The Society of Thoracic Surgeons
Adult Cardiac Surgery Database
Data Collection Form

A. Administrative

Participant ID: |___|___|___|___|___|

B. Demographics

Patient Medical Record Number: _not harvested____

Last Name: _____not harvested_____ First: ____not harvested_ MI: _nh_

Date of Birth: __ __/__ __/__ __ __ __ (mm/dd/yyyy)

Gender: Male Female

Race: Caucasian Black Hispanic Asian Native American Other

Social Security (or National ID) Number: _not harvested____

ZIP or Postal Code: _____

Referring Cardiologist's Name: ____not harvested_____

Referring Physician's Name: ___not harvested_____

C. Hospitalization

Hospital Name: _____

Primary Payor: _____

Same Day Elective Admission: *No* *Yes*

Date of - Admission: __ __/__ __/__ __ __ __ Surgery: __ __/__ __/__ __ __ __ Discharge: __ __/__ __/__ __ __ __

D. Pre-Operative Risk Factors

Weight: _____ (kg) Height: _____ (cm)

Smoker: *No* *Yes* → Current Smoker: *No* *Yes*

Family History of CAD: *No* *Yes*

Diabetes: *No* *Yes* → Diabetes Control: None Diet Oral Insulin

Hypercholesterolemia: *No* *Yes*

Renal Failure: *No* *Yes* → Dialysis: *No* *Yes*

Last Creatinine Preop: _____

Hypertension: *No* *Yes*

Cerebrovascular Accident: *No* *Yes* → When: Recent (<= 2 weeks) Remote (> 2 weeks)

Infectious Endocarditis: *No* *Yes* → Infectious Endocarditis Type: Treated Active

Chronic Lung Disease: *No* Mild Moderate Severe

Immunosuppressive Trtment: *No* *Yes*

Peripheral Vascular Disease: *No* *Yes*

Cerebrovascular Disease: *No* *Yes* → CVD Type: Coma CVA RIND TIA Non Invasive > 75%

E. Previous Interventions

Previous CV Interventions: *No* *Yes*

# of Prior Cardiac Operations - Requiring Cardiopulmonary Bypass: _____ Without Cardiopulmonary Bypass: _____

Previous Surgery - Coronary Artery Bypass: *No* *Yes* Valve: *No* *Yes* Prev Oth Cardiac: *No* *Yes*

Prior PTCA incl Balloon, Ather, +/or Stent: *No* *Yes* → Interval: <= 6 hours > 6 hours → Prev Stent Placement: *No* *Yes*

Thrombolysis: *No* *Yes* → Thrombolysis Interval: <= 6 hours > 6 hours

Previous Balloon Valvuloplasty: *No* *Yes*

F. Pre Operative Cardiac Status

Myocardial Infarction: *No* *Yes* → When: <= 6 hours > 6 hours but <24 hours 1 - 7 days 8 - 21 days > 21 days

Congestive Heart Failure: *No* *Yes*

Angina: No Yes →Type: Stable Unstable↓

Unstable Type: Rest Angina New Class 3 Recent Accel Variant Angina Non-Q MI Post- Infarct Angina

Cardiogenic Shock: *No* *Yes* → Type: Refractory Shock Hemodynamic Instability

Resuscitation: *No* *Yes*

Arrhythmia: *No* *Yes* → Type: Sust VT/VF Heart Block AFib/Flutter

Classification: CCS: 0 I II III IV NYHA: I II III IV

G. Pre Operative Medications

Digitalis: *No* *Yes* Beta Blockers: *No* *Yes* Nitrates – I.V.: *No* *Yes* Anticoagulants: *No* *Yes*

Diuretics: *No* *Yes* Inotropic Agents: *No* *Yes* Steroids: *No* *Yes* Aspirin: *No* *Yes*

H. Pre Operative Hemodynamics and Cath

Number of Diseased Coronary Vessels: None One Two Three (**Note: LM Disease (>50%) counts for two: LAD+CFX)**

Left Main Disease > 50%: *No* *Yes*

Hemodynamic Data - Ejection Fraction: _____ → Method: None LV gram Radionucleotide Estimate ECHO

Hemodynamic Data - Pulmonary Artery Mean Pressure: _____

Aortic Stenosis:	*No* *Yes*	Insufficiency:	0=None	1=Trivial	2=Mild	3= Moderate	4= Severe
Mitral Stenosis:	*No* *Yes*	Insufficiency:	0=None	1=Trivial	2=Mild	3= Moderate	4= Severe
Tricuspid Stenosis:	*No* *Yes*	Insufficiency:	0=None	1=Trivial	2=Mild	3= Moderate	4= Severe
Pulmonic Stenosis:	*No* *Yes*	Insufficiency:	0=None	1=Trivial	2=Mild	3= Moderate	4= Severe

J. Operative

Surgeon's Name: *harvested - removed from harvest files - encrypted - requires surgeon specific permission to be unencrypted*

Status of the procedure:

Elective

Urgent → Reason: AMI IABP Worsening CP CHF Anatomy USA Rest Angina

Emergent → Reason: Shock Circ Support Shock No Circ Support Pulm Edema AEMI Ongoing Ischemia

Salvage

Coronary Artery Bypass: *No* *Yes*

Aortic:	Mitral:	Tricuspid:	Pulmonic:
No	No	No	No
Replacement	Annuloplasty only	Annuloplasty Only	Replacement
Repair/Reconstruction	Replacement	Replacement	Reconstruction
Root Reconstruction Valve Conduit	Reconstruction w/ Annuloplasty	Reconstruction w/ Annuloplasty	
Reconstruction w/ Valve Sparing	Reconstruction w/out Annuloplasty	Reconstruction w/out Annuloplasty	
Resuspension Aortic Valve		Valvectomy	
Resection Sub-Aortic Stenosis			

Minimally Invasive Proc Attempted: *No* *Yes*↓ (complete sect. M) Oth Cardiac Proc: *No* *Yes*↓ (complete sect. N) Oth Non-Cardiac Proc: *No* *Yes*↓ (complete sect. O)

K. Coronary Surgery

Unplanned CABG: *No* *Yes*

Number of Distal Anastomoses - with Arterial Conduits: _____ with Vein Grafts: _____ (continued)

IMAs Used as Grafts: Left IMA Right IMA Both IMAs No IMA Number of IMA Distal Anastomoses: _____

Radial Artery(ies) Used as Grafts: No Radial Left Radial Right Radial Both Radials

Number of - Radial Artery Distal Anastomoses: _____ Gastro-Epiploic Artery Distal Anastomoses: _____

L. Valve Surgery

↓ Key M = Mechanical, B = Bioprosthesis, H = Homograft, A = Autograft, R = Ring

Aortic Prosthesis -	Implant Type:	None	M	B	H	A	R	Implant: _____	Size: _____(mm)
	Explant Type:	None	M	B	H	A	R	Explant: _____	Size: _____(mm)
Mitral Prosthesis -	Implant Type:	None	M	B	H	A	R	Implant: _____	Size: _____(mm)
	Explant Type:	None	M	B	H	A	R	Explant: _____	Size: _____(mm)
Tricuspid Prosthesis -	Implant Type:	None	M	B	H	A	R	Implant: _____	Size: _____(mm)
	Explant Type:	None	M	B	H	A	R	Explant: _____	Size: _____(mm)
Pulmonic Prosthesis -	Implant Type:	None	M	B	H	A	R	Implant: _____	Size: _____(mm)
	Explant Type:	None	M	B	H	A	R	Explant: _____	Size: _____(mm)

Valve Key

Mechanical
M1= ATS Mechanical Prosthesis
M2= Björk-Shiley Convex-Concave Mechanical Prosthesis
M3= Björk-Shiley Monostrut Mechanical Prosthesis
M4= CarboMedics Mechanical Prosthesis
M5= Edwards Tekna Mechanical Prosthesis
M6= Lillehei-Kaster Mechanical Prosthesis
M7= Medtronic-Hall Mechanical Prosthesis
M8= OmniCarbon Mechanical Prosthesis
M9= OmniScience Mechanical Prosthesis
M10= On-X Mechanical Prosthesis
M11= Sorin Bicarbon (Baxter Mira) Mechanical Prosthesis
M12= Sorin Monoleaflet Allcarbon Mechanical Prosthesis
M13= St. Jude Medical Mechanical Prosthesis
M14= Starr-Edwards Caged-Ball Prosthesis
M15= Ultracor Mechanical Prosthesis

Bioprosthetic
B1= Baxter Prima Plus Stentless Porcine Bioprosthesis
B2= Baxter Prima Stentless Porcine Bioprosthesis
B3= Biocor Porcine Bioprosthesis
B4= Biocor Stentless Porcine Bioprosthesis
B5= CarboMedics PhotoFix Pericardial Bioprosthesis
B6= Carpentier-Edwards Pericardial Bioprosthesis
B7= Carpentier-Edwards Standard Porcine Bioprosthesis
B8= Carpentier-Edwards Supra-Annular Porcine Bioprosthesis
B9= Cryolife O'Brien Stentless Porcine Bioprosthesis
B10= Hancock Standard Porcine Bioprosthesis
B11= Hancock II Porcine Bioprosthesis
B12= Hancock Modified Orifice Porcine Bioprosthesis
B13= Ionescu-Shiley Pericardial Bioprosthesis
B14= Labcor Stented Porcine Bioprosthesis
B15= Labcor Stentless Porcine Bioprosthesis
B16= Medtronic Freestyle Stentless Porcine Bioprosthesis
B17= Medtronic Intact Porcine Bioprosthesis
B18= Medtronic Mosaic Porcine Bioprosthesis
B19= Mitroflow Pericardial Bioprosthesis
B20= Sorin Pericarbon Stentless Pericardial Bioprosthesis
B21= St. Jude Medical - Toronto SPV Stentless Porcine Bioprosthesis
B22= St. Jude Medical-Bioimplant Porcine Bioprosthesis

Homograft
H1= Homograft Aortic – Subcoronary
H2= Homograft Aortic Root/Cylinder
H3= Homograft Mitral
H4= Homograft Pulmonic Root
H5= Cryolife Homograft

Autograft
A1= Autograft Pulmonic Root

Ring
R1= Carpentier-Edwards Classic Ring
R2= Carpentier-Edwards Physio Ring
R3= Cosgrove-Edwards Ring
R4= Medtronic Sculptor Ring
R5= Medtronic-Duran Ring
R6= Sorin-Puig-Messana Ring
R7= St. Jude Medical Sequin Ring

777= Other

M. Minimally Invasive

Primary Indication for minimally Invasive approach: Surg/Pat Choice Contrained Std Approach Comb Cath Intervention

Primary Incision: (Sternotomy) Full Partial Transverse (Parasternal) Right Vertical Left Vertical
(Thoracotomy) Right Anterior Left Anterior Posterolateral Xiphoid Epigastric Subcostal

Total # of Incisions: _____ Conversion to Stnd Incision: *No* *Yes* → Indication: Exposure Bleeding Rhythm Hypotension Conduit

Cardiopulmonary Bypass Used: No Yes →Cannulation Meth: Aorta and Fem/Jug Vein Fem Art and Fem/Jug Vein Aorta and Atrial/Caval Fem Art and Atrial/Caval Other

Aortic Occlusion Method: None Cross-clamp Balloon Occlusion

Intracoronary Shunt used during distal anastomoses: *No* *Yes*

Cumulative Ischemic Time (minutes) for LAD system: _____ RCA system: _____ CFX: _____

Suture Technique: Running Interrupted Stapler Combination

Vessel Stabilization Technique: None Suture Snare Suction Device Compression Other

Technique of IMA Harvest: None Direct Vision Thorascopy Combination

Acute Flow Patency Assess of Grafts (Periop): None IntaOp Doppler IntraOp Angio Postop Angio Postop Doppler

N. Other Cardiac Procedures

No	Yes	Left Ventricular Aneurysm Repair	No	Yes	Ventricular Septal Defect Repair	No	Yes	Atrial Septal Defect Repair
No	Yes	Batista	No	Yes	Congenital Defect Repair			
No	Yes	Transmyocard Laser Revasc	No	Yes	Cardiac Trauma	No	Yes	Cardiac Transplant
No	Yes	Permanent Pacemaker	No	Yes	Autom Impl Cardioverter Defibrillator	No	Yes	Other

O. Other Non Cardiac Procedures

No Yes Aortic Aneurysm No Yes Carotid Endarterectomy No Yes Other Vascular No Yes Other Thoracic

P. CPB and Support

Cross Clamp Time (min): _____ Perfusion Time (min): _____ Cardioplegia: No Yes

IABP No Yes → When Inserted: Preop Intraop Postop

➥ Indication: Hemodynamic Instab PTCA Support Unst. Angina CPB Wean Prophylatic

Ventricular Assist Device: No Yes

Q. Post Operative

Blood Products Used: No Yes Number of Hours Ventilated Postop: _____

R. Complications (in hospital)

Complications: No Yes

Operative	No	Yes	ReOperation for Bleeding	Infection	No	Yes	Infection - Sternum - Deep
	No	Yes	ReOperation for Valvular Dysfunction		No	Yes	Thoracotomy
	No	Yes	ReOperation for Graft Occlusion		No	Yes	Leg
	No	Yes	ReOperation for Other Cardiac Problem		No	Yes	Septicemia
	No	Yes	ReOperation for Other Non Cardiac Problem		No	Yes	Urinary Tract Infection
	No	Yes	Perioperative Myocardial Infarction				
Neurologic	No	Yes	Stroke	Pulmonary	No	Yes	Prolonged Ventilation
	No	Yes	Transient		No	Yes	Pulmonary Embolism
	No	Yes	Continuous Coma >=24Hrs		No	Yes	Pneumonia
Renal	No	Yes	Renal Failure	Vascular	No	Yes	Vascular - Aortic Dissection
					No	Yes	Illiac/Femoral Dissection
					No	Yes	Acute Limb Ischemia
Other	No	Yes	Heart Block		No	Yes	Gastro-Intestinal Complic.
	No	Yes	Cardiac Arrest		No	Yes	Multi-System Failure
	No	Yes	Anticoagulant Complication		No	Yes	Atrial Fibrillation
	No	Yes	Tamponade				

S. Mortality

Discharge Status: Alive Dead Status at 30 days after surgery: Alive Dead

Mortality - Date __ __/__ __/__ __ __ __ (mm/dd/yyyy) Location of Death: OR Hospital Home Other Facility

Primary Cause of Death (select only one): Cardiac Neurological Renal Vascular Infection Pulmonary Valvular Other

Mortality - Operative Death: No Yes

T. Readmission

Readmit <=30 Days from Date of Procedure: No Yes↓

Readmission Reason: Anticoagulant Compl Arrhythmias CHF Incisional Complication MI/Recurrent Angina

Pericardial Effusion/Tamponade Pneumonia Respiratory Complication Valve Dysfunction Other