“Barriers to Long-Acting Injectables for HIV Patients with Documented Oral Treatment Failures in the West of Ireland”

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Background

Long-acting injectable antiretroviral therapies (LAI-ARVs) offer a novel and effective option for managing HIV. This audit evaluated the feasibility of and barriers to implementing LAI-ARVs at Galway University Hospital (GUH) for patients with **documented virological failure on oral treatment**. The clinical pathway was developed in conjunction with St James’s Hospital, based on the work by Gandhi et al. in San Francisco (1). The GUH HIV clinic is a regional centre serving the North West of Ireland, with approximately 700 patients currently attending and receiving treatment.

Method

The eligibility criteria included HIV patients with documented virological failure (viral load>20copies/mL) in the past year who were assessed by a multidisciplinary team. Resistance profiles, hepatitis serologies and clinical suitability for LAI-ARVs were reviewed.
Data was collected on barriers encountered during selection and initiation.

Results

Twenty-six patients were identified based on eligibility criteria. Of the 26 patients evaluated, 15 were female and 9 were male. The **median CD4 count was 368 cells/mm³, with a viral load (VL) range of 0 to 385,204 copies/mL.** Time since HIV diagnosis ranged from **1 to 32 years, with a median duration of 14 years.**

16 patients (62%) not virologically suitable for LAI-ARVs

- Documented resistance in 9 patients:
  - **9 with NNRTI resistance**
  - **1 with INSTI resistance**
- Suspected or confirmed **A1/A6 clade infection in 4 patients**
- **No documented baseline resistance testing in 3 patients** and with VL too low for resistance testing

Ten patients (38%) were virologically suitable for LAI-ARVs:

- **Three** had previously **disengaged from care** but have **recently re-engaged** and are currently undergoing work-up.
- **Three** were **uncontactable** despite multiple attempts.
- **One** currently not suitable due to comorbidities

- **Three patients** (11.5%; 2 male, 1 female) started treatment in the past 4–6 months, **all achieving viral suppression.**

Figure 1. Demographics & transmission risk among patients with virological failure evaluated for LA-ARVs

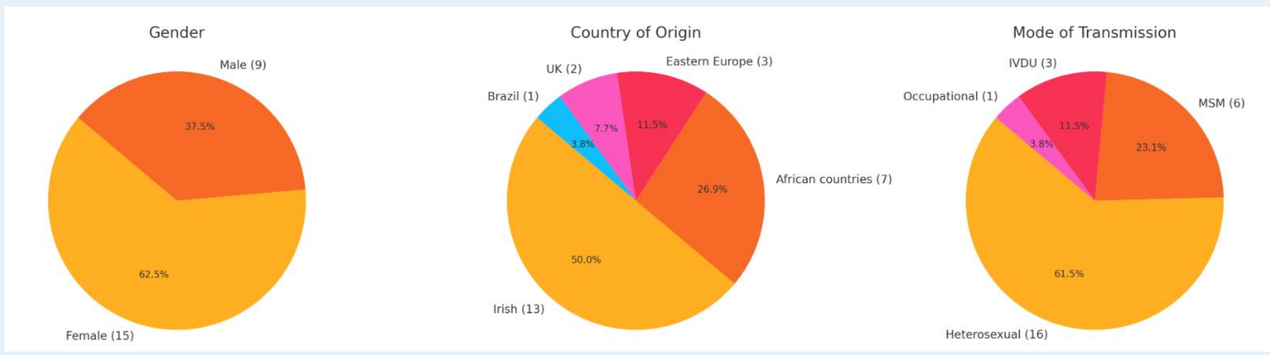
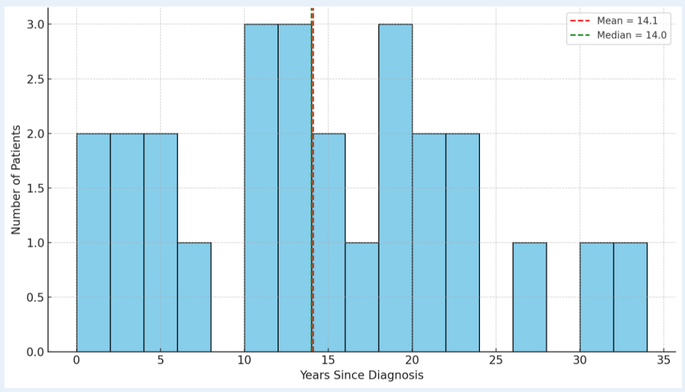


Figure 2. Years since HIV diagnosis among patients with virological failure evaluated for LA-ARVs



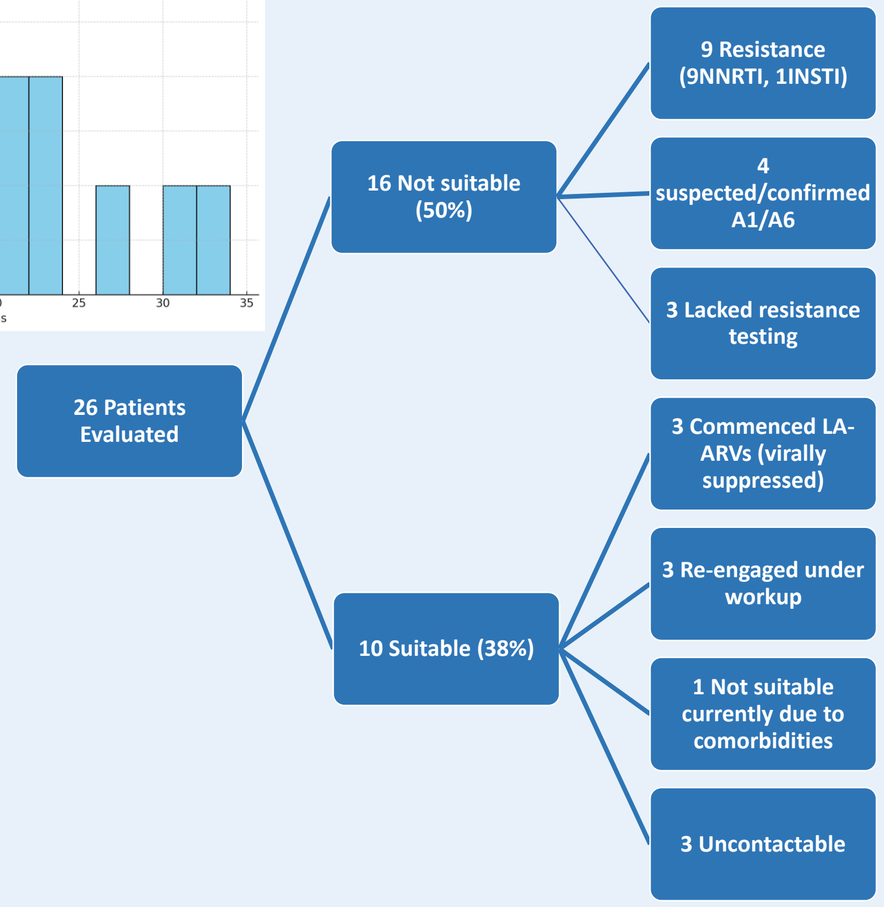


Figure 3. Results of suitability of patients evaluated for LA-ARVs with virological failure

Discussion & Conclusion

This audit identifies key barriers to implementing LAI-ARVs for HIV patients with documented oral treatment failures in the west of Ireland.
Major barriers among individuals with longstanding HIV infection included antiretroviral resistance secondary to chronic adherence challenges, geographical isolation and travel distance, as well as communication breakdowns—all contributing to disengagement from care.

Despite these barriers, **three of the 26 patients evaluated were successfully initiated on LAI-ARVs, achieving viral suppression and reporting high patient satisfaction.** Notably, two of these individuals achieved a sustained **undetectable viral load for the first time**.

This pathway demonstrates that **LAI-ARVs can be effective options for patients who struggle to take oral medications**. However, it requires appropriate infrastructure to screen, counsel, support, administer LAIs, and maintain ongoing clinical engagement.

References

1) Gandhi M, Hickey M, Imbert E, Grochowski J, Mayorga-Munoz F, Szumowski JD, Oskarsson J, Shiels M, Sauceda J, Salazar J, Dilworth S, Nguyen JQ, Glidden DV, Havlir DV, Christopoulos KA. Demonstration Project of Long-Acting Antiretroviral Therapy in a Diverse Population of People With HIV. Ann Intern Med. 2023 Jul;176(7):969-974. doi: 10.7326/M23-0788. Epub 2023 Jul 4. PMID: 37399555; PMCID: PMC10771861