Supplementary Table 2. ICD-9-CM codes of suspected risk factors searched in the National Inpatient Sample (NIS) from 1998–2013

inpatient Sample (NIS) 11011 1996–2015	
Suspected Risk Factor	ICD-9-CM Codes Searched
Acute coronary syndrome	410.x
Anemia	280.x, 285.2x
Aortic and mitral stenosis or insufficiency	396.x
Aortic insufficiency	395.1, 746.4
Aortic stenosis	395.0, 746.3
Aortic stenosis and insufficiency	395.2
Atrial fibrillation	427.3x
Cardiogenic shock	785.51
Cardiomyopathy	425.x
Carotid stenosis	433.1x
Congestive heart failure	428.0
Coronary artery disease	411.x, 412, 413.x, 414.00–414.06,
	414.3, 414.8, 414.9, V45.81, V45.82
DM type 1	250.01, 250.03
DM type 2	250.00, 250.02
DM with neurological manifestations	250.60, 250.62
DM with ophthalmic manifestations	362.01–362.06, 250.5x
DM with renal manifestations	250.40, 250.42
Embolic stroke	434.11
Giant cell arteritis	446.5
Hypercoagulable state*	289.81, 289.82, 270.4, 795.79
Hyperlipidemia	272.0–272.4
Hypertension	401.x
Hypertensive heart disease	402.x
Mitral insufficiency	746.6, 394.1
Mitral stenosis	746.5, 394.0
Mitral stenosis and insufficiency	394.4
Myxoma	212.7, 164.1
Obesity	278.0x
Other aortic valve disease	395.9
Other mitral valve disease	394.9
Other stroke	997.02, 434.91
Peripheral vascular disease	443.9
Postoperative bleed	285.1
Smoking	V15.82, 305.1
Thrombocytopenia	287.30, 287.31, 287.33, 287.39,
• 1	287.4x, 287.5, 287.8, 287.9
Thrombotic stroke	434.01
Transfusion	99.00, 99.04
Transient cerebral ischemia	435.x
Ventricular septal defect	745.4

Suspected risk factors were searched in the NIS among patients undergoing cardiac surgery. An "x" next to a code indicates that all nested codes were searched. e.g., "278.0x" indicates that "278.00–278.03" were searched. Each risk factor was included in the multivariate models as independent variables. \*Hypercoagulable state includes: 289.81: primary hypercoagulable state; 289.82: Secondary hypercoagulable state; 270.4: Disturbances of sulfur-bearing amino-acid metabolism (as a proxy for homocystinuria); 795.79: Other and unspecified nonspecific immunological findings (includes presence of antiphospholipid antibody). DM with ophthalmic complications includes: diabetic retinopathy (362.01–362.06, excluding diabetic macular edema) and diabetes with ophthalmic manifestations (250.5x). Acute coronary syndrome includes codes for initial, unspecified, and subsequent episodes of care for myocardial infarction. DM: diabetes mellitus; ICD-9-CM: International Classification of Diseases, Ninth Revision, Clinical Modification.