

# Prevalence and cardiovascular risk assessment in HIV patients: Comparison between SCORE2 and REGICOR Scales

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## Background:

People living with HIV are at higher risk of cardiovascular disease (CVD) due to factors related to the virus, the host, and antiretroviral therapy (ART) [1].

**Our main objective** was to determine the prevalence of CVD risk in our hospital cohort and to compare the agreement between the European **SCORE2** (Systemic Coronary Risk Evaluation Score 2) and the Spanish **REGICOR** (Registro Gironí del Cor) risk scales [2,3].

## Materials and methods:

A retrospective, single-center cross-sectional study was conducted on a sample of HIV-positive patients from November 2023 to June 2024, attending our clinics.

**Inclusion criteria** were aged 40 to 70 years and under follow-up at our center. Demographic, clinical, and laboratory data were collected, and web-based calculators for **SCORE2** and **REGICOR** were used to categorize patients into high/very high, moderate, and low risk of experiencing CVD in the next 10 years, as well as the need for lipid-lowering therapy. The agreement between the two scales was analyzed using Cohen's kappa statistic ( $\kappa$ ).

## Results:

A total of **120 patients** were analyzed.

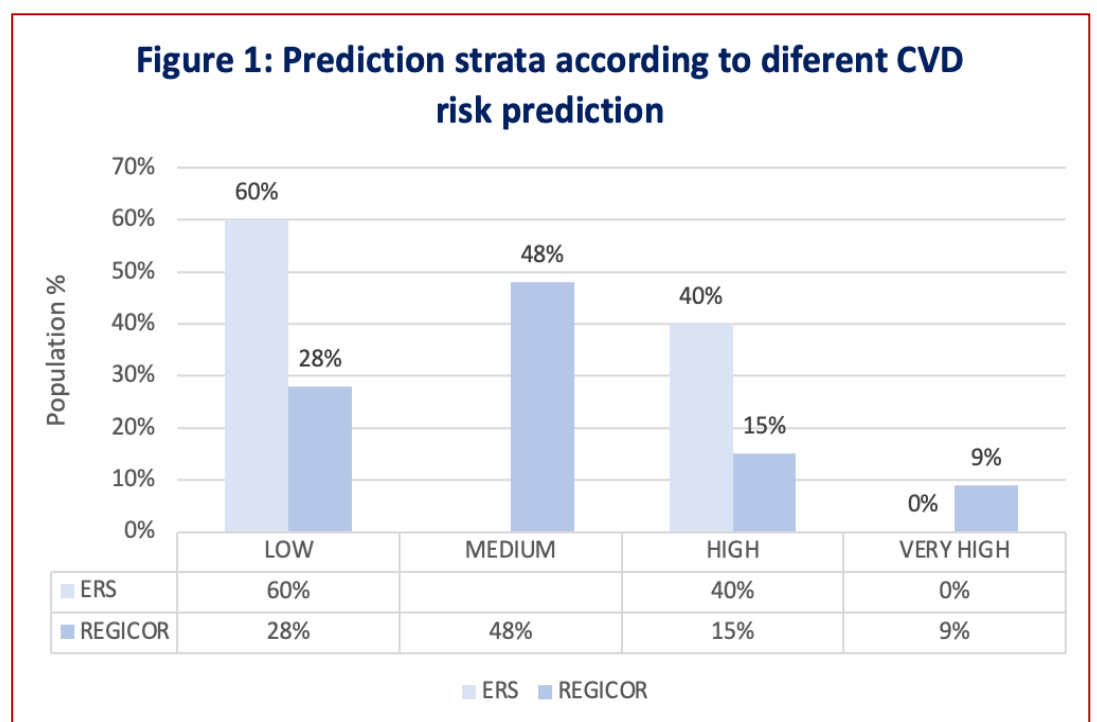
The agreement between SCORE2 and REGICOR was **k=0.68** (95% CI: 0.58–0.76). SCORE2 identified 72% of patients needing lipid-lowering therapy, while REGICOR identified 40%.

Only 39% of the cohort was receiving statin therapy.

Table 1. Baseline characteristics at enrollment			
		n	%
Gender	Male	74	74%
	Female	26	26%
		<b>100</b>	
		n	%
Age		54 (36-69)	
Smoking (current smoker)		56	56%
Body mass index. Obese => (30 kg/m <sup>2</sup> )		15	15%
Diabetes		12	12%
Hypertension		24	24%
Hypercholesterolemia		39	39%
Triglycerides		5	5%

## Conclusions:

- **Assessing and categorizing CVD risk** in people living with HIV is crucial for prevention and proper management.
- SCORE2 and REGICOR scales demonstrate satisfactory agreement in risk categorization. **SCORE2 identifies more high-risk patients**, needing urgent preventive treatment, while **REGICOR identifies** more patients who could benefit from preventive measures.
- **The low treatment rate of statin therapy underscores the imperative for enhanced strategies to prevent CVD in PLWHIV.**



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