

SUPPLEMENTAL MATERIAL

Type 2 diabetes and risk of diverticular disease: a Danish cohort study

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Supplemental Material 1. Extended type 2 diabetes cohort

For this analysis, any type of diabetes was defined by at least one of the following three criteria: 1) self-reported diabetes diagnosis in the Danish National Health Survey (yes/no), 2) a hospital-based discharge diagnosis of diabetes registered in the Danish National Patient Registry before the index date, or 3) a redeemed prescription for a glucose-lowering drug registered in the Danish National Health Service Prescription Database before the index date. We then defined and excluded patients with type 1 diabetes as those with a hospital-based diabetes diagnosis or a redeemed prescription for insulin before 30 years of age and with no redeemed prescription of oral glucose-lowering medications before the index date.

Supplemental Table 1. <i>International Classification of Diseases (ICD), Nordic Medico-Statistical Committee System (NOMESCO), and Anatomical Therapeutic Chemical Classification System (ATC) codes used in the study.</i>		
	ICD-10/NOMESCO	ATC
Exposure		
Type 2 Diabetes Mellitus	E10-E14 O24 (except O24.4) G63.2, H36.0, N08.3 Type 2 diabetes mellitus: first ICD-10 code or glucose-lowering medication (A10) at or above 40 years of age. Subclassifications: Type 1 diabetes mellitus: first ICD-10 code before 30 years of age and treated with insulin (A10A), in addition no history of oral glucose-lowering medications (A10B) before index date.	Insulin: A10A, and oral glucose-lowering medications: A10B
Outcome		
Diverticular Disease	K57.2–K57.9 (also used for exclusion) Subclassifications: 1) Surgically treated: ICD-10 code and a KJF, KJG, or KJAH01 surgery code (NOMESCO) recorded within 30 days after ICD-10 code. 2) Acute admission to inpatient care: ICD-10 code as an acute inpatient diagnosis	
Exclusion criteria		
Inflammatory Bowel Disease	K50-K51	
Colorectal Cancer	C18, C20	
Colonoscopy definition		
Colonoscopy or sigmoidoscopy (with or without biopsy)	KUJF32, KUJF35, KUJF42, KUJF45	
Comorbidities		
Myocardial Infarction	I21	
Stroke	I60, I61, I63, I64	
Heart Failure	I50, I11.0, I13.0, I13.2, I42.0, I42.6, I42.7, I42.8, I42.9	
Hypertension	I10-I15	Anti-hypertensive drugs: C02, vasodilators: C04, β -blockers: C07, calcium channel blockers: C08, renin-angiotensin system inhibitors: C09, and diuretics: C03 (≥ 2 prescriptions in the last year)
Atrial Fibrillation	I48	
Comedications		
Non-Steroidal Anti-Inflammatory Drugs		M01A (≥ 4 in the last year)
Antiplatelets		N02BA01, B01AC, (≥ 2 in the last year)

Angiotensin-Converting Enzyme inhibitors /Angiotensin 2 Receptor Blockers		C09AA, C09CA (≥ 2 in the last year)
Beta-Blockers		C07 (≥ 2 in the last year)
Calcium Channel Blockers		C08 (≥ 2 in the last year)
Diuretics		C03 (≥ 2 in the last year)
Statins		C10AA (≥ 2 in the last year)

Supplemental Table 2. Risk of diverticular disease in patients with and without diabetes among the 2010 and 2013 DNHS respondents ≥ 40 years of age, overall and stratified by duration of diabetes.

	Events	Incidence rates per 1,000 person-years (95% CI)	Hazard ratios (95% CI)	
			Crude*	Adjusted‡
No diabetes	7,825	0.54 (0.53-0.55)	Reference	Reference
Type 2 diabetes, overall	702	0.76 (0.70-0.82)	1.08 (1.00-1.16)	0.88 (0.80-0.96)
Short duration (< 2.5 years)	199	0.80 (0.70-0.92)	1.19 (1.04-1.37)	1.05 (0.90-1.23)
Moderate duration (2.5-4.9 years)	164	0.82 (0.70-0.95)	1.17 (1.00-1.37)	0.94 (0.78-1.12)
Long duration (≥ 5 years)	339	0.71 (0.64-0.79)	0.98 (0.88-1.09)	0.76 (0.67-0.87)

DNHS, Danish National Health Survey; CI, Confidence Interval.

*With age as underlying time variable. ‡Based on the crude model with additional adjustment for survey year, sex, body mass index, physical activity intensity, smoking behavior, diet, and education.