

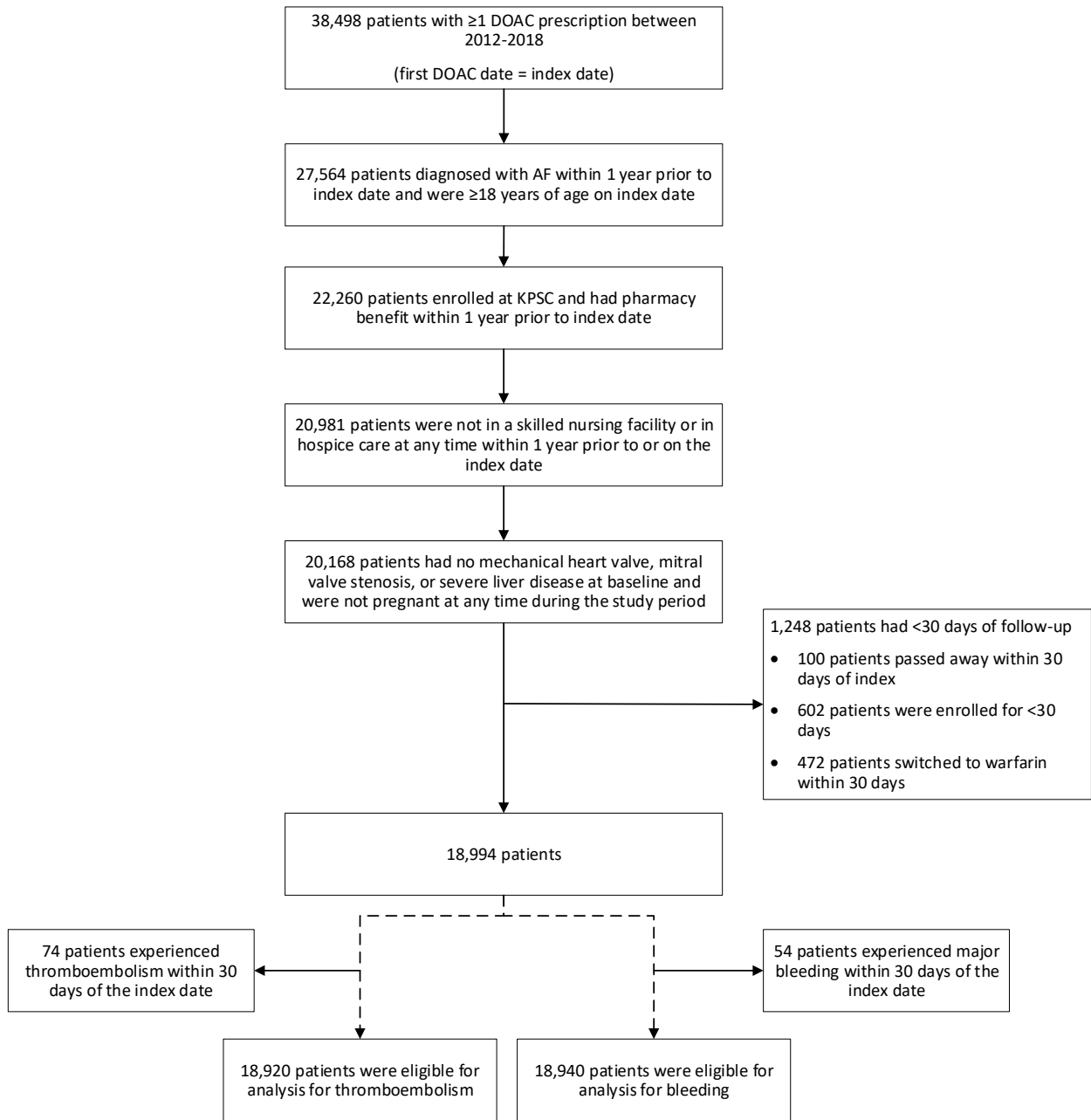
SUPPLEMENTAL MATERIAL

Table S1. Definition of Outcomes

Outcomes	ICD-9 or ICD-10 codes
Thromboembolism	
<ul style="list-style-type: none">Ischemic stroke	Principal hospital discharge diagnoses ICD-9 codes 433.x1, 434.x1, 436.x ICD-10 codes I63.x, I67.89 Positive Predictive Values (PPV) for the algorithm = 85% or higher ¹⁹
<ul style="list-style-type: none">Systemic embolism	Principal hospital discharge diagnoses ICD-9 codes 444.2, 444.8 - 444.9, 593.81 ICD-10 codes I74.2 – I74.9, N28.0
Major Bleed	
<ul style="list-style-type: none">Intracranial hemorrhage	Principal hospital discharge diagnosis ICD-9 codes 430 – 432, 852.2, 852.4x, 853.0x ICD-10 codes I60 - I62, S06.34 - S06.36, S06.4 – S06.5 PPV = 77% ¹⁹
<ul style="list-style-type: none">Gastrointestinal bleeds	Principal hospital discharge diagnosis ICD-9 codes 455.2, 455.5, 455.8, 456, 456.0, 456.2, 530.7, 530.82, 531.0 – 531.6, 532.0 – 532.6, 533.0 – 533.6, 534.0 – 534.6, 535.1, 535.x1, 537.83, 562.x2, 562.x3, 568.81, 569.3, 569.85, 578 ICD-10 codes I85.01, I85.1, I86, K22.6, K22.8, K25.0 – K25.6, K26.0 – K26.6, K27.0 – K27.6, K28.0 – K28.6, K29.01, K29.21, K29.41, K29.51, K29.61, K29.71, K29.81, K29.91, K31.811, K52.81, K55.21, K57.11, K57.13, K57.31, K57.33, K62.5, K64.4, K64.8, K66.1, K92.0 – K92.2
<ul style="list-style-type: none">Other major bleeds	Principal hospital discharge diagnosis ICD-9 codes 423.0, 459.0, 599.7, 719.11, 784.7, 784.8, 786.3 ICD-10 codes I31.2, M25.01, R04.0 – R04.2, R31, R31.0, R31.9, R58

PPV for major bleeds = 85%²⁰

Figure S1. Cohort Flow



*Abbreviations: DOAC = direct oral anticoagulants; AF = atrial fibrillation; KPSC = Kaiser Permanente Southern California