

Real-world patient experience of long-acting injectable antiretroviral therapy (LAI-ART): The voice of young adults with perinatally acquired HIV (YAPAH)

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BACKGROUND:

Poor adherence to ART among YAPAH remains an issue and a driver of HIV-related morbidity and mortality.

Treatment fatigue and psychological barriers negatively affect adherence to ART in YAPAH.

There is limited real-world data using unlicensed LAI-ART with previous or possible HIV resistance in YAPAH.

This study explores the attitudes of YAPAH towards LAI-ART and evaluates real-world use ahead of UK and EU licensing.

METHOD:

We conducted a mixed-methods study:

1. Retrospective electronic notes review of all YAPAH who had received LAI-ART compassionate access in an urban HIV centre between May 2018 and June 2021, and
2. Semi-structured interviews with these YAPAH exploring attitudes towards using oral ART Vs LAI-ART.

Data collection included demographics, ART, medical and virological data. Interviews were transcribed and evaluated using thematic content analysis.

RESULTS:

5 patients were granted compassionate access to LAI-ART: 100% black African YAPAH, 80% (4/5) female, median age 27(25-35), 80% (4/5) had previous AIDS defining illness.

YAPAH described **psychological barriers to oral ART (left)** and **benefits of LAI-ART (right)**:

Table 1 shows ART and virological data

Characteristics	n= 5
Median Nadir CD4 count	9 (0-258)
Median time on cART (years)	22 (18-24)
Mean number of ART switches	11 (8-15)
Prior ART resistance (major mutations)	
NRTI	
M184V	3
T215Y	2
T210LW	1
M41L	1
A62V	1
NNRTI	
K103NS	3
Y181YC	2
V108I	1
Nil	1
Time on LA ART	
3 months	2
1 year	2
3 years	1
% of historical VL that were undetectable (VL<50copies/ml) <i>pre</i> -LA ART	
0-20%	4
21-50%	1
51-80%	0
81-100%	0
% of VL that were undetectable (VL<50copies/ml) <i>whilst</i> on LA ART	
0-20%	2*
21-50%	0
51-80%	0
80-100%	3

*1 failed, 1 recently started LAI-ART

Table 2 shows LAI-ART tolerability and reasons for discontinuation

	n= 5
Tolerability	
Injection site reactions	1
Pain at injection site	2
Fever	1
No reported side effects	1
Reasons for discontinuation	
Planning pregnancy	2
Resistance (K219N, Y181C)	1

1 failed LAI-ART with emergence of presumed archived resistance.

Despite 80% (4/5) reporting at least 1 adverse reaction, all YAPAH felt the benefits outweighed the risks.

CONCLUSION:

YAPAH described preference for LAI-ART with improved health and psychological wellbeing. Rates of viral suppression were much improved on LAI-ART. LAI-ART was life saving for at least one our patients and its use is an important alternative to oral ART in YAPAH with adherence issues and past ART failure. Future work is needed to support clinicians making complex decisions regarding LAI-ART usage as it becomes commercially available.

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