

**Supplemental Table 1.** Patient characteristics at baseline median (Inter Quartile Range; IQR) or n (%) stratified by diabetes status and glucose lowering treatment. An individual patient can only be classified into one group.

	Diabetes										No Diabetes			
	n	Diet (n=3091)	Metformin (n=3982)	SU (n=374)	Insulin (n=3570)	SGLT2i/GLP1RA (n=888)	DPP4 (n=210)	Insulin + Metformin (n=2034)	Insulin + SU (n=165)	Unspecified combination (n=2042)	No Diabetes (n=52887)	No Diabetes + unspecified combination (n=156)	No diabetes + Metformin (n=871)	p-value overall
<b>Clinical characteristics</b>														
Age (years)	70270	73 (58-88)	69 (55-83)	77 (65-89)	72 (57-87)	65 (52-78)	74 (63-85)	69 (55-83)	76 (62-90)	69 (55-83)	69 (53-85)	70 (51-89)	65 (52-78)	<0.001
Sex (male)	70270	2060 (66.6)	2887 (72.5)	252 (67.4)	2223 (62.3)	645 (72.6)	149 (71.0)	1440 (70.8)	106 (64.2)	1442 (70.6)	37038 (70.0)	111 (71.2)	659 (75.7)	<0.001
Current smoker	70269	547 (17.7)	920 (23.1)	51 (13.6)	520 (14.6)	175 (19.7)	28 (13.3)	413 (20.3)	22 (13.3)	405 (19.8)	12126 (22.9)	45 (28.8)	272 (31.2)	<0.001
BMI (kg/m <sup>2</sup> )	68807	27.6 (21.5-33.7)	28.4 (22.4-34.5)	27.0 (20.9-33.1)	27.9 (21.4-34.4)	31.4 (24.8-38.0)	28.4 (21.8-35.0)	29.5 (23.2-35.8)	28.3 (21.6-35.0)	28.7 (22.6-34.8)	26.3 (21.3-31.3)	27.4 (21.1-33.7)	28.9 (22.8-35.0)	<0.001
Weight (kg)	69769	81 (60-102)	85 (63-107)	79 (59-99)	82 (61-103)	94 (72-116)	85 (63-108)	88 (66-110)	84 (63-105)	85 (63-107)	80 (60-100)	82 (58-106)	88 (66-110)	<0.001
Killip class I	60819	2477 (93.8)	3250 (95.0)	274 (91.9)	2691 (91.2)	717 (94.0)	169 (96.6)	1596 (93.5)	136 (95.1)	1644 (93.5)	44074 (95.7)	132 (94.3)	731 (95.6)	<0.001
<b>Previous disease</b>														
Myocardial infarction	70270	945 (30.6)	996 (25.0)	118 (31.6)	1314 (36.8)	252 (28.4)	53 (25.2)	648 (31.9)	57 (34.5)	626 (30.7)	7872 (14.9)	27 (17.3)	116 (13.3)	<0.001
Heart failure	70270	378 (12.2)	254 (6.4)	61 (16.3)	680 (19.0)	89 (10.0)	29 (13.8)	215 (10.6)	19 (11.5)	215 (10.5)	2163 (4.1)	8 (5.1)	26 (3.0)	<0.001
PAD	70270	256 (8.3)	184 (4.6)	31 (8.3)	480 (13.4)	52 (5.9)	20 (9.5)	116 (5.7)	18 (10.9)	103 (5.0)	1791 (3.4)	4 (2.6)	15 (1.7)	<0.001
PCI	70270	673 (21.8)	745 (18.7)	91 (24.3)	927 (26.0)	215 (24.2)	41 (19.5)	519 (25.5)	41 (24.8)	490 (24.0)	5912 (11.2)	27 (17.3)	104 (11.9)	<0.001
CABG	70269	328 (10.6)	345 (8.7)	51 (13.6)	585 (16.4)	75 (8.4)	17 (8.1)	265 (13.0)	23 (13.9)	240 (11.8)	2410 (4.6)	9 (5.8)	45 (5.2)	<0.001
Stroke	70270	366 (11.8)	297 (7.5)	57 (15.2)	476 (13.3)	74 (8.3)	18 (8.6)	203 (10.0)	26 (15.8)	198 (9.7)	2807 (5.3)	14 (9.0)	18 (2.1)	<0.001
Renal failure	70270	261 (8.4)	37 (0.9)	24 (6.4)	586 (16.4)	39 (4.4)	30 (14.3)	34 (1.7)	8 (4.8)	77 (3.8)	1007 (1.9)	8 (5.1)	2 (0.2)	<0.001
Cancer	70270	165 (5.3)	118 (3.0)	23 (6.1)	191 (5.4)	17 (1.9)	9 (4.3)	58 (2.9)	9 (5.5)	66 (3.2)	1142 (2.2)	8 (5.1)	16 (1.8)	<0.001
Dementia	70270	13 (0.4)	10 (0.3)	3 (0.8)	21 (0.6)	0 (0)	0 (0)	7 (0.3)	1 (0.6)	5 (0.2)	147 (0.3)	1 (0.6)	0 (0)	0.028
Hypertension	70268	2356 (76.2)	2892 (72.6)	300 (80.2)	2922 (81.8)	703 (79.2)	179 (85.2)	1597 (78.5)	134 (81.2)	1641 (80.4)	25886 (48.9)	84 (53.8)	451 (51.8)	<0.001
Hyperlipidaemia	70270	1716 (55.5)	2180 (54.7)	231 (61.8)	2438 (68.3)	586 (66.0)	130 (61.9)	1339 (65.8)	116 (70.3)	1349 (66.1)	15853 (30.0)	53 (34.0)	250 (28.7)	<0.001
<b>Biochemistry</b>														
Blood glucose (mmol/L)	61032	8.2 (4.4-12.6)	9.4 (5.2-13.6)	10.3 (5.1-15.6)	12.0 (4.8-19.2)	12.2 (6.1-18.2)	10.0 (5.6-14.2)	12.5 (5.2-19.8)	13.1 (6.7-19.5)	11.8 (5.7-17.9)	6.5 (4.6-8.4)	9.7 (4.8-14.6)	8.4 (4.8-12.0)	<0.001
HbA1c (mmol/mol)	15513	45 (35-55)	52 (40-64)	53 (39-67)	64 (41-87)	66 (41-91)	51 (41-61)	67 (38-96)	69 (39-99)	63 (41-85)	38 (33-42)	53 (25-81)	46 (34-58)	<0.001
HbA1c (%)	15513	6.3 (5.4-7.2)	6.9 (5.8-8.0)	7.0 (5.7-8.3)	8.0 (5.9-10.1)	8.2 (5.9-10.5)	6.8 (5.9-7.7)	8.3 (5.6-10.9)	8.5 (5.7-11.2)	7.9 (5.9-9.9)	5.6 (5.2-6.0)	7.0 (4.4-9.6)	6.4 (5.3-7.5)	<0.001
CRP (mg/L)	63463	5 (0-13)	5 (0-12)	5 (0-17)	6 (0-21)	5 (0-15)	5 (0-12)	5 (0-13)	6 (0-15)	5 (0-14)	4 (0-10)	5 (0-16)	5 (0-11)	<0.001
Creatinine (mmol/L)	69383	86 (48-124)	76 (51-101)	86 (48-124)	95 (40-151)	78 (47-109)	107 (49-164)	77 (50-104)	89 (46-132)	80 (47-113)	79 (54-104)	79 (48-110)	77 (56-98)	<0.001

<b>Indication</b>	70270													<0.001
NSTEMI		2089 (67.6)	2670 (67.1)	268 (71.7)	2618 (73.3)	612 (68.9)	146 (69.5)	1439 (70.7)	114 (69.1)	1442 (70.6)	31977 (60.5)	86 (55.1)	506 (58.1)	
STEMI		1002 (32.4)	1312 (32.9)	106 (28.3)	952 (26.7)	276 (31.1)	64 (30.5)	595 (29.3)	51 (30.9)	600 (29.4)	20910 (39.5)	70 (44.9)	365 (41.9)	
<b>Angiographic findings</b>	70263													<0.001
Normal		195 (6.3)	176 (4.4)	20 (5.4)	156 (4.4)	39 (4.4)	12 (5.7)	81 (4.0)	9 (5.5)	84 (4.1)	3916 (7.4)	12 (7.7)	29 (3.3)	
1-vessel		1054 (34.1)	1507 (37.8)	116 (31.1)	941 (26.4)	290 (32.7)	57 (27.1)	596 (29.3)	46 (27.9)	703 (34.4)	23816 (45.0)	66 (42.3)	391 (44.9)	
2-vessel		827 (26.8)	1080 (27.1)	97 (26.0)	922 (25.8)	222 (25.0)	54 (25.7)	566 (27.8)	49 (29.7)	575 (28.2)	13497 (25.5)	43 (27.6)	262 (30.1)	
3-vessel		724 (23.4)	911 (22.9)	96 (25.7)	1122 (31.4)	251 (28.3)	73 (34.8)	586 (28.8)	43 (26.1)	522 (25.6)	8390 (15.9)	23 (14.7)	144 (16.6)	
Left main		286 (9.3)	305 (7.7)	43 (11.5)	420 (11.8)	82 (9.2)	13 (6.2)	202 (9.9)	18 (10.9)	157 (7.7)	3206 (6.1)	12 (7.7)	43 (4.9)	
<b>Revascularisation method</b>														
PCI	70270	2432 (78.7)	3220 (80.9)	293 (78.3)	2640 (73.9)	694 (78.2)	154 (73.3)	1573 (77.3)	138 (83.6)	1649 (80.8)	44270 (83.7)	132 (84.6)	763 (87.6)	<0.001
CABG ≤ months after index AMI	70270	34 (1.1)	68 (1.7)	2 (0.5)	49 (1.4)	15 (1.7)	7 (3.3)	41 (2.0)	4 (2.4)	28 (1.4)	483 (0.9)	1 (0.6)	11 (1.3)	
Stent during PCI	57958	2118 (87.1)	2897 (90.0)	251 (85.7)	2255 (85.4)	616 (88.8)	141 (91.6)	1358 (86.3)	122 (88.4)	1450 (87.9)	40367 (91.2)	122 (92.4)	712 (93.3)	<0.001
Complete revascularisation	56139	1315 (56.5)	1916 (61.7)	147 (52.7)	1281 (50.6)	398 (60.0)	80 (53.7)	830 (54.7)	67 (49.6)	953 (59.9)	28568 (66.5)	74 (56.9)	473 (63.0)	<0.001
<b>Ejection fraction (EF%)</b>	61566													<0.001
EF ≥50%		1467 (55.7)	2173 (61.2)	178 (56.2)	1544 (51.3)	446 (57.8)	96 (55.5)	987 (57.0)	76 (52.4)	971 (56.5)	29953 (64.3)	78 (54.9)	512 (65.9)	
EF 40-49%		618 (23.5)	760 (21.4)	72 (22.7)	730 (24.2)	174 (22.6)	47 (27.2)	379 (21.9)	40 (27.6)	386 (22.4)	9749 (20.9)	33 (23.2)	152 (19.6)	
EF 30-39%		354 (13.4)	440 (12.4)	49 (15.5)	509 (16.9)	107 (13.9)	20 (11.6)	250 (14.4)	16 (11.7)	251 (14.6)	5086 (10.9)	20 (14.1)	85 (10.9)	
EF <30%		172 (6.5)	149 (4.2)	15 (4.7)	204 (6.8)	39 (5.1)	10 (5.8)	97 (5.6)	10 (6.9)	102 (5.9)	1510 (3.2)	11 (7.7)	23 (3.0)	
Unknown EF		22 (0.8)	28 (0.8)	3 (0.9)	24 (0.8)	5 (0.6)	0 (0)	18 (1.0)	3 (2.1)	10 (0.6)	298 (0.6)	0 (0)	5 (0.6)	
<b>Medications at discharge</b>														
Aspirin	70260	2861 (92.6)	3764 (94.5)	347 (92.8)	3277 (91.8)	828 (93.2)	191 (91.0)	1911 (94.0)	150 (90.9)	1926 (94.3)	50196 (94.9)	141 (90.4)	842 (96.7)	<0.001
Clopidogrel	70260	924 (29.9)	901 (22.6)	137 (36.6)	1154 (32.3)	155 (17.5)	47 (22.4)	505 (24.8)	55 (33.3)	501 (24.5)	12062 (22.8)	41 (26.3)	117 (13.4)	<0.001
Ticagrelor	70260	1734 (56.1)	2587 (65.0)	187 (50.0)	1908 (53.4)	619 (69.7)	126 (60.0)	1234 (60.7)	96 (58.2)	1271 (62.2)	35562 (67.3)	101 (64.7)	684 (78.5)	<0.001
Beta blockade	70260	2782 (90.0)	3641 (91.5)	341 (91.2)	3188 (89.3)	811 (91.3)	183 (87.1)	1868 (91.8)	153 (92.7)	1872 (91.7)	46990 (88.9)	146 (93.6)	801 (92.0)	<0.001
ACE inhibitor	70260	1730 (56.0)	2542 (63.9)	208 (55.6)	1870 (52.4)	478 (53.8)	89 (42.4)	1274 (62.6)	89 (53.9)	1200 (58.8)	33885 (64.1)	98 (62.8)	601 (69.0)	<0.001
Angiotensin II receptor inhibitor	70252	920 (29.8)	1133 (28.5)	115 (30.7)	1216 (34.1)	340 (38.3)	78 (37.1)	622 (30.6)	57 (34.5)	700 (34.3)	9890 (18.7)	36 (23.1)	177 (20.3)	<0.001
Spirolacton	70260	239 (7.7)	304 (7.6)	34 (9.1)	321 (9.0)	88 (9.9)	19 (9.0)	219 (10.8)	11 (6.7)	193 (9.5)	2346 (4.4)	9 (5.8)	36 (4.1)	<0.001
Eplerenon	70260	42 (1.4)	68 (1.7)	8 (2.1)	59 (1.7)	42 (4.7)	2 (1.0)	44 (2.2)	3 (1.8)	42 (2.1)	754 (1.4)	5 (3.2)	23 (2.6)	<0.001
Statin	70260	2881 (93.2)	3848 (96.7)	346 (92.5)	3273 (91.7)	853 (96.1)	196 (93.3)	1946 (95.7)	155 (93.9)	1947 (95.3)	50549 (95.6)	150 (96.2)	854 (98.0)	<0.001
Ezetemide	70253	87 (2.8)	106 (2.7)	10 (2.7)	148 (4.1)	56 (6.3)	10 (4.8)	42 (2.1)	7 (4.2)	62 (3.0)	819 (1.5)	2 (1.3)	27 (3.1)	<0.001

**Supplemental Table 2:** Glucose lowering drugs in patients with diabetes (n=16 356).

<b>Glucose lowering drug</b>	<b>n (%)</b>
Any metformin	8287 (50.7)
Any SU	1863 (11.4)
Any Insulin	7044 (43.4)
Any SGLT2i	447 (2.7)
Any GLP-1 RA	513 (3.1)
Any DPP4i	1378 (8.4)

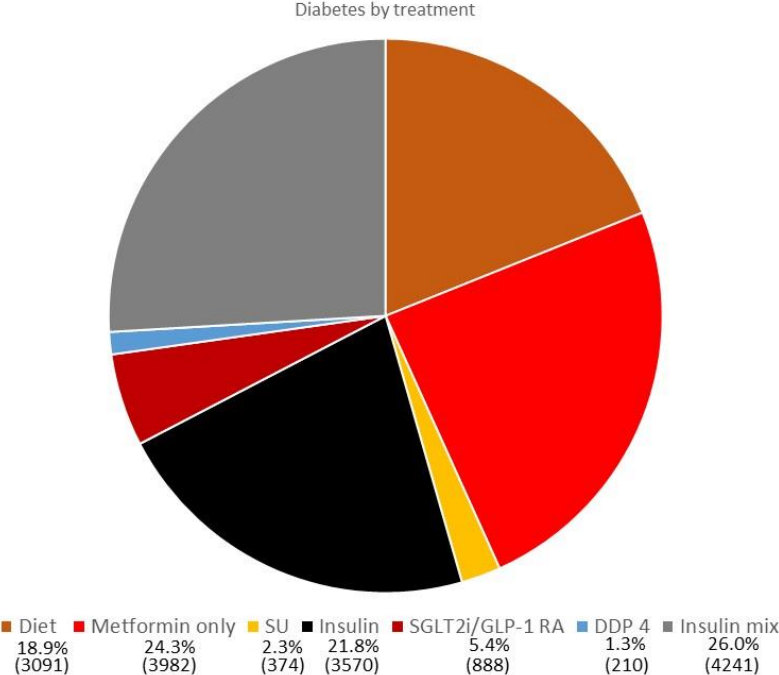
**Supplemental Table 3.** Unadjusted and adjusted risk (HR CI 95%) for MACE and MACE+ after index myocardial infarction in patients stratified by diabetes status and glucose lowering treatment. Diabetes patients on diet treatment served as a reference group with HR 1.0.

<b>Event</b>	<b>Events n (%)</b>	<b>Unadjusted HR (95% CI)</b>	<b>p- value</b>	<b>Adjusted* HR (95%CI)</b>	<b>p- value</b>
<i>MACE+</i>					
<i>(MI, Heart failure, Stroke, Death)</i>					
Diet	1212 (39)	1 (referent)		1 (referent)	
Monotherapy metformin	1196 (30)	0.67 (0.62-0.72)	<0.001	0.92 (0.85-0.997)	0.042
Monotherapy sulfonylurea	192 (51)	1.15 (0.99-1.34)	0.067	1.002 (0.86-1.17)	0.982
Monotherapy insulin	1986 (56)	1.48 (1.37-1.59)	<0.001	1.32 (1.23-1.42)	<0.001
Any SGLT2i/GLP-1 RA	239 (27)	0.77 (0.67-0.88)	<0.001	1.07 (0.93-1.24)	0.334
Monotherapy DPP4i	77 (37)	1.05 (0.83-1.32)	0.698	1.05 (0.83-1.32)	0.704
Insulin + metformin	807 (40)	0.90 (0.83-0.99)	0.027	1.13 (1.03-1.24)	0.009
Insulin + sulfonylurea	87 (53)	1.25 (1.01-1.56)	0.044	1.18 (0.95-1.48)	0.144
Unspecified combination of GLD	791 (39)	0.91 (0.83-0.99)	0.035	1.09 (0.996-1.20)	0.060
No diabetes	13658 (26)	0.56 (0.53-0.59)	<0.001	0.82 (0.78-0.88)	<0.001
No diabetes + unspecified combination of GLD	61 (39)	1.07 (0.83-1.39)	0.586	1.48 (1.14-1.92)	0.003
No diabetes + monotherapy metformin	179 (21)	0.45 (0.38-0.52)	<0.001	0.82 (0.70-0.96)	0.013
<i>MACE</i>					
<i>(MI, Stroke, Death)</i>					
Diet	986 (32)	1 (referent)		1 (referent)	
Monotherapy metformin	947 (24)	0.67 (0.61-0.73)	<0.001	0.91 (0.83-0.997)	0.042
Monotherapy sulfonylurea	157 (42)	1.15 (0.97-1.36)	0.101	1.05 (0.88-1.24)	0.607
Monotherapy insulin	1628 (46)	1.45 (1.34-1.56)	<0.001	1.32 (1.22-1.43)	<0.001
Any SGLT2i/GLP-1 RA	175 (20)	0.73 (0.62-0.86)	<0.001	1.007 (0.85-1.19)	0.936
Monotherapy DPP4i	58 (28)	1.003 (0.77-1.31)	0.985	1.02 (0.78-1.34)	0.867
Insulin + metformin	631 (31)	0.88 (0.80-0.97)	0.012	1.10 (0.99-1.22)	0.069
Insulin + sulfonylurea	76 (46)	1.34 (1.06-1.69)	0.014	1.26 (0.99-1.60)	0.062
Unspecified combination of GLD	597 (29)	0.85 (0.77-0.94)	0.002	1.03 (0.93-1.14)	0.619
No diabetes	10879 (21)	0.57 (0.53-0.61)	<0.001	0.83 (0.77-0.88)	<0.001
No diabetes + unspecified combination of GLD	46 (29)	1.002 (0.75-1.35)	0.989	1.33 (0.99-1.80)	0.060
No diabetes + monotherapy metformin	139 (16)	0.45 (0.38-0.54)	<0.001	0.79 (0.66-0.95)	0.012
<i>Mortality</i>					
Diet	576 (19)	1 (referent)		1 (referent)	
Monotherapy metformin	397 (10)	0.48 (0.42-0.54)	<0.001	0.81 (0.71-0.92)	0.002
Monotherapy sulfonylurea	106 (28)	1.29 (1.05-1.58)	0.017	1.09 (0.88-1.34)	0.442
Monotherapy insulin	957 (27)	1.41 (1.27-1.56)	<0.001	1.30 (1.17-1.45)	<0.001
Any SGLT2i/GLP-1 RA	52 (6)	0.42 (0.32-0.56)	<0.001	0.96 (0.72-1.29)	0.802
Monotherapy DPP4i	26 (12)	0.83 (0.56-1.23)	0.358	0.90 (0.61-1.34)	0.601
Insulin + metformin	266 (13)	0.60 (0.52-0.70)	<0.001	0.98 (0.85-1.14)	0.801
Insulin + sulfonylurea	45 (27)	1.23 (0.91-1.67)	0.175	1.17 (0.86-1.61)	0.323
Unspecified combination of GLD	244 (12)	0.58 (0.50-0.67)	<0.001	0.85 (0.73-0.99)	0.032
No diabetes	4624 (9)	0.41 (0.38-0.45)	<0.001	0.69 (0.63-0.76)	<0.001
No diabetes + unspecified combination of GLD	24 (15)	0.93 (0.62-1.40)	0.738	1.39 (0.92-2.09)	0.119
No diabetes + monotherapy metformin	37 (4)	0.21 (0.15-0.29)	<0.001	0.57 (0.41-0.80)	0.001

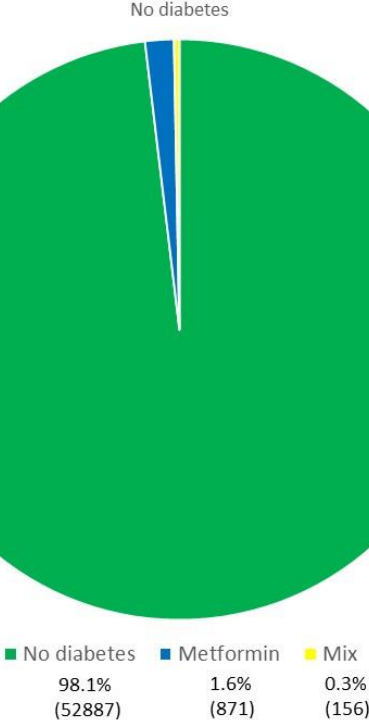
\* Adjusted for age, gender, smoking, creatinine, previous diagnosis of myocardial infarction/ heart failure/ CABG/ cancer/ dementia/ dialysis/ hypertension/ chronic obstructive pulmonary disease/ renal failure/ stroke/ peripheral artery disease, year, indication, hospital, angiographic findings, primary decision after angiography, cardiac chock and medications at discharge (ACE inhibitors, angiotensin II receptor antagonists, lipid lowering agents, aspirin, beta blockade, oral anticoagulants, other antiplatelet therapy).

GLD= Glucose lowering drugs

**Supplemental Figure 1a.** Proportions (% [n]) of glucose lowering treatment in patients with diabetes.

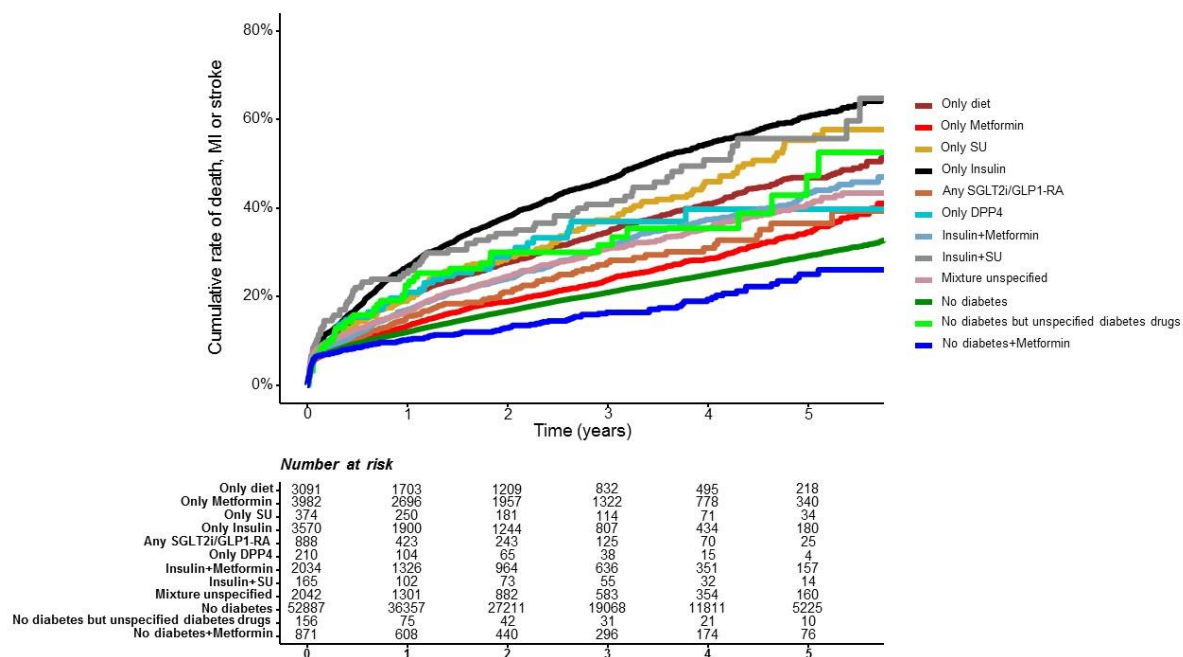


**Supplemental Figure 1b.** Proportions (% [n]) of glucose lowering treatment in patients without diabetes.

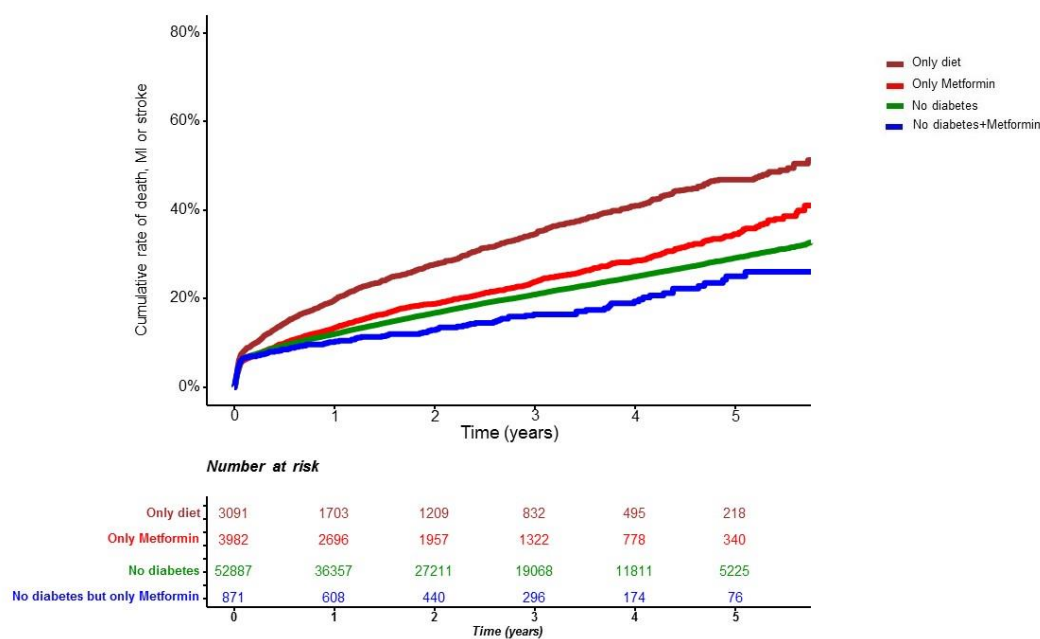


**Supplemental Figure 2.** Time to hospitalisation for MACE (first of myocardial infarction, stroke or death) after index myocardial infarction by (A) diabetes status and glucose lowering treatment and for clarity (B) by diabetes status and treatment with metformin.

**A.**

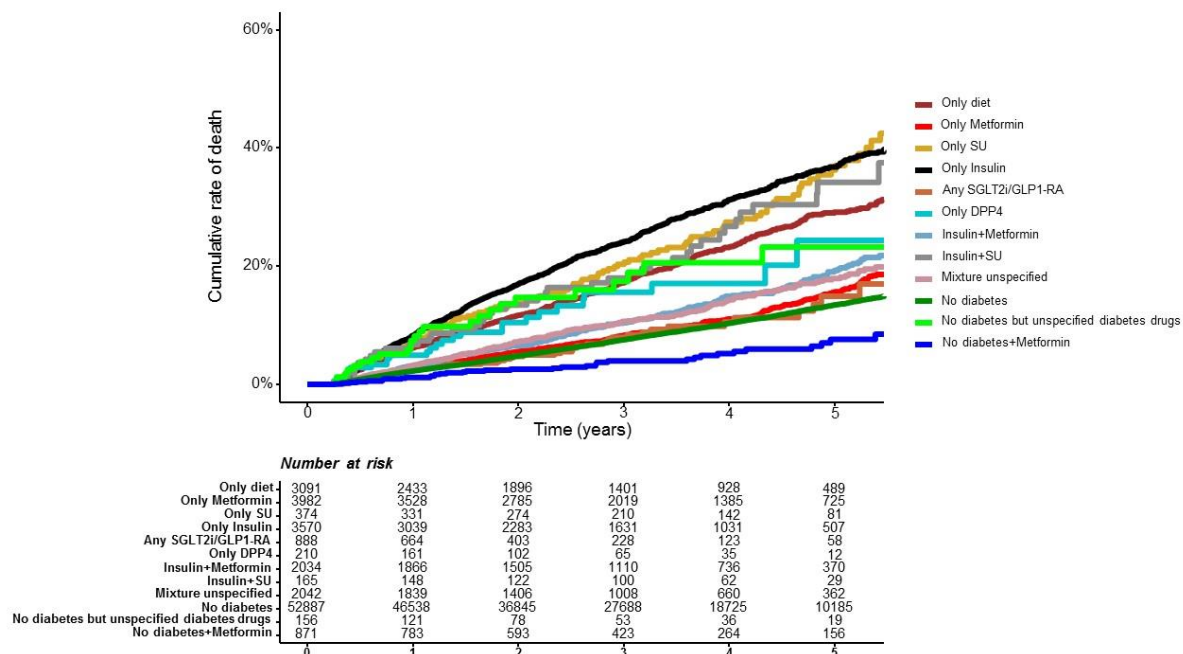


**B.**



**Supplemental Figure 3.** Time to death after index myocardial infarction by (A) diabetes status and glucose lowering treatment and for clarity (B) by diabetes status and treatment with metformin.

**A.**



**B.**

