INTRODUCTION AND OBJECTIVES:

- Active surveillance (AS) in low-risk prostate cancer (PCa) patients could be improved with new biomarkers such as the 4KscoreTest (4KsT).
- We analyze its ability to predict tumor reclassification at the confirmatory biopsy (cBx) at 6 months after initial biopsy (iBx).

METHODS:

- Observational, prospective, blinded, and non-randomized study, within the Spanish National Registry on AS (AEU/PIEM/2014/0001;NCT02865330) with 137 patients included after iBx.
- Central pathological review confirmed inclusion criteria at iBx and reclassification ones at cBx.
- Plasma was collected 6 months after iBx just before cBx to determine 4KsT. Family history, prostate volume (PV), body mass index, and positive core ratio were also analyzed.
- Reclassification was defined as Gleason+7 and/or higher PCa volume.
- We used logistic regression analysis, calibration plots, area under the receiver operating characteristic curve (AUC), and probability density functions (PDF) to assess discriminatory capacity, and clinical utility curves for decision making.

RESULTS, univariate and multivariate analysis of patients’ characteristics. Combined nomogram generated (4KsT + PV).

- One hundred thirty-seven patients were finally evaluated. Fifty-one patients (37.2%) were reclassified at cBx.

CONCLUSIONS:

- A nomogram combining 4KsT and PV can aid individual decision-making to indicate a cBx in patients in AS management.
- These results should be externally validated.