

Supplementary Table

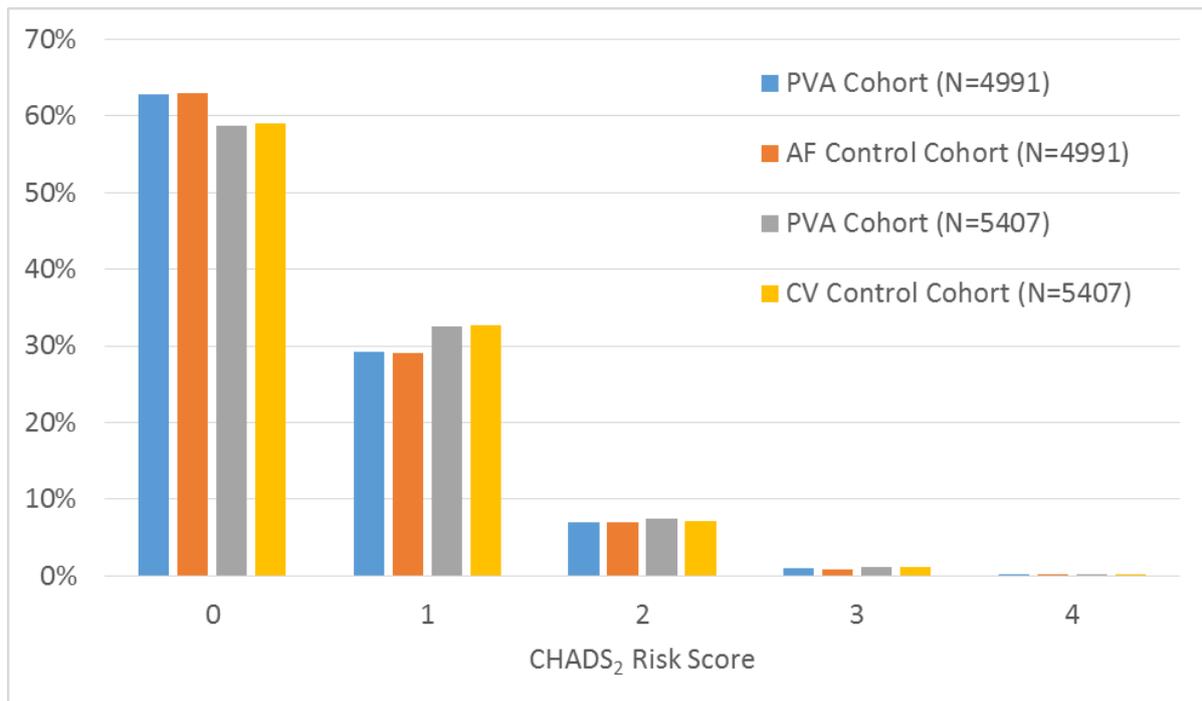
Diagnosis or Procedure	Definition
Ablation - Atrial Flutter	Any of the following OPCS4 codes appear in any procedure field:- K622 Percutaneous transluminal ablation of atrial wall for atrial flutter K623 Percutaneous transluminal ablation of conducting system of heart for atrial flutter NEC (April 2007 onwards)
Ablation - Atrioventricular (AV) Node	Any of the following OPCS4 codes appear in any procedure field:- K521 Open ablation of atrioventricular node K571 Percutaneous transluminal ablation of atrioventricular node
Ablation - Other Foci	Any of the following OPCS4 codes appear in any procedure field:- K574 Percutaneous transluminal ablation of accessory pathway (April 2006 onwards) K575 Percutaneous transluminal ablation of atrial wall NEC (April 2006 onwards) K578 Other specified other therapeutic transluminal operations on heart
Ablation - Pulmonary Vein	Any of the following OPCS4 codes appear in any procedure field:- K621 Percutaneous transluminal ablation of pulmonary vein to left atrium conducting system (April 2007 onwards)
Atrial Fibrillation or Flutter	Any of the following ICD10 codes appear in any diagnosis field:- I48X Atrial fibrillation or flutter
Cardiomyopathy	Any of the following ICD10 codes appear in any diagnosis field:- I42- Cardiomyopathy I43- Cardiomyopathy in diseases classified elsewhere I255 Ischemic cardiomyopathy
Cardiomyopathy - Hypertrophic	Any of the following ICD10 codes appear in any diagnosis field:- I421 Obstructive hypertrophic cardiomyopathy I422 Other hypertrophic cardiomyopathy
Cardioversion	Any of the following OPCS4 codes appear in any procedure field:- X501 Direct current cardioversion X502 External cardioversion NEC
Chronic Kidney Disease	Any of the following ICD10 codes appear in any diagnosis field:- I12- Hypertensive renal disease I13- Hypertensive heart and renal disease N18- Chronic kidney disease
Chronic Obstructive Pulmonary Disease (COPD)	Any of the following ICD10 codes appear in any diagnosis field:- J439 Emphysema, unspecified J44- Other chronic obstructive pulmonary disease
Coronary Artery Bypass Graft (CABG)	Any of the following OPCS4 codes appear in any procedure field:- K40- Saphenous vein graft replacement of coronary artery K41- Other autograft replacement of coronary artery K42- Allograft replacement of coronary artery K43- Prosthetic replacement of coronary artery K44- Other replacement of coronary artery K45- Connection of thoracic artery to coronary artery K46- Other bypass of coronary artery
Coronary Artery Disease (CAD)	Any of the following ICD10 codes appear in any diagnosis field:- I20- Angina pectoris I21- Acute myocardial infarction I22- Subsequent myocardial infarction I23- Certain current complications following acute myocardial infarction I24- Other acute ischaemic heart diseases I25- Chronic ischaemic heart disease Z951 Presence of aortocoronary bypass graft

Diabetes	Any of the following ICD10 codes appear in any diagnosis field:- E10- Insulin-dependent diabetes mellitus E11- Non-insulin-dependent diabetes mellitus E12- Malnutrition-related diabetes mellitus E13- Other specified diabetes mellitus E14- Unspecified diabetes mellitus
Heart Failure	Any of the following ICD10 codes appear in any diagnosis field:- I110 Hypertensive heart disease with (congestive) heart failure I130 Hypertensive heart and renal disease with (congestive) heart failure I132 Hypertensive heart and renal disease with both (congestive) heart failure and renal failure I50- Heart failure
Hyperlipidaemia	Any of the following ICD10 codes appear in any diagnosis field:- E780 Pure hypercholesterolaemia E781 Pure hyperglyceridaemia E782 Mixed hyperlipidaemia E783 Hyperchylomicronaemia E784 Other hyperlipidaemia E785 Hyperlipidaemia, unspecified
Hypertension	Any of the following ICD10 codes appear in any diagnosis field:- I10- Essential (primary) hypertension I11- Hypertensive heart disease I12- Hypertensive renal disease I13- Hypertensive heart and renal disease I15- Secondary hypertension
Obesity	Any of the following ICD10 codes appear in any diagnosis field:- E66- Obesity
Other Arrhythmias/Conduction Disorders	Any of the following ICD10 codes appear in any diagnosis field:- I44- Atrioventricular and left bundle-branch block I45- Other conduction disorders I47- Paroxysmal tachycardia I49- Other cardiac arrhythmias
Other Operations on the Heart Conduction System	Any of the following OPCS4 codes appear in any procedure field:- K522 Epicardial excision of rhythmogenic focus K523 Endocardial excision of rhythmogenic focus K524 Open division of accessory pathway within heart K525 Open division of conducting system of heart NEC K528 Other specified open operations on conducting system of heart K529 Unspecified open operations on conducting system of heart K572 Percutaneous transluminal ablation of conducting system of heart NEC K573 Percutaneous transluminal removal of foreign body from heart (April 2006 onwards)

Pacemaker or Implantable Cardioverter Defibrillator (ICD)	<p>Any of the following OPCS4 codes appear in any procedure field:- K591 Implantation of cardioverter defibrillator using one electrode lead K592 Implantation of cardioverter defibrillator using two electrode leads K593 Resiting of lead of cardioverter defibrillator K594 Renewal of cardioverter defibrillator K595 Removal of cardioverter defibrillator K596 Implantation of cardioverter defibrillator using three electrode leads K598 Other specified cardioverter defibrillator introduced through the vein K599 Unspecified cardioverter defibrillator introduced through the vein K601 Implantation of intravenous cardiac pacemaker system NEC K602 Resiting of lead of intravenous cardiac pacemaker system K603 Renewal of intravenous cardiac pacemaker system K604 Removal of intravenous cardiac pacemaker system K605 Implantation of intravenous single chamber cardiac pacemaker system K606 Implantation of intravenous dual chamber cardiac pacemaker system K607 Implantation of intravenous biventricular cardiac pacemaker system K608 Other specified cardiac pacemaker system introduced through vein K609 Unspecified cardiac pacemaker system introduced through vein K611 Implantation of cardiac pacemaker system NEC K612 Resiting of lead of cardiac pacemaker system NEC K613 Renewal of cardiac pacemaker system NEC K614 Removal of cardiac pacemaker system NEC K615 Implantation of single chamber cardiac pacemaker system K616 Implantation of dual chamber cardiac pacemaker system K617 Implantation of biventricular cardiac pacemaker system K618 Other specified other cardiac pacemaker system K619 Unspecified other cardiac pacemaker system U311 Distant pacemaker test U318 Other specified pacemaker testing U319 Unspecified pacemaker testing</p> <p>OR any of the following ICD10 codes appear in any diagnosis field:- Z450 Adjustment and management of cardiac pacemaker Z950 Presence of cardiac pacemaker</p>
Percutaneous Coronary Intervention (PCI)	<p>Any of the following OPCS4 codes appear in any procedure field:- K49- Transluminal balloon angioplasty of coronary artery K50- Other therapeutic transluminal operations on coronary artery K75- Percutaneous transluminal balloon angioplasty and insertion of stent into coronary artery (only available from April 2006)</p>
Peripheral Vascular Disease (PVD)	<p>Any of the following ICD10 codes appear in any diagnosis field:- I70- Atherosclerosis I71- Aortic aneurysm and dissection I72- Other aneurysm and dissection I73- Other peripheral vascular diseases I74- Arterial embolism and thrombosis I798 Other disorders of arteries, arterioles and capillaries in diseases classified elsewhere</p>
Pulmonary Disease	<p>Any of the following ICD10 codes appear in any diagnosis field:- I26- Pulmonary embolism I27- Other pulmonary heart diseases I28- Other diseases of pulmonary vessels</p>
Sleep Apnoea	<p>Any of the following ICD10 codes appear in any diagnosis field:- G473 Sleep apnoea</p>
Stroke - Hemorrhagic	<p>Any of the following ICD10 codes appear in any diagnosis field:- I60- Subarachnoid haemorrhage I61- Intracerebral haemorrhage I62- Other nontraumatic intracranial haemorrhage</p>

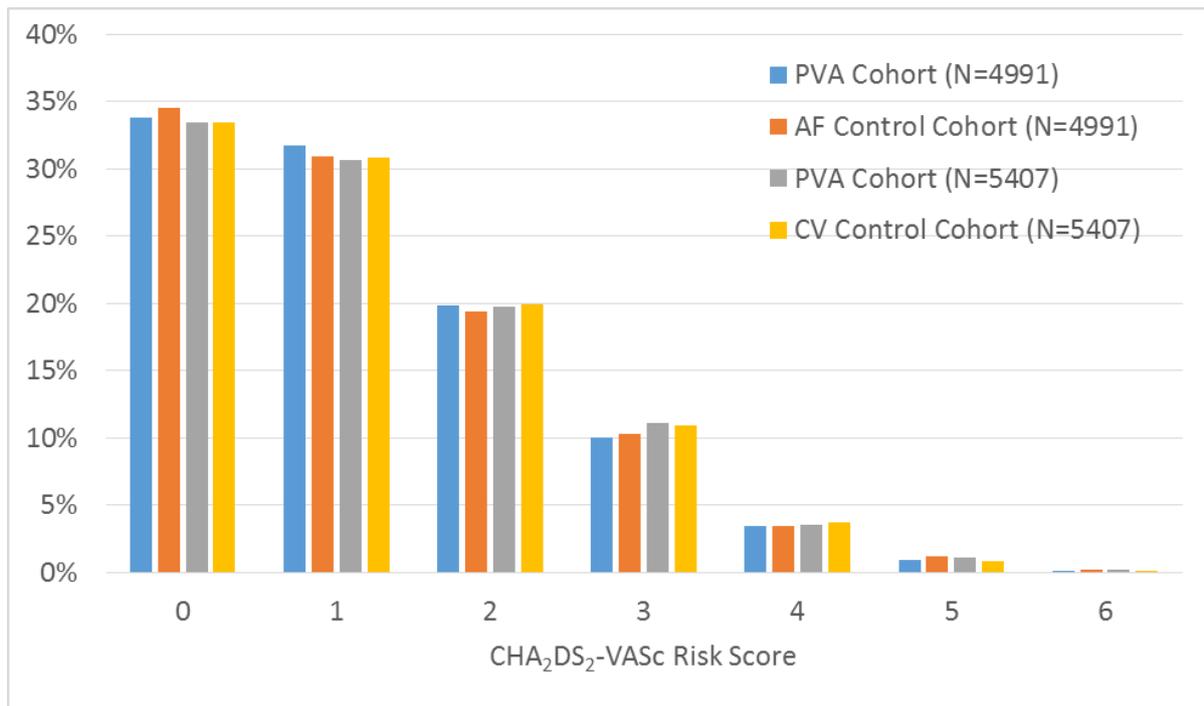
Stroke - Ischemic	Any of the following ICD10 codes appear in any diagnosis field:- I63- Cerebral infarction I64X Stroke, not specified as haemorrhage or infarction
Transient Ischemic Attack (TIA)	Any of the following ICD10 codes appear in any diagnosis field:- G45- Transient cerebral ischaemic attacks and related syndromes
Valvular Disease	Any of the following OPCS4 codes appear in any procedure field:- K253 Prosthetic replacement of mitral valve K263 Prosthetic replacement of aortic valve OR any of the following ICD10 codes appear in any diagnosis field:- I05- Rheumatic mitral valve diseases I06- Rheumatic aortic valve diseases I07- Rheumatic tricuspid valve diseases I08- Multiple valve diseases I091 Rheumatic diseases of endocardium, valve unspecified I34- Nonrheumatic mitral valve disorders I35- Nonrheumatic aortic valve disorders I36- Nonrheumatic tricuspid valve disorders I37- Pulmonary valve disorders I38- Endocarditis, valve unspecified I39- Endocarditis and heart valve disorders in diseases classified elsewhere Z952 Presence of prosthetic heart valve Z953 Presence of xenogenic heart valve
Vascular Disease	Any of the components in these fields:- Coronary Artery Disease Peripheral Vascular Disease CABG PCI

Figure S1 A: CHADS₂ Risk Scores by Matched Cohort



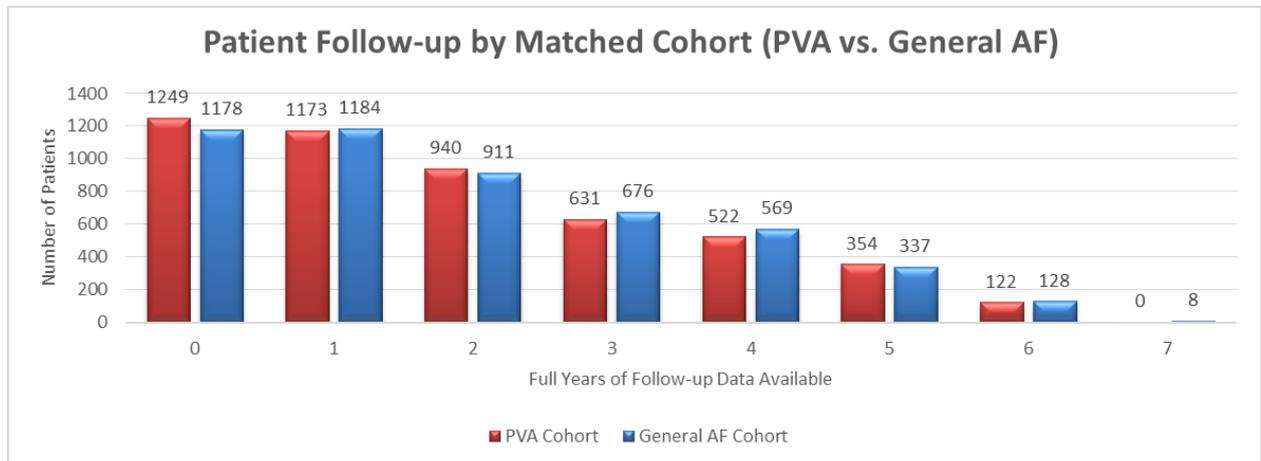
PVA: pulmonary vein ablation; AF: atrial fibrillation; CV: cardioversion

Figure S1 B: CHA₂DS₂-VASc Risk Scores by Matched Cohort



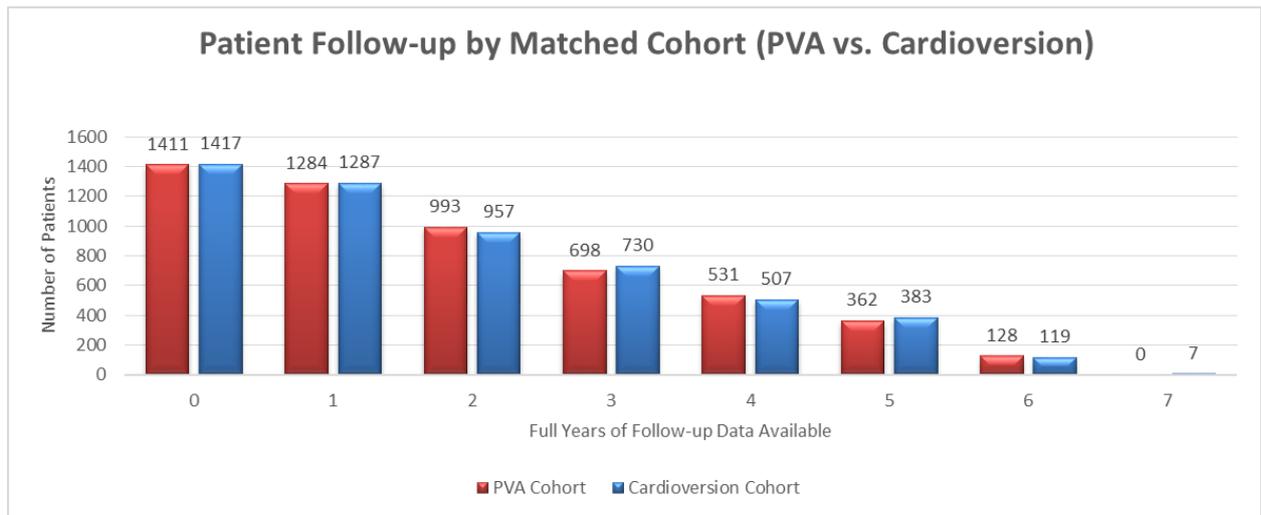
PVA: pulmonary vein ablation; AF: atrial fibrillation; CV: cardioversion

Figure S2 A: Patient Follow-up by Matched Cohort (PVA vs. General AF)



PVA: pulmonary vein ablation; AF: atrial fibrillation

Figure S2 B: Patient Follow-up by Matched Cohort (PVA vs. Cardioversion)



PVA: pulmonary vein ablation