

Electronic supplementary material

Manuscript title: 'Metformin and risk of Alzheimer's disease among community-dwelling people with diabetes: a national case-control study'

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Table 1. Criteria used to identify medical conditions and history of medication use among cases and controls

Medical condition or medication use	ICD-10 code or Classification number	Measurement period	Data source
Renal failure	Hospitalization (ICD-10: I13.1, N18, N19, Z94.0, Z99.2, Z49; ICD-9 codes: 40311, 40391, 40412, 40492, 585,586, V420, V451, V560, V568) or special reimbursement (classification numbers 137, 138)	Diagnosed between 1987 ^a and the lag date	HDR, SRR
Cardiovascular comorbidities			
History of stroke	ICD-10: I60-I64, I69 ICD-9: 430, 431, 432, 4330A, 4331A, 4339A, 4349A, 4340A, 4341A, 4360 ICD-8: 430, 431, 432, 433, 434	Primary or secondary diagnosis between 1972 and the lag date	HDR
Hypertension	Hospitalization (ICD-10: I10-I15) or special reimbursement (classification number 205)	Diagnosed between 1996 ^a and the lag date	HDR, SRR
Coronary artery disease	Hospitalization (ICD-10: I20-I25) or (NOMESCO: FNA, FNC, FNE, FNG00, FNG10, FN1AT, FN1BT, FN1YT) or special reimbursement (classification numbers 206, 213, 280)	Diagnosed between 1996 ^a and the lag date	HDR, SRR
Chronic heart failure	Hospitalization (ICD-10: I42-43, I50, I110) or special reimbursement (classification number 201)	Diagnosed between 1996 ^a and the lag date	HDR, SRR
Atrial fibrillation	Hospitalization ICD-10: I48	Diagnosed between 1996 and the lag date	HDR
Peripheral arterial disease	Hospitalization (ICD-10: I70, I712, I714, I716, I719, I73, I77, I79, K551, K559, Z958; ICD-9 codes: 4400-4409, 4412, 4414, 4417, 4419, 4431-4439, 4471, 5571, 5579, V434)	Diagnosed between 1987 and the lag date	HDR

Psychiatric disorders			
Depression	Hospitalization (ICD-10: F32-34, F38-39; ICD-9 codes: 2961, 2968, 3011, 3004; ICD-8 codes: 2960, 3004, 3011)	Diagnoses from 1972 until five years prior to the index date	HDR
Bipolar disorder	Hospitalization (ICD-10 codes F30-31; ICD-9 codes 2962, 2963, 2964 and 2967; ICD-8 codes 29610, 29620, 29630, 29688 and 29699)	Diagnoses from 1972 until five years prior to the index date	HDR
Schizophrenia, schizotypal and delusional disorders	Hospitalization (ICD-10 codes F20–29; ICD-9 codes 295, 297, 298, 3010 and 3012; ICD-8 codes 295, 297, 298, 29999, 30100 and 30120)	Diagnoses from 1972 until five years prior to the index date	HDR
Previous medication use			
HMG Co-A reductase inhibitor (statin)	ATC codes C10AA, C10BA, C10BX	Medications dispensed from 1995	PR
Antihypertensive ^b	ATC codes C02, C03, C07, C08, C09	Medications dispensed from 1995	PR
Sulfonylurea	ATC codes A10BB, A10BD02, A10BD04, A10BD06	Medications dispensed from 1995	PR
Insulin	ATC code A10A	Medications dispensed from 1995	PR
All other diabetes medications ^c	All other medications identified by ATC code A10 excluding use of metformin, sulfonylureas and insulin	Medications dispensed from 1995	PR

ATC: Anatomical and Therapeutic Chemical; HDR: Hospital Discharge Register; ICD: International Classification of Diseases; PR: Prescription Register; SRR: Special Reimbursement Register.

^a Special reimbursements since 1972

^b Includes beta blocking agents, calcium channel blockers, agents acting on the renin-angiotensin system and diuretics

^c excluding metformin, sulfonylureas and insulin