SUPPLEMENTARY DATA

Supplementary Table 1. Patient characteristics at baseline stratified by BMI data missing status (N=56,137).

		T2DM		Non-T2DM		
	BMI	No BMI	P-	BMI	No BMI	P-
			value			value
N	5,708	1,703		16,273	32,453	
Mean age ± SD	70.6 ± 10.8	70.7 ± 12.0	0.9211	68.3 ± 12.0	68.5 ± 12.7	0.1798
(median)	(72)	(71)		(69)	(69)	
Gender						
Men	3,669	1,026 (60.3%)	0.0024	10,689	21,136	0.2227
	(64.3%)			(65.7%)	(65.1%)	
Smoking	4,249	889 (52.2%)	< 0.000	11,871	18,154	< 0.000
	(74.4%)		1	(73.0%)	(55.9%)	1
Obesity	2,376	143 (8.4%)	< 0.000	4,293	851 (2.6%)	< 0.000
	(41.6%)		1	(26.4%)		1
Dyslipidemia	1,360	223 (13.1%)	< 0.000	2,680	3,105	< 0.000
	(23.8%)		1-	(16.5%)	(9.6%)	1
Hypertension	5,615	1,592 (93.5%)	< 0.000	15,140	27,456	< 0.000
	(98.4%)		1	(93.0%)	(84.6%)	1
Unstable Angina	356 (6.2%)	82 (4.8%)	0.029	700 (4.3%)	986 (3.0%)	< 0.000
						1
History of MI	823 (14.4%)	212 (12.5%)	0.0396	2,146	2,799	< 0.000
				(13.2%)	(8.6%)	1
Family history of	142 (2.5%)	25 (1.5%)	0.0128	542 (3.3%)	549 (1.7%)	< 0.000
MI						1
Statin use	3,331	553 (32.5%)	< 0.000	5,829	6,083 (18.7)	< 0.000
	(58.4%)		1	(35.8%)		1
BMI status						
Underweight	39 (0.7%)	NA	NA	357 (2.2%)	NA	NA
Normal weight	1,097(19.2%			5,073		
)			(31.2%)		
Overweight	2,383			6,743		
	(41.8%)			(41.4%)		
Class I obesity	1,472			3,045		
	(25.8%)			(18.7%)		
Class II and up	717 (12.6%)			1,055 (6.5%)		
obesity						

SUPPLEMENTARY DATA

Supplementary Table 2. Adjusted hazard ratios stratified by gender for outcomes of cardiovascular (CV) death and non-cardiovascular death for T2DM versus non-T2DM patients eligible for ONS linkage in the primary cohort

	Events	Adj HR* [95%	Covariates adjustment [†] (HR)
		CI]	
A subset analysis of			
the primary cohort [‡]			
(n=31,313)			
CV death			
Men	2,958	1.49 [1.36,	Age (1.09), unstable angina (1.16),
		1.64]	hypertension (1.46), personal history of MI
			(1.85)
Women	1,972	1.46 [1.30,	Age (1.09), unstable angina (1.34),
		1.65]	hypertension (1.39), personal history of MI
			(1.59), statin (1.14)
non-CV death			
Men	2,635	1.44 [1.30,	Age (1.09), smoking (1.29), dyslipidemia
		1.59]	(0.81)
Women	1,806	1.38 [1.22,	Age (1.08), smoking (1.30), dyslipidemia
		1.57]	(0.82), family history of MI (0.65), unstable
			angina (1.33)

^{*} All p-values for these adjusted HRs were <0.0001.

[†] Covariates (binary variables unless specified) used to fit the stepwise proportional hazards models consisted of age (continuous), unstable angina, dyslipidemia, hypertension, use of statins, smoking, personal history of MI, family history of MI, and obesity.

[‡]The primary cohort was identified with specific and non-specific Read codes for MI. Patients for this subset were those who were eligible to be linked to the ONS mortality linkage data.

SUPPLEMENTARY DATA

Supplementary Table 3. Sensitivity analysis (requiring 28 days instead of 90 days of registration with a general practice) of adjusted hazard ratios stratified by gender for recurrent MI, all-cause death, and a composite outcome of all-cause death or recurrent MI for T2DM versus non-T2DM patients in primary cohort

	Events*	Adj HR [†] CI]	[95%	Covariates adjustment [‡] (HR)			
Primary cohort [§] (n=58,282)							
Recurrent MI							
Men	6,434	1.15 1.23]	[1.07,	Age (1.01), unstable angina (1.30), hypertension (0.88), personal history of MI (1.24)			
Women	3,416	1.25 1.37]	[1.14,	Age (1.01), unstable angina (1.20), dyslipidemia (1.17), personal history of MI (1.13)			
All-cause death							
Men	11,866	1.38 1.45]	[1.32,	Age (1.09), unstable angina (1.12), smoking (1.16), dyslipidemia (0.90), hypertension (1.24), personal history of MI (1.36), statins (1.09)			
Women	8,325	1.46 1.55]	[1.38,	Age (1.08), smoking (1.19), obesity (0.91), hypertension (1.18), unstable angina (1.29), dyslipidemia (0.86), personal history of MI (1.29), statins (1.11)			
All-cause death or recurrent MI							
Men	15,665	1.27 1.32]	[1.21,	Age (1.05), unstable angina (1.12), smoking (1.11), personal history of MI (1.28), dyslipidemia (0.95)			
Women	9,973	1.35 1.43]	[1.28,	Age (1.06), unstable angina (1.25), smoking (1.14), obesity (0.94), personal history of MI (1.25)			

^{*} A minimum of 28 days instead of 90 days of registration with a GP was required in this sensitivity analysis. Therefore, all outcomes started from 28 days after index MI.

[†] All p-values for these adjusted HRs were <0.0001.

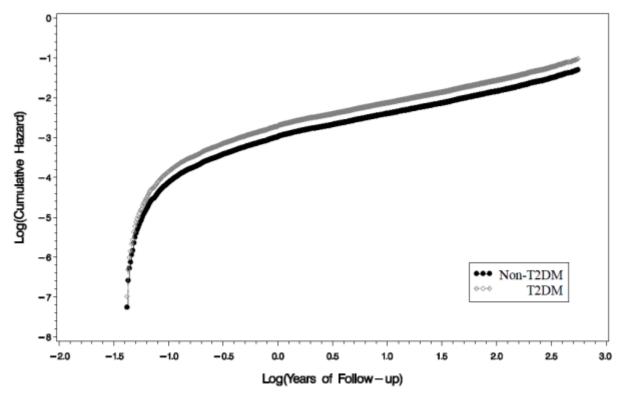
[‡] Covariates (binary variables unless specified) used to fit the stepwise proportional hazards models consisted of age (continuous), unstable angina, dyslipidemia, hypertension, use of statins, smoking, personal history of MI, family history of MI, and obesity.

[§] The primary cohort was identified with specific and non-specific Read codes for MI.

The primary outcome was recurrent MI, the secondary outcomes were all-cause death and a composite of all-cause death or recurrent MI.

Supplementary Figure 1. Graphical assessment of proportional hazards assumption for primary outcome (n=56,137) Notes: solid circles = Non-T2DM, hollow circles = T2DM.

Graphical Assessment of Proportional Hazards Assumption Model for Primary Outcome

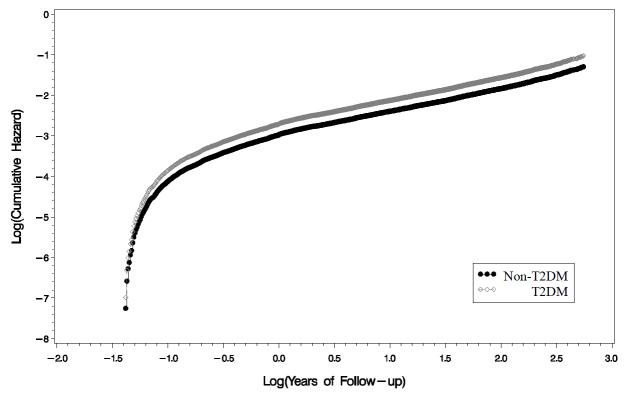


T2DM/Non-T2DM HR = 1.41, 95% CI [1.27, 1.56] p-value = <.000001

Hazard ratio from stepwise Cox regression adjusted with multiple covariates

Supplementary Figure 2. Graphical assessment of proportional hazards assumption for the composite endpoint of all-cause death or subsequent myocardial infarction (n=56,137) Notes: solid circles = Non-T2DM, hollow circles = T2DM.

Graphical Assessment of Proportional Hazards Assumption Model for Primary Outcome



T2DM/Non-T2DM HR = 1.41, 95% CI [1.27, 1.56] p-value = <.000001 Hazard ratio from stepwise Cox regression adjusted with multiple covariates