

Supplementary Table 2. Definition of comorbidities

Diagnosis	ICD-10-CM code and definition
Hypertension	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	\geq 2 E11–E14: \geq 1 E11–E14 and minimum 1 prescription of anti-diabetic drugs (sulfony-lureas, metformin, meglitinides, thiazolidinediones, dipeptidyl peptidase-4 inhibitors, α -glucosidase inhibitors, meglitinides and insulin) Diabetes mellitus was defined based on at least two diagnostic codes or at least one claim per year for the prescription of anti-diabetic medication under diabetes diagnostic codes.
Hyperlipidemia ^a	E ₇ 8
Heart failure ^a	I50
Atrial fibrillation ^a	I48
Chronic kidney disease (≥ severe) ^a	N18.4-5, N18.9

ICD-10-CM, International Classification of Disease, 10th revision, Clinical Modification.

^a All variables except hypertension and diabetes mellitus were defined when patients had one or more diagnoses during hospitalization or at outpatient clinic.