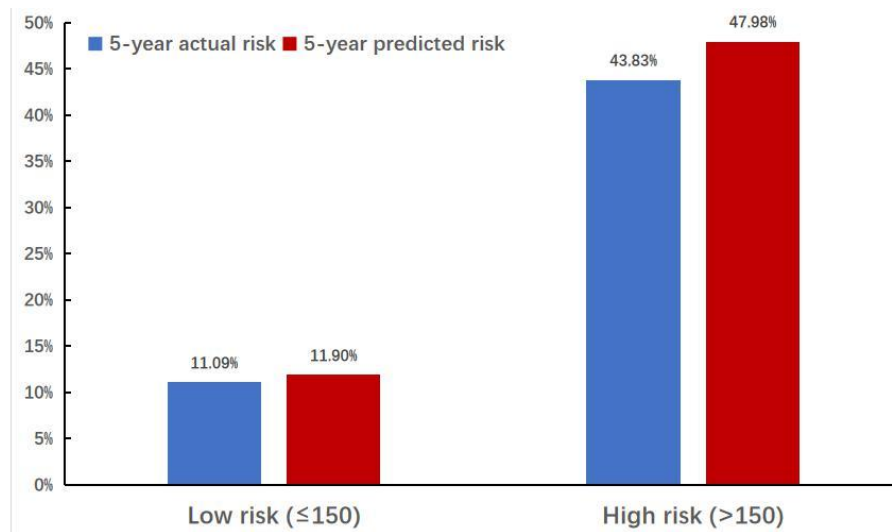


Supplemental material

Table S1. Baseline characteristics of the entire cohort.

Variables	Overall (n = 8455)	Missing data (%)	Development cohort (n = 5645)	Validation cohort (n = 2810)	P value
Age, years	67.69±6.74	0 (0)	67.66±6.70	67.77±6.82	0.481
Female, n (%)	5211 (61.6)	0 (0)	3468 (61.4)	1743 (62.0)	0.614
Height, cm	155.96±8.05	0 (0.05)	155.89±8.02	156.10±8.11	0.255
Weight, kg	59.56±10.38	4 (0.05)	59.51±10.33	59.66±10.50	0.536
BMI, kg/m ²	24.44±3.60	4 (0.05)	24.45±3.59	24.44±3.63	0.913
Waist, cm	85.02±9.39	35 (0.4)	84.94±9.41	85.16±9.36	0.319
SBP, mmHg	146.34±20.39	15 (0.1)	146.20±20.40	146.63±20.38	0.353
DBP, mmHg	81.83±11.35	21 (0.2)	81.72±11.32	82.06±11.42	0.19
Diabetes mellitus, n (%)	1681 (20.4)	0 (0)	1090 (19.9)	591 (21.5)	0.085
Hypertension, n (%)	6355 (75.2)	0 (0)	4232 (75.0)	2123 (75.6)	0.577
Ever smoking, n (%)	1504 (17.8)	2 (0.2)	1005 (17.8)	499 (17.8)	0.986
Ever drinking, n (%)	1026 (12.1)	0 (0)	678 (12.0)	348 (12.4)	0.645
Exercise		6 (0.07)			
Never, n (%)	3905 (46.2)		2595 (46.0)	1310 (46.7)	0.581
Once a week, n (%)	1326 (15.7)		879 (15.6)	447 (15.9)	
Few times a week, n (%)	444 (5.3)		289 (5.1)	155 (5.5)	
Daily, n (%)	2774 (32.8)		1878 (33.3)	896 (31.9)	
Laboratory examination					
Fasting glucose, mmol/L	5.29±1.78	8 (0.08)	4.87 [4.41, 5.51]	4.87 [4.40, 5.58]	0.471
RBC, 10 ¹² /L	4.71±0.59	142 (1.68)	4.64 [4.32, 5.02]	4.63 [4.31, 5.00]	0.478
Hemoglobin, g/L	136.03±15.58	90(1.06)	136.00 [127.00, 146.00]	136.00 [127.00, 145.00]	0.682
WBC, 10 ⁹ /L	6.77±1.85	39 (0.46)	6.60 [5.60, 7.70]	6.60 [5.60, 7.70]	0.739
PLT, 10 ⁹ /L	215.56±57.93	24 (0.29)	211.00 [177.00, 249.00]	211.00 [177.00, 250.00]	0.556
ALT, U/L	26.87±20.22	18(0.21)	22.70 [17.30, 30.50]	21.90 [16.83, 30.10]	0.064
BUN, mmol/L	5.96±9.90	36 (0.43)	5.40 [4.60, 6.40]	5.40 [4.53, 6.50]	0.942
Cholesterol, mmol/L	5.40±1.18	15 (0.18)	5.33 [4.61, 6.08]	5.33 [4.61, 6.09]	0.93
Triglyceride, mmol/L	1.72±1.12	15 (0.18)	1.42 [0.99, 2.08]	1.41 [0.98, 2.11]	0.681
Uric acid, umol/L	377.57±110.76	1749(20.69)	367.20 [298.30, 446.95]	367.00 [301.20, 443.10]	0.971
Scr, umol/L	70.79±24.60	0 (0)	66.10 [54.91, 80.60]	66.22 [55.20, 81.60]	0.387
eGFR, mL/min/1.73m ²	93.92±26.64	0 (0)	92.35 [76.87, 109.47]	91.60 [76.06, 109.55]	0.204
Medications					
ACEI/ARB, n (%)	668 (8.4)	464 (5.49)	452 (8.5)	216 (8.1)	0.581
CCB, n (%)	813 (10.2)	465(5.5)	552 (10.4)	261 (9.8)	0.438
β-blocker, n (%)	269 (3.4)	465(5.5)	181 (3.4)	88 (3.3)	0.865
Diuretics, n (%)	66 (0.8)	465(5.5)	47 (0.9)	19 (0.7)	0.507
Metformin, n (%)	302 (3.7)	295 (3.5)	202 (3.7)	100 (3.7)	1

Abbreviations: BMI, body mass index; SBP, systolic blood pressure; DBP, diastolic blood pressure; RBC, red blood cell; WBC, white blood cell; PLT, platelet; ALT, alanine aminotransferase; BUN, urea nitrogen ; Scr, serum creatinine; eGFR, estimated glomerular filtration rate; ACEI, angiotensin-converting enzyme inhibitor; ARB, angiotensin receptor antagonists; CCB, calcium channel blocker.



Supplement figure 1: Risk stratification of 5-year rapid kidney function decline (RKFD) based on the nomogram scores. Low-risk group (scores ≤ 150), high-risk group (scores > 150). The predicted rates of RKFD in the validation cohort were closed to those in the development cohort inside both of the low and high risk groups.