

Table 2: Performance of prediction models in the development and validation cohorts.

Optimism-corrected performance measures were computed by internal validation with 500 bootstrap resamples. Results for the outcome ‘alive without incidence and progression of CKD’ (CKD) and ROC curves can be found in Supplemental Table 3 and Supplemental Figure 3, respectively.

Performance Measures	Laboratory Model ¹			Clinical Model ²		
	Overall performance	State-specific performance		Overall performance	State-specific performance	
		Alive with CKD	Death		Alive with CKD	Death
Explained variation						
Nagelkerke-R ²						
optimism-corrected	10.73%	8.08%	9.12%	11.68%	7.45%	10.06%
externally-validated	10.59%	7.27%	10.24%	12.06%	8.44%	12.07%
Discrimination						
C-statistic						
optimism-corrected	0.68	0.67	0.68	0.69	0.66	0.69
externally-validated	0.68	0.66	0.70	0.69	0.68	0.71
Calibration ³						
Calibration-in-the-large						
optimism-corrected	0/0	0	0	0/0	0	0
externally-validated	0.01/-0.08	0.02	-0.08	0.14/0.05	0.13	0.02
Calibration slope						
optimism-corrected	0.98/0.98	0.99	0.98	0.88/0.90	0.89	0.89
externally-validated	1.01/0.92	0.95	1.08	1.04/1.16	1.04	1.15

¹ Predictors: d-UACR_{tp}, defined as the difference between the participant-specific cutpoint of developing a new micro- or macro-albuminuria and UACR at baseline on the log-scale, eGFR CKD-EPI, albuminuria stage (normo- or microalbuminuria), age and gender.

² Predictors: d-UACR_{tp}, eGFR CKD-EPI, albuminuria stage, peripheral artery disease, glucose, fasting LDL, number of antihypertensive drugs, stroke/TIA, waist circumference, MACE, duration of diabetes, laser therapy for diabetic retinopathy, age race, and gender

³ A multinomial logistic model with three outcomes has two estimates for calibration-in-the-large and the calibration slope.

In an ideally calibrated prediction model calibration-in-the-large would be 0 and the calibration slope would be 1, indicating that predictions are not systematically biased. The optimism-corrected calibration slopes are also used as shrinkage factors.

Abbreviations: CKD, (incidence or progression of) chronic kidney disease.