

COMPARATIVE STUDY OF PATIENT PROFILES AND INITIAL ANTIRETROVIRAL TREATMENT IN 2014 VERSUS 2018

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Background and Importance

Antiretroviral therapy (ART) has evolved over the years, leading to a change in initial therapy strategies.

Aim and Objectives

To describe and compare the profile of patients who started ART in 2014 and 2018.
To assess chosen treatment schemes and cost/patient.

Material and Methods

Retrospective, observational, descriptive study. 2nd level hospital HIV patients started ART in 2014 and in 2018.

Data:

- ✓ Electronic medical history
- ✓ Prescription program



- demographic
- transmission route
- cost/patient/year
- viral load (VL) and CD4 (beginning -4 weeks treatment)
- ART

Results

	2014	2018
Patients	15	15 (drop out at week-2: 1 patient)
Men	93%	73%
Age(years)	44,9 (28-68)	41,5 (14-72)
Transmission route		
heterosexual	46%	33%
homosexual	27%	47%
parenteral	27%	20%
Days from diagnosis to the beginning of ART	1025 (12-4116)	93 (6-489)
Week-0		
VL(copies/mL)	410535 (3200-2530000)	252510 (1410-2340000)
CD4(U/mm ³)	247,8 (4-701)	452 (52-1165)
Week-4		
VL(copies/mL)	1992 (0-12500)	1318 (0-13800)
Undetectable VL patients	1	5
CD4(U/mm ³)	302 (74-713)	553 (197-1455)

TDF/FTC: Tenofovir-disoproxil/Emtricitabine
ABC/3TC: Abacavir/Lamivudine
TAF: Tenofovir-alafenamide
DRV: Darunavir



Treatment cost (patient/year)

- 2014 → 8632 €
- 2018 → 7405 €

Combination ART therapy

Year	2014		2018	
	2 nucleoside reverse-transcriptase inhibitors	Non-nucleoside reverse-transcriptase inhibitor	2 nucleoside reverse-transcriptase inhibitors	Protease inhibitor
2014	TDF/FTC	87%	TDF/FTC	26%
	ABC/3TC	13%	TAF/FTC	20%
	Non-nucleoside reverse-transcriptase inhibitor		ABC/3TC	53,3%
	Efavirenz	13,3%	Protease inhibitor	
	Rilpivirine	20%	Darunavir-Cobicistat	20%
	Protease inhibitor		Integrase inhibitor (INSTI)	
2018	Darunavir-Ritonavir	46,7%	Dolutegravir	60%
	Integrase inhibitor		Elvitegravir-Cobicistat (ELV/c)	20%
	Raltegravir	20%	TAF/FTC+DRV+ELV/c (resistance profile) 1 patient	

Conclusion

- The demographic profile of patients has hardly changed.
- Sexual transmission continues to be the main route of infection despite official prevention strategies.
- The new recommendations for early initiation of ART in all HIV patients leads to better results than deferred treatment (higher values of CD4 at baseline and at 4 weeks, and more patients with indetectable VL).
- Our study reflects a decrease in the use of TDF/FTC as starting ART and TAF/FTC is introduced, a fact attributable to its better bone and renal safety profile. In turn, the use of INSTI associated with initial ART has increased due to its power and good tolerance.
- The cost/patient decreases slightly despite commercialization of generics due to the appearance of INSTI and TAF.