

**Indexed according to
the ICD-10 codes**

Category of complications

E110-E119	Type 2 diabetes mellitus
E780-E789	Disorders of lipoprotein metabolism and other lipidemias
I10	Essential (primary) hypertension
I480-I489	Atrial fibrillation and flutter
N180-N189	Chronic kidney disease

**Indexed according to
ATC codes**

Category of concomitant medications

A10H0-A10P5	Oral antidiabetic drugs
B01C1-B01C9	Platelet aggregation inhibitors
C03A1-C03A9	Diuretic
C07A0	Beta blocking agents
C08A0	Calcium antagonists
C09A0-C09X0	Agents acting on the renin-angiotensin system
C10A1-C10C0	Lipid-regulating/antiatheroma preparations

Appendix 1.

Covariates classification based on ICD-10 codes and ATC codes.

ICD-10, International Classification of Diseases, 10th Revision

ATC, Anatomical Therapeutic Chemical Classification System

	Mean (SD)	Case group (n = 22996)	Control group (n = 22996)	Std diff
		N (%)	N (%)	
Age		78.6 (7.2)	78.5 (7.3)	
Sex	Male	12965 (56.4)	12965 (56.4)	
	Female	10031 (43.6)	10031 (43.6)	
Complications				
Type 2 diabetes mellitus		5676 (24.7)	3818 (16.6)	0.201
Essential (primary) hypertension		12321 (53.6)	9133 (39.7)	0.281
Atrial fibrillation and flutter		2945 (12.8)	1651 (7.2)	0.188
Chronic kidney disease		1914 (8.3)	1023 (4.4)	0.159
Disorders of lipoprotein metabolism and other lipidemias		4850 (21.1)	3702 (16.1)	0.129
Knee osteoarthritis		1376 (6.0)	1202 (5.2)	0.033
Hip osteoarthritis		261 (1.1)	257 (1.1)	0.002
Hand osteoarthritis		38 (0.2)	39 (0.2)	0.001
Concomitant medication				
Oral antidiabetic drugs		3593 (15.6)	2305 (10.0)	0.168
Platelet aggregation inhibitors		6357 (27.6)	2700 (11.7)	0.408
Diuretic		4785 (20.8)	2334 (10.1)	0.298
Beta blocking agents		4197 (18.3)	1509 (6.6)	0.36
Calcium antagonists		6872 (29.9)	4520 (19.7)	0.239
Agents acting on the renin-angiotensin system		6574 (28.6)	4126 (17.9)	0.254
Lipid-regulating/antiatheroma preparations		5579 (24.3)	3316 (14.4)	0.251

Appendix 2.**Characteristics of patients with IHD and controls.**

SD, standard deviation; Std diff, standardized difference.

	Mean (SD)	Case group (n = 31639)	Control group (n = 31639)	Std diff
		N (%)	N (%)	
Age		79.0 (7.3)	78.9 (7.3)	
Sex	Male	17920 (56.6)	17920 (56.6)	
	Female	13719 (43.4)	13719 (43.4)	
Complications				
Type 2 diabetes mellitus		7761 (24.5)	5164 (16.3)	0.205
Essential (primary) hypertension		19164 (60.6)	12085 (38.2)	0.459
Atrial fibrillation and flutter		4284 (13.5)	1304 (4.1)	0.337
Chronic kidney disease		2739 (8.7)	1044 (3.3)	0.227
Disorders of lipoprotein metabolism and other lipidemias		8017 (25.3)	5355 (16.9)	0.207
Knee osteoarthritis		1751 (5.5)	1702 (5.4)	0.007
Hip osteoarthritis		349 (1.1)	361 (1.1)	0.004
Hand osteoarthritis		41 (0.1)	45 (0.1)	0.003
Concomitant medication				
Oral antidiabetic drugs		4756 (15.0)	3197 (10.1)	0.149
Platelet aggregation inhibitors		9219 (29.1)	4751 (15.0)	0.346
Diuretic		6153 (19.4)	1682 (5.3)	0.439
Beta blocking agents		6412 (20.3)	1311 (4.1)	0.508
Calcium antagonists		10213 (32.3)	6314 (20.0)	0.283
Agents acting on the renin-angiotensin system		9909 (31.3)	5390 (17.0)	0.338
Lipid-regulating/antiatheroma preparations		8958 (28.3)	5031 (15.9)	0.303

Appendix 3.**Characteristics of patients with CHF and controls.**

SD, standard deviation; Std diff, standardized difference.

		Case group (n =14944)	Control group (n =14944)	Std diff
		N (%)	N (%)	
Age	Mean (SD)	79.1 (7.2)	79.1 (7.2)	
Sex	Male	8657 (57.9)	8657 (57.9)	
	Female	6287 (42.1)	6287 (42.1)	
Complications				
Type 2 diabetes mellitus		3900 (26.1)	2781 (18.6)	0.18
Essential (primary) hypertension		8830 (59.1)	6490 (43.4)	0.317
Atrial fibrillation and flutter		1605 (10.7)	1221 (8.2)	0.088
Chronic kidney disease		1195 (8.0)	824 (5.5)	0.099
Disorders of lipoprotein metabolism and other lipidemias		3605 (24.1)	2851 (19.1)	0.123
Knee osteoarthritis		959 (6.4)	774 (5.2)	0.053
Hip osteoarthritis		154 (1.0)	152 (1.0)	0.001
Hand osteoarthritis		23 (0.2)	21 (0.1)	0.003
Concomitant medication				
Oral antidiabetic drugs		2365 (15.8)	1671 (11.2)	0.136
Platelet aggregation inhibitors		4503 (30.1)	2333 (15.6)	0.351
Diuretic		2776 (18.6)	2002 (13.4)	0.142
Beta blocking agents		2340 (15.7)	1671 (11.2)	0.132
Calcium antagonists		4404 (29.5)	3165 (21.2)	0.192
Agents acting on the renin-angiotensin system		4409 (29.5)	3094 (20.7)	0.204
Lipid-regulating/antiatheroma preparations		3794 (25.4)	2767 (18.5)	0.167

Appendix 4.**Characteristics of patients with stroke and controls.**

SD, standard deviation; Std diff, standardized difference.

	Crude estimate			Adjusted estimate		
	Odds ratio	Lower 95% CI	Upper 95% CI	Odds ratio	Lower 95% CI	Upper 95% CI
Type 2 diabetes mellitus	1.659	1.584	1.739	1.362	1.283	1.446
Essential (primary) hypertension	1.751	1.686	1.818	1.2	1.144	1.259
Atrial fibrillation and flutter	1.902	1.784	2.027	1.379	1.283	1.482
Chronic kidney disease	1.96	1.811	2.121	1.37	1.255	1.495
Disorders of lipoprotein metabolism and other lipidemias	1.395	1.33	1.463	0.912	0.858	0.969
Knee osteoarthritis	1.156	1.067	1.253	1.187	1.086	1.297
Hip osteoarthritis	1.016	0.854	1.209	1.078	0.891	1.306
Hand osteoarthritis	0.974	0.623	1.523	1.099	0.677	1.784
Oral antidiabetic drugs	1.681	1.588	1.78	0.987	0.916	1.063
Platelet aggregation inhibitors	2.911	2.763	3.066	2.387	2.257	2.525
Diuretic	2.377	2.249	2.512	1.475	1.384	1.571
Beta blocking agents	3.209	3.009	3.422	2.152	2.002	2.313
Calcium antagonists	1.744	1.669	1.822	1.123	1.065	1.185
Agents acting on the renin-angiotensin system	1.818	1.739	1.901	1.017	0.961	1.076
Lipid-regulating/antiatheroma preparations	1.905	1.815	2	1.264	1.187	1.346

Appendix 5.

Crude and adjusted ORs and 95% CIs of IHD in relation to KOA, HipOA, and HandOA.

CI, confidence interval.

	Crude estimate			Adjusted estimate		
	Odds ratio	Lower 95% CI	Upper 95% CI	Odds ratio	Lower 95% CI	Upper 95% CI
Type 2 diabetes mellitus	1.676	1.61	1.744	1.324	1.253	1.398
Essential (primary) hypertension	2.495	2.413	2.581	1.648	1.577	1.723
Atrial fibrillation and flutter	3.603	3.374	3.846	2.759	2.564	2.969
Chronic kidney disease	2.771	2.574	2.984	1.865	1.713	2.029
Disorders of lipoprotein metabolism and other lipidemias	1.675	1.611	1.743	0.941	0.891	0.993
Knee osteoarthritis	1.031	0.962	1.104	1.027	0.948	1.112
Hip osteoarthritis	0.966	0.834	1.12	0.968	0.816	1.149
Hand osteoarthritis	0.911	0.597	1.391	1.139	0.705	1.841
Oral antidiabetic drugs	1.583	1.508	1.662	0.846	0.79	0.905
Platelet aggregation inhibitors	2.343	2.25	2.44	1.571	1.496	1.65
Diuretic	4.374	4.121	4.643	3.007	2.816	3.211
Beta blocking agents	5.938	5.559	6.343	3.33	3.099	3.579
Calcium antagonists	1.92	1.85	1.993	0.999	0.952	1.048
Agents acting on the renin-angiotensin system	2.243	2.157	2.333	1.076	1.021	1.133
Lipid-regulating/antiatheroma preparations	2.104	2.021	2.189	1.215	1.149	1.286

Appendix 6.
Crude and adjusted ORs and 95% CIs of CHF in relation to KOA, HipOA, and HandOA.
CI, confidence interval.

	Crude estimate			Adjusted estimate		
	Odds ratio	Lower 95% CI	Upper 95% CI	Odds ratio	Lower 95% CI	Upper 95% CI
Type 2 diabetes mellitus	1.555	1.47	1.644	1.254	1.17	1.344
Essential (primary) hypertension	1.913	1.824	2.007	1.561	1.472	1.656
Atrial fibrillation and flutter	1.355	1.252	1.465	1.178	1.08	1.284
Chronic kidney disease	1.489	1.358	1.632	1.141	1.034	1.259
Disorders of lipoprotein metabolism and other lipidemias	1.357	1.283	1.435	0.938	0.875	1.005
Knee osteoarthritis	1.26	1.142	1.39	1.221	1.099	1.356
Hip osteoarthritis	1.013	0.809	1.27	0.918	0.723	1.165
Hand osteoarthritis	1.095	0.606	1.979	1.169	0.635	2.151
Oral antidiabetic drugs	1.503	1.404	1.609	0.986	0.904	1.074
Platelet aggregation inhibitors	2.323	2.193	2.462	2.028	1.903	2.162
Diuretic	1.498	1.405	1.597	1.107	1.029	1.19
Beta blocking agents	1.473	1.377	1.576	0.931	0.86	1.008
Calcium antagonists	1.564	1.483	1.65	1.094	1.027	1.165
Agents acting on the renin-angiotensin system	1.599	1.516	1.686	1.035	0.969	1.105
Lipid-regulating/antiatheroma preparations	1.498	1.417	1.584	0.976	0.908	1.05

Appendix 7.

Crude and adjusted ORs and 95% CIs of stroke in relation to KOA, HipOA, and HandOA.

CI, confidence interval.