

# EFFECTIVENESS AND SAFETY OF SWITCHING TO DUAL ANTIRETROVIRAL THERAPY IN A TREATMENT EXPERIENCED HIV COHORT

C. Ruiz Martinez, C.G. Rodriguez-Gonzalez, A. Ribed, J.L. Revuelta, M. Tovar-Pozo, B. Monje, C. Ortega-Navarro, X. Garcia-Gonzalez, A. Herranz Alonso, M. Sanjurjo Saez.

Servicio de Farmacia, Hospital General Universitario Gregorio Marañón

## BACKGROUND AND OBJECTIVE

Long-term adverse effects, expense, and difficulty of adherence to antiretroviral therapy (ART) have led to study simpler maintenance therapies. Switching from a triple therapy to a dual therapy seems to be effective and safe, but few data exist in clinical practice.

**Objective:** To assess the effectiveness and safety of simplification to a dual therapy in experienced HIV patients.



## MATERIAL AND METHODS

**Design:** retrospective study. **Inclusion criteria:** experienced HIV patients switching from triple to dual therapy between August 2009 and January 2015. Demographic and clinical characteristics, viral load (VL), CD4+ T-cell count, CD4/CD8 ratio, fasting lipid profile, liver and renal function were recorded when dual therapy was started and at week 24. Previous ARTs, reason for change to dual therapy and adverse events leading to discontinuation of the new regimen were also evaluated.

## RESULTS

### Previous ART:

- 2 Nucleoside reverse transcriptase inhibitor(NRTI) + ritonavir-boosted Protease Inhibitor (rPI): 55.1%
- 2 NRTI + Non-nucleoside RTI: 18.8%
- 2 NRTI + Integrase inhibitor: 7.2 %

### Dual therapy prescription profile:

- rPI + Maraviroc: 41.8%
- rPI + Lamivudine: 35.8%
- rPI + Raltegravir: 13.4%
- Dolutegravir with rilpivirine: 5.9%

### Reasons for switching to dual therapy:

- Presence of adverse events (44.8%)
  - Treatment simplification (26.9%)
  - Virological failure (14.9%)
  - Immunological failure (3%)
  - Others reasons (10.4%)

- ✓ Bone toxicity: 14 (46.6%)
- ✓ Nephrotoxicity: 12 (40.0%)
- ✓ Metabolic disorders: 3 (10.0%)
- ✓ Gastrointestinal disorders: 1 (3.3%)

### Table 1. EFFECTIVENESS AND SAFETY RESULTS

All values are expressed as median (IQR), unless otherwise indicated.

	Baseline (N = 67)	At week 24 (N = 67)
VL < 37 copies/ml (% of patients)	55(82.1%)	63(94%) No virological failures was detected during treatment
CD4 cell count (cel/mcL)	569 (418-743)	581(364-785)
CD4/CD8 ratio	0.61(0.39-0.92)	0.57(0.39-0.84)
Cholesterol(mg/dl)	189(154-218)	191(170-229)*
LDL(mg/dl)	107(86-121)	107(86-136)
HDL(mg/dl)	50(40-64)	47(40-64)
Triglycerides(mg/dl)	120(92-161)	129(96-197)
Atherogenic Index	3.7(3.1-4.4)	4.1(3.2-5)
ALT(U/L)	22(16-29)	20 (15-26)*
AST(U/L)	23(17-31)	16(15-21)*
GGT(U/L)	29(18-68)	25(16-53)*
Alkaline phosphatase(U/L)	80(70-96)	78(61-94)*
Creatinine(mg/dl)	0.91(0.8-1.03)	0.91(0.77-1.01)
Phosphate(mg/dl)	3.2(2.8-3.6)	3.3(2.9-3.9)
GFR <60 ml/min(% of patients)	92.5%	92.5%

\* p < 0,05

Eighteen patients (26.9%) interrupted the dual therapy: 4 patients (6.0%) switched to a triple therapy. Fourteen patients (21.0%) switched to a different dual therapy due to: toxicity (42.9%), drug interactions (28,6%) simplification (21,4%), and failure to achieved an undetectable VL (7.1%).

## CONCLUSIONS

Switching to dual therapy for maintenance treatment is effective, safe and non-inferior to triple therapy in treatment experienced HIV patients.

