

## Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

Supplement to: M Tancredi, A Rosengren, A-M Svensson, A Pivodic, S Gudbjörnsdottir, H Wedel, M Lind. Glycaemic control and excess risk of major coronary events in patients with type 2 diabetes: a population-based study.

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## ***2 Inpatient Registry and ICD Codes***

The Inpatient Registry and cause of death registry includes mandatory information on all principal and secondary hospital discharge diagnoses, deaths, and causes of deaths. The Inpatient Registry was first used in the 1960s, with nationwide coverage beginning in 1987. Diagnoses in the Inpatient Registry are classified according to the International Classification of Diseases (ICD) system, and sensitivity and specificity for diagnoses of acute myocardial infarction, coronary heart disease, hospitalization for heart failure, atrial fibrillation, and stroke have previously been validated. These, as well as cancer diagnoses, were collected before baseline registration and during follow-up. Dates and causes of death were collected from the cause of death registry. The following ICD-9 and ICD-10 codes were collected: coronary heart disease: ICD-9 410-414, and ICD-10 I20-I25 (including acute myocardial infarction: ICD-9 410, and ICD-10 I21); stroke: ICD-9 431, 432X, 433, 434, 436, 437X, and ICD10 I61, I62.9, I63, I64, I67.9; hospitalization for heart failure ICD-9 428, and ICD-10 I50; atrial fibrillation ICD-9 427D, and ICD-10 I48; and cancer ICD-9 140-208, and ICD-10 C00-C97. Cardiovascular mortality was defined as ICD-10 I00-I99, death from cancer as ICD-10 C00-C97, diabetes-related death as ICD-10 E10-E14, external death (e.g. due to accident, exposure to fire, smoke, flames, or forces of nature, intentional self-harm, etc.) as ICD-10 V00-Y99, and all other causes of death other than those listed. For renal dialysis and transplantation, the following codes were used: ICD-9 V42A, V45B, V56A, V56W, and ICD-10 Z94.0, Z49, Z99.2.

Table S1. Baseline Characteristics of Individuals with Type 2 Diabetes and Matched Controls from the General Population

	HbA1c categories at baseline (NGSP % / IFCC mmol/mol)							
	Controls n=2173620	All Type II diabetes n=431579	<=6.9% (<=52 mmol/mol) n=215103	7.0-7.8% (53-62 mmol/mol) n=82189	7.9-8.7% (63-72 mmol/mol) n=44283	8.8-9.6% (73-82 mmol/mol) n=21454	>=9.7% (>=83 mmol/mol) n=20849	Missing value n=47701
<b>Sex</b>								
<b>Men</b>	1170663 (53.9%)	234556 (54.3%)	114128 (53.1%)	45044 (54.8%)	24681 (55.7%)	12372 (57.7%)	12558 (60.2%)	25773 (54.0%)
<b>Women</b>	1002957 (46.1%)	197023 (45.7%)	100975 (46.9%)	37145 (45.2%)	19602 (44.3%)	9082 (42.3%)	8291 (39.8%)	21928 (46.0%)
<b>Age (years)</b>	64.7 (12.6) n=2173620	65.0 (12.7) n=431579	65.7 (12.4) n=215103	66.2 (12.2) n=82189	64.9 (12.6) n=44283	63.2 (12.8) n=21454	60.7 (12.9) n=20849	63.0 (14.4) n=47701
<b>Age category</b>								
<55 years	432693 (19.9%)	84782 (19.6%)	38103 (17.7%)	13822 (16.8%)	8906 (20.1%)	5213 (24.3%)	6438 (30.9%)	12300 (25.8%)
55-64 years	610925 (28.1%)	116802 (27.1%)	57293 (26.6%)	21964 (26.7%)	12221 (27.6%)	6368 (29.7%)	6571 (31.5%)	12385 (26.0%)
65-74 years	630801 (29.0%)	123969 (28.7%)	64673 (30.1%)	24259 (29.5%)	12315 (27.8%)	5498 (25.6%)	4748 (22.8%)	12476 (26.2%)
75+ years	499201 (23.0%)	106026 (24.6%)	55034 (25.6%)	22144 (26.9%)	10841 (24.5%)	4375 (20.4%)	3092 (14.8%)	10540 (22.1%)
<b>Born in Sweden</b>	1902246 (87.5%)	353441 (82.0%)	180033 (83.8%)	67691 (82.5%)	35958 (81.3%)	17240 (80.5%)	16107 (77.4%)	36412 (76.4%)
<b>Education</b>								
<b>Low</b>	770057 (36.1%)	182183 (43.3%)	89552 (42.5%)	36872 (46.1%)	20180 (47.0%)	9520 (45.9%)	8405 (41.6%)	17654 (38.3%)
<b>Mid</b>	845048 (39.6%)	169656 (40.4%)	85120 (40.4%)	31397 (39.3%)	16730 (39.0%)	8279 (39.9%)	8642 (42.8%)	19488 (42.3%)
<b>High</b>	520240 (24.4%)	68508 (16.3%)	35822 (17.0%)	11641 (14.6%)	6032 (14.0%)	2932 (14.1%)	3135 (15.5%)	8946 (19.4%)
<b>Variables in the NDR only</b>								
<b>HbA1c (mmol/mol, IFCC)</b>		54.4 (15.0) n=383878	44.7 (5.0) n=215103	56.5 (2.6) n=82189	66.9 (2.8) n=44283	76.9 (2.8) n=21454	97.0 (12.6) n=20849	
<b>HbA1c (% , NGSP)</b>		7.13 (1.37) n=383878	6.24 (0.46) n=215103	7.33 (0.24) n=82189	8.27 (0.26) n=44283	9.19 (0.26) n=21454	11.0 (1.2) n=20849	
<b>Diabetes duration</b>		5.50 (7.06) n=382414	4.14 (5.72) n=191416	6.63 (7.18) n=75667	8.08 (7.90) n=41225	8.08 (8.06) n=19986	5.64 (7.36) n=19299	5.91 (9.41) n=34821
<b>Body mass index (kg/m<sup>2</sup>)</b>		29.7 (5.4) n=324054	29.5 (5.3) n=175683	29.9 (5.4) n=67917	30.0 (5.5) n=36371	30.4 (5.8) n=17399	30.4 (5.9) n=16237	30.1 (5.8) n=10447

	Controls n=2173620	All Type II diabetes n=431579	HbA1c categories at baseline (NGSP % / IFCC mmol/mol)					Missing value n=47701
			<=6.9% (<=52 mmol/mol) n=215103	7.0-7.8% (53-62 mmol/mol) n=82189	7.9-8.7% (63-72 mmol/mol) n=44283	8.8-9.6% (73-82 mmol/mol) n=21454	>=9.7% (>=83 mmol/mol) n=20849	
Cholesterol (mmol/L)		5.10 (1.10) n=260743	5.05 (1.06) n=147490	5.09 (1.09) n=53128	5.13 (1.12) n=26336	5.22 (1.17) n=12218	5.55 (1.33) n=12199	5.22 (1.20) n=9372
HDL cholesterol (mmol/L)		1.28 (0.39) n=229758	1.31 (0.40) n=130706	1.26 (0.38) n=46691	1.24 (0.39) n=23132	1.21 (0.38) n=10632	1.16 (0.36) n=10629	1.25 (0.39) n=7968
LDL cholesterol (mmol/L)		2.98 (0.96) n=222187	2.96 (0.94) n=127106	2.96 (0.96) n=45065	2.96 (0.97) n=22032	3.02 (0.99) n=10004	3.26 (1.08) n=9755	3.11 (1.00) n=8225
Systolic blood pressure (mmHg)		140.4 (18.2) n=369273	139.3 (17.8) n=199750	141.5 (18.3) n=76386	142.3 (18.7) n=40770	142.6 (19.1) n=19464	141.0 (19.2) n=17970	139.7 (19.2) n=14933
Diastolic blood pressure (mmHg)		78.9 (9.8) n=369273	78.4 (9.6) n=199750	78.9 (9.8) n=76386	79.4 (9.9) n=40770	80.2 (10.0) n=19464	81.4 (10.3) n=17970	79.5 (10.6) n=14933
Blood pressure category								
<110/<65 mmHg		2982 (0.8%)	1725 (0.9%)	528 (0.7%)	293 (0.7%)	112 (0.6%)	158 (0.9%)	166 (1.1%)
110-119/65-69 mmHg		8116 (2.2%)	4801 (2.4%)	1471 (1.9%)	771 (1.9%)	372 (1.9%)	327 (1.8%)	374 (2.5%)
120-129/70-79 mmHg		47674 (12.9%)	27740 (13.9%)	9154 (12.0%)	4534 (11.1%)	2111 (10.8%)	2114 (11.8%)	2021 (13.5%)
130-139/80-89 mmHg		101544 (27.5%)	57684 (28.9%)	20060 (26.3%)	10105 (24.8%)	4726 (24.3%)	4769 (26.5%)	4200 (28.1%)
140-159/90-99 mmHg		139340 (37.7%)	74225 (37.2%)	29674 (38.8%)	15991 (39.2%)	7574 (38.9%)	6577 (36.6%)	5299 (35.5%)
>=160/>=100 mmHg		69617 (18.9%)	33575 (16.8%)	15499 (20.3%)	9076 (22.3%)	4569 (23.5%)	4025 (22.4%)	2873 (19.2%)
eGFR (CKD-EPI)		80.9 (20.2) n=301009	80.1 (19.4) n=165585	80.1 (20.2) n=60400	81.5 (21.2) n=29987	84.3 (21.8) n=14059	89.5 (21.4) n=14416	81.4 (22.1) n=16562
eGFR category (CKD-EPI)								
CKD stage 1 (eGFR >=90)		110550 (36.7%)	56327 (34.0%)	21398 (35.4%)	11735 (39.1%)	6495 (46.2%)	8211 (57.0%)	6384 (38.5%)
CKD stage 2 (eGFR 60-89)		142226 (47.2%)	82979 (50.1%)	28634 (47.4%)	13180 (43.9%)	5463 (38.8%)	4681 (32.5%)	7289 (43.9%)
CKD stage 3 (eGFR 30-59)		44801 (14.9%)	24536 (14.8%)	9670 (16.0%)	4685 (15.6%)	1928 (13.7%)	1398 (9.7%)	2584 (15.6%)
CKD stage 4 (eGFR 15-29)		2952 (1.0%)	1463 (0.9%)	628 (1.0%)	338 (1.1%)	158 (1.1%)	113 (0.8%)	252 (1.5%)
CKD stage 5 (eGFR <15 or dialysis)		562 (0.2%)	308 (0.2%)	84 (0.1%)	56 (0.2%)	19 (0.1%)	14 (0.1%)	81 (0.5%)
Albuminuria								
Normoalbuminuria		189033 (79.3%)	105318 (82.4%)	38649 (77.6%)	20179 (74.2%)	9130 (70.9%)	7795 (71.1%)	7962 (82.4%)
Microalbuminuria		29449 (12.4%)	14052 (11.0%)	6736 (13.5%)	4085 (15.0%)	2157 (16.7%)	1725 (15.7%)	694 (7.2%)
Macroalbuminuria		19240 (8.1%)	8075 (6.3%)	4363 (8.8%)	2858 (10.5%)	1579 (12.3%)	1436 (13.1%)	929 (9.6%)
CKD stage 5		562 (0.2%)	308 (0.2%)	84 (0.2%)	56 (0.2%)	19 (0.1%)	14 (0.1%)	81 (0.8%)

	HbA1c categories at baseline (NGSP % / IFCC mmol/mol)							Missing value n=47701
	Controls n=2173620	All Type II diabetes n=431579	<=6.9% (<=52 mmol/mol) n=215103	7.0-7.8% (53-62 mmol/mol) n=82189	7.9-8.7% (63-72 mmol/mol) n=44283	8.8-9.6% (73-82 mmol/mol) n=21454	>=9.7% (>=83 mmol/mol) n=20849	
<b>Smoking</b>								
<b>No</b>		291594 (84.4%)	157535 (85.8%)	60553 (85.4%)	32025 (84.2%)	14981 (82.1%)	13451 (79.9%)	13049 (72.9%)
<b>Yes</b>		53911 (15.6%)	26069 (14.2%)	10339 (14.6%)	5988 (15.8%)	3276 (17.9%)	3393 (20.1%)	4846 (27.1%)
<b>Registrations in the IPR prior to baseline</b>								
<b>AF (I48)</b>	104426 (4.8%)	33474 (7.8%)	16954 (7.9%)	6604 (8.0%)	3389 (7.7%)	1527 (7.1%)	1299 (6.2%)	3701 (7.8%)
<b>CHD (I20-I25)</b>	77022 (3.5%)	31853 (7.4%)	15673 (7.3%)	6626 (8.1%)	3556 (8.0%)	1597 (7.4%)	1176 (5.6%)	3225 (6.8%)
<b>HF (I50)</b>	48208 (2.2%)	21368 (5.0%)	9554 (4.4%)	4422 (5.4%)	2596 (5.9%)	1258 (5.9%)	1119 (5.4%)	2419 (5.1%)
<b>Valve disease (I05-I09,I34-I36)</b>	31704 (1.5%)	8349 (1.9%)	4446 (2.1%)	1576 (1.9%)	765 (1.7%)	346 (1.6%)	299 (1.4%)	917 (1.9%)
<b>Stroke (I61-I64)</b>	74137 (3.4%)	25269 (5.9%)	12726 (5.9%)	4940 (6.0%)	2709 (6.1%)	1175 (5.5%)	905 (4.3%)	2814 (5.9%)
<b>Cancer (C00-C97)</b>	182757 (8.4%)	38748 (9.0%)	20722 (9.6%)	7272 (8.8%)	3331 (7.5%)	1468 (6.8%)	1302 (6.2%)	4653 (9.8%)
For categorical variables n (%) is presented. For continuous variables Mean (SD) is presented. 2018-01-28 ManusAn.sas								

**Table S2 Adjusted hazard ratios for AMI or CHD death and 95% confidence intervals for time-updated mean HbA1c categories, albuminuria categories and eGFR categories versus controls Models 1-3**

AMI or CHD death	Hazard ratio (95% CI) p-value		
	Model 1 - All	Model 2 - All	Model 3 - All
<b>Time updated mean HbA1c categories</b>	n events=150165 N subjects=2595124 data used = 99.6%	n events=147076 N subjects=2549416 data used = 97.9%	n events=142689 N subjects=2502026 data used = 96.0%
Controls (reference)	1.00	1.00	1.00
<=6.9% (<=52 mmol/mol)	1.31 (1.29 - 1.33) <.0001	1.29 (1.27 - 1.32) <.0001	1.19 (1.17 - 1.21) <.0001
7.0-7.8% (53-62 mmol/mol)	1.78 (1.75 - 1.82) <.0001	1.67 (1.64 - 1.71) <.0001	1.51 (1.48 - 1.55) <.0001
7.9-8.7% (63-72 mmol/mol)	2.36 (2.30 - 2.42) <.0001	2.15 (2.09 - 2.21) <.0001	1.91 (1.85 - 1.96) <.0001
8.8-9.6% (73-82 mmol/mol)	2.83 (2.72 - 2.95) <.0001	2.56 (2.45 - 2.67) <.0001	2.23 (2.14 - 2.33) <.0001
>=9.7% (>=83 mmol/mol)	3.40 (3.23 - 3.58) <.0001	3.17 (3.00 - 3.35) <.0001	2.77 (2.62 - 2.93) <.0001
<b>Time updated albuminuria categories</b>	n events=144240 N subjects=2524515 data used = 96.9%	n events=142118 N subjects=2492852 data used = 95.7%	n events=137903 N subjects=2447451 data used = 93.9%
Controls (reference)	1.00	1.00	1.00
Normoalbuminuria	1.48 (1.45 - 1.50) <.0001	1.40 (1.38 - 1.42) <.0001	1.29 (1.27 - 1.31) <.0001
Microalbuminuria	1.98 (1.93 - 2.03) <.0001	1.82 (1.77 - 1.88) <.0001	1.63 (1.58 - 1.68) <.0001
Macroalbuminuria	2.68 (2.60 - 2.76) <.0001	2.44 (2.37 - 2.52) <.0001	2.08 (2.01 - 2.15) <.0001
CKD stage 5	5.70 (5.11 - 6.36) <.0001	5.02 (4.48 - 5.63) <.0001	4.20 (3.74 - 4.72) <.0001

AMI or CHD death	Hazard ratio (95% CI) p-value		
	Model 1 - All	Model 2 - All	Model 3 - All
<b>Time updated eGFR categories</b>	n events=144291 N subjects=2567321 data used = 98.5%	n events=141497 N subjects=2523524 data used = 96.9%	n events=137434 N subjects=2477771 data used = 95.1%
<b>Controls (reference)</b>	1.00	1.00	1.00
<b>CKD stage 1 (eGFR &gt;=90)</b>	1.73 (1.67 - 1.78) <.0001	1.68 (1.63 - 1.74) <.0001	1.55 (1.51 - 1.61) <.0001
<b>CKD stage 2 (eGFR 60-89)</b>	1.32 (1.29 - 1.34) <.0001	1.25 (1.23 - 1.28) <.0001	1.17 (1.15 - 1.19) <.0001
<b>CKD stage 3 (eGFR 30-59)</b>	1.81 (1.77 - 1.85) <.0001	1.68 (1.64 - 1.72) <.0001	1.46 (1.43 - 1.50) <.0001
<b>CKD stage 4 (eGFR 15-29)</b>	3.38 (3.21 - 3.56) <.0001	2.99 (2.82 - 3.15) <.0001	2.37 (2.24 - 2.51) <.0001
<b>CKD stage 5 (eGFR &lt;15 or dialysis)</b>	5.79 (5.18 - 6.46) <.0001	5.07 (4.52 - 5.68) <.0001	4.25 (3.79 - 4.78) <.0001
Model 1: adjusted for time-updated age and sex Model 2: Model 1 additionally adjusted for time-updated diabetes duration (centered at median 8 years) Model 3: Model 2 additionally adjusted for born in Sweden, maximum education level and baseline comorbidities (AF, CHD, HF, VD, stroke, cancer).			



**Table S3 Males-Adjusted hazard ratios for AMI or CHD death and 95% confidence intervals for time-updated mean HbA1c categories, albuminuria categories and eGFR categories versus controls Models 1-3**

AMI or CHD death	Hazard ratio (95% CI) p-value		
	Model 1a - Male	Model 2a - Male	Model 3a - Male
<b>Time updated mean HbA1c categories</b>	n events=91874 N subjects=1400103 data used = 99.6%	n events=90107 N subjects=1376447 data used = 98.0%	n events=142689 N subjects=2502026 data used = 96.0%
<b>Controls (reference)</b>	1.00	1.00	1.00
<b>&lt;=6.9% (&lt;=52 mmol/mol)</b>	1.27 (1.24 - 1.30) <.0001	1.26 (1.23 - 1.29) <.0001	1.15 (1.13 - 1.18) <.0001
<b>7.0-7.8% (53-62 mmol/mol)</b>	1.68 (1.63 - 1.72) <.0001	1.59 (1.55 - 1.64) <.0001	1.44 (1.40 - 1.48) <.0001
<b>7.9-8.7% (63-72 mmol/mol)</b>	2.17 (2.10 - 2.25) <.0001	2.01 (1.94 - 2.09) <.0001	1.79 (1.72 - 1.85) <.0001
<b>8.8-9.6% (73-82 mmol/mol)</b>	2.59 (2.45 - 2.73) <.0001	2.39 (2.26 - 2.53) <.0001	2.09 (1.97 - 2.21) <.0001
<b>&gt;=9.7% (&gt;=83 mmol/mol)</b>	3.10 (2.90 - 3.32) <.0001	2.91 (2.71 - 3.13) <.0001	2.54 (2.36 - 2.74) <.0001
<b>Time updated albuminuria categories</b>	n events=88650 N subjects=1363305 data used = 97.0%	n events=87389 N subjects=1346438 data used = 95.8%	n events=85501 N subjects=1325008 data used = 94.3%
<b>Controls (reference)</b>	1.00	1.00	1.00
<b>Normoalbuminuria</b>	1.39 (1.36 - 1.42) <.0001	1.33 (1.30 - 1.36) <.0001	1.23 (1.20 - 1.26) <.0001
<b>Microalbuminuria</b>	1.84 (1.78 - 1.90) <.0001	1.73 (1.67 - 1.79) <.0001	1.55 (1.50 - 1.60) <.0001
<b>Macroalbuminuria</b>	2.50 (2.41 - 2.59) <.0001	2.33 (2.24 - 2.42) <.0001	2.00 (1.92 - 2.08) <.0001
<b>CKD stage 5</b>	5.26 (4.58 - 6.04) <.0001	4.75 (4.12 - 5.48) <.0001	3.96 (3.42 - 4.58) <.0001
<b>Time updated eGFR categories</b>	n events=88509 N subjects=1385242 data used = 98.6%	n events=86900 N subjects=1362602 data used = 97.0%	n events=85066 N subjects=1341052 data used = 95.4%
<b>Controls (reference)</b>	1.00	1.00	1.00

AMI or CHD death	Hazard ratio (95% CI) p-value		
	Model 1a - Male	Model 2a - Male	Model 3a - Male
<b>CKD stage 1 (eGFR ≥90)</b>	1.59 (1.53 - 1.64) <.0001	1.55 (1.49 - 1.60) <.0001	1.44 (1.38 - 1.49) <.0001
<b>CKD stage 2 (eGFR 60-89)</b>	1.28 (1.25 - 1.30) <.0001	1.22 (1.19 - 1.25) <.0001	1.13 (1.10 - 1.16) <.0001
<b>CKD stage 3 (eGFR 30-59)</b>	1.80 (1.74 - 1.85) <.0001	1.69 (1.64 - 1.74) <.0001	1.45 (1.40 - 1.50) <.0001
<b>CKD stage 4 (eGFR 15-29)</b>	3.17 (2.94 - 3.42) <.0001	2.85 (2.63 - 3.09) <.0001	2.26 (2.08 - 2.45) <.0001
<b>CKD stage 5 (eGFR &lt;15 or dialysis)</b>	5.32 (4.63 - 6.12) <.0001	4.80 (4.16 - 5.54) <.0001	3.97 (3.43 - 4.60) <.0001
Model 1a: adjusted for time-updated age Model 2a: Model 1a additionally adjusted for time-updated diabetes duration (centered at median 8 years) Model 3a: Model 2a additionally adjusted for born in Sweden, maximum education level and baseline comorbidities (AF, CHD, HF, VD, stroke, cancer).			

**Table S4 Females-Adjusted hazard ratios for AMI or CHD death and 95% confidence intervals for time-updated mean HbA1c categories, albuminuria categories and eGFR categories versus controls Models 1-3**

AMI or CHD death	Hazard ratio (95% CI) p-value		
	Model 1b - Female	Model 2b - Female	Model 3b - Female
<b>Time updated mean HbA1c categories</b>	n events=58291 N subjects=1195021 data used = 99.6%	n events=56969 N subjects=1172969 data used = 97.7%	n events=54546 N subjects=1147778 data used = 95.6%
Controls (reference)	1.00	1.00	1.00
<=6.9% (<=52 mmol/mol)	1.38 (1.35 - 1.42) <.0001	1.36 (1.32 - 1.40) <.0001	1.26 (1.22 - 1.30) <.0001
7.0-7.8% (53-62 mmol/mol)	1.97 (1.91 - 2.03) <.0001	1.82 (1.76 - 1.88) <.0001	1.65 (1.59 - 1.71) <.0001
7.9-8.7% (63-72 mmol/mol)	2.67 (2.56 - 2.78) <.0001	2.37 (2.26 - 2.47) <.0001	2.10 (2.01 - 2.20) <.0001
8.8-9.6% (73-82 mmol/mol)	3.21 (3.02 - 3.41) <.0001	2.80 (2.62 - 2.99) <.0001	2.46 (2.30 - 2.64) <.0001
>=9.7% (>=83 mmol/mol)	3.78 (3.49 - 4.10) <.0001	3.49 (3.21 - 3.80) <.0001	3.10 (2.84 - 3.38) <.0001
<b>Time updated albuminuria categories</b>	n events=55590 N subjects=1161210 data used = 96.8%	n events=54729 N subjects=1146414 data used = 95.5%	n events=52402 N subjects=1122443 data used = 93.5%
Controls (reference)	1.00	1.00	1.00
Normoalbuminuria	1.62 (1.58 - 1.66) <.0001	1.50 (1.46 - 1.54) <.0001	1.38 (1.34 - 1.42) <.0001
Microalbuminuria	2.31 (2.21 - 2.41) <.0001	2.06 (1.97 - 2.16) <.0001	1.84 (1.75 - 1.93) <.0001
Macroalbuminuria	3.23 (3.06 - 3.40) <.0001	2.86 (2.71 - 3.03) <.0001	2.40 (2.27 - 2.54) <.0001
CKD stage 5	6.81 (5.70 - 8.13) <.0001	5.84 (4.85 - 7.03) <.0001	4.74 (3.93 - 5.72) <.0001

<b>Time updated eGFR categories</b>	n events=55782 N subjects=1182079 data used = 98.5%	n events=54597 N subjects=1160922 data used = 96.7%	n events=52368 N subjects=1136719 data used = 94.7%
<b>Controls (reference)</b>	1.00	1.00	1.00
<b>CKD stage 1 (eGFR <math>\geq</math>90)</b>	2.08 (1.96 - 2.21) <.0001	2.05 (1.92 - 2.18) <.0001	1.89 (1.77 - 2.01) <.0001
<b>CKD stage 2 (eGFR 60-89)</b>	1.43 (1.39 - 1.47) <.0001	1.35 (1.31 - 1.40) <.0001	1.28 (1.24 - 1.32) <.0001
<b>CKD stage 3 (eGFR 30-59)</b>	1.83 (1.77 - 1.88) <.0001	1.66 (1.61 - 1.72) <.0001	1.47 (1.42 - 1.52) <.0001
<b>CKD stage 4 (eGFR 15-29)</b>	3.50 (3.26 - 3.75) <.0001	3.02 (2.79 - 3.25) <.0001	2.37 (2.19 - 2.57) <.0001
<b>CKD stage 5 (eGFR &lt;15 or dialysis)</b>	6.98 (5.83 - 8.35) <.0001	5.95 (4.93 - 7.17) <.0001	4.91 (4.07 - 5.93) <.0001
Model 1b: adjusted for time-updated age Model 2b: Model 1b additionally adjusted for time-updated diabetes duration (centered at median 8 years) Model 3b: Model 2b additionally adjusted for born in Sweden, maximum education level and baseline comorbidities (AF, CHD, HF, VD, stroke, cancer).for women			

**Table S5 Adjusted hazard ratios for AMI or CHD death and 95% confidence intervals for time-updated mean HbA1c categories together with albuminuria and eGFR versus controls Models 1-3**

AMI or CHD death	Hazard ratio (95% CI)		
	Model 1 - All	Model 2 - All	Model 3 - All
<b>Time updated mean HbA1c categories and albuminuria</b>	n events=143750 N subjects=2521622	n events=141717 N subjects=2490637	n events=137531 N subjects=2445379
Controls (reference)	1.00	1.00	1.00
<=6.9% (<=52 mmol/mol) - Normoalbuminuria	1.17 (1.14 - 1.20) <.0001	1.16 (1.13 - 1.18) <.0001	1.08 (1.05 - 1.11) <.0001
7.0-7.8% (53-62 mmol/mol) - Normoalbuminuria	1.59 (1.54 - 1.63) <.0001	1.50 (1.46 - 1.54) <.0001	1.37 (1.33 - 1.42) <.0001
7.9-8.7% (63-72 mmol/mol) - Normoalbuminuria	2.11 (2.03 - 2.19) <.0001	1.95 (1.87 - 2.03) <.0001	1.75 (1.68 - 1.82) <.0001
8.8-9.6% 73-82 (mmol/mol) - Normoalbuminuria	2.51 (2.36 - 2.67) <.0001	2.32 (2.17 - 2.47) <.0001	2.06 (1.93 - 2.20) <.0001
>=9.7% (>=83 mmol/mol) - Normoalbuminuria	3.30 (3.05 - 3.57) <.0001	3.10 (2.86 - 3.37) <.0001	2.74 (2.52 - 2.99) <.0001
<=6.9% (<=52 mmol/mol) - Not Normoalbuminuria	1.76 (1.70 - 1.82) <.0001	1.72 (1.67 - 1.78) <.0001	1.53 (1.48 - 1.59) <.0001
7.0-7.8% (53-62 mmol/mol) - Not Normoalbuminuria	2.26 (2.19 - 2.34) <.0001	2.11 (2.03 - 2.19) <.0001	1.85 (1.79 - 1.93) <.0001
7.9-8.7% (63-72 mmol/mol) - Not Normoalbuminuria	2.96 (2.84 - 3.09) <.0001	2.70 (2.58 - 2.82) <.0001	2.33 (2.23 - 2.44) <.0001
8.8-9.6% 73-82 (mmol/mol) - Not Normoalbuminuria	3.64 (3.42 - 3.88) <.0001	3.28 (3.07 - 3.50) <.0001	2.75 (2.57 - 2.94) <.0001
>=9.7% (>=83 mmol/mol) - Not Normoalbuminuria	4.39 (4.02 - 4.78) <.0001	4.01 (3.66 - 4.38) <.0001	3.32 (3.03 - 3.63) <.0001
<b>Time updated mean HbA1c categories and eGFR</b>	n events=143980 N subjects=2563955	n events=141317 N subjects=2521539	n events=137259 N subjects=2475849
Controls (reference)	1.00	1.00	1.00
<=6.9% (<=52 mmol/mol) - eGFR>=60	1.10 (1.07 - 1.12) <.0001	1.08 (1.05 - 1.11) <.0001	1.02 (1.00 - 1.05) 0.11
7.0-7.8% (53-62 mmol/mol) - eGFR>=60	1.50 (1.46 - 1.55) <.0001	1.43 (1.39 - 1.48) <.0001	1.33 (1.29 - 1.37) <.0001
7.9-8.7% (63-72 mmol/mol) - eGFR>=60	2.11 (2.03 - 2.19) <.0001	1.95 (1.88 - 2.03) <.0001	1.78 (1.71 - 1.85) <.0001

AMI or CHD death	Hazard ratio (95% CI) p-value		
	Model 1 - All	Model 2 - All	Model 3 - All
8.8-9.6% 73-82 (mmol/mol) - eGFR $\geq$ 60	2.52 (2.38 - 2.68) <.0001	2.32 (2.18 - 2.47) <.0001	2.08 (1.96 - 2.22) <.0001
$\geq$ 9.7% ( $\geq$ 83 mmol/mol) - eGFR $\geq$ 60	3.29 (3.06 - 3.55) <.0001	3.18 (2.94 - 3.44) <.0001	2.86 (2.63 - 3.10) <.0001
$\leq$ 6.9% ( $\leq$ 52 mmol/mol) - eGFR $<$ 60	1.64 (1.59 - 1.68) <.0001	1.61 (1.56 - 1.65) <.0001	1.41 (1.37 - 1.45) <.0001
7.0-7.8% (53-62 mmol/mol) - eGFR $<$ 60	2.07 (2.00 - 2.14) <.0001	1.91 (1.85 - 1.98) <.0001	1.65 (1.59 - 1.71) <.0001
7.9-8.7% (63-72 mmol/mol) - eGFR $<$ 60	2.62 (2.50 - 2.75) <.0001	2.37 (2.25 - 2.49) <.0001	1.99 (1.89 - 2.09) <.0001
8.8-9.6% 73-82 (mmol/mol) - eGFR $<$ 60	3.19 (2.96 - 3.44) <.0001	2.84 (2.62 - 3.07) <.0001	2.29 (2.12 - 2.49) <.0001
$\geq$ 9.7% ( $\geq$ 83 mmol/mol) - eGFR $<$ 60	3.50 (3.13 - 3.91) <.0001	3.29 (2.92 - 3.69) <.0001	2.58 (2.29 - 2.91) <.0001
<b>Time updated mean HbA1c categories albuminuria and eGFR</b>	n events=142521 N subjects=2524082	n events=140292 N subjects=2490765	n events=136231 N subjects=2445866
<b>Controls (reference)</b>	1.00	1.00	1.00
$\leq$ 6.9% ( $\leq$ 52 mmol/mol) - Normoalbuminuria and eGFR $\geq$ 60	1.01 (0.98 - 1.04) 0.45	1.00 (0.97 - 1.03) 0.88	0.95 (0.92 - 0.98) 0.0009
7.0-7.8% (53-62 mmol/mol) - Normoalbuminuria and eGFR $\geq$ 60	1.36 (1.31 - 1.41) <.0001	1.29 (1.24 - 1.34) <.0001	1.21 (1.16 - 1.25) <.0001
7.9-8.7% (63-72 mmol/mol) - Normoalbuminuria and eGFR $\geq$ 60	1.90 (1.81 - 2.00) <.0001	1.77 (1.68 - 1.86) <.0001	1.63 (1.54 - 1.72) <.0001
8.8-9.6% 73-82 (mmol/mol) - Normoalbuminuria and eGFR $\geq$ 60	2.28 (2.09 - 2.48) <.0001	2.10 (1.92 - 2.30) <.0001	1.92 (1.75 - 2.10) <.0001
$\geq$ 9.7% ( $\geq$ 83 mmol/mol) - Normoalbuminuria and eGFR $\geq$ 60	3.17 (2.83 - 3.55) <.0001	3.02 (2.68 - 3.40) <.0001	2.73 (2.42 - 3.09) <.0001
$\leq$ 6.9% ( $\leq$ 52 mmol/mol) - Not Normoalbuminuria or eGFR $<$ 60	1.60 (1.57 - 1.64) <.0001	1.58 (1.54 - 1.62) <.0001	1.40 (1.37 - 1.44) <.0001
7.0-7.8% (53-62 mmol/mol) - Not Normoalbuminuria or eGFR $<$ 60	2.08 (2.02 - 2.14) <.0001	1.95 (1.89 - 2.00) <.0001	1.70 (1.65 - 1.75) <.0001
7.9-8.7% (63-72 mmol/mol) - Not Normoalbuminuria or eGFR $<$ 60	2.71 (2.62 - 2.81) <.0001	2.48 (2.38 - 2.57) <.0001	2.11 (2.03 - 2.20) <.0001

AMI or CHD death	Hazard ratio (95% CI) p-value		
	Model 1 - All	Model 2 - All	Model 3 - All
<b>8.8-9.6% 73-82 (mmol/mol) - Not Normoalbuminuria or eGFR&lt;60</b>	3.31 (3.13 - 3.50) <.0001	2.99 (2.82 - 3.17) <.0001	2.48 (2.33 - 2.63) <.0001
<b>&gt;=9.7% (&gt;=83 mmol/mol) - Not Normoalbuminuria or eGFR&lt;60</b>	3.82 (3.54 - 4.13) <.0001	3.57 (3.29 - 3.87) <.0001	2.94 (2.71 - 3.19) <.0001
Model 1: adjusted for time-updated age and sex Model 2: Model 1 additionally adjusted for time-updated diabetes duration Model 3: Model 2 additionally adjusted for born in Sweden, maximum education level and baseline comorbidities (AF, CHD, HF, VD, stroke, cancer).			

**Table S6 Males- Adjusted hazard ratios for AMI or CHD death and 95% confidence intervals for time-updated mean HbA1c categories together with albuminuria and eGFR versus controls Models 1-3**

AMI or CHD death	Hazard ratio (95% CI) p-value		
	Model 1a - Male	Model 2a - Male	Model 3a - Male
<b>Time updated mean HbA1c categories and albuminuria</b>	n events=88362 N subjects=1361844	n events=87155 N subjects=1345309	n events=85274 N subjects=1323920
Controls (reference)	1.00	1.00	1.00
<=6.9% (<=52 mmol/mol) - Normoalbuminuria	1.13 (1.09 - 1.16) <.0001	1.12 (1.08 - 1.15) <.0001	1.04 (1.01 - 1.07) 0.015
7.0-7.8% (53-62 mmol/mol) - Normoalbuminuria	1.48 (1.43 - 1.54) <.0001	1.42 (1.37 - 1.48) <.0001	1.30 (1.25 - 1.35) <.0001
7.9-8.7% (63-72 mmol/mol) - Normoalbuminuria	1.90 (1.80 - 2.00) <.0001	1.79 (1.70 - 1.89) <.0001	1.61 (1.53 - 1.70) <.0001
8.8-9.6% 73-82 (mmol/mol) - Normoalbuminuria	2.23 (2.05 - 2.42) <.0001	2.11 (1.94 - 2.31) <.0001	1.88 (1.72 - 2.05) <.0001
>=9.7% (>=83 mmol/mol) - Normoalbuminuria	3.02 (2.71 - 3.36) <.0001	2.92 (2.61 - 3.26) <.0001	2.59 (2.31 - 2.90) <.0001
<=6.9% (<=52 mmol/mol) - Not Normoalbuminuria	1.69 (1.63 - 1.76) <.0001	1.67 (1.61 - 1.74) <.0001	1.49 (1.43 - 1.55) <.0001
7.0-7.8% (53-62 mmol/mol) - Not Normoalbuminuria	2.08 (1.99 - 2.17) <.0001	1.98 (1.89 - 2.07) <.0001	1.74 (1.66 - 1.82) <.0001
7.9-8.7% (63-72 mmol/mol) - Not Normoalbuminuria	2.75 (2.61 - 2.90) <.0001	2.56 (2.42 - 2.70) <.0001	2.22 (2.09 - 2.34) <.0001
8.8-9.6% 73-82 (mmol/mol) - Not Normoalbuminuria	3.33 (3.07 - 3.60) <.0001	3.05 (2.81 - 3.31) <.0001	2.58 (2.38 - 2.81) <.0001
>=9.7% (>=83 mmol/mol) - Not Normoalbuminuria	3.80 (3.40 - 4.24) <.0001	3.49 (3.11 - 3.92) <.0001	2.98 (2.65 - 3.35) <.0001
<b>Time updated mean HbA1c categories and eGFR</b>	n events=88338 N subjects=1383617	n events=86803 N subjects=1361621	n events=84970 N subjects=1340092
Controls (reference)	1.00	1.00	1.00
<=6.9% (<=52 mmol/mol) - eGFR>=60	1.09 (1.06 - 1.12) <.0001	1.07 (1.04 - 1.10) <.0001	1.00 (0.97 - 1.04) 0.75
7.0-7.8% (53-62 mmol/mol) - eGFR>=60	1.43 (1.38 - 1.48) <.0001	1.38 (1.33 - 1.43) <.0001	1.28 (1.23 - 1.32) <.0001
7.9-8.7% (63-72 mmol/mol) - eGFR>=60	1.95 (1.86 - 2.04) <.0001	1.83 (1.75 - 1.93) <.0001	1.66 (1.58 - 1.75) <.0001



AMI or CHD death	Hazard ratio (95% CI) p-value		
	Model 1a - Male	Model 2a - Male	Model 3a - Male
<b>8.8-9.6% 73-82 (mmol/mol) - eGFR≥60</b>	2.25 (2.09 - 2.42) <.0001	2.12 (1.96 - 2.29) <.0001	1.90 (1.75 - 2.05) <.0001
<b>&gt;=9.7% (&gt;=83 mmol/mol) - eGFR≥60</b>	2.98 (2.72 - 3.27) <.0001	2.89 (2.62 - 3.18) <.0001	2.58 (2.34 - 2.85) <.0001
<b>&lt;=6.9% (&lt;=52 mmol/mol) - eGFR&lt;60</b>	1.65 (1.58 - 1.71) <.0001	1.63 (1.56 - 1.70) <.0001	1.40 (1.35 - 1.47) <.0001
<b>7.0-7.8% (53-62 mmol/mol) - eGFR&lt;60</b>	2.03 (1.93 - 2.12) <.0001	1.90 (1.81 - 2.00) <.0001	1.62 (1.54 - 1.71) <.0001
<b>7.9-8.7% (63-72 mmol/mol) - eGFR&lt;60</b>	2.45 (2.29 - 2.62) <.0001	2.28 (2.13 - 2.45) <.0001	1.90 (1.77 - 2.04) <.0001
<b>8.8-9.6% 73-82 (mmol/mol) - eGFR&lt;60</b>	3.20 (2.88 - 3.55) <.0001	2.94 (2.63 - 3.27) <.0001	2.33 (2.08 - 2.60) <.0001
<b>&gt;=9.7% (&gt;=83 mmol/mol) - eGFR&lt;60</b>	3.34 (2.84 - 3.93) <.0001	3.07 (2.59 - 3.65) <.0001	2.45 (2.06 - 2.91) <.0001
<b>Time updated mean HbA1c categories albuminuria and eGFR</b>	n events=87475 N subjects=1361586	n events=86216 N subjects=1344296	n events=84382 N subjects=1323072
<b>Controls (reference)</b>	1.00	1.00	1.00
<b>&lt;=6.9% (&lt;=52 mmol/mol) - Normoalbuminuria and eGFR≥60</b>	1.00 (0.97 - 1.04) 0.87	0.99 (0.95 - 1.03) 0.66	0.94 (0.90 - 0.98) 0.0014
<b>7.0-7.8% (53-62 mmol/mol) - Normoalbuminuria and eGFR≥60</b>	1.29 (1.24 - 1.36) <.0001	1.25 (1.19 - 1.31) <.0001	1.16 (1.11 - 1.22) <.0001
<b>7.9-8.7% (63-72 mmol/mol) - Normoalbuminuria and eGFR≥60</b>	1.74 (1.63 - 1.85) <.0001	1.65 (1.54 - 1.76) <.0001	1.51 (1.41 - 1.62) <.0001
<b>8.8-9.6% 73-82 (mmol/mol) - Normoalbuminuria and eGFR≥60</b>	2.01 (1.80 - 2.24) <.0001	1.92 (1.71 - 2.15) <.0001	1.75 (1.56 - 1.96) <.0001
<b>&gt;=9.7% (&gt;=83 mmol/mol) - Normoalbuminuria and eGFR≥60</b>	2.83 (2.45 - 3.27) <.0001	2.75 (2.37 - 3.20) <.0001	2.51 (2.16 - 2.93) <.0001
<b>&lt;=6.9% (&lt;=52 mmol/mol) - Not Normoalbuminuria or eGFR&lt;60</b>	1.59 (1.54 - 1.64) <.0001	1.57 (1.52 - 1.62) <.0001	1.39 (1.34 - 1.43) <.0001
<b>7.0-7.8% (53-62 mmol/mol) - Not Normoalbuminuria or eGFR&lt;60</b>	1.98 (1.91 - 2.05) <.0001	1.89 (1.82 - 1.96) <.0001	1.65 (1.58 - 1.71) <.0001
<b>7.9-8.7% (63-72 mmol/mol) - Not Normoalbuminuria or eGFR&lt;60</b>	2.55 (2.43 - 2.67) <.0001	2.39 (2.27 - 2.51) <.0001	2.04 (1.94 - 2.15) <.0001

AMI or CHD death	Hazard ratio (95% CI) p-value		
	Model 1a - Male	Model 2a - Male	Model 3a - Male
<b>8.8-9.6% 73-82 (mmol/mol) - Not Normoalbuminuria or eGFR&lt;60</b>	3.11 (2.90 - 3.35) <.0001	2.89 (2.68 - 3.12) <.0001	2.41 (2.23 - 2.60) <.0001
<b>&gt;=9.7% (&gt;=83 mmol/mol) - Not Normoalbuminuria or eGFR&lt;60</b>	3.52 (3.18 - 3.89) <.0001	3.28 (2.95 - 3.66) <.0001	2.77 (2.49 - 3.09) <.0001
Model 1a: adjusted for time-updated age Model 2a: Model 1a additionally adjusted for time-updated diabetes duration Model 3a: Model 2a additionally adjusted for born in Sweden, maximum education level and baseline comorbidities (AF, CHD, HF, VD, stroke, cancer).			

**Table S7-Female- Adjusted hazard ratios for AMI or CHD death and 95% confidence intervals for time-updated mean HbA1c categories together with albuminuria and eGFR versus controls Models 1-3**

AMI or CHD death	Hazard ratio (95% CI) p-value		
	Model 1b - Female	Model 2b - Female	Model 3b - Female
<b>Time updated mean HbA1c categories and albuminuria</b>	n events=55388 N subjects=1159778	n events=54562 N subjects=1145328	n events=52257 N subjects=1121459
Controls (reference)	1.00	1.00	1.00
<=6.9% (<=52 mmol/mol) - Normoalbuminuria	1.24 (1.20 - 1.29) <.0001	1.23 (1.18 - 1.27) <.0001	1.15 (1.10 - 1.19) <.0001
7.0-7.8% (53-62 mmol/mol) - Normoalbuminuria	1.75 (1.68 - 1.83) <.0001	1.62 (1.55 - 1.70) <.0001	1.49 (1.42 - 1.56) <.0001
7.9-8.7% (63-72 mmol/mol) - Normoalbuminuria	2.41 (2.28 - 2.55) <.0001	2.15 (2.02 - 2.28) <.0001	1.92 (1.81 - 2.04) <.0001
8.8-9.6% 73-82 (mmol/mol) - Normoalbuminuria	2.91 (2.66 - 3.18) <.0001	2.57 (2.34 - 2.82) <.0001	2.31 (2.10 - 2.54) <.0001
>=9.7% (>=83 mmol/mol) - Normoalbuminuria	3.63 (3.22 - 4.08) <.0001	3.27 (2.90 - 3.70) <.0001	2.94 (2.59 - 3.34) <.0001
<=6.9% (<=52 mmol/mol) - Not Normoalbuminuria	1.95 (1.84 - 2.06) <.0001	1.89 (1.78 - 2.00) <.0001	1.67 (1.57 - 1.78) <.0001
7.0-7.8% (53-62 mmol/mol) - Not Normoalbuminuria	2.75 (2.59 - 2.91) <.0001	2.49 (2.34 - 2.65) <.0001	2.19 (2.05 - 2.33) <.0001
7.9-8.7% (63-72 mmol/mol) - Not Normoalbuminuria	3.51 (3.26 - 3.78) <.0001	3.10 (2.87 - 3.35) <.0001	2.67 (2.47 - 2.89) <.0001
8.8-9.6% 73-82 (mmol/mol) - Not Normoalbuminuria	4.31 (3.87 - 4.79) <.0001	3.78 (3.39 - 4.22) <.0001	3.15 (2.81 - 3.53) <.0001
>=9.7% (>=83 mmol/mol) - Not Normoalbuminuria	5.64 (4.91 - 6.48) <.0001	5.07 (4.40 - 5.84) <.0001	3.99 (3.45 - 4.62) <.0001
<b>Time updated mean HbA1c categories and eGFR</b>	n events=55642 N subjects=1180338	n events=54514 N subjects=1159918	n events=52289 N subjects=1135757
Controls (reference)	1.00	1.00	1.00
<=6.9% (<=52 mmol/mol) - eGFR>=60	1.13 (1.09 - 1.18) <.0001	1.12 (1.08 - 1.17) <.0001	1.07 (1.03 - 1.12) 0.0019

AMI or CHD death	Hazard ratio (95% CI) p-value		
	Model 1b - Female	Model 2b - Female	Model 3b - Female
7.0-7.8% (53-62 mmol/mol) - eGFR $\geq$ 60	1.67 (1.59 - 1.75) <.0001	1.57 (1.49 - 1.65) <.0001	1.47 (1.39 - 1.54) <.0001
7.9-8.7% (63-72 mmol/mol) - eGFR $\geq$ 60	2.44 (2.29 - 2.60) <.0001	2.21 (2.06 - 2.36) <.0001	2.04 (1.90 - 2.18) <.0001
8.8-9.6% 73-82 (mmol/mol) - eGFR $\geq$ 60	3.12 (2.83 - 3.45) <.0001	2.76 (2.48 - 3.06) <.0001	2.49 (2.24 - 2.78) <.0001
$\geq$ 9.7% ( $\geq$ 83 mmol/mol) - eGFR $\geq$ 60	3.87 (3.41 - 4.39) <.0001	3.70 (3.24 - 4.23) <.0001	3.44 (3.00 - 3.95) <.0001
$\leq$ 6.9% ( $\leq$ 52 mmol/mol) - eGFR $<$ 60	1.62 (1.56 - 1.69) <.0001	1.57 (1.50 - 1.64) <.0001	1.40 (1.34 - 1.46) <.0001
7.0-7.8% (53-62 mmol/mol) - eGFR $<$ 60	2.12 (2.02 - 2.23) <.0001	1.92 (1.82 - 2.02) <.0001	1.67 (1.59 - 1.76) <.0001
7.9-8.7% (63-72 mmol/mol) - eGFR $<$ 60	2.81 (2.63 - 2.99) <.0001	2.44 (2.27 - 2.61) <.0001	2.06 (1.92 - 2.21) <.0001
8.8-9.6% 73-82 (mmol/mol) - eGFR $<$ 60	3.20 (2.88 - 3.55) <.0001	2.72 (2.43 - 3.05) <.0001	2.24 (2.00 - 2.52) <.0001
$\geq$ 9.7% ( $\geq$ 83 mmol/mol) - eGFR $<$ 60	3.63 (3.11 - 4.23) <.0001	3.42 (2.92 - 4.01) <.0001	2.67 (2.26 - 3.14) <.0001
<b>Time updated mean HbA1c categories albuminuria and eGFR</b>	n events=55046 N subjects=1162496	n events=54076 N subjects=1146469	n events=51849 N subjects=1122794
$\leq$ 6.9% ( $\leq$ 52 mmol/mol) - Normoalbuminuria and eGFR $\geq$ 60	1.05 (1.00 - 1.10) 0.064	1.03 (0.98 - 1.09) 0.27	0.98 (0.93 - 1.04) 0.56
7.0-7.8% (53-62 mmol/mol) - Normoalbuminuria and eGFR $\geq$ 60	1.50 (1.41 - 1.60) <.0001	1.40 (1.31 - 1.49) <.0001	1.31 (1.23 - 1.40) <.0001
7.9-8.7% (63-72 mmol/mol) - Normoalbuminuria and eGFR $\geq$ 60	2.23 (2.06 - 2.43) <.0001	2.00 (1.84 - 2.18) <.0001	1.87 (1.71 - 2.04) <.0001
8.8-9.6% 73-82 (mmol/mol) - Normoalbuminuria and eGFR $\geq$ 60	2.83 (2.47 - 3.25) <.0001	2.44 (2.11 - 2.82) <.0001	2.25 (1.94 - 2.60) <.0001
$\geq$ 9.7% ( $\geq$ 83 mmol/mol) - Normoalbuminuria and eGFR $\geq$ 60	3.77 (3.13 - 4.53) <.0001	3.45 (2.84 - 4.18) <.0001	3.09 (2.53 - 3.78) <.0001

AMI or CHD death	Hazard ratio (95% CI) p-value		
	Model 1b - Female	Model 2b - Female	Model 3b - Female
<b>&lt;=6.9% (&lt;=52 mmol/mol) - Not Normoalbuminuria or eGFR&lt;60</b>	1.63 (1.57 - 1.69) <.0001	1.58 (1.52 - 1.65) <.0001	1.42 (1.36 - 1.47) <.0001
<b>7.0-7.8% (53-62 mmol/mol) - Not Normoalbuminuria or eGFR&lt;60</b>	2.22 (2.13 - 2.32) <.0001	2.03 (1.94 - 2.12) <.0001	1.78 (1.69 - 1.86) <.0001
<b>7.9-8.7% (63-72 mmol/mol) - Not Normoalbuminuria or eGFR&lt;60</b>	2.96 (2.80 - 3.13) <.0001	2.60 (2.45 - 2.76) <.0001	2.21 (2.07 - 2.35) <.0001
<b>8.8-9.6% 73-82 (mmol/mol) - Not Normoalbuminuria or eGFR&lt;60</b>	3.59 (3.29 - 3.90) <.0001	3.11 (2.84 - 3.40) <.0001	2.56 (2.33 - 2.81) <.0001
<b>&gt;=9.7% (&gt;=83 mmol/mol) - Not Normoalbuminuria or eGFR&lt;60</b>	4.22 (3.75 - 4.75) <.0001	3.92 (3.47 - 4.43) <.0001	3.14 (2.77 - 3.56) <.0001
Model 1b: adjusted for time-updated age Model 2b: Model 1b additionally adjusted for time-updated diabetes duration Model 3b: Model 2b additionally adjusted for born in Sweden, maximum education level and baseline comorbidities (AF, CHD, HF, VD, stroke, cancer).			