

Supplementary File

Definitions of the diseases for exclusion

Patients with nonvalvular atrial fibrillation who had at least 2 outpatient records or 1 inpatient record of the following conditions (Table S1) during the last year before the initial prescription of non-vitamin-K antagonist oral anticoagulants (NOACs) will be excluded.

Table S1. ICD-9 or ICD-10 codes of diseases for exclusion.

Disease	ICD-9 code	ICD-10 code
Mitral stenosis	394.0	I05.0, I05.2, Q23.2
Prosthetic valves	V43.3	Z95.2
Infective endocarditis	036.42, 074.22, 093.2, 098.84, 112.81, 115.04, 115.14, 115.94, 391.1, 421.0, 421.1, 421.9, 424.9	A32.82, A39.51, B33.21, A52.03, A54.83, B37.6, B39.4, I39, I01.1, I33.0, I33.9, I38, M32.11
Chronic kidney disease	585	N18.x
ESRD (Registry for catastrophic illness patients' database)	585	N18.x
Haemodialysis	Procedure codes: 58001C, 58027C, 58029C	
Peritoneal dialysis	Procedure codes: 58002C, 58011C, 58017C, 58028C	

ESRD: end-stage renal disease; ICD: International Classification of Diseases