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

A. Administrative

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

B. Demographics

Patient Medical Record Number: _____

Last Name: _____ First: _____ MI: ____

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

Gender: Male Female

Race: Caucasian Black Hispanic Asian Native American Other

Social Security (or National ID) Number: _____

ZIP or Postal Code: _____

Referring Cardiologist's Name: _____

Referring Physician's Name: _____

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: _____

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* Vertical 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