diagnoses

Characteristic	
Age (mean, y)	34
Sex: Male of which, MSM	100% (127/127) 98% (125/127)
Recent infection (RITA) %	50% (58/116)
Baseline CD4 (median, IQR) cells/mm³	466 (310 - 578)
Baseline VL (median, IQR) cpm VL > 1million cpm	72,000 (24,000 – 290,000) 14%

Time to start ART	N* (%)
Within 48h	28 (24%)
48h – 7d	30 (26%)
7d – 14d	20 (17%)
>14d	37 (32%)

*Includes the 26 who do not start at 1st appt and subsequently start

Whitlock G et al, BHIVA 2017

56 Dean St - 2017

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

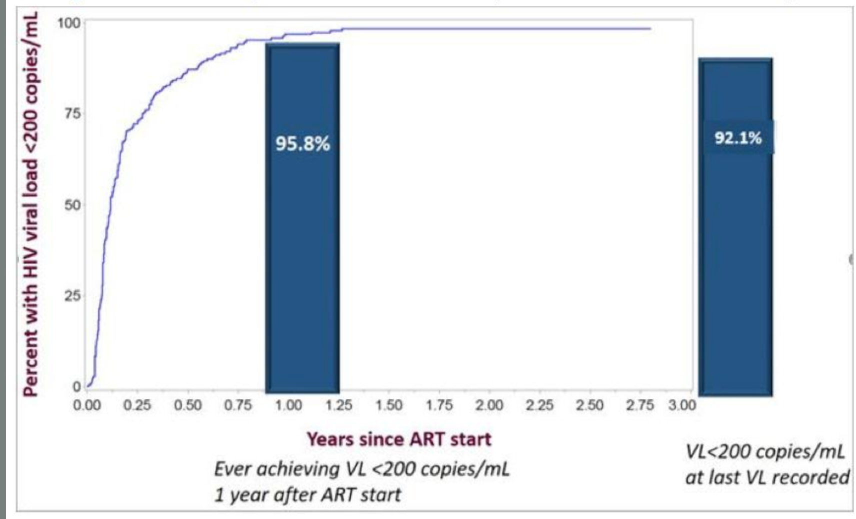
San Francisco – 2013-2017

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.

BHIVA Standards (2016) and BHIVA Monitoring Guidelines (2019 update).

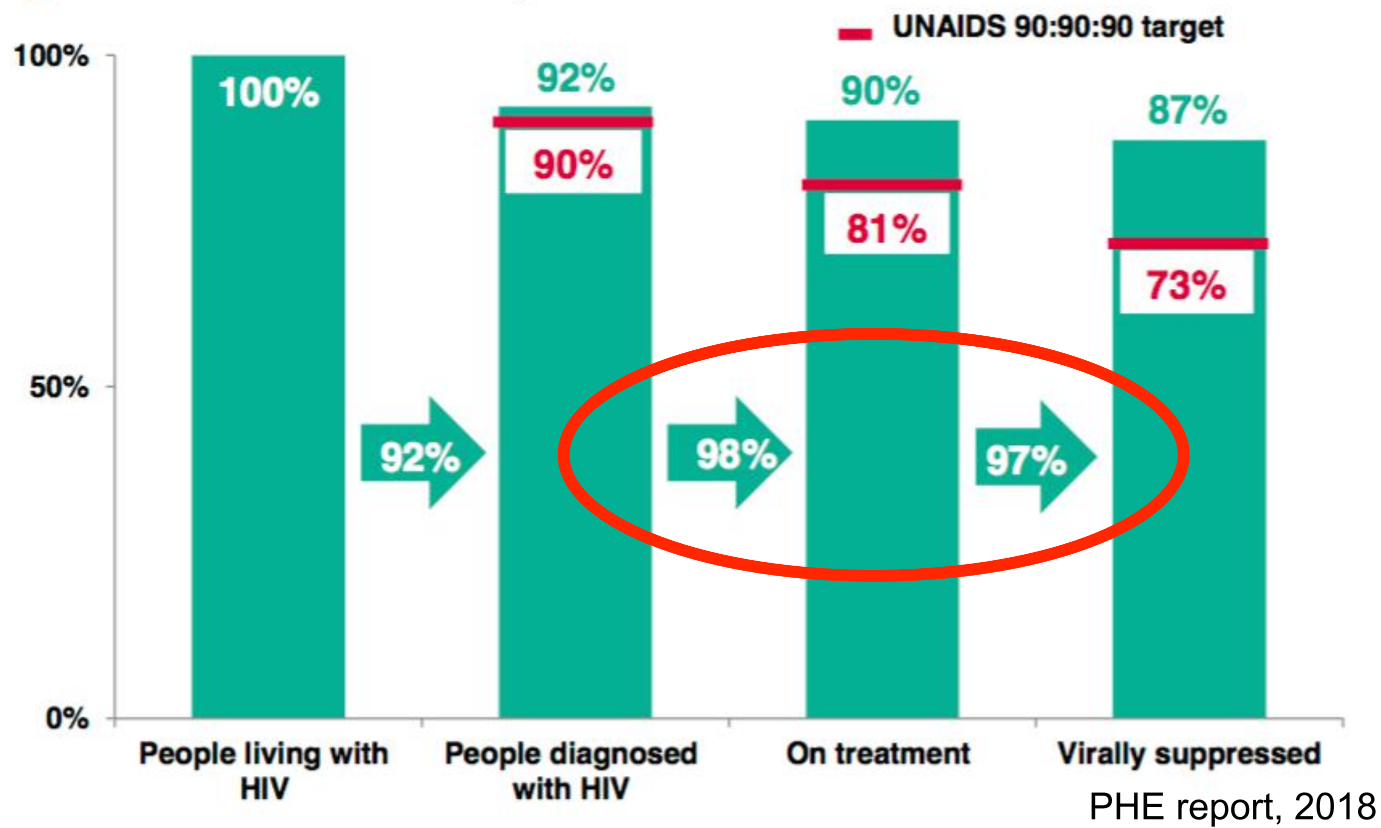


Figure 1: Continuum of HIV care, UK: 2017
UNAIDS 90:90:90 target
100%
50%
0%
100%
92%
90%
90%
81%
87%
73%
92%
98%
97%
People living with HIV
People diagnosed with HIV
On treatment
Virally suppressed
PHE report, 2018

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]

1. Lee MJ et al. Int J STD AIDS (2019)

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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Questions?