

RAPID START: EVALUATING THE TIME TO HIV THERAPY INITIATION IN A TERTIARY CARE HOSPITAL IN PORTUGAL (2020-2023)

Background: The rapid initiation of antiretroviral therapy (ART) within 7 to 14 days of HIV has been proven to reduce HIV-related morbidity and mortality, as well as the risk of transmission.⁽¹⁾

Portugal faces significant challenges in adhering to national guidelines for timely initiation of antiretroviral therapy (ART), despite having one of the highest rates of new HIV diagnoses in the European Union. These delays can be attributed to both administrative and psychosocial barriers.⁽²⁾ This retrospective study assessed the period from referral to the first hospital consultation and consultation to ART initiation among newly diagnosed individuals at the *Unidade Local de Saúde de Coimbra*, Portugal.

Material and Methods:

Table 1: Patients newly diagnosed with HIV infection (naïve) included in the study, divided per year

	2020	2021	2022	2023
Number of first consultations	173 (21,2%)	166 (20,4%)	210 (25,8%)	266 (32,6%)
Naive	50 (22%)	57 (25%)	54 (24%)	67 (29%)

- Demographic characteristics
- Origin of referral / Date of referral
- Date of first appointment
- Date of ART initiation
- Stage of HIV infection according to the CDC classification system (1993)

Results:

♀ 21,1%

♂ 78,9%

Median age - 44 years

Nationality

- Portugal – 185 (81,1%)
- Africa – 19 (8,3%)
- South America – 18 (8%)
- Others – 6 (2,6%)

Origin of referral

Primary Healthcare Units	99 (43,4%)
Hospital Care	95 (41,6%)
NGO/ HIV self-test	34 (15%)

Regarding the stage of infection at the time of diagnosis, 55.2% of patients were asymptomatic, which suggests that more patients are being diagnosed earlier in the course of the disease.

Table 2: Distribution of HIV-infected patients by Stage of Infection

	1	2	3
A	29 (12,7%)	73 (32%)	24 (10,5%)
B	9 (4%)	32 (14%)	30 (13,2%)
C	0	7 (3,1%)	24 (10,5%)

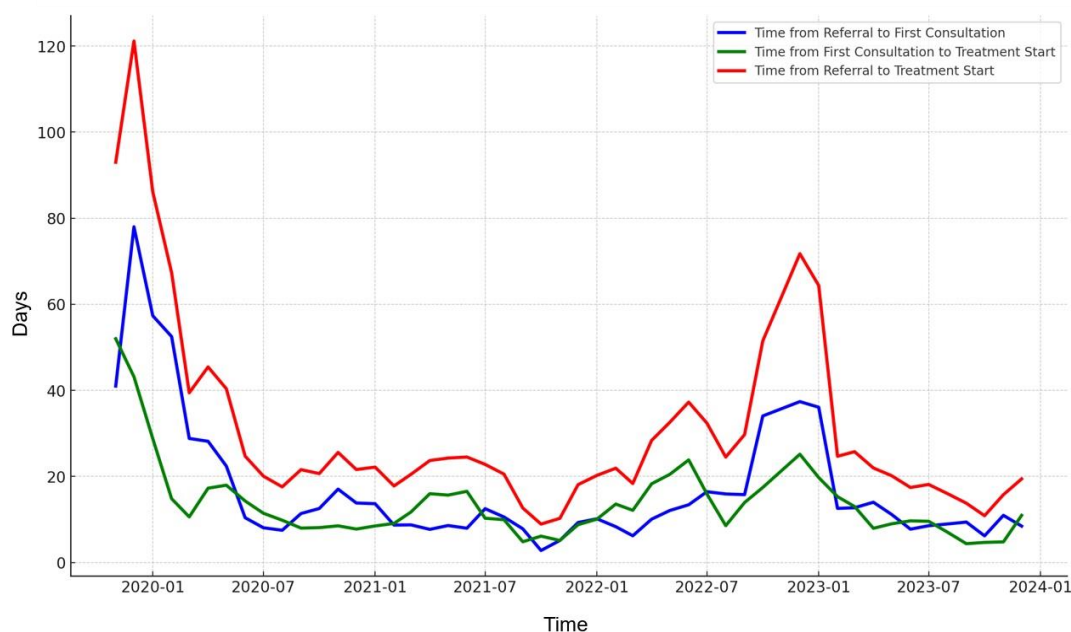
The descriptive statistics consolidating data from 2020 to 2023, the median number of days from referral to the first HIV consultation is 7 days with a standard deviation (SD) of 23 days, as well as the time from the first consultation to the initiation of ART (7 days, with a SD of 19 days). The median number of days from initial referral to the start of ART is 19 days with a SD of 30 days.

Table 3: Median time and SD (in days) from referral to the 1st consultation, from the 1st consultation to ART initiation, and from referral to ART initiation

	2020	2021	2022	2023
Referral – 1st Consultation	14±39	6±6	7±13	7±22
1st Consultation - ART	10±16	7±15	7±29	7±10
Referral - ART	22±45	18±16	21±30	15±23

The analysis of the median of days for each phase of the medical process reveals a favourable trend over the years.

Chart 1: Temporal Evolution from January 2020 to December 2024 of the time (in days) from referral to the 1st consultation, from the 1st consultation to ART initiation, and from referral to ART initiation



Conclusion: This study evidenced an improvement in waiting time between referral and the start of ART and a notable proportion of asymptomatic cases, which could highlight the role of both healthcare and non-profit organisations in early referral. Continued monitoring of these timelines is essential to optimise health outcomes for individuals living with HIV.

References:

- (1) Gandhi RT, Bedimo R, Hoy JF, Landovitz RJ, Smith DM, Eaton EF, et al. Antiretroviral drugs for treatment and prevention of HIV infection in adults: 2022 recommendations of the International Antiviral Society-USA Panel. *JAMA*. 2023;329(1):63
- (2) Nicolau V, Cortes R, Lopes M, Virgolino A, Santos O, Martins A, et al. HIV Infection: Time from Diagnosis to Initiation of Antiretroviral Therapy in Portugal, a Multicentric Study. *Healthcare*. 2021;9(7):797. [https://doi.org/10.3390/healthcare907079\(2\)](https://doi.org/10.3390/healthcare907079(2))