

# Antiretroviral therapy impact on cardiovascular risk and lipid profile HIV-infected patients

I. Javier\*, A. Escudero\*, E. Ramió\*, Gl. Ballesteros\*, M. Aguas\*, J. Delàs\*\*, N. <u>El Hilali\*</u>, B. Eguileor\*

\*Pharmacy \*\*Internal medicine. Capio Hospital Universitari Sagrat Cor, Barcelona, Spain

## **OBJECTIVES**

Antiretroviral therapy (ART), especially the ones based on boosted protease inhibitors (PI/r) may induce dyslipidemia and therefore increase cardiovascular risk (CVR) on HIV-infected Patients. Some studies suggest that Tenofovir (TDF) could be a protective factor. Our purpose is to describe the CVR score in HIV-infected patients and identify which kind of ART (PI/r or TDF) is more convenient for an appropriate lipid profile (LP).

# MATERIAL AND METHODS

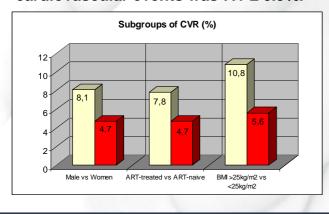
Descriptive cross-sectional study with HIV-patients in a 300 bed hospital during July 2011. Overall 10-years probability for cardiovascular events was evaluated by the Framingham risk score. We analysed CVR and LP according to gender, body mass index (BMI), ART-naives and ATR based on PI/r or TDF. Patients were classified as having low, moderate, or high CVR (<10%, 10%-20% and <20%, respectively). Statistical analysis was performed with SPSS.

# **RESULTS**

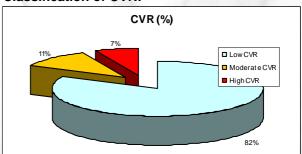
We enrolled 47 HIV-infected patients:

- ➤ Median age 48.3±9.8 years
- > 70.2% male
- ➤ 30.4% current smokers
- Mean BMI 23.6±3.3 kg/m2
- ≥ 23.4% ART-naives
- > 29.8% on PI/r and 61.7% on TDF

# The mean 10-years probability for cardiovascular events was 7.1 ± 6.9%.



### Classification of CVR:



# CVR and LP according to ATR based on PI/r or TDF:

	ART	
	Based on TDF	Based on PI/r
CVR	5.9%	7.8%
Cholesterol	183.4mg/dl	196.6mg/dl
HDL	0.53mg/dl	0.44mg/dl

# CONCLUSIONS

- ✓ The results show that our HIV-patients have better CVR compared to the studies reported in the literature.
- ✓ An ART regime change in patients with bad LP should be considered.