

P175 Estimated eGFR and risk of cardiovascular events in a large cohort of chronically infected HIV subjects

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Introduction

End-stage renal disease substantially increases the risks of death and cardiovascular disease, but the effects of less severe kidney dysfunction on these outcomes in HIV infected subjects are less well defined.

Methods

A retrospective study was performed on the cohort of a large reference hospital in Northern Italy. eGFR was computed for HIV+ subjects followed in 2006 and the occurrence of cardiovascular diseases was checked in the following 10 years.

End-point definition

Cardiovascular diseases was defined as any of the following: hospitalization for coronary disease, heart failure, stroke, or peripheral arterial disease and death because of cardiovascular reasons. Furthermore, the occurrence of hypertension and/or chronic kidney insufficiency was recorded.

Patients' disposition

Patients with at least a visit in 2006
1482 subjects

Death not due to CV disease
12 subjects (0.8%)

Lost to follow-up
42 subjects (2.8%)

Already diagnosed with CV disease in 2006
69 subjects (4.6%)

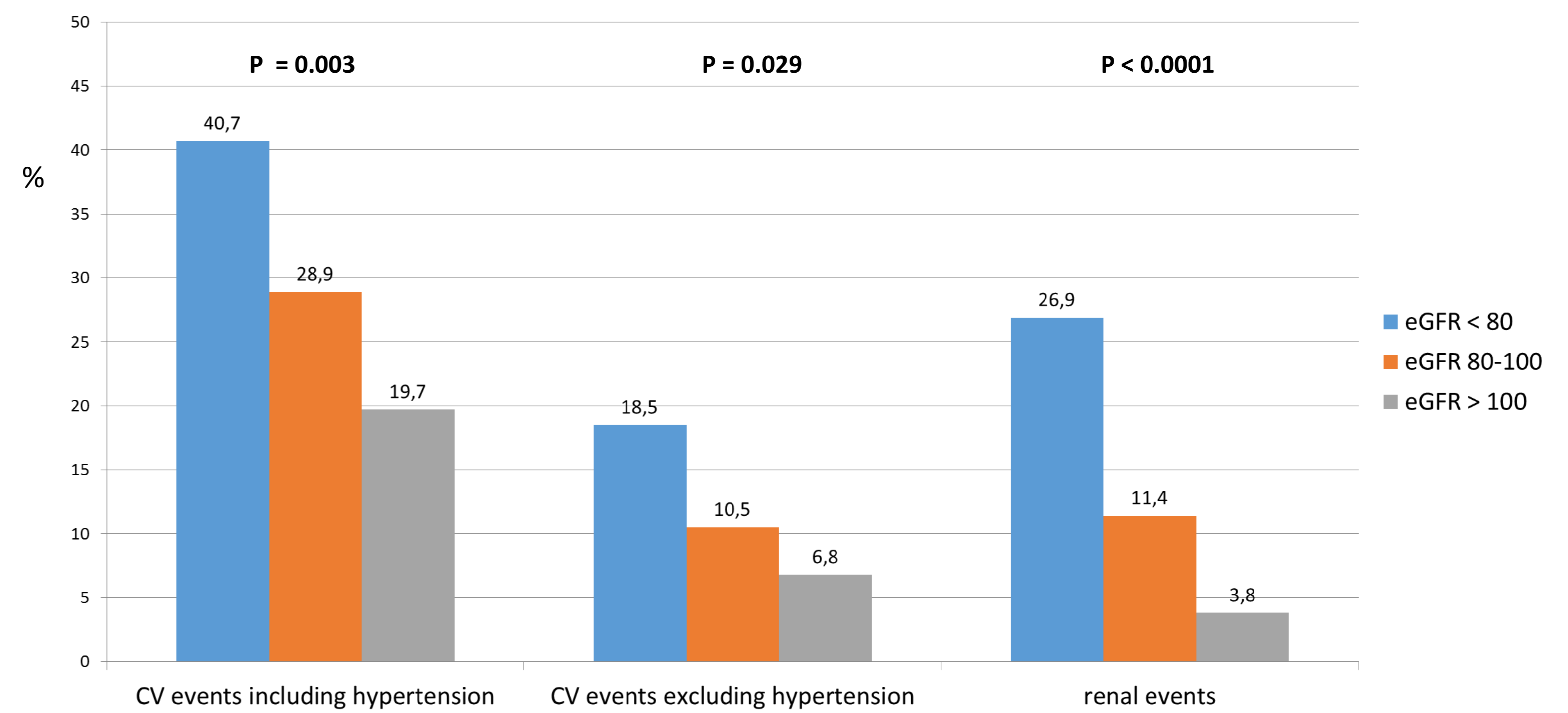
Followed between 2006 and 2016 and included in the analysis
1359 subjects

Baseline characteristics

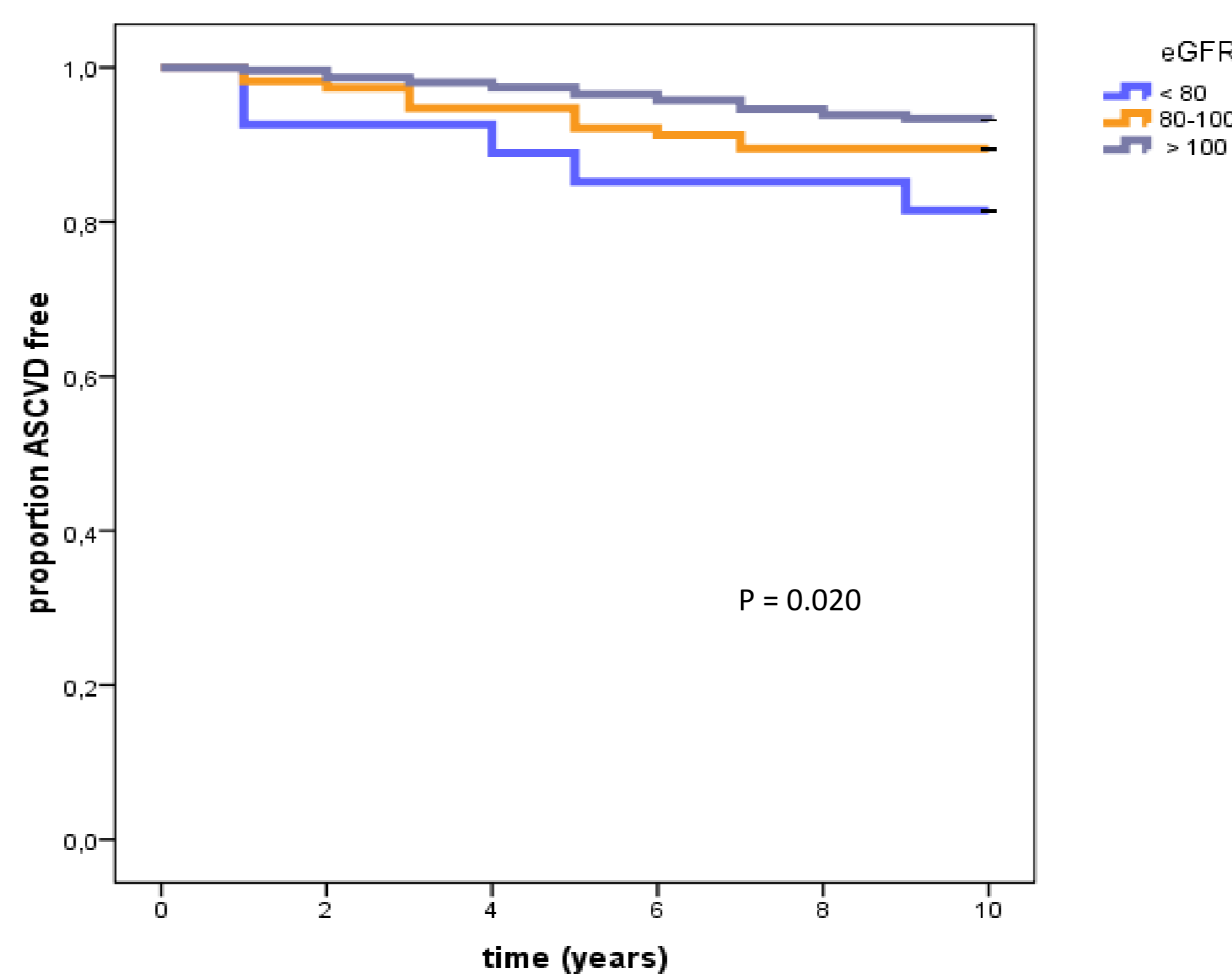
Subjects were mostly males (72%) with a median age of 41.6 years (IQR 10.8) and a median time from first HIV diagnosis of 9.6 years (IQR 6.2). The proportion of patients with a HIV-RNA value < 50 copies/ml was 57.8% in 2006 and the proportion of severely immune-depressed patients (CD4 < 200/cells/mcL) was 9.3%. Median serum creatinine levels were 0.8 mg/dl (IQR 0.2) and eGFR median value was 109.6 (IQR 15.4). The proportion of patients with altered eGFR (< 60 ml/min/1.73 m²) was a modest 1.2%. For eGFR the 5th percentile cut-off value was 80 ml/min/1.73 m² and the 25th percentile was 100 ml/min/1.73 m².

Results

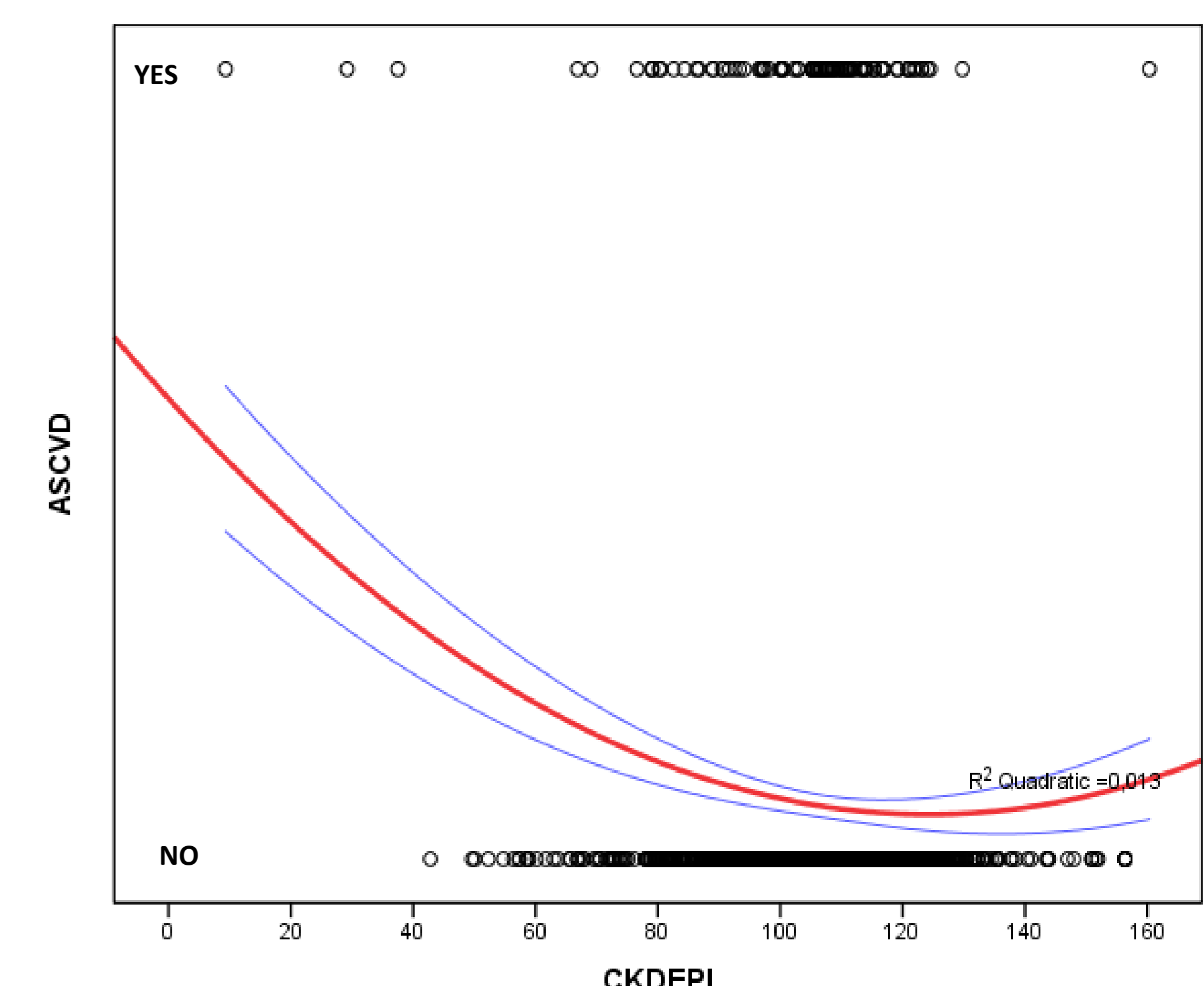
Proportion of patients with at least an event over 10 years (1359 patients without CV known problems at baseline)



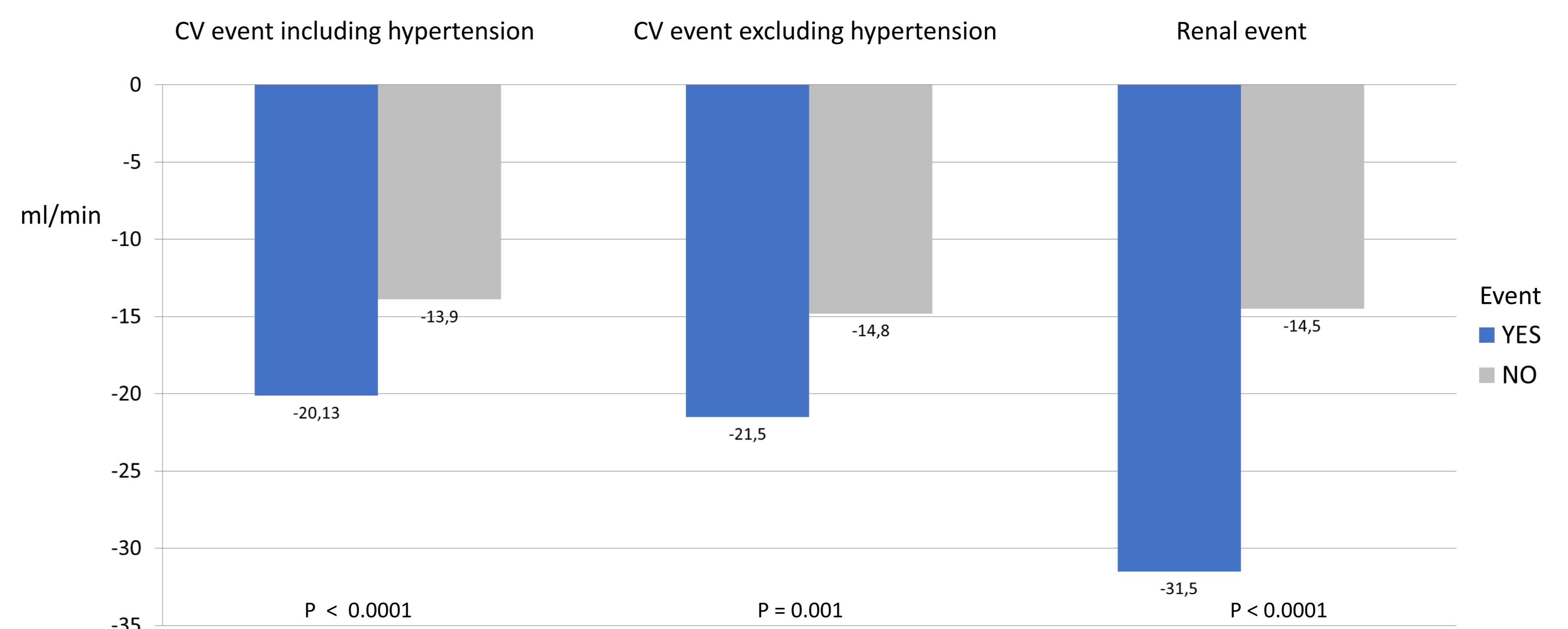
Proportion of patients ASCVD free over 10 years according to baseline eGFR



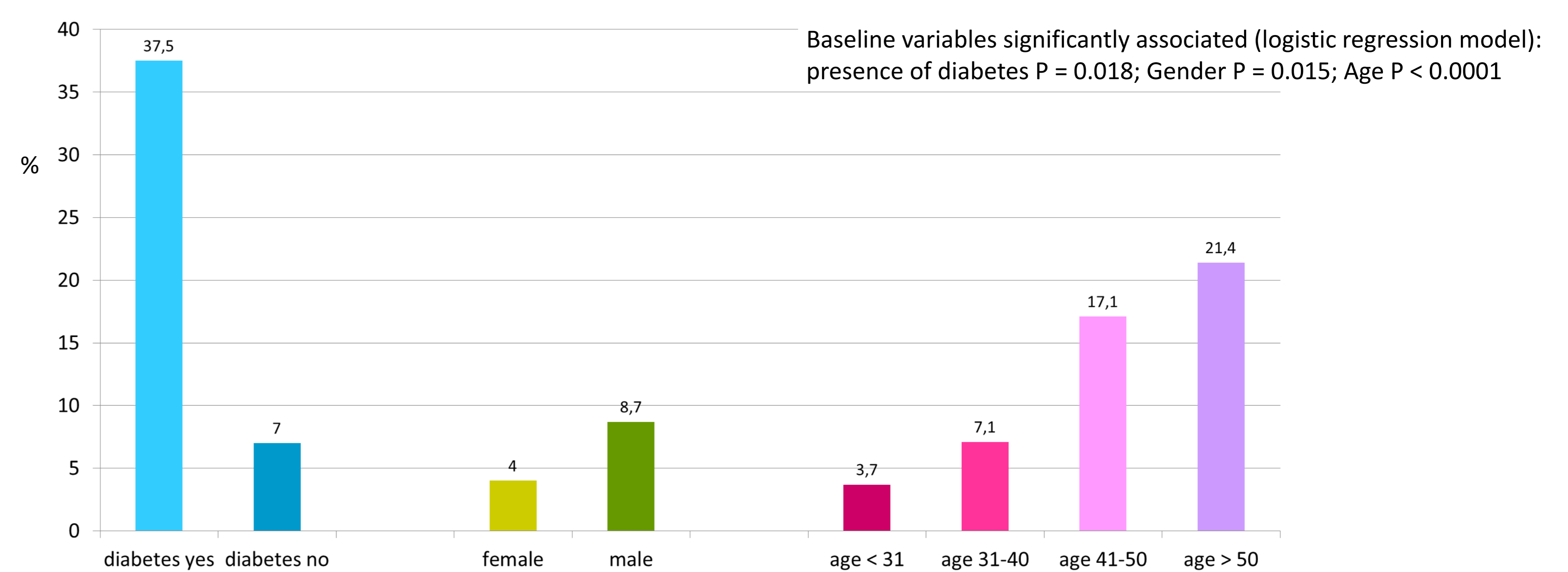
Baseline eGFR values in patients with and without ASCVD over 10 years



eGFR variation over 10 years



Proportion of patients with at least an event over 10 years (CV events excluding hypertension)



Conclusions

A relevant, graded association was observed between a reduced estimated GFR and the risk of death, cardiovascular events, or renal insufficiency. These findings highlight the clinical importance of closely monitoring chronic renal insufficiency in the HIV infected population.