

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>								
Low	770057 (36.1%)	182183 (43.3%)	89552 (42.5%)	36872 (46.1%)	20180 (47.0%)	9520 (45.9%)	8405 (41.6%)	17654 (38.3%)
Mid	845048 (39.6%)	169656 (40.4%)	85120 (40.4%)	31397 (39.3%)	16730 (39.0%)	8279 (39.9%)	8642 (42.8%)	19488 (42.3%)
High	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
<b>Cholesterol (mmol/L)</b>		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

	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>HDL cholesterol (mmol/L)</b>		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
<b>LDL cholesterol (mmol/L)</b>		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
<b>Systolic blood pressure (mmHg)</b>		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
<b>Diastolic blood pressure (mmHg)</b>		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
<b>Blood pressure category</b>								
<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%)
<b>eGFR (CKD-EPI)</b>		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
<b>eGFR category (CKD-EPI)</b>								
<b>CKD stage 1 (eGFR &gt;=90)</b>		110550 (36.7%)	56327 (34.0%)	21398 (35.4%)	11735 (39.1%)	6495 (46.2%)	8211 (57.0%)	6384 (38.5%)
<b>CKD stage 2 (eGFR 60-89)</b>		142226 (47.2%)	82979 (50.1%)	28634 (47.4%)	13180 (43.9%)	5463 (38.8%)	4681 (32.5%)	7289 (43.9%)
<b>CKD stage 3 (eGFR 30-59)</b>		44801 (14.9%)	24536 (14.8%)	9670 (16.0%)	4685 (15.6%)	1928 (13.7%)	1398 (9.7%)	2584 (15.6%)
<b>CKD stage 4 (eGFR 15-29)</b>		2952 (1.0%)	1463 (0.9%)	628 (1.0%)	338 (1.1%)	158 (1.1%)	113 (0.8%)	252 (1.5%)
<b>CKD stage 5 (eGFR &lt;15 or dialysis)</b>		562 (0.2%)	308 (0.2%)	84 (0.1%)	56 (0.2%)	19 (0.1%)	14 (0.1%)	81 (0.5%)
<b>Albuminuria</b>								
<b>Normoalbuminuria</b>		189033 (79.3%)	105318 (82.4%)	38649 (77.6%)	20179 (74.2%)	9130 (70.9%)	7795 (71.1%)	7962 (82.4%)
<b>Microalbuminuria</b>		29449 (12.4%)	14052 (11.0%)	6736 (13.5%)	4085 (15.0%)	2157 (16.7%)	1725 (15.7%)	694 (7.2%)
<b>Macroalbuminuria</b>		19240 (8.1%)	8075 (6.3%)	4363 (8.8%)	2858 (10.5%)	1579 (12.3%)	1436 (13.1%)	929 (9.6%)
<b>CKD stage 5</b>		562 (0.2%)	308 (0.2%)	84 (0.2%)	56 (0.2%)	19 (0.1%)	14 (0.1%)	81 (0.8%)
<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%)

	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
Yes		53911 (15.6%)	26069 (14.2%)	10339 (14.6%)	5988 (15.8%)	3276 (17.9%)	3393 (20.1%)	4846 (27.1%)
<i>Registrations in the IPR prior to baseline</i>								
<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. AMI or CHD death per 1000 patient years by sex and age categories at baseline with 95% confidence intervals estimated by exact Poisson confidence limits**

AMI or CHD death, primary diagnosis	All		Men		Women	
	Type 2 diabetes	Controls	Type 2 diabetes	Controls	Type 2 diabetes	Controls
<b>All</b>						
N	431579	2173620	234556	1170663	197023	1002957
n(%)	36124 (8.4%)	115172 (5.3%)	21343 (9.1%)	71180 (6.1%)	14781 (7.5%)	43992 (4.4%)
Cases per 1000 years (95% CI)	14.64 (14.49 - 14.79)	8.73 (8.68 - 8.78)	16.12 (15.90 - 16.34)	10.03 (9.96 - 10.10)	12.93 (12.72 - 13.14)	7.22 (7.15 - 7.29)
IRR (95% CI)	1.68 (1.66-1.70)		1.61 (1.58-1.63)		1.79 (1.76-1.82)	
<b>&lt;55 years</b>						
N	84782	432693	50655	260421	34127	172272
n(%)	2448 (2.9%)	4512 (1.0%)	1852 (3.7%)	3838 (1.5%)	596 (1.7%)	674 (0.4%)
Cases per 1000 years (95% CI)	4.68 (4.50 - 4.87)	1.65 (1.60 - 1.70)	5.96 (5.70 - 6.24)	2.33 (2.26 - 2.41)	2.81 (2.59 - 3.04)	0.62 (0.57 - 0.67)
IRR (95% CI)	2.84 (2.70-2.98)		2.56 (2.42-2.70)		4.55 (4.07-5.08)	
<b>55-64 years</b>						
N	116802	610925	70440	373021	46362	237904
n(%)	6472 (5.5%)	17730 (2.9%)	4777 (6.8%)	14492 (3.9%)	1695 (3.7%)	3238 (1.4%)
Cases per 1000 years (95% CI)	8.92 (8.70 - 9.13)	4.49 (4.43 - 4.56)	11.04 (10.73 - 11.36)	6.07 (5.97 - 6.17)	5.78 (5.51 - 6.06)	2.08 (2.01 - 2.15)
IRR (95% CI)	1.98 (1.93-2.04)		1.82 (1.76-1.88)		2.78 (2.62-2.95)	
<b>65-74 years</b>						
N	123969	630801	67270	338121	56699	292680
n(%)	10834 (8.7%)	34155 (5.4%)	6813 (10.1%)	23775 (7.0%)	4021 (7.1%)	10380 (3.5%)
Cases per 1000 years (95% CI)	15.25 (14.96 - 15.54)	8.80 (8.71 - 8.89)	18.40 (17.96 - 18.84)	11.73 (11.58 - 11.88)	11.82 (11.46 - 12.20)	5.60 (5.49 - 5.71)
IRR (95% CI)	1.73 (1.70-1.77)		1.57 (1.53-1.61)		2.11 (2.04-2.19)	
<b>75+ years</b>						
N	106026	499201	46191	199100	59835	300101
n(%)	16370 (15.4%)	58775 (11.8%)	7901 (17.1%)	29075 (14.6%)	8469 (14.2%)	29700 (9.9%)
Cases per 1000 years (95% CI)	32.20 (31.71 - 32.70)	22.41 (22.23 - 22.59)	37.51 (36.69 - 38.35)	28.08 (27.75 - 28.40)	28.45 (27.84 - 29.06)	18.72 (18.50 - 18.93)
IRR (95% CI)	1.44 (1.41-1.46)		1.34 (1.30-1.37)		1.52 (1.48-1.56)	

**Table S3 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**

	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
<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%
Controls (reference)	1.00	1.00	1.00

AMI or CHD death	Hazard ratio (95% CI) p-value		
	Model 1 - All	Model 2 - All	Model 3 - All
<b>CKD stage 1 (eGFR <math>\geq</math>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 S4 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 1a-3a**

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%	
<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 S5 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 90</math>)</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 S6 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 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
<b>8.8-9.6% 73-82 (mmol/mol) - eGFR<math>\geq</math>60</b>	2.52 (2.38 - 2.68) <.0001	2.32 (2.18 - 2.47) <.0001	2.08 (1.96 - 2.22) <.0001
<b>&gt;=9.7% (&gt;=83 mmol/mol) - eGFR<math>\geq</math>60</b>	3.29 (3.06 - 3.55) <.0001	3.18 (2.94 - 3.44) <.0001	2.86 (2.63 - 3.10) <.0001
<b>&lt;=6.9% (&lt;=52 mmol/mol) - eGFR&lt;60</b>	1.64 (1.59 - 1.68) <.0001	1.61 (1.56 - 1.65) <.0001	1.41 (1.37 - 1.45) <.0001
<b>7.0-7.8% (53-62 mmol/mol) - eGFR&lt;60</b>	2.07 (2.00 - 2.14) <.0001	1.91 (1.85 - 1.98) <.0001	1.65 (1.59 - 1.71) <.0001
<b>7.9-8.7% (63-72 mmol/mol) - eGFR&lt;60</b>	2.62 (2.50 - 2.75) <.0001	2.37 (2.25 - 2.49) <.0001	1.99 (1.89 - 2.09) <.0001
<b>8.8-9.6% 73-82 (mmol/mol) - eGFR&lt;60</b>	3.19 (2.96 - 3.44) <.0001	2.84 (2.62 - 3.07) <.0001	2.29 (2.12 - 2.49) <.0001
<b>&gt;=9.7% (&gt;=83 mmol/mol) - eGFR&lt;60</b>	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
<b>&lt;=6.9% (&lt;=52 mmol/mol) - Normoalbuminuria and eGFR<math>\geq</math>60</b>	1.01 (0.98 - 1.04) 0.45	1.00 (0.97 - 1.03) 0.88	0.95 (0.92 - 0.98) 0.0009
<b>7.0-7.8% (53-62 mmol/mol) - Normoalbuminuria and eGFR<math>\geq</math>60</b>	1.36 (1.31 - 1.41) <.0001	1.29 (1.24 - 1.34) <.0001	1.21 (1.16 - 1.25) <.0001
<b>7.9-8.7% (63-72 mmol/mol) - Normoalbuminuria and eGFR<math>\geq</math>60</b>	1.90 (1.81 - 2.00) <.0001	1.77 (1.68 - 1.86) <.0001	1.63 (1.54 - 1.72) <.0001
<b>8.8-9.6% 73-82 (mmol/mol) - Normoalbuminuria and eGFR<math>\geq</math>60</b>	2.28 (2.09 - 2.48) <.0001	2.10 (1.92 - 2.30) <.0001	1.92 (1.75 - 2.10) <.0001
<b>&gt;=9.7% (&gt;=83 mmol/mol) - Normoalbuminuria and eGFR<math>\geq</math>60</b>	3.17 (2.83 - 3.55) <.0001	3.02 (2.68 - 3.40) <.0001	2.73 (2.42 - 3.09) <.0001
<b>&lt;=6.9% (&lt;=52 mmol/mol) - Not Normoalbuminuria or eGFR&lt;60</b>	1.60 (1.57 - 1.64) <.0001	1.58 (1.54 - 1.62) <.0001	1.40 (1.37 - 1.44) <.0001
<b>7.0-7.8% (53-62 mmol/mol) - Not Normoalbuminuria or eGFR&lt;60</b>	2.08 (2.02 - 2.14) <.0001	1.95 (1.89 - 2.00) <.0001	1.70 (1.65 - 1.75) <.0001
<b>7.9-8.7% (63-72 mmol/mol) - Not Normoalbuminuria or eGFR&lt;60</b>	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 S7 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 1a-3a**

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<math>\geq</math>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<math>\geq</math>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<math>\geq</math>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<math>\geq</math>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<math>\geq</math>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<math>\geq</math>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<math>\geq</math>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 S8-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 Models1-2**

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
<b>Controls (reference)</b>	1.00	1.00	1.00
7.9-8.7% (63-72 mmol/mol) - Normoalbuminuria and eGFR $\geq$ 60	1.74 (1.63 - 1.85) <.0001	1.65 (1.54 - 1.76) <.0001	1.51 (1.41 - 1.62) <.0001
8.8-9.6% 73-82 (mmol/mol) - Normoalbuminuria and eGFR $\geq$ 60	2.01 (1.80 - 2.24) <.0001	1.92 (1.71 - 2.15) <.0001	1.75 (1.56 - 1.96) <.0001
$\geq$ 9.7% ( $\geq$ 83 mmol/mol) - Normoalbuminuria and eGFR $\geq$ 60	2.83 (2.45 - 3.27) <.0001	2.75 (2.37 - 3.20) <.0001	2.51 (2.16 - 2.93) <.0001
$\leq$ 6.9% ( $\leq$ 52 mmol/mol) - Not Normoalbuminuria or eGFR $<$ 60	1.59 (1.54 - 1.64) <.0001	1.57 (1.52 - 1.62) <.0001	1.39 (1.34 - 1.43) <.0001
7.0-7.8% (53-62 mmol/mol) - Not Normoalbuminuria or eGFR $<$ 60	1.98 (1.91 - 2.05) <.0001	1.89 (1.82 - 1.96) <.0001	1.65 (1.58 - 1.71) <.0001
7.9-8.7% (63-72 mmol/mol) - Not Normoalbuminuria or eGFR $<$ 60	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 1b - Female	Model 2b - Female	Model 3b - Female
<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).			

