

S1 Table. Definition diagnosis code of comorbidities

Comorbidity	ICD-10-CM code and definition
Hypertension ^{a)}	I10-I13, I15; and minimum 1 prescription of anti-hypertensive drug (thiazide, loop diuretics, aldosterone antagonist, alpha-/beta-blocker, calcium-channel blocker, angiotensin-converting enzyme inhibitor, angiotensin II receptor blocker)
Diabetes mellitus ^{a)}	E10-E14; and minimum 1 prescription of anti-diabetic drugs (sulfonylureas, metformin, meglitinides, thiazolidinediones, dipeptidyl peptidase-4 inhibitors, α -glucosidase inhibitors and insulin)
Congestive heart failure	I09.9, I11.0, I13.2, I25.5, I42.0, I42.5-I42.9, I43.x, I50.x, P29.0
Cerebrovascular disease	G45.x, G46.x, H34.0, I60-I69
Transient ischemic attack	G458, G459
Peripheral vascular disease	I70-I71, I73.x, I77.1, I79.0, I79.2, K55.1, K55.8, K55.9, Z95.8, Z95.9
Myocardial infarction	I21, I22, I25.2
Dementia (Alzheimer's disease)	F00.x-F03.x, F05.1, G30.x, G31.x
Mild cognitive impairment	F06.7
Mild memory disturbance	F06.8
Other symptoms and signs involving cognitive functions and awareness	R41

All variables except hypertension and diabetes mellitus were defined when patients had one or more diagnoses during hospitalization or at outpatient clinic. ^{a)}Hypertension and diabetes mellitus were identified when patients had ≥ 1 diagnoses during hospitalization or ≥ 2 diagnoses at outpatient clinic for preventing overestimation of diagnosis.