

STRATEGY FOR CHANGE IN ANTIRETROVIRAL THERAPY: LOOKING FOR BETTER RESULTS

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Background and importance

Regional HIV working group, to improve the efficiency and safety of antiretroviral therapy (ART), recommended (June-2018) changing Emtricitabine/Tenofovir disoproxil fumarate/Rilpivirine (E/TDF/R) to Emtricitabine/Tenofovir alafenamide/Rilpivirine (E/TAF/R).

Different studies evaluated TDF vs TAF, where TDF was associated with more nephrotoxicity and bone alteration, but similar effectiveness.

Aim and objectives

To evaluate the efficiency and safety with the implementation of this strategy.

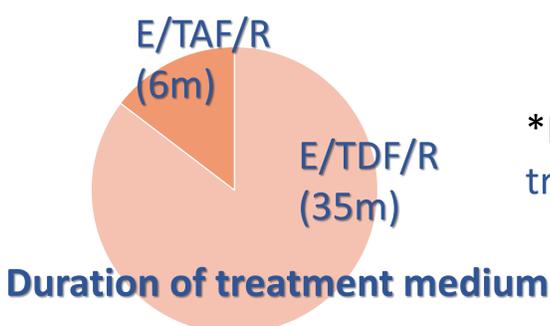
Materials and methods

- Retrospective observational study (June-2018 to March-2019)
- All patients treated with E/TDF/R.
- Collected data:
 - Gender
 - Age
 - Duration of treatment
 - Last available analyticals before the change and at least 3 months later:
 - **Viral load (VL), HIV RNA, CD4 +cell to asses effectiveness
 - **Glomerular filtration rate (GFR) and phosphataemia to asses nephrotoxicity
 - **Alkaline phosphatase (AF) to analyze bone alteration.
- The cost per patient was calculated based on agreed regional prices.

Results

60 patients E/TDF/R → E/TAF/R

21 women and 39 men, median age 48 years (range 22-82)



*In March-19: 97% of patients continued treatment with E/TAF/R

	E/TDF/R	E/TAF/R
VL	undetectable	Undetectable
HIV RNA	negative	Negative
CD4+ (cell/ml)	851±392,3	856± 392,3
GFR	3 patients <50ml/min	Improved to >50ml/min
Phosphataemia	Ok	Ok
AF	Elevated in 3 patients	Improved in this patients

***Cost saving: €40 per patient/month**, and total saving of the study period was €24.000.

Conclusion and relevance

- Effectiveness was similar with the change
- Safety was slightly favorable with E/TAF/R. However, it would have been interesting to evaluate longer use to E/TAF/R to obtain more conclusive results about the improvement of renal function and to carry out an analysis of bone metabolism with markers of greater sensitivity and specificity.
- E/TAF/R could be presented as a more cost-efficient alternative since it could mean annual savings of up to €28.800.

