

Safety of transcatheter aortic valve replacement in patients with aortic aneurysm: a propensity-matched analysis

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Short title: Safety of non TA-TAVR in aortic aneurysm

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Key Words: transcatheter aortic valve replacement, aortic stenosis, aortic aneurysm

Supplemental Material: ICD 9 and 10 codes used in data analysis

ICD 9 Code	Diagnosis/Procedure	ICD 10 Code
	Transfemoral transcatheter aortic valve replacement	
35.05	Endovascular Replacement of Aortic Valve	
	Replacement of Aortic Valve with Synthetic Substitute, Percutaneous Approach	02RF3JZ
	Replacement of Aortic Valve with Autologous Tissue Substitute, Percutaneous Approach	02RF37Z
	Replacement of Aortic Valve with Zooplastic Tissue, Percutaneous Approach	02RF38Z
	Replacement of Aortic Valve with Non-autologous Tissue Substitute, Percutaneous Approach	02RF3KZ
	Permanent pacemaker placement	
37.80	Insertion of Permanent Pacemaker, Initial or Replacement, Type of Device Not Specified	
37.81	Initial Insertion of Single-Chamber Device, Not Specified as Rate Responsive	
37.82	Initial Insertion of a Single-Chamber Device, Rate Responsive	

37.83	Initial Insertion of Dual-Chamber Device	
	Insertion of Pacemaker Lead into Right Atrium, Percutaneous Approach	02H63JZ
	Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Approach	02HK3JZ
	Insertion of pacemaker, dual chamber into chest, subcutaneous tissue and fascia	0JH636Z
	Aortic Aneurysm	
441.2	Thoracic aortic aneurysm without rupture	I71.2
441.3	Abdominal aortic aneurysm without rupture	I71.4
441.7	Thoracoabdominal aortic aneurysm without rupture	I71.6
441.9	Aortic aneurysm of unspecified site without rupture	I71.9
441.1	Thoracic aortic aneurysm, ruptured	I71.1
441.3	Abdominal aortic aneurysm, ruptured	I71.3
441.6	Thoracoabdominal aortic aneurysm, ruptured	I71.5
441.5	Aortic aneurysm of unspecified site, ruptured	I71.8
	Aortic Dissection	
441.01	Dissection of the aorta, thoracic	I71.01

441.02	Dissection of the aorta, abdominal	I71.02
441.03	Dissection of the aorta, thoracoabdominal	I71.03
441.00	Dissection of the aorta, unspecified site	I71.00
	Smoking	
350.1	Tobacco use disorder	F17.2, Z72.0
V15.82	History of tobacco use	Z87.891
	Nicotine dependence, unspecified, uncomplicated	F17.200
	Diabetes	
	Diabetes mellitus due to underlying condition	E08*
	Drug or chemical induced diabetes mellitus	E09*
	Type 1 diabetes mellitus	E10*
	Type 2 diabetes mellitus	E11*
	Other specified diabetes mellitus	E13*
	Coronary artery disease	
413.9	Angina pectoris	I20*
410.0, 410.1, 410.11, 410.4, 410.91	Acute myocardial infarction	I21*
410.0, 410.1, 410.11, 410.4, 410.91	Subsequent ST Elevation and Non-ST Elevation myocardial infarction	I22*
412, 414.01, 414.00, 414.4, 414.9,	Chronic ischemic heart disease	I25*

	Hypertension	
	Essential (primary) hypertension	I10*
	Hypertensive heart disease	I11*
	Hypertensive chronic kidney disease	I12*
	Hypertensive heart and chronic kidney disease	I13*
	Secondary hypertension	I15*
	Hypertensive crisis	I16*
	Congestive Heart Failure	
	Cardiomyopathy	I42*
	Cardiomyopathy in diseases classified elsewhere	I43*
	Heart failure	I50*
	Chronic Kidney Disease	
	Chronic kidney disease	N18*
	Hypertensive chronic kidney disease	I12*
	Hypertensive heart and chronic kidney disease	I13*
	Obesity	
	Body mass index (BMI) 30-39, adult	Z68.3*
	Body mass index (BMI) 40 or greater, adult	Z68.4*
	Overweight and obesity	E66*
	Cerebrovascular accident	

434.01, 434.11, 434.91	Cerebral infarction	I63*
997.02	Intraoperative cerebrovascular infarction	I97.81*
997.02	Postprocedural cerebrovascular infarction	I97.82*
	Acute Limb Ischemia	
444.21	Embolism and thrombosis of arteries of the upper extremities	I74.2
444.22	Embolism and thrombosis of arteries of the lower extremities	I74.3
	Embolism and thrombosis of arteries of extremities, unspecified	I74.4
444.81	Embolism and thrombosis of iliac artery	I74.5
	Acute Kidney Injury	
	Acute kidney failure with tubular necrosis	N170
	Acute kidney failure with acute cortical necrosis	N171
584.7	Acute kidney failure with medullary necrosis	N172
	Other acute kidney failure	N178
584.9	Acute kidney failure, unspecified	N179
	Heart Block	
426.0	Atrioventricular block complete	I44.2
426.11	First degree atrioventricular block	I44.0
426.12	Mobitz (type) II atrioventricular block	I44.1

426.13	Other second-degree atrioventricular block	
426.9	Conduction disorder, unspecified	I45.9
426.6	Other heart block	I45.4
	Hypertension	
	Essential (primary) hypertension	I10*
	Hypertensive heart disease	I11*
	Hypertensive chronic kidney disease	I12*
	Hypertensive heart and chronic kidney disease	I13*
	Secondary hypertension	I15*
	Hypertensive crisis	I16*
99.01-99.09	Blood Transfusion	30243N0 30243N1 30243P0 30243P1 30243H0 30243H1 30240N0 30240N1 30240P0 30240P1 30240H0 30240H1 30230H0 30230H1 30230N0 30230N1 30230P0 30230P1 30233N0 30233N1 30233P0 30233P1
998.11, 998.12, 285.1	Post op-hemorrhage	I97611 I97618 I97620 I97411 I97418 I9742 T85838 T82837 T82838
39.31, 39.41, 39.49, 39.52, 39.53, 39.56, 39.57, 39.58, 39.59, 39.79	Vascular complications	04QY0ZZ 04QY3ZZ 04QY4ZZ 04QC0ZZ 04QC3ZZ 04QC4ZZ 04QD0ZZ 04QD3ZZ 04QD4ZZ 03QY0ZZ 03QY3ZZ 03QY4ZZ 03Q30ZZ0 3Q33ZZ 03Q34ZZ

		03Q40ZZ 03Q43ZZ 03Q44ZZ 0GQ60ZZ 0GQ63ZZ 0GQ64ZZ 0GQ70ZZ 0GQ73ZZ 0GQ74ZZ 03L23ZZ 03L33ZZ 03L43ZZ 03L50DZ 03L53DZ 03L53ZZ 03L54DZ 03L60DZ 03L63DZ 03L63ZZ 03L64DZ 03L70DZ 03L73DZ 03L73ZZ 03L74DZ 03L80DZ 03L83DZ 03L83ZZ 03L84DZ 03L90DZ 03L93DZ 03L93ZZ 03L94DZ 03LA0DZ 03LA3DZ 03LA3ZZ 03LA4DZ 03LB0DZ 03LB3DZ 03LB3ZZ 03LB4DZ 03LC0DZ 03LC3DZ 03LC3ZZ 03LC4DZ 03LH3ZZ 03LJ3ZZ 04L03ZZ 04LC0DZ 04LC3DZ 04LC3ZZ 04LC4DZ 04LD0DZ 04LD3DZ 04LD3ZZ 04LD4DZ 04LE0DZ 04LE3DZ 04LE3ZZ 04LE4DZ 04LF0DZ 04LF3DZ 04LF3ZZ 04LF4DZ 04LH0DZ 04LH3DZ 04LH3ZZ 04LH4DZ 04LJ0DZ 04LJ3DZ 04LJ3ZZ 04LJ4DZ 04LK0DZ 04LK3DZ 04LK3ZZ 04LK4DZ 04LL0DZ 04LL3DZ 04LL3ZZ 04LL4DZ
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*-further subdivisions included