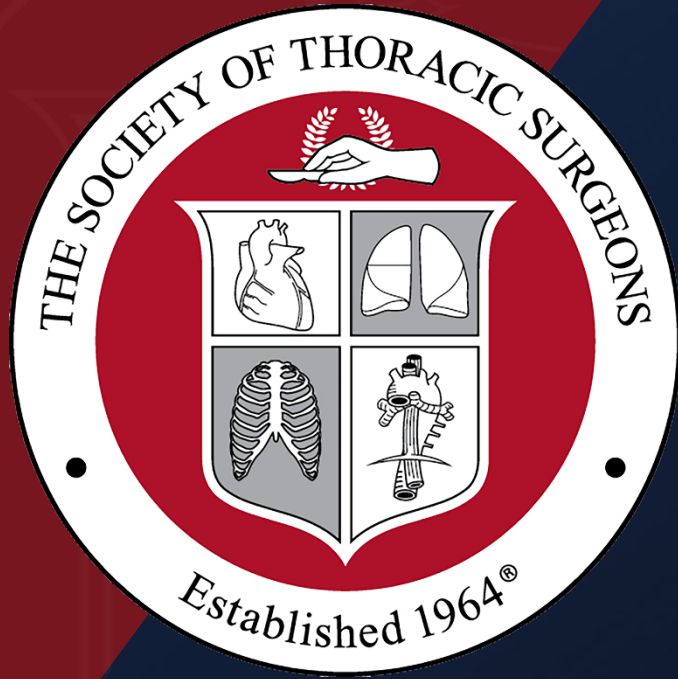




The Society of Thoracic Surgeons

Adult Cardiac Surgery Database

Monthly Webinar

September 2, 2026



Agenda

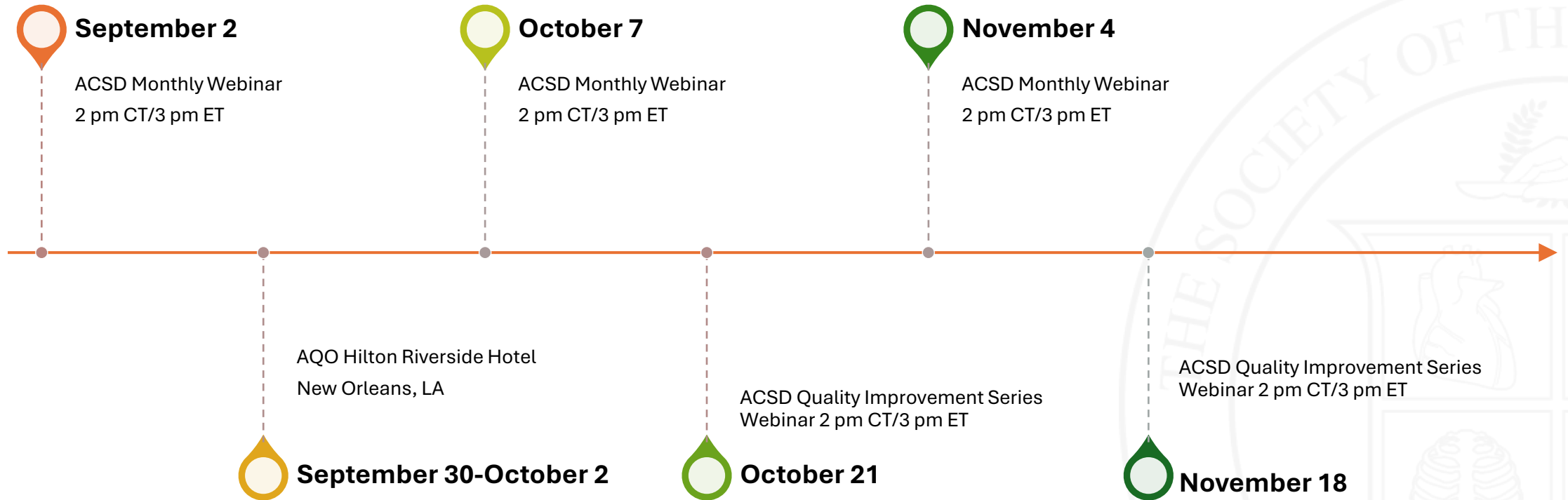
Welcome and Introductions

STS Updates

Aorta Session #6-Bentall Procedure
Melinda Offer

Q&A

Important Dates



2026 Harvest Schedule

Term	Harvest Submission Window Close	Opt-Out Date	Includes Procedures Performed Through	Report Posting	Comments
Harvest 1	February 20	February 24	December 31, 2025	Spring 2026	Star Rating
Harvest 2	May 29	June 2	March 31, 2026	Summer 2026	
Harvest 3	August 28	September 1	June 30, 2026	Fall 2026	Star Rating
Harvest 4	November 20	November 24	September 30, 2026	Winter 2026/2027	

Analysis for each harvest is based on a 36-month window.

*Data submission is continuous for all harvest terms. Submission close occurs at 11:59 p.m. Eastern on the date listed.
Harvest opt-out closes at 5:00 p.m. Eastern on the date listed.*

STS Updates

ACTION REQUIRED — BY OCT. 2

Update your contact information

Include surgeon lists and billing contacts.

[Open the Contact Form](#)

COMING LATER THIS SUMMER

ACSD Public Reporting update

The ACSD Public Reporting site will be refreshed with 2026 Harvest 1 data.

HARVEST 3 CLOSED AUG. 28

Harvest 3 reports

Expect your Harvest 3 reports in late October 2026.

AQO 2026 – New Orleans

STS National Database™
Trusted. Transformed. Real-Time.

AQO 2026 will offer a unique opportunity to explore techniques for optimizing data collection, using case scenarios, and driving quality improvement. Head for New Orleans this September to attend the premier gathering of STS National Database professionals as they share valuable research and important clinical findings with hundreds of peers.

September 30 – October 2, 2026

SEPTEMBER 24

Intermacs & Pedimacs Live Virtual Forum

SEPTEMBER 30 – OCTOBER 1

CHSD & GTSD Sessions

OCTOBER 1 – OCTOBER 2

ACSD Sessions (half-day breakouts)

[AQO 2026 Justification Letter Request | STS](#)



Registration & Pricing

HOW TO REGISTER

Event

2026 Advances in Quality & Outcomes: A Data Managers Meeting

Discussions on valuable research and important clinical findings with the goal of improving data collection and patient outcomes.

Register Now



Date(s)
Sep 30 – Oct 2, 2026

Location
New Orleans, LA

Audience
Allied Health
Data Manager

[Register at Meetings | STS](#)

PRICING

In-Person Registration	Registration Fee	Late Registration Fee (after Aug. 31, 2026)
STS Member — One Registry (CHSD or GTSD or ACSD)	\$700	\$800
STS Member — Two Registries ((CHSD or GTSD) AND (ACSD))	\$1,100	\$1,200
Non-Member — One Registry (CHSD or GTSD or ACSD)	\$800	\$900
Non-Member — Two Registries ((CHSD or GTSD) AND (ACSD))	\$1,200	\$1,300
Industry Employee	\$1,200	\$1,300
Virtual-Only Registration	Early Bird Registration Fee (through July 31, 2026)	Standard Registration Fee
STS Member Virtual Pass + Intermacs Forum	\$450	\$550
STS Member Virtual Pass Only (no Intermacs Forum)	\$350	\$450
Non-Member Virtual Pass + Intermacs Forum	\$550	\$650
Non-Member Virtual Pass Only (no Intermacs Forum)	\$450	\$550

Hotel Accommodations

Hilton New Orleans Riverside

2 Poydras St, New Orleans, LA 70130

\$259

Group rate per night, plus taxes

Sept. 8

Group rate guaranteed through
Tuesday

A block of rooms has been reserved at the Hilton New Orleans Riverside. Rooms booked after the cutoff date, or once the block sells out, are subject to hotel availability.

[Start Your Reservation](#)

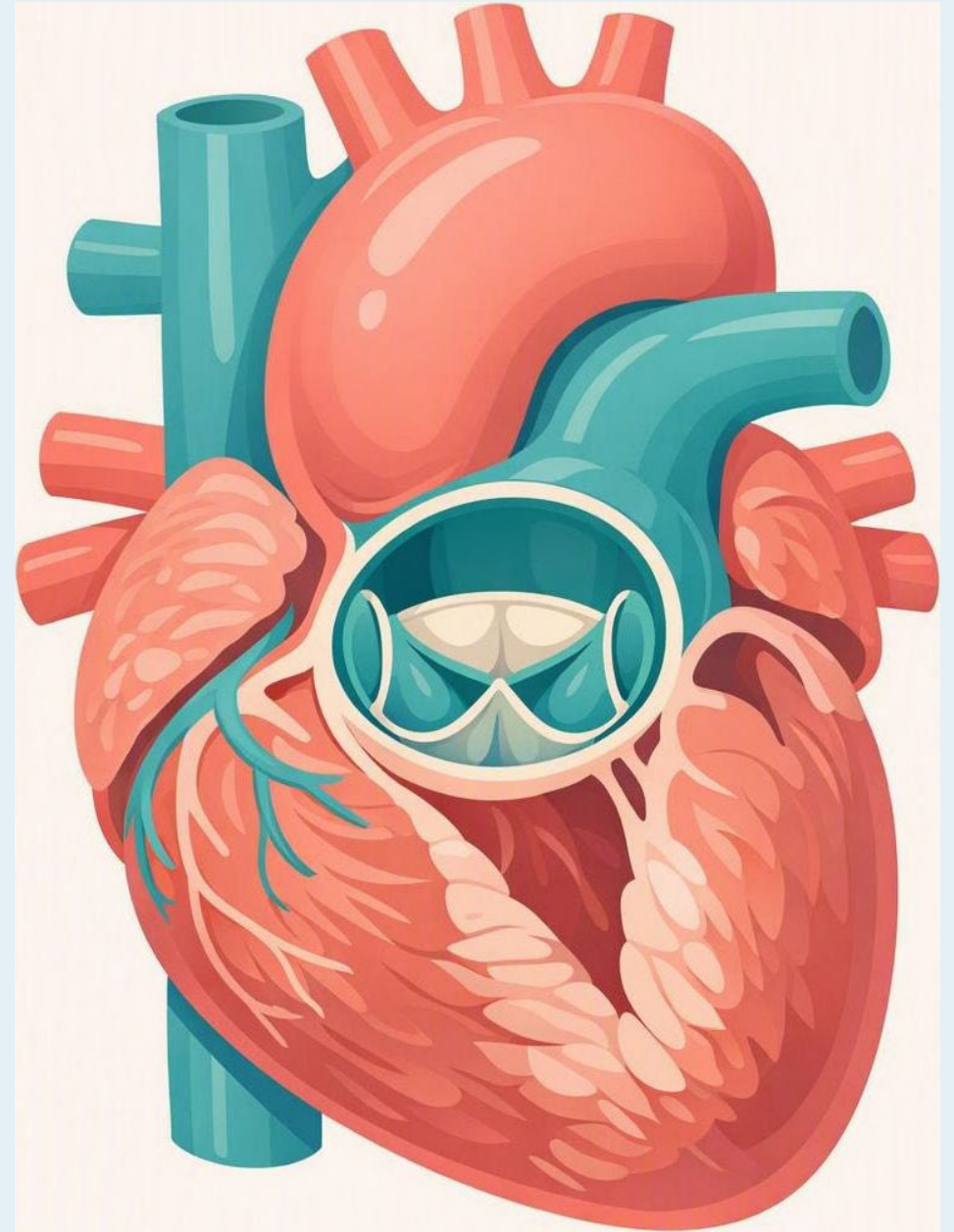


HOST HOTEL — NEW ORLEANS, LA

AORTA SESSION #6

Bentall Procedure

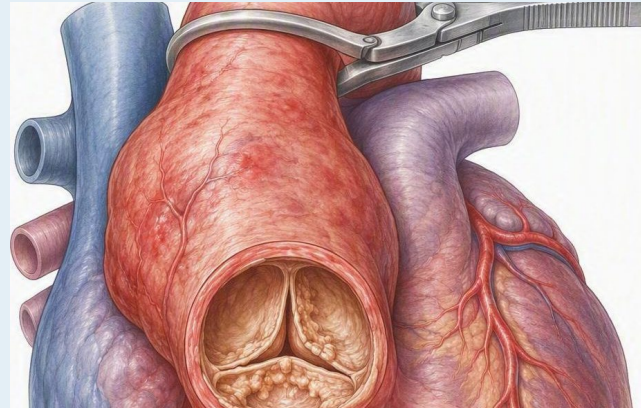
Melinda Offer, RN, MSN



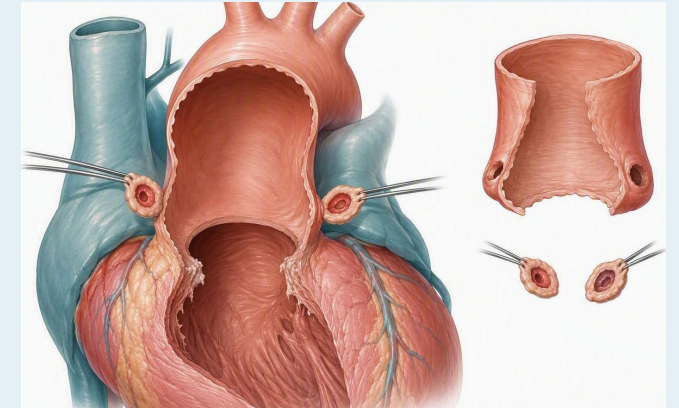


What Is the Bentall Procedure?

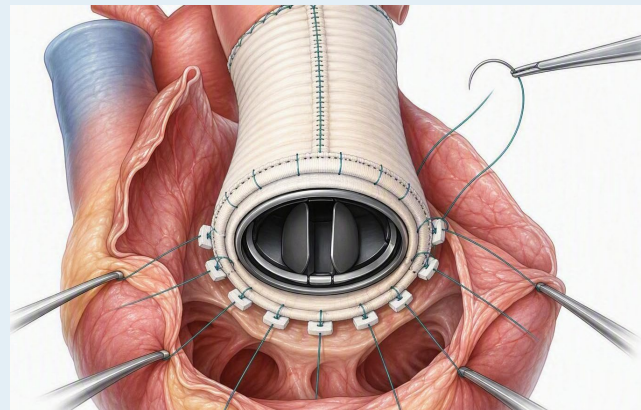
- First described by Bentall and De Bono, 1968
- Replaces the aortic valve and aortic root and usually the ascending aorta
- Coronary ostial reimplantation occurs



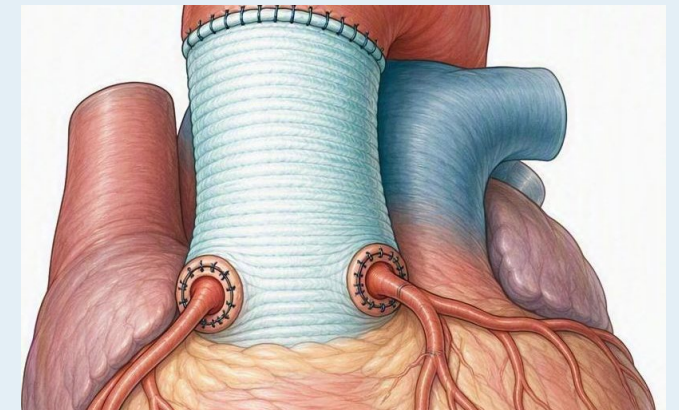
1 • Aneurysm, cross-clamp applied



2 • Root excised, coronary buttons



3 • Valve conduit sewn to annulus



4 • Buttons and distal anastomosis

My first approach is to highlight areas in the op note that correspond with data fields to be collected.

I am specifically looking for the operative elements but will highlight any other field that I have to code.

PREOPERATIVE DIAGNOSIS:

1. Aortic root aneurysm
2. Ascending aortic aneurysm
3. Severe aortic valve insufficiency
4. Hypertension
5. PFO, small

POSTOPERATIVE DIAGNOSIS: same

OPERATION PERFORMED:

1. Aortic root replacement (Bentall procedure) with a 29 mm CarboMedics Carbo-Seal Valsalva mechanical-valve conduit
2. Ascending aorta replacement

INDICATION(S): TR is a pleasant 58-year-old male with a history of hypertension, small PFO, and family history of cardiac disease who is referred for surgical evaluation of an ascending aortic aneurysm and severe aortic insufficiency with depressed left ventricular function. Patient reports experiencing progressive fatigue for some time now. He denies any obvious shortness of breath or chest pain. Transthoracic echocardiogram on 12/4/2025 showed an EF of 55% with severe aortic insufficiency. Aortic root and ascending dilatation was noted at that time. He then had a CCTA performed on 2/6/2026, and this demonstrated a 4.8 cm ascending aorta at the level of the right pulmonary artery and a 5 cm aortic root, both measured by myself. Cardiac MRI on 2/25/2026 showed a moderately dilated LV, an EF of 50% with mild global hypokinesis, a tricuspid aortic valve with eccentric severe AI, and a 5 cm aortic root. Cardiac catheterization on 5/6/2024 was normal.

FINDINGS: Aneurysmal aortic root and ascending aorta. Trileaflet aortic valve with severe insufficiency.

*Once you highlight
all the pertinent
areas, you can
compile a list of
items for you to use
in abstracting*

DESCRIPTION OF PROCEDURE:

An upper midline skin incision was made, and a median sternotomy was performed. Cannulation sutures were placed in the proximal aortic arch and in the right atrial appendage. The aortic cannula was inserted followed by the right atrial venous. A retrograde cardioplegia catheter was placed through the right atrial free wall into the coronary sinus. A left ventricular vent was placed through the right superior pulmonary vein. Cardiopulmonary bypass was then initiated. The aortic cross-clamp was applied and Del Nido cardioplegia was started retrograde. Topical cooling was utilized. The aortic root was decompressed with the LV vent and an aortotomy was made distal to the sinotubular junction. The right coronary ostium was identified and cardioplegia was administered with a handheld cardioplegia catheter. A prompt electromechanical arrest was achieved. Once all of the cardioplegia was in, the aorta was transected and resected distally to within 1 cm of the aortic cross-clamp, which had been placed just proximal to the origin of the innominate artery. Proximally, the aorta was resected to the level of the sinotubular junction. Retraction sutures were placed at all 3 commissures. The ostium of the left main coronary artery was identified and cut out as a Carrel patch. This process was repeated for the right coronary artery. We then addressed the regurgitant aortic valve which was noted to be trileaflet. The leaflets were sharply resected and the annulus was debrided of calcium. Once the annulus was deemed satisfactory, the ventricle was irrigated with a liter of cold saline. Multiple pledgeted 2-0 Ti-Cron sutures were then placed circumferentially around the annulus. The annulus was sized, and a 29 mm mechanical-valve conduit was selected. The valved conduit was then brought up, and the annular sutures were passed through the sewing ring of the valve. The valve was slid into position and seated nicely. The sutures were tied and cut. A site suitable for reimplantation of the left main was identified and marked. A defect was created in the Valsalva portion of the Dacron tube graft using an eye cautery device. The left main was then reimplanted using a running 5-0 Prolene suture. The right coronary artery was reimplanted in a similar fashion with a running 5-0 Prolene suture. The distal portion of the Dacron tube graft was then tailored, and the graft-to-aorta anastomosis was performed using a running 3-0 Prolene suture reinforced with a felt strip. An aortic root vent was placed into the Dacron tube graft. De-airing maneuvers were performed. The aortic cross-clamp was then removed and the patient was subsequently weaned from cardiopulmonary bypass. Once off bypass, all surgical sites were inspected and adequate hemostasis was noted. The valve was evaluated using TEE and appeared to be functioning properly.

Highlighted Items

DIAGNOSES & OPERATION

- **Bentall procedure** — aortic root replacement, 29 mm CarboMedics Carbo-Seal Valsalva mechanical-valve conduit
- **Ascending aorta replacement**

HISTORY

- **History of HTN and family history of CAD** — presents with fatigue

IMAGING & FINDINGS

- **Cardiac Cath normal** 5/6/24
- **Aortic root and ascending dilatation** — TTE 12/4/2025
- **CCTA 2/6/2026** — 4.8 cm ascending aorta at the right pulmonary artery; 5 cm aortic root
- **Tricuspid aortic valve, eccentric severe AI; 5 cm aortic root** — cardiac MRI 2/25/2026

PROCEDURE

- **Median sternotomy** performed
- **Cannulation sutures** were placed in the proximal aortic arch and in the right atrial appendage. The aortic cannula was inserted followed by the right atrial venous.
- **Retrograde cardioplegia catheter** through the right atrial free wall into the coronary sinus
- **Left ventricular vent** via the right superior pulmonary vein
- **Aortic cross-clamp applied** with Del Nido cardioplegia retrograde

PROCEDURE (CONT.)

- **Aortotomy** made distal to the sinotubular junction
- **Cardioplegia** given with a handheld cardioplegia catheter
- **Aorta transected and resected** to within 1 cm of the cross-clamp distally, sinotubular junction proximally
- **Left main coronary ostium** cut out as a Carrel patch; repeated for the right coronary
- **Regurgitant aortic valve addressed** — noted to be trileaflet
- **Leaflets sharply resected** and annulus debrided of calcium
- **Left main reimplantation site** marked; defect created in the Valsalva portion of the graft
- **Left main and right coronary reimplanted** with running 5-0 Prolene
- **Distal Dacron graft tailored** and graft-to-aorta anastomosis performed



Clinical Background & Diagnoses

PATIENT PROFILE

- 58-year-old male
- History of hypertension and family history of cardiac disease
- Progressive fatigue; denies shortness of breath or chest pain
- Referred for ascending aortic aneurysm and severe AI with depressed LV function

PREOPERATIVE DIAGNOSIS

- 1 Aortic root aneurysm
- 2 Ascending aortic aneurysm
- 3 Severe aortic valve insufficiency

Family History of Premature Coronary Artery Disease: ** ☐ Yes ☐ No ☐ Unknown FHCAD (355)		Look for ages of family members & what kind of cardiac disease
Diabetes: ** ☐ Yes ☐ No ☐ Unknown (If Yes →)	Diabetes-Control: ** ☐ None ☐ Diet only ☐ Oral ☐ Insulin ☐ Other SubQ	
Diabetes (360)	DiabCtrl (365) ☐ Other ☐ Unknown	
Dialysis: ** ☐ Yes ☐ No ☐ Unknown	Hypertension: ** ☒ Yes ☐ No ☐ Unknown	
Dialysis (375)	Hypertn (380)	

Indicate if the patient has any direct blood relatives (parents, siblings, children) who have had any of the following at age <55 y for male relatives or <65 y for female relatives:

- Angina
- Acute MI
- Sudden cardiac death without obvious cause
- CABG surgery
- PCI

Presenting Symptom: Presentation (4710)	☐ Pain ☐ CHF ☐ Cardiac Arrest ☐ Syncope ☐ Infection ☐ Asymptomatic
	☒ Injury related to Surgical Complication ☐ Neuro Deficit
	☒ Other ☐ Unknown
Primary Indication: PrimIndic (4712)	☒ Aneurysm ☐ Dissection ☐ Other

(If Neuro Deficit → AortPresNeuroDef (4711)) ☐ Stroke ☐ Limb numbness ☐ Paralysis ☐ Hoarseness (acute vocal cord dysfunction)

Highlighted Items

DIAGNOSES & OPERATION

- **Bentall procedure** — aortic root replacement, 29 mm CarboMedics Carbo-Seal Valsalva mechanical-valve conduit
- **Ascending aorta replacement**

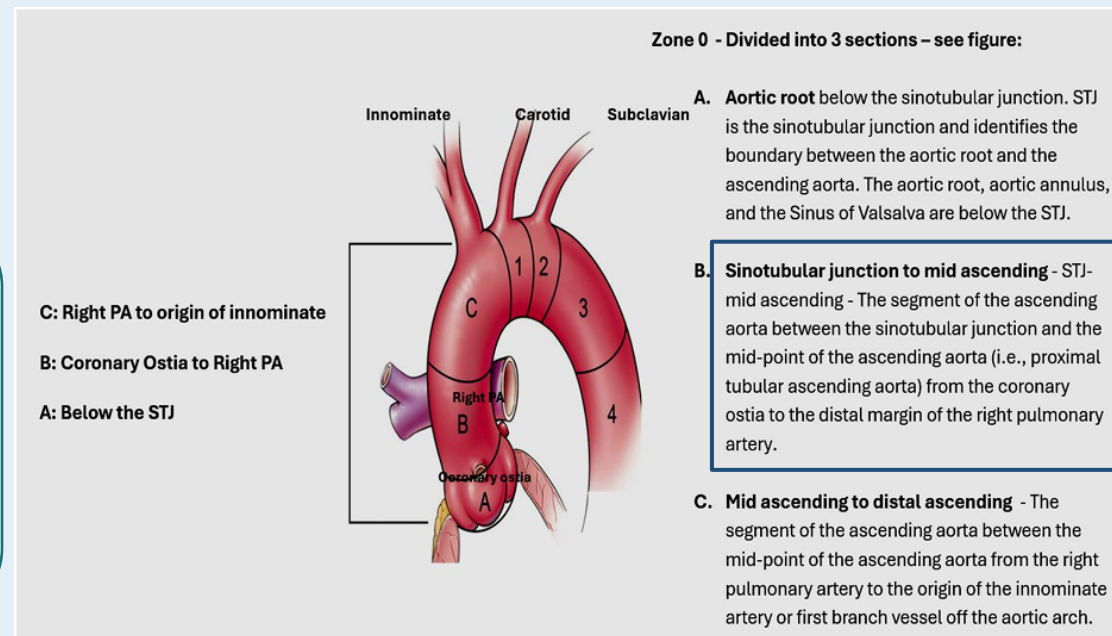
Use this information to abstract the procedure

IMAGING & FINDINGS

- **Cardiac Cath normal** 5/6/24
- **Aortic root and ascending dilatation** — TTE 12/4/2025
- **CCTA 2/6/2026** — 4.8 cm ascending aorta at the right pulmonary artery; 5 cm aortic root
- **Tricuspid aortic valve, eccentric severe AI; 5 cm aortic root** — cardiac MRI 2/25/2026

Make a note of this information to compare with pre-op studies for hemo /measurements

Note: the ascending aorta measurement is taken at the right pulmonary artery.



Highlighted Items

PROCEDURE

- **Median sternotomy** performed
- **Cannulation sutures** were placed in the proximal aortic arch and in the right atrial appendage. The aortic cannula was inserted followed by the right atrial venous.
- **Retrograde cardioplegia catheter** through the right atrial free wall into the coronary sinus
- **Left ventricular vent** via the right superior pulmonary vein
- **Aortic cross-clamp applied** with Del Nido cardioplegia retrograde
- **Aortotomy** made distal to the sinotubular junction
- **Cardioplegia** given with a handheld cardioplegia catheter
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- **Leaflets sharply resected** and annulus debrided of calcium
- **Left main reimplantation site** marked; defect created in the Valsalva portion of the graft
- **Left main and right coronary reimplanted** with running 5-0 Prolene
- **Distal Dacron graft tailored** and graft-to-aorta anastomosis performed

Most of this information will be used to code the surgical procedure

But what about that LV vent — what is that?

We do not code the LV vent. An LV vent is a catheter inserted into the left ventricle during heart surgery to decompress the chamber, remove excess blood, and evacuate air, protecting the heart and improving surgical access.



Operation Performed

1 Aortic root replacement – Bentall procedure

The Bentall procedure is an open-heart surgery that replaces the aortic valve, aortic root, and most often the ascending aorta using a composite graft, with re-implantation of the coronary arteries.

2 Ascending aorta replacement

Aorta Procedure Performed: AortProc (2123)	☒ Yes, planned ☐ Yes, unplanned due to surgical complication ☐ Yes, unplanned due to unsuspected disease or anatomy ☐ No (If Yes complete Section M 2) (If Aorta Procedure performed →)
Valve Procedure Performed: OpValve (2129)	Did the surgeon provide input for aortic surgery data abstraction? ☒ Yes ☐ No AortProcSurgInput (2124)
	Was a valve explanted: ☐ Yes ☒ No ValExp (2130) (If Yes complete Section K)
	Aortic Valve Procedure performed: VSAV (2131) ☒ Yes, planned ☐ Yes, unplanned due to surgical complication ☐ Yes, unplanned due to unsuspected disease or anatomy ☐ No
(If Yes →)	(If Yes →) Was a procedure performed on the Aorta? ☒ Yes ☐ No AVAortaProcPerf (2132) (If 'Yes' complete M2; If 'No' complete K1)



Procedure — Sternotomy and exposure

1 Sternotomy & exposure

Upper midline incision and median sternotomy;
pericardial well created; systemic heparinization.

What is a pericardial well — do we have to code it?

The pericardial well is part of the procedure — there is nothing to code for it.

A pericardial well refers to the space created between the heart and the pericardium by strategically placing and tensioning pericardial stitches. These stitches are passed through the pericardium and anchored to the chest wall or retractor system to help open up and stabilize the surgical field.

Initial Operative Approach:

OPApp (2100)

☒ Full conventional sternotomy

☐ Partial sternotomy

☐ Sub-xiphoid

☐ Thoracotomy

☐ Thoracoabdominal Incision

☐ Percutaneous

☐ Port Access

☐ Other



Procedure – Cannulation

2

Cannulation

Proximal aortic arch and right atrial appendage cannulated;
retrograde cardioplegia catheter to the coronary sinus.

What about the retrograde catheter placed in the coronary sinus — where is it coded?

The catheter is not coded in the database.

A retrograde coronary sinus catheter delivers cardioplegia — a solution that stops and protects the heart muscle — backward through the coronary sinus, the large vein that drains blood from the myocardium into the right atrium. The catheter is inserted into the coronary sinus (often via the right atrium) and infused with cardioplegic solution, which flows backward into the coronary veins and then into the heart muscle.

Arterial Cannulation Insertion Site: (Select all that apply) ↓				
ArtCannInsertSite (2336)				
☒ Aortic	☐ Axillary	☐ Femoral	☐ Innominate	☐ Other
Venous Cannulation Insertion Site: (Select all that apply) ↓				
VenCannInsertSite (2361)				
☒ Femoral	☐ Pulmonary Vein	☐ Jugular	☒ SVC	
☒ Rt. Atrial	☐ Lt. Atrial	☐ Other		



Procedure – Cardiopulmonary Bypass

3

Cross-clamp & arrest

Cardiopulmonary bypass was initiated. Aortic cross-clamp applied; Del Nido cardioplegia given retrograde with topical cooling → electromechanical arrest.

Del Nido cardioplegia was developed in the 1990s. It provides myocardial protection by inducing a controlled, depolarized cardiac arrest while minimizing ischemia-reperfusion injury. The solution is primarily crystalloid-based, typically mixed with blood in a 1:4 ratio. A single dose can maintain cardiac arrest for up to 90 minutes, reducing the need for repeated dosing.

Perfusion Strategy CPBUtil (2325)	☐ None	
	☒ Left Heart Bypass	
	☐ Combination	(If Combination→) Combination Plan: ☐ Planned ☐ Unplanned (If Unplanned↓) CPBCmb (2330) Unplanned Reason: ☐ Exposure/visualization ☐ Bleeding CPBCmbR (2335) ☐ Inadequate size/ diffuse disease of distal vessel ☐ Hemodynamic instability (hypotension/arrhythmias) ☐ Conduit quality and/or trauma ☐ Other
	☒ Full	(If Left Heart Bypass, Combination or Full ↓)

Aortic Occlusion: AortOccl (2430)	☐ None – beating heart ☐ None – fibrillating heart	☒ Aortic Cross clamp ☐ Balloon Occlusion
	(If Aortic cross clamp or Balloon occlusion →):	Cross Clamp Time: _____ (min) XClampTm (2435) See perfusion record
Cardioplegia Delivery: CplegiaDeliv (2440)	☐ None ☐ Antegrade ☒ Retrograde ☐ Both	
	(If Antegrade, Retrograde or Both→) Type of Cardioplegia used:	☒ Blood ☐ Crystalloid ☐ Both ☐ Other CplegiaType (2445)

Aortic Valve Replacement

An aortotomy was made distal to the sinotubular junction. **We then addressed the aortic valve. The leaflets were sharply resected, and the annulus was debrided of calcium. The annulus was sized, and a 29 mm Carbo Medics Carbo-Seal Valsalva mechanical-valve conduit was selected. The valved conduit was then brought up, and the annular sutures were passed through the sewing ring of the valve.** The valve was slid into position and seated nicely.

Aortic Valve or Root Procedure Performed: ☒ Yes, planned ☐ Yes, unplanned due to surgical complication	
VSAVAo (4951) ☐ Yes, unplanned due to unsuspected disease or anatomy ☐ No	
(If Yes ↓)	
Procedure Performed:	
VSAVPrAo (4952)	
☒ Replacement (If Replacement ↓)	
Transcatheter Valve Replacement: ☐ Yes ☐ No	
VSTCVAo (4953)	
(If Yes →)	Approach:
	VSTCVRAo (4954)
	☐ Transapical ☐ Transaxillary ☐ Transfemoral ☐ Transaortic ☐ Subclavian
	☐ Other ☒ Transiliac ☐ Transeptal ☐ Transcarotid. ☐ Transcaval
Surgical valve Replacement: ☒ Yes ☐ No	
VSAVSurgRepAo (4955)	
(If Yes →)	Device type: ☐ Mechanical ☐ Bioprosthetic ☐ Surgeon fashioned pericardium (Ozaki) ☒ Other
	VSAVSurgTypeAo (4956)
(If Bioprosthetic →)	Valve type: ☐ Stented ☐ Stentless sub coronary valve only ☐ Sutureless/rapid deployment
	VSAVSurgBioTAo (4957)

Other — For Composite Valve Conduit, which includes Stented Valve Conduit and Biologic Full Root, capture as Other.
Then complete SEQ 4966 and SEQ 4967 to capture the type of composite valve conduit.

Aortic Root Replacement

The aortic root was decompressed with the LV vent and **an aortotomy was made distal to the sinotubular junction**. The aorta was transected and **resected distally to within 1 cm of the aortic cross-clamp, which had been placed just proximal to the origin of the innominate artery. Proximally, the aorta was resected to the level of the sinotubular junction**. 29 mm Carbo Medics Carbo-Seal Valsalva mechanical-valve conduit was selected.

Coronary Artery Re-implant

The ostium of the left main coronary artery was identified and cut out as a Carrel patch. This process was repeated for the right coronary artery. A site suitable for reimplantation of the left main was identified and marked. A defect was created in the Valsalva portion of the Dacron tube graft using an eye cautery device. **The left main and the right coronary artery were then reimplanted using a running 5-0 Prolene suture.**

Root Procedure: ☒ Yes ☐ No (If Yes ↓)

VSAVRoot (4963)

Root Replacement with coronary Ostial Reimplantation ☒ Yes ☐ No

VSAVRootOReimp (4964)

(If Yes →)
VSAVRootOReimpType
(4965)

☒ Composite Valve Conduit ☐ Valve Sparing Root

(If Composite Valve
Conduit →)
VSAVRootOReimpTy
(4966)

☒ Mechanical ☐ Bioprosthetic ☐ Homograft Root Replacement
☐ Autograft with Native Pulmonary Valve (Ross)

(If Bioprosthetic →)
VSAVRepBioTy
(4967)

☐ Stented Valve Conduit ☐ Stentless Valve Conduit
☐ Stentless Biologic Full Root

(If Valve Sparing Root →)
VSAVSparRtOp (4968)

☐ Valve sparing root reimplantation (David)
☐ Valve sparing root remodeling (Yacoub)
☐ Valve sparing root reconstruction (Florida Sleeve)

Coronary Reimplantation:

VSAVCorReimp (4969)

☐ No

☒ Direct to Root Prosthesis (Button)

☐ With Vein Graft Extension (SVG Cabrol)

☐ With Dacron Graft Extension (Classic Cabrol)

Major root reconstruction/ debridement without coronary ostial reimplantation

VSAVRootRecon (4970)

☐ Yes ☒ No

What is a Carrel Patch

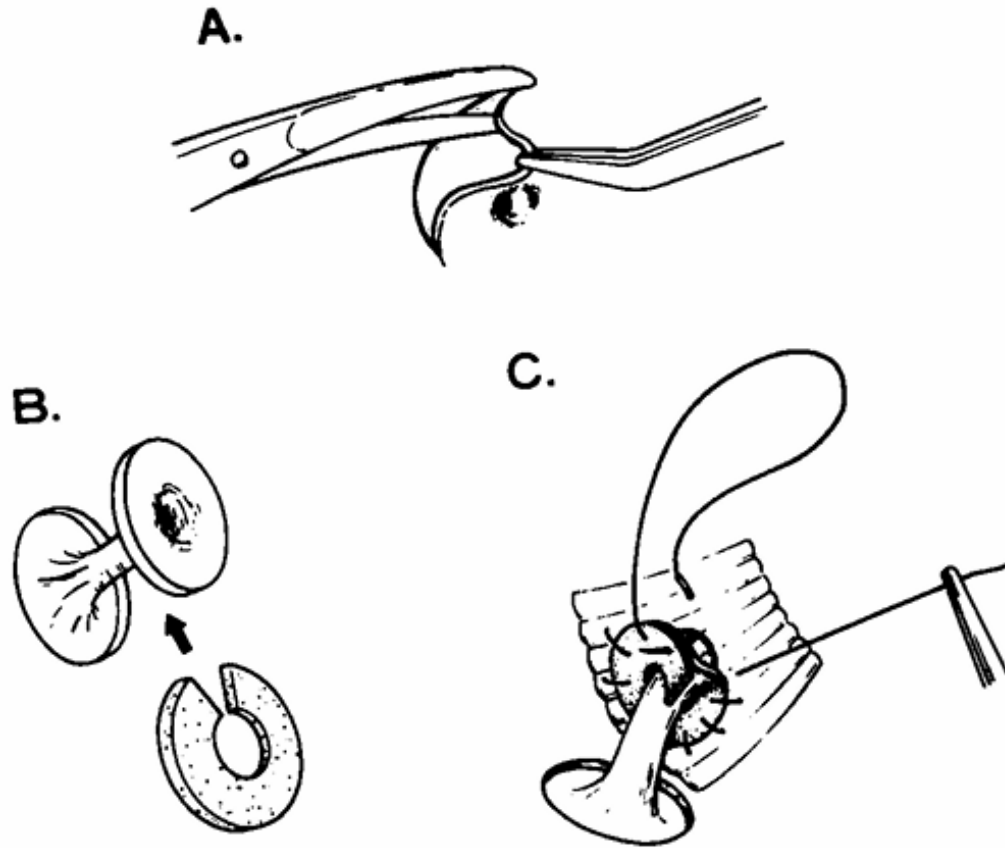


Fig 1. (A) The coronary ostium is excised with a collar of aortic wall (5 mm away from the ostium), leaving epicardium on the aortic wall. (B) Coronary button is mobilized further and reinforced by a ring of felt. (C) Coronary ostia are sewn directly on the holes in the graft with a running 4-0 polypropylene suture.

New Modified Bentall Procedure: Carrel Patch and Inclusion Technique Kouhei Kawazoe, MD, Kiyoyuki Eishi, MD, and Yasunaru Kawashima, MD Division of Cardiovascular Surgery, National Cardiovascular Center of Japan, Osaka, Japan

Ascending aorta replacement

Aorta transected and resected to within 1 cm of the cross-clamp distally which had been placed just proximal to the origin of the innominate artery and to the sinotubular junction proximally; replaced with a tailored Dacron tube graft anastomosed to the distal ascending aorta.

Surgical Ascending/Arch Procedure ☒ Yes ☐ No (If Yes ↓)

ArchProc (4975)

Proximal Location: ☒ STJ-midascending ☐ Midascending to distal ascending ☐ Zone 1 ☐ Zone 2 ☐ Zone 3

ArchProxLoc (4976)

Distal Technique: ☐ Open/Unclamped ☒ Clamped

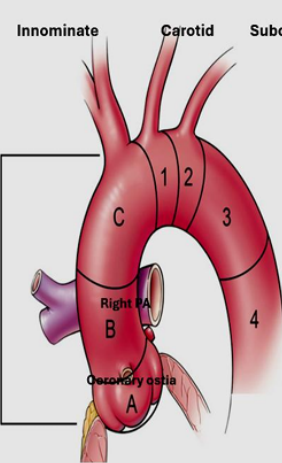
ArchDisTech (4980)

21

Note - If the procedure originates with the aortic valve choose STJ-Mid ascending.

The intent is to define whether the distal anastomosis was done with or without a clamp.

Zone 0 - Divided into 3 sections – see figure:



C: Right PA to origin of innominate

B: Coronary Ostia to Right PA

A: Below the STJ

A. Aortic root below the sinotubular junction. STJ is the sinotubular junction and identifies the boundary between the aortic root and the ascending aorta. The aortic root, aortic annulus, and the Sinus of Valsalva are below the STJ.

B. Sinotubular junction to mid ascending - STJ-mid ascending - The segment of the ascending aorta between the sinotubular junction and the mid-point of the ascending aorta (i.e., proximal tubular ascending aorta) from the coronary ostia to the distal margin of the right pulmonary artery.

C. Mid ascending to distal ascending - The segment of the ascending aorta between the mid-point of the ascending aorta from the right pulmonary artery to the origin of the innominate artery or first branch vessel off the aortic arch.

Distal Site: ☒ Ascending Aorta ☐ Hemiarch ☐ Zone 1 ☐ Zone 2 ☐ Zone 3 ☐ Zone 4

ArchDiscSite (4985)

Distal Extention: ☐ Elephant trunk ☐ Frozen Elephant trunk ☒ No

ArchDisExt (4990)

Arch Branch Reimplantation: ☐ Yes ☒ No (If Yes ↓ - select all that apply)

ArchBranReimp (4995)

Arch Branch Location:

ArchBranReimpLoc (4996)

☐ Innominate

☐ Right Subclavian

☐ Right Common Carotid

☐ Left Common Carotid

☐ Left Subclavian

☐ Left Vertebral

☐ Other

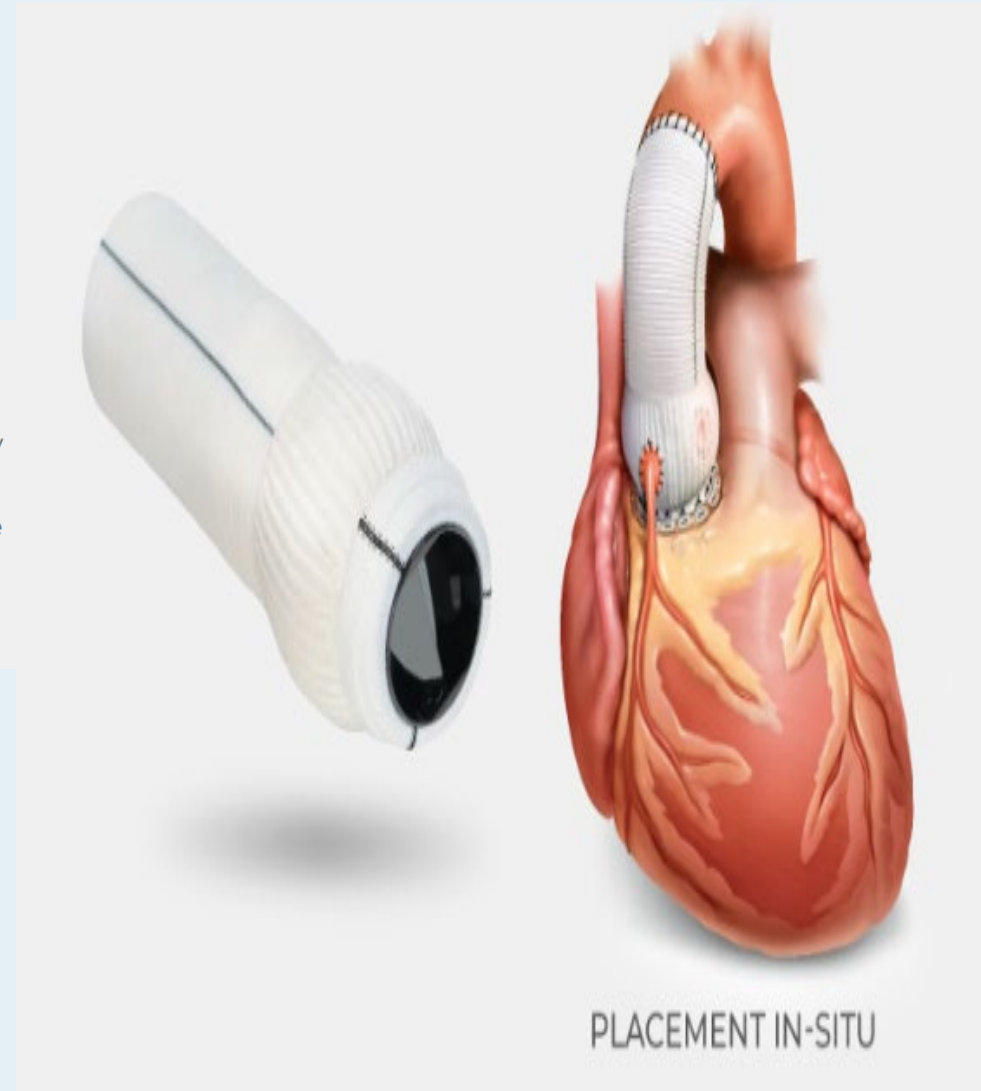
Before we code the devices, let's see what the device implanted looks like

CARBOMEDICS CARBO-SEAL VALSALVA ASCENDING AORTIC PROSTHESES

Carbomedics Carbo-Seal Valsalva

- Vertical orientation of pleats facilitates coronary anastomoses.⁷
- Reproduces the native sinus, reducing stress on the coronary anastomoses.⁷
- Sinus design encourages natural formation of systolic vortex.^{8,9}
- Low profile taper to reduce stress on the coronary ostia buttons.⁷
- Full-sized standard aortic valve provides favorable hemodynamics.^{1,2}

Carbomedics Carbo-Seal Valsalva Ascending Aortic Prostheses (AAP) include the Carbomedics Standard Aortic Valve, a fully rotatable valve with a very low rate of thromboembolic events, favorable hemodynamics, and negligible post-operative structural failures¹⁻⁶



Implant Information

Devices	
Device(s) Inserted: ☒ Yes ☐ No (If Yes, list aorta proximal to distal using device key ↓) ADevIns (5440)	
Aortic Valve or Aortic Valve Composite Graft Implanted ☒ Yes ☐ No (If Yes ↓) AVAVCompGraftImplAo (5441)	
Implant Model Number: _____ AVAVCompGrImplModelAo (5442)	332-CP-0## - Sorin Group: Carbomedics Carbo-Seal Valsalva Ascending Aortic Prosthesis
Implant Size: _____ AVAVCompGrImplSizeAo (5443)	
Unique Device identifier (UDI): _____ AVAVCompGrImplUDIAo (5444)	



SORIN

CARBOMEDICS CARBO-SEAL

VALSALVA

ASCENDING AORTIC PROSTHESIS

产品名称：带主动脉瓣血管



SIZE	规格尺寸 Valve Size	29
	血管直径 Graft Diameter	32mm
REF	规格型号 Catalog Number	CP-029
SN	序列号 Serial Number	S1262159-B

产品注册证号：CFDA(1)201234645(4) (更)

产品标准：Y229/USA 5666-2012



有效期
Use by

2020-04-30

Aorta Devices				
Location :		X. No device inserted (only for locations 2 – 15) A. Bicuspid aortic valve B. Sinus of Valsalva C. Ascending aorta D. Descending aorta	E. No device inserted (only for locations 2 – 15) F. Bicuspid aortic valve G. Sinus of Valsalva H. Ascending aorta I. Descending aorta	
				
For devices other than aortic valves and aortic aneurysms				
Implant Method:	1=Open Surgical 2=Endovascular 3=Hybrid 4=Other			
Outcome:	1= Unsuccessful 2= Implanted and removed 3= Successfully implanted/deployed			
Model Number:	Enter the model number of the device			
UDI:	Enter the UDI number (not serial number)			
Location (Letter)	Implant Method	Outcome	Model Number	UDI
ADevLoc01 (5450)	ADevDelMeth01 (5451)	ADevOut01 (5460)	ADevModel01 (5465)	ADevUDI01 (5470)
ADevLoc02 (5475)	ADevDelMeth02 (5480)	ADevOut02 (5485)	ADevModel02 (5490)	ADevUDI02 (5495)

Seq 5441 – Aortic valve or Aortic Valve Composite Graft - The intent is to capture commercial valves and commercial valve conduits in this field.

Seq 5450 Aorta Device - Location #01 – The intent of this field is to capture devices other than commercial aortic valves and commercial aortic valve composite grafts that are implanted in the aorta.

Devices

What would I do if I had a valve conduit that was not in the ACSD Selection set?

For example, if a 29 mm Konnect Resilia which is not in the ACSD selection set was implanted?

Complete the form as below:

Devices	
Device(s) Inserted: ☒ Yes ☐ No (If Yes, list aorta proximal to distal using device key ↓) ADevIns (5440)	
Aortic Valve or Aortic Valve Composite Graft Implanted ☒ Yes ☐ No (If Yes↓) AVAVCompGrImplAo (5441)	
	Implant Model Number: <u>777 Other US FDA-Approved Device</u> AVAVCompGrImplModelAo (5442)
	Implant Size: <u>29 mm</u> AVAVCompGrImplSizeAo (5443)
	Unique Device identifier (UDI): _____ AVAVCompGrImplUDIAo (5444)

Then you complete the RedCap form to document the device that is not in the selection set.

General Information Valve RedCap Form

Starting with July 1, 2022, cases, please begin entering devices that are not available in version 4.20.2 data specification by using the Valve RedCap link below. Feb 2026 Update Clarification – Use of the RedCap Form for valve device entry is an extension of the ACSD and is mandatory to complete. Additionally, please continue to code the implant model fields available on the data collection for as 'other, FDA approved device' or 'other, non-FDA approved device'. This applies to devices implanted into the aortic, mitral, tricuspid, and pulmonic valve positions, as well as aortic valve composite grafts. Please refer to the ACSD User Group Webinar from June 15, 2022, for additional information.

Update Sept 2022 – When entering Patient ID and Record ID in the RedCap form, please enter the STS Patient ID and the STS Record ID – this is the ID that starts with “V”.

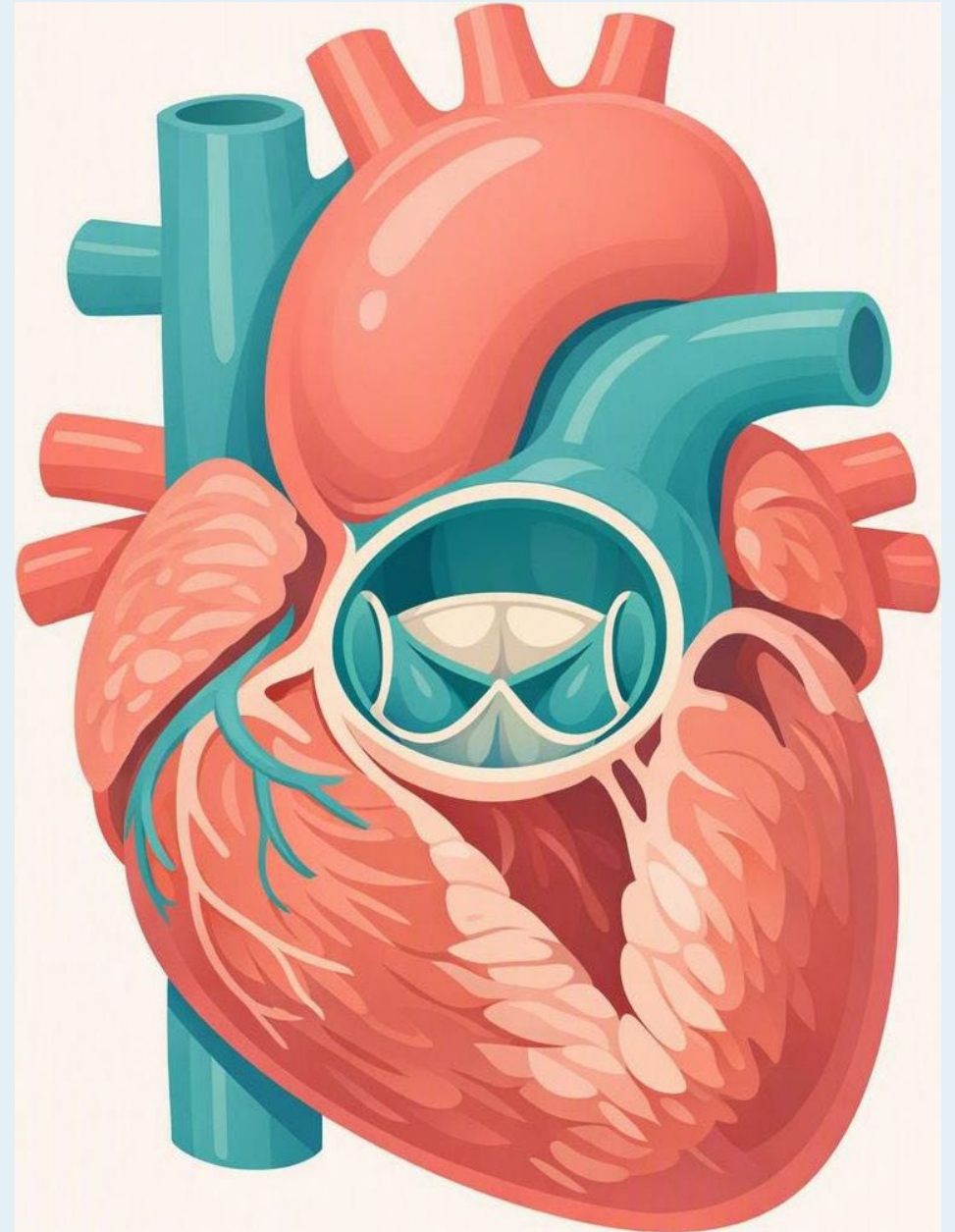
<https://redcap.sts.org/surveys/?s=8YR88JKHPMTXKRMM>

Update May 2024 - If a REDCap form is entered incorrectly or needs to be deleted, please use the following link to view the “Navigation of RedCap Form Supplemental Resource” to update, edit, or delete the form.

<https://www.sts.org/sites/default/files/Database%20Manuals/ACSD%20Navigation%20of%20RedCap%20Form%20Supplement%20Resource%205.1.24.pdf>

THANK YOU • OPEN FOR DISCUSSION

Questions & Discussion



Please use the
raise-hand
function.

Please use the
Q&A Function.

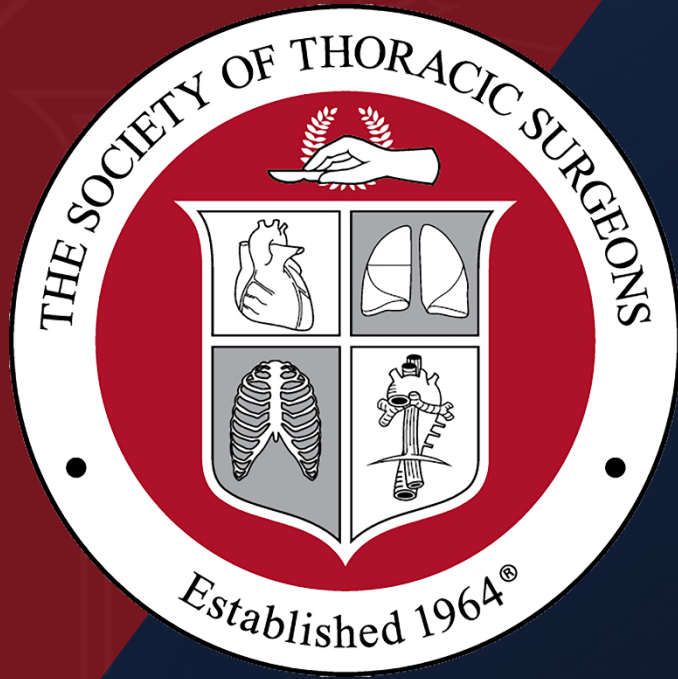
We will answer
as many
questions as
possible.

We encourage
your feedback
and want to hear
from you!

We Need You!

If you have implemented a QI project at your
site, we want to hear about your work!

Please reach out to
Nancy Honeycutt @ nhoneycutt@sts.org.



Thank You for Joining!

SAVE THE DATE

AQO 2026

September 30 – October 2, 2026
· New Orleans, LA

NEXT WEBINAR

ACSD Monthly Webinar

Wednesday, October 7, 2026 · 2
p.m. CT / 3 p.m. ET