

The Society of Thoracic Surgeons Adult Cardiac Surgery Database

Data Collection Form Version 2.9

February 13, 2017

A. Administrative								
Participant ID:	Record ID: (softw	vare gene	rated)			STS Cost Link:		
Patient ID: (software generated)								
Patient participating in STS-related clinical trial: ☐ None ☐ Trial 1 ☐ Trial 2 ☐ Trial 3 ☐	Trial 4 🔲 Tri	al 5 🗆	l Trial	6 (If not	"None" →)	Clinical trial pati	ient ID:	
B. Demographics								
	atient First Name:				Dationt M	iddle Name:		
Date of Birth:/(mm/dd/yyyy)	Patient	A ga:			Fatient M	Sex: ☐ Male ☐ F	iomala	
National Identification (Social Security) Number Know) N	Intional ID N	Number:		
National Identification (Social Security) Number Know	/II: □ Tes □ NO □	Kerusec	I (II Yes	5 →) 1	ational ID 1	vuilibei.		
Medical Record Number:								
Street Address:	Cit	1 /*						
Region:		P Code:				Country:		
Is This Patient's Permanent Address: ☐ Yes ☐ No		Coue.				Country.		
Is the Patient's Race Documented? \square Yes \square No \square		Disclose						
(If Yes \rightarrow) Race: (Select all that apply \rightarrow) White:	i it. Decimed to i		es 🗆	No	Am Indi	an/Alaskan:	□ Yes □	No
11 2 /	frican American:					n/Pacific Islander	□ Yes □	
Diacity 11	micum i micricum.	,	C3 <u></u>	110	Tiuwana	n/1 defrie 13idrider	L 103 L	110
Asian:		□ Ye	es 🗆	No	Other:		□ Yes □	No
	No Docu							
r								
C. Hospitalization								
Hospital Name: (If Not	Missing →)	Hospit	tal ZIP	Code:		Hospi	ital Region:	
Hospital National Provider Identifier:					ation Numb	er:	8	
Primary Payor: (Choose one)		(If Prin	nary Pay	vor <> None	e/Self) Sec	ondary Payor: (Choo	ose one)	
□ None/Self			None		ψ) 222			
☐ Medicare (includes commercially managed option	ons)		Med					
☐ Medicaid (includes commercially managed option				icaid				
☐ Military Health	J113)			tary Healt	h			
· · · · · · · · · · · · · · · · · · ·								
☐ Indian Health Service				an Health				
☐ Correctional Facility				ectional F				
☐ State Specific Plan				e Specific				
☐ Other Government Insurance			Othe	er Governi	ment Insura	nce		
☐ Commercial Health Insurance			Com	mercial H	Health Insura	ance		
☐ Health Maintenance Organization			Heal	th Mainte	enance Orga	nization		
□ Non -U.S. Plan				-U.S. Pla				
☐ Charitable care/ Foundation Funding			Char	ritable car	e/ Foundation	on Funding		
(if Medicare →) Primary Payor Medicare Fee for Servic	e·□Yes □ No					ledicare Fee for Serv	vice: \square Yes	□ No
(if Wedicare 7) I finally Layor Wedicare Lee for Bervie	c. <u>L.</u> 103 L. 110	(11 14100	neare /) become	ary rayor w	redicare rec for Ber	vice. 🗀 163	_ 1,0
Admit Date://		Date of	Surger	ry:/	/ /		(mm/d	d/yyyy)
(mm/dd/yyyy)		2 410 01	Surger	· J ·			(11111)	<i>a, j j j j j j</i>
	rgency Departmen	t \square Ti	ransfer	in from a	nother hosp	ital/acute care facili	ty DOther	
					•		•	
	(If Tr	ansfer →`	Other	r Hospital	Performs C	ardiac Surgery	Yes □ No	
	(11 11)	unsier /	Other	Hospital	1 criorins c	ardiae Burgery —	165 🗖 110	
D. Risk Factors								
"Unknown" should only be selected if Patient / Family unable	e to provide history							
Height (cm):	2 12 provide motory		7	Weight (k	g):			
Family History of Premature Coronary Artery Disease	: □ Yes □ No	□ Unkn		. 6 (**)	U/ ·	_		
Diabetes: ☐ Yes ☐ No ☐ Unknown (If Yes →) Diab				nly 🗆 O	ral 🗆 Insu	llin	□ Other □	
Unknown			-500	, _ 0				
	Dialysis: ☐ Yes ☐	l No □ I	Unknov	wn		Hypertension: ☐ Y Unknown	es 🗆 No 🗆	
Endocarditis: ☐ Yes ☐ No (If Yes→) Endocarditis T	ype: □ Treated □	Active						

(If Endocarditis Yes→)	□ Ent	terococcus sp	pecies 🗆 G	pecies ☐ MRSA ram negative spec ☐Fungal ☐ (cies 🗆 Polymicro	bial	re staph
Tobacco use:	☐ Never smoker ☐ Current every day smoker ☐ Current some day smoker			☐ Smoker, curre ☐ Former smoke ☐ Smoking statu	nt status (frequenc		
Lung Disease: ☐ No ☐ (If Mild, Moderate or Severe	Mild ☐ Moderate ☐ Severe		ase docume	nted, severity unk	nown 🛮 Unkno		Not
	Done: ☐ Yes ☐ No Predicted: d: ☐ Yes ☐ No (If Yes →)		st Performed arbon Dioxi	l: □ Yes □ No de Level:	(If Yes →) _ Oxygen L		licted:
Home Oxygen: ☐ Yes, P.	RN Yes, oxygen dependent Compared to the second of the		nknown	Inhaled Medication No □ Unknown	on or Oral Bronch	nodilator Therapy	
Sleep Apnea: ☐ Yes ☐	No 🗆 Unknown			Pneumonia: R			own
	nt 🗆 Remote 🗆 No 🗀 Unknown			Depression ☐ Ye		nown	
				one Unknow			
Liver Disease: ☐ Yes ☐				A \square B \square C \square U	Inknown		
			iver transpla	ıt: □ Yes □ No ınt: □ Yes □ No			
	ent: 🗆 Yes 🗆 No 🗆 Unknown			al Radiation: 🗆 Y			
	Yes □ No □ Unknown			l Artery Disease:		Unknown	
	☐ Yes ☐ No ☐ Unknown			□ Yes □ No □			
Unresponsive State: ☐ Y			Chest wal	l Deformity: 🛘 Y	es 🗆 No 🗆 Unk	known	
(If Yes→) Prior C	☐ Yes ☐ No ☐ Unknown VA: ☐ Yes ☐ No ☐ Unknown YA: ☐ Yes ☐ No ☐ Unknown Unknown		Prior (CVA-When: □ <	$= 30 \text{ days } \square > 30$	0 days	
CVDC	Carotid stenosis: ☐ Right ☐ Le	eft 🗆 Both	□ None	☐ Not Documer	ited		
	"Right" or "Both" →) Severity of					% □ 100% □ i	Not
	documente		Ü	•			
	If "Left" or "Both" →) Severity of	stenosis on	the left caro	tid artery: \square 50-	79% □ 80 – 99%	6 □ 100% □ 1	Not
	documente	d					
	of previous carotid artery surgery						
	alts below. Not all tests are expended and the expended are more and the expension and the expension are more are more and the expension are more are the expension and the expension are the expension are the expension are expension as a second are the expension are expension and the expension are expension ar						
WBC Count:	Hemoglobin:	1331115. 11 121		matocrit:	Platelet C		хрестей
Last Creatinine Level:	Total Albumin:			al Bilirubin:			
	□ No □ Not Applicable INF	·		LD Score:	(System Calculat		
	ne: \square Yes \square No \square Non-ambula		IVIL	LD Score.	_ (System Calculat	IIOII) DINI	<u>-</u> -
(If Yes —			Time 2	2: (secon	ds) Ti	me 3 : (s	seconds)
,	e: \square Yes \square No (If Yes \rightarrow)				us) 111	inc 3 (s	seconds)
Six windle walk test don	c. Li Tes Li No (n Tes)	Total Dista	iicc	icct			
E. Previous Cardiac I							
	tions: Yes No Unknown						
	ronary artery bypass (CAB): \(\simeg\) Ye						
Previous val	lve procedure: ☐ Yes ☐ No If Pr	Valve Yes, En	ter at least or			<u> </u>	
			#1	#2	#3	#4	#5
	al valve procedure(s)						
	balloon valvotomy/valvuloplasty						
	repair, surgical						
	replacement, surgical						
	replacement, transcatheter						
	balloon valvotomy/valvuloplasty						
	commissurotomy, surgical						
Mitral valve	repair, percutaneous						
Mitral valve	repair, surgical						
	replacement, surgical						
Mitral valve	replacement, transcatheter						
	alve balloon valvotomy/valvulopla	sty					
Tricuspid va	alve repair, percutaneous						
	alve repair, surgical						
	alve replacement, surgical						
	alve replacement, transcatheter						
Tricuspid va	•						
	valve balloon valvotomy/valvulop	lastv		1	1	1	
	valve repair, surgical			†	1	1	
	valve repair, surgical			1	1	1	
1 unitonal y	. a 5 repraeement, buigical				1	1	<u> </u>

Pulmonary valve replacement, transcatheter						
Pulmonary valvectomy						
Other valve procedure						
Previous PCI: ☐ Yes ☐ No						
(If Yes →) PCI Performed Within This Episode Of	Care:	this facility	☐ Yes, at some	other acute care	facility	No (If
"Yes, at this facility" or "Yes, at some other		↓)			-	
Indication for Surgery: ☐ PCI Con	plication			re without Clin	ical Deterior	ration
	are with Clinical		☐ PCI/Surg	ery Staged (not	STEMI)	
□ PCI for S	STEMI, multivess	el disease	\square Other			
PCI Stent: \square Yes \square No (If Yes \rightarrow) S	Stent Type: □ Ba	re metal □ □)rug-eluting □ I	Rioresorhable [7Multiple	
Unknown			rug-cluding 🗀 i	Jioresoroadie L		
PCI Interval: $\square \le 6$ Hours $\square > 6$						
	10415					
Other Previous Cardiac Interventions: Yes No	(If Yes, Enter at le	ast one previou	is other cardiac pr	ocedure and up to	7 1)	
	#1		#3 #4	#5	#6	#7
No additional interventions						
Ablation, catheter, atrial fibrillation						
Ablation, catheter, other or unknown						
Ablation, catheter, ventricular						
Ablation, surgical, atrial fibrillation						
Ablation, surgical, other or unknown						
Aneurysmectomy, LV						
Aortic procedure, arch						
Aortic procedure, ascending						
Aortic procedure, descending						
Aortic procedure, root						
Aortic procedure, thoracoabdominal						
Aortic Procedure, TEVAR						
Aortic root procedure, valve sparing						
Atrial appendage obliteration, Left, surgical						
Atrial appendage obliteration, Left, transcatheter						
Cardiac Tumor						
Cardioversion(s)						
Closure device, atrial septal defect						
Closure device, ventricular septal defect						
Congenital cardiac repair, surgical						
ECMO						
Implantable Cardioverter Defibrillator (ICD) with						
or without pacemaker						
Pacemaker						
Pericardial window/Pericardiocentesis						
Pericardiectomy						
Pulmonary Thromboembolectomy						
Total Artificial Heart (TAH)						
Transmyocardial Laser Revascularization (TMR)						
Transplant heart & lung						
Transplant, heart						
Transplant, lung(s)						
Ventricular Assist Device (VAD), BiVAD						
Ventricular Assist Device (VAD), left						
Ventricular Assist Device (VAD), right						
Other Cardiac Intervention (not listed)						

	ve Cardiac Status										
Prior Myocardia	Infarction: ☐ Yes ☐										_
Candia a Duacanta	tion/Symptoms: (Choose						s. 🗆 1	to 7 Days □	8 to 21 Days [_l>21 I	Days
Cardiac Presenta	uon/Symptoms: (Choos	e <u>one</u> I	rom the list bel	low for each		me of this	a denia si s		A + +	ima af	surgery:
No Symp	toms				Att	ille of ulls	aumissic	JII.	Att	illie oi	surgery.
Stable Ar											
Unstable											
	Elevation MI (Non-STE	EMI)									
ST Elevar	tion MI (STEMI)										
Angina E	quivalent										
Other			*				B 1		"		
Heart Failure:⊔	Yes □ No □ Unknow	vn (lf Y		ıng: ⊔ Ac	ute ⊔ (NVHA:	hronic Class I	Both	Type: ☐ Syst	olic ⊔ Diastolic II □ Class IV		th Unavailable
Cardiogenic Sho	ck : ☐ Yes, at the time	of the									Documented
	Yes - Within 1 hour o										e procedure \square
No			1								1
Arrhythmia: N											
(If Arrhythmia = Y			nanently Pace					I . —			T
(If Yes, choose on each rhythm →)	e response below for	VTa	ch/VFib	Sick Sin	ıs	AFlutter		AFibrillation	Second De Heart Bloo		Third Degree Heart Block
cacii iiiyiiiii -)	None								пеан Бю	CK	neart block
Rem	note (> 30 days preop)										
	total (= 30 days preop)										
(If AFibrillation no	ot 'None' →)	Atria	al Fibrillation	Type: □	Paroxys	mal Per	rsistent	☐ Longstandin	g Persistent	Permar	nent
					_						
G. Preoperative Medications Medication Timeframe							_		istration		
ACE or ARB			Within 48 ho					indicated U		1	
Amiodarone			Prior to surg	ery		s, on nome known	tnerapy	☐ Yes, thera	apy started this a	admissi	on 🗆 No
	Beta Blocker		Within 24 ho	ours		s 🗆 No 🗆	Contra	indicated			
	Beta Blocker		On therapy f					indicated U	nknown		
			weeks prior								
	Calcium Channel		On therapy f		□ Ye	s □ No □	☐ Contra	indicated \square U	nknown		
Antianginal	Blocker Long-acting Nitrate		Weeks prior to On therapy f	to surgery		а П Ма Г	Contro	indicated U	[m]rm ovvm		
7 Mitiangmai	Long-acting Nitrate		weeks prior			S LINO L	i Conna	illidicated 🗀 0	likilowii		
	Nitrates, intravenous		Within 24 ho		□Y€	s 🗆 No					
	Other Antianginal		On therapy f	rightarrow 2			Contra	indicated 🗆 Ui	nknown		
			weeks prior								
	ADP Inhibitor		Within 5 day	'S				indicated U			
	(includes P2Y12) Aspirin		Within 5 day	1C				Discontinuatio indicated U		aays pr	ior to surgery)
Antiplatelet	Aspiriii		within 5 day	3				Discontinuation		avs pri	or to surgery)
1					(If Ye			one time dose:		шу Б ртт.	or to surgery)
	Glycoprotein IIb/IIIa		Within 24 ho			s 🗆 No					
	Anticoagulants		Within 48 ho	ours	□ Ye	s 🗆 No (1	[f Yes→)	Medication:	☐ Heparin (U		
	(Intravenous/ SubQ)								☐ Heparin (Lo	ow Mol	ecular)
									☐ Both ☐ Other		
	Warfarin (Coumadin))	Within 5 day	/S	□ Ye	s 🗆 No	□ Unkn	own	□ Other		
Anticoagulant	(<i>'</i>						continuation: _	(# days	prior to	surgery)
-	Factor Xa inhibitors		Within 5 day	/S		s 🗆 No					
								continuation: _	(# days	prior to	surgery)
	Novel Oral Anticoagulant		Within 5 day	/S		s □ No s→) NOAC	Unkn		(# days pr	ior to s	urgamı)
	Thrombin Inhibitors		Within 5 day	/S		s □ No			(# days pr	101 to Si	urgery)
	1 monion minorors		., idini 5 day					bitor Discontin	uation:	_ (# dav	ys prior to surgery)
	Thrombolytics		Within 48 ho	ours		s 🗆 No				_ \	· · · · · · · · · · · · · · · · · · ·
Inotropic, intrave	•		Within 48 ho			s 🗆 No					
Lipid lowering			Within 24 ho	ours				indicated D U			
Steroids			Within 24 ho					oe : □ Statin □	Statin + Other	□ No	on-statin/Other
Nieroias		1	witnin 7/1 hr	nire	1 1 1 Y 6	S LINO I	LUOnfr	amoreated III	i inknown		

	Performed : ☐ Yes ☐ No		Catheterization Date:	//	
,	ease known: Yes No	o (If Yes↓)			
	Dominance:	Left		inant Not Documented	
	Source(s) used to quantify s Number Diseased Vessels (iogram □ CT □ IVUS e □ One □ Two □		ther \square Multiple
7	vessel disease ↓)			Timee	
		ust have documentation o		T	Γ =
Coronary	Native Artery % Stenosis Known: □	Graft(s) Graft(s) Present: □ Yes	Stent(s) Stent(s) Present: □	Fractional Flow Reserve (FFR)	Instantaneous wave-free ratio
	Yes □ No (If yes ↓)	\Box No (If yes ψ)	Yes \square No (If yes \checkmark)	performed: □Yes	(iFR) performed:
				\square No (If yes \checkmark)	□Yes □No(If
		☐ Patent	☐ Patent		yes√)
Left Main	%	☐ Stenosis >=50%	☐ Stenosis >=50%		
		□ 100% occlusion	☐ Not Documented		
		☐ Not Documented			
	%	☐ Patent ☐ Stenosis >=50%	☐ Patent☐ Stenosis >=50%		
Proximal LAD		☐ 100% occlusion	☐ Not Documented		
		☐ Not Documented			
	0/	☐ Patent	☐ Patent		
Mid LAD	%	☐ Stenosis >=50% ☐ 100% occlusion	☐ Stenosis >=50% ☐ Not Documented		
		☐ Not Documented	1 Not Bocamented		
		☐ Patent	☐ Patent		
Distal LAD	%	☐ Stenosis >=50% ☐ 100% occlusion	☐ Stenosis >=50%		
		☐ Not Documented	☐ Not Documented		
		□ Patent	☐ Patent		
D'	%	☐ Stenosis >=50%	☐ Stenosis >=50%		
Diagonal 1		☐ 100% occlusion	☐ Not Documented		
		☐ Not Documented ☐ Patent	☐ Patent		
	%	☐ Patent ☐ Stenosis >=50%	☐ Stenosis >=50%		
Diagonal 2		□ 100% occlusion	☐ Not Documented		
		☐ Not Documented			
	%	☐ Patent☐ Stenosis >=50%	☐ Patent☐ Stenosis >=50%		
Diagonal 3	70	☐ 100% occlusion	□ Not Documented		
		☐ Not Documented			
	0/	☐ Patent	☐ Patent		
Circumflex	%	☐ Stenosis >=50% ☐ 100% occlusion	☐ Stenosis >=50% ☐ Not Documented		
		☐ Not Documented			
		□ Patent	□ Patent		
Obtuse Marginal 1	%	☐ Stenosis >=50% ☐ 100% occlusion	☐ Stenosis >=50% ☐ Not Documented		
_		☐ Not Documented	Not Documented		
		☐ Patent	☐ Patent		
Obtuse Marginal 2	%	☐ Stenosis >=50%	☐ Stenosis >=50%		
9		☐ 100% occlusion ☐ Not Documented	☐ Not Documented		
		☐ Patent	☐ Patent		
Obtuse Marginal 3	%	☐ Stenosis >=50%	☐ Stenosis >=50%		
Obtuse Wai ginai S		☐ 100% occlusion	☐ Not Documented		
		☐ Not Documented ☐ Patent	☐ Patent		
Ramus	%	☐ Stenosis >=50%	☐ Stenosis >=50%		
Kamus		☐ 100% occlusion	☐ Not Documented		
		☐ Not Documented ☐ Patent	☐ Patent		
D.C.A	%	☐ Stenosis >=50%	☐ Stenosis >=50%		
RCA		□ 100% occlusion	☐ Not Documented		
		☐ Not Documented	□ D-44		
Acute Marginal	%	☐ Patent☐ Stenosis >=50%	☐ Patent☐ Stenosis >=50%		
(AM)		☐ 100% occlusion	☐ Not Documented		
		☐ Not Documented			

		☐ Patent		☐ Patent					
Posterior Descending	%	☐ Stenosis >=50%		☐ Stenosis >=50%					
(PDA)		☐ 100% occlusion		☐ Not Documented					
		☐ Not Documented		□ D-44					
	%	☐ Patent☐ Stenosis >=50%		☐ Patent☐ Stenosis >=50%					
Posterolateral (PLB)	70	☐ 100% occlusion		□ Not Documented					
		□ Not Documented		1 Not Documented					
	☐ Yes ☐ No (If Yes→) S								
	No (If Yes \rightarrow) Result:			Positive (Abnormal)	☐ Not Documented				
	☐ Yes ☐ No (If Yes→)			(%)					
	☐ Yes ☐ No (If Yes→)				V End-Diastolic Dimensi	on: (mm)			
	easured:	Y es→)	PA	Systolic Pressure:	mmHg				
Aortic Valve	N	□ M:14 □ M - 4		C	-4- 1 /IC ((0)I 22 I)				
	None ☐ Trivial/Trace Yes ☐ No ☐ Not Docum		te ப	Severe \square Not Documer	ited(If not "None" ↓)				
Aortic Valve Disease:		icited							
(If Yes $\downarrow \rightarrow$)		Yes □ No (If Yes→)	Hemo	dynamic/Echo data availa	able: Yes No (If Yes	↓)			
		Sm	nallest .	Aortic Valve Area:	cm ²				
		Hi	ghest N	Mean Gradient:	mmHg Maximum Aortic	jet velocity (V _{max):}			
m/s									
AV Disease Etiology Choose PRIMARY Etiology (one):									
AV Disease Etiology Choose PRIMARY Etiology (one): □ Bicuspid valve disease □ Primary Aortic Disease, Hypertensive Aneurysm									
□ Degenerative- Calcified □ Primary Aortic Disease, Inflammatory									
□ Degenerative- Calcified □ Primary Aortic Disease, Inflammatory □ Degenerative- Leaflet prolapse with or without annular dilation □ Primary Aortic Disease, Loeys-Dietz Syndrome									
□ Degenerative- Leaflet prolapse with or without annular dilation □ Primary Aortic Disease, Loeys-Dietz Syndrome □ Degenerative- Pure annular dilatation without leaflet prolapse □ Primary Aortic Disease, Marfan Syndrome									
	mmissural rupture				se, Other Connective tissu				
Č	tensive fenestration			•	of previous AV repair or r	eplacement			
	aflet perforation/hole			Rheumatic					
☐ Endocarditis with				Supravalvular Aortic	Stenosis				
☐ Endocarditis with				Trauma					
	t Pathology, HOCM t Pathology, Sub-aortic me	mhrane		Tumor, Carcinoid Tumor, Myxoma					
	t Pathology, Sub-aortic Tu			Tumor, Papillary Fibr	oelastoma				
	t Pathology, Other	inici		Tumor, Other	Ociusionia				
	isease, Aortic Dissection			Mixed Etiology					
☐ Primary Aortic D	isease, Atherosclerotic An	eurysm		Not Documented					
	isease, Ehler-Danlos Synd								
	→) Sievers Class: □ 0 No r	aphe 🛮 1 one raphe l	\Box 2 tw	o raphe Not Document	ted				
Mitral Valve	N		7.0						
Mitral Insufficiency: ☐ (If not "None" ↓)	None ☐ Trivial/Trace ☐	Mild ⊔ Moderate L	」 Seve	re □ Not Documented					
	Yes □ No □ Not Docume	ented							
Mitral Valve Disease:									
(If Yes $\downarrow \rightarrow$) Mitral S	tenosis: ☐ Yes ☐ No (If Yes→) Hemod	ynami	c/ Echo data available:	Yes \square No (If Yes \downarrow)				
					ea: cm ² Highest	Mean Gradient:			
Mark Bill a		`		mmHg					
	noose PRIMARY Etiology (o	ne):		Tumor, Papillary fibr	oolastoma				
☐ Myxomatous ☐ Rheumatic	s degeneration/prolapse			Tumor, Papinary nor	ociasionia				
	cute, post infarction (MI \leq 2)	21 days)		Carcinoid					
	ronic (MI > 21 days)	21 days)		Trauma					
	ic Cardiomyopathy			Congenital					
□ Endocarditis				Pure annular dilatatio	n				
	c Obstructive Cardiomyop	athy (HOCM)			of previous MV repair or i	eplacement			
☐ Tumor, Caro				Mixed Etiology					
☐ Tumor, Myx	ioma			Not Documented					
MV Lesion Choose PRIN	MARY Lesion (one):								
	pse, posterior			Papillary muscle elon					
	pse, bileaflet			Papillary muscle rupt	ure				
	apse, anterior			Leaflet thickening					
	pse, unspecified			Leaflet retraction					
	iptured chord(s)/Flail			Chordal tethering	· · · · · · · · · · · · · · · · · · ·				
☐ Annular dila	tation			Chordal thickening/re	etraction/Tusion				

	Leaflet calcification		Commissura	l fusio	n
	Leaflet perforation/hole		Mixed lesion		
	Mitral annular calcification		Not Docume	nted	
Tricuspi					
	l Insufficiency: ☐ None ☐ Trivial/Trace ☐ Mild ☐ Moderate				
	l Annular Echo Measurement Available: \square Yes \square No (If Yes-			::	cm
Tricuspic	l Valve Disease: ☐ Yes ☐ No (If Yes→) Tricuspid Stenosis:		□ No		
	oid Disease Yes →) TV Etiology: Choose PRIMARY Etiology	(one):			
	Functional/ secondary		Rheumatic		
	Endocarditis		Tumor		
	Carcinoid		Trauma		
	Congenital		Reoperation	n-Failu	re of previous TV repair or replacement
	Degenerative		Mixed etiol	ogy	
	Pacing wire/catheter induced dysfunction		Not Docum	ented	
	c Insufficiency: ☐ None ☐ Trivial/Trace ☐ Mild ☐ Modera	ite □ S	evere □ Not Doc	ument	ed
	c Valve Disease: ☐ Yes ☐ No				
(If Yes \rightarrow	,		Indexed to BSA:_		
(If Yes \rightarrow	Pulmonic Stenosis: \square Yes \square No (If Yes \rightarrow) H	emodyr	amic /Echo data	availat	ole: ☐ Yes ☐ No (If Yes ↓)
			Highest Mean Gr	adient	:mmHg
$(If Yes \rightarrow)$	/				
	☐ Acquired				a-Failure of previous PV repair or replacement
	☐ Congenital, s/p Tetralogy of Fallot (TOF) repair			d etiol	
	☐ Congenital, no prior Tetralogy of Fallot (TOF) repai	r	□ Not I	Oocum	ented
I. Oper	ative				
ı, optı					
Surgeon:			Surgeon N	PI:	
Taynayei	Identification Number:				
	whether the STS Risk Calculator score was discussed with the	nationt	family prior to su	irgery	
muicate	☐ Yes, STS risk calculator score was calculated and discussed	with th	nationt/family p	rior to	surgary as documented in the medical record
	☐ Pes, 515 lisk calculator score was calculated and discussed ☐ No, STS risk calculator score was available for scheduled p				
	as not documented	rocedur	e but not discusse	a with	the patient/family prior to surgery of the discussion
W/	as not documented				
		dal arra	ilabla fan thia mua	a a d 11 ma)
	☐ NA, Not applicable (emergent or salvage case, or no risk me	odel ava	ilable for this pro	cedure)
	☐ NA, Not applicable (emergent or salvage case, or no risk mo	odel ava			
	☐ NA, Not applicable (emergent or salvage case, or no risk mo	odel ava			cardiovascular surgery
	☐ NA, Not applicable (emergent or salvage case, or no risk mo	odel ava		l re-op	
	 □ NA, Not applicable (emergent or salvage case, or no risk motor) □ First cardiovascular surgery □ First re-op cardiovascular surgery 	odel ava		l re-op th or m	cardiovascular surgery
	□ NA, Not applicable (emergent or salvage case, or no risk mo	odel ava		l re-op th or m	cardiovascular surgery
	 □ NA, Not applicable (emergent or salvage case, or no risk motor) □ First cardiovascular surgery □ First re-op cardiovascular surgery 	odel ava		l re-op th or m not a c	cardiovascular surgery
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo	odel ava	☐ Third	l re-op th or m not a c	cardiovascular surgery ore re-op cardiovascular surgery ardiovascular surgery
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo □ First cardiovascular surgery □ First re-op cardiovascular surgery □ Second re-op cardiovascular surgery □ Elective □ Urgent (If Urgent or Emergent choose the most pressing reason ♥)	odel ava	☐ Third	l re-op th or m not a c	cardiovascular surgery ore re-op cardiovascular surgery ardiovascular surgery
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo	odel ava	☐ Third	l re-op th or m not a c	cardiovascular surgery nore re-op cardiovascular surgery ardiovascular surgery □ Emergent Salvage
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo	odel ava	☐ Third	I re-op th or m not a c gent	cardiovascular surgery ore re-op cardiovascular surgery ardiovascular surgery □ Emergent Salvage PCI Incomplete without clinical deterioration
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo	odel ava	☐ Third	I re-op th or m not a c gent	cardiovascular surgery nore re-op cardiovascular surgery ardiovascular surgery □ Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo	odel ava	☐ Third	I re-op th or m not a c gent	cardiovascular surgery nore re-op cardiovascular surgery ardiovascular surgery □ Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration Pulmonary Edema
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo	odel ava	☐ Third	I re-op th or m not a c gent	cardiovascular surgery nore re-op cardiovascular surgery ardiovascular surgery Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration Pulmonary Edema Pulmonary Embolus
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo	odel ava	☐ Third	I re-op th or m not a c gent	cardiovascular surgery nore re-op cardiovascular surgery ardiovascular surgery Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration Pulmonary Edema Pulmonary Embolus Rest Angina
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo		☐ Third	l re-op th or m not a c gent	cardiovascular surgery ore re-op cardiovascular surgery ardiovascular surgery Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration Pulmonary Edema Pulmonary Embolus Rest Angina Shock, Circulatory Support
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo		☐ Third	d re-op th or m not a c	cardiovascular surgery ore re-op cardiovascular surgery ardiovascular surgery Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration Pulmonary Edema Pulmonary Embolus Rest Angina Shock, Circulatory Support Shock, No Circulatory Support
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo	ation	□ Third □ Fourt □ NA-	d re-op th or m not a c gent	cardiovascular surgery ore re-op cardiovascular surgery ardiovascular surgery Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration Pulmonary Edema Pulmonary Embolus Rest Angina Shock, Circulatory Support Shock, No Circulatory Support Syncope
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo	ration	□ Third □ Fourt □ NA- □ Emer	d re-op th or m not a c	cardiovascular surgery ore re-op cardiovascular surgery ardiovascular surgery Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration Pulmonary Edema Pulmonary Embolus Rest Angina Shock, Circulatory Support Shock, No Circulatory Support Syncope Transplant
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo	ation nnular device m	☐ Third☐ Fourt☐ NA-☐ Emer	d re-op th or m not a c gent	cardiovascular surgery ore re-op cardiovascular surgery ardiovascular surgery Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration Pulmonary Edema Pulmonary Embolus Rest Angina Shock, Circulatory Support Shock, No Circulatory Support Syncope Transplant Trauma
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo	ation nnular device m	☐ Third☐ Fourt☐ NA-☐ Emer	d re-op th or m not a c gent	cardiovascular surgery ore re-op cardiovascular surgery ardiovascular surgery Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration Pulmonary Edema Pulmonary Embolus Rest Angina Shock, Circulatory Support Shock, No Circulatory Support Syncope Transplant Trauma USA
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo	ation nnular device m	☐ Third☐ Fourt☐ NA-☐ Emer	d re-op th or m not a c gent	cardiovascular surgery ore re-op cardiovascular surgery ardiovascular surgery Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration Pulmonary Edema Pulmonary Embolus Rest Angina Shock, Circulatory Support Shock, No Circulatory Support Syncope Transplant Trauma USA Valve Dysfunction
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo	ation nnular device m	☐ Third☐ Fourt☐ NA-☐ Emer	d re-op th or m not a c gent	cardiovascular surgery ore re-op cardiovascular surgery ardiovascular surgery Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration Pulmonary Edema Pulmonary Embolus Rest Angina Shock, Circulatory Support Shock, No Circulatory Support Syncope Transplant Trauma USA Valve Dysfunction Worsening CP
Incidence	□ NA, Not applicable (emergent or salvage case, or no risk mo	ation nnular device m	☐ Third☐ Fourt☐ NA-☐ Emer	d re-op th or m not a c gent	cardiovascular surgery ore re-op cardiovascular surgery ardiovascular surgery Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration Pulmonary Edema Pulmonary Embolus Rest Angina Shock, Circulatory Support Shock, No Circulatory Support Syncope Transplant Trauma USA Valve Dysfunction
Incidence Status:	□ NA, Not applicable (emergent or salvage case, or no risk model. □ First cardiovascular surgery □ First re-op cardiovascular surgery □ Second re-op cardiovascular surgery □ Elective □ Urgent (If Urgent or Emergent choose the most pressing reason↓) Urgent / Emergent reason: □ AMI □ Anatomy □ Aortic Aneurysm □ Aortic Dissection □ CHF □ Device Failure □ Diagnostic/Interventional Procedure Complice □ Endocarditis □ Failed Transcatheter Valve Therapy, acute at □ Failed Transcatheter Valve Therapy, subacute IABP □ Infected Device □ Intracardiac mass or thrombus □ Ongoing Ischemia □ previously attempted during this admission, but canceled: □	ation nnular device me device	☐ Third☐ Fourt☐ NA-☐ Emer	d re-op th or m not a c gent	cardiovascular surgery ore re-op cardiovascular surgery ardiovascular surgery Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration Pulmonary Edema Pulmonary Embolus Rest Angina Shock, Circulatory Support Shock, No Circulatory Support Syncope Transplant Trauma USA Valve Dysfunction Worsening CP
Incidence Status:	□ NA, Not applicable (emergent or salvage case, or no risk more: □ First cardiovascular surgery □ Second re-op cardiovascular surgery □ Elective □ Urgent (If Urgent or Emergent choose the most pressing reason ♥) Urgent / Emergent reason: □ AMI □ Anatomy □ Aortic Aneurysm □ Aortic Dissection □ CHF □ Device Failure □ Diagnostic/Interventional Procedure Complice □ Endocarditis □ Failed Transcatheter Valve Therapy, acute at □ Failed Transcatheter Valve Therapy, subacute IABP □ Infected Device □ Intracardiac mass or thrombus □ Ongoing Ischemia e previously attempted during this admission, but canceled: □ Date of previous case: □ / □ / □ □ (mm/dd/yy)	ration nnular device me device	☐ Third☐ Fourt☐ NA-☐ Emer	d re-op th or m not a c gent	cardiovascular surgery ore re-op cardiovascular surgery ardiovascular surgery Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration Pulmonary Edema Pulmonary Embolus Rest Angina Shock, Circulatory Support Shock, No Circulatory Support Syncope Transplant Trauma USA Valve Dysfunction Worsening CP Other
Incidence Status:	□ NA, Not applicable (emergent or salvage case, or no risk model: □ First cardiovascular surgery □ First re-op cardiovascular surgery □ Second re-op cardiovascular surgery □ Elective □ Urgent (If Urgent or Emergent choose the most pressing reason ♥) Urgent / Emergent reason: □ AMI □ Anatomy □ Aortic Aneurysm □ Aortic Dissection □ CHF □ Device Failure □ Diagnostic/Interventional Procedure Complice □ Endocarditis □ Failed Transcatheter Valve Therapy, acute at □ Failed Transcatheter Valve Therapy, subacute IABP □ Infected Device □ Intracardiac mass or thrombus □ Ongoing Ischemia Previously attempted during this admission, but canceled: □ Date of previous case: □ / / (mm/dd/yyyou Timing of previous case: □ Prior to induction	Yes yy)	☐ Third☐ Fourt☐ NA-☐ Emery isruption alposition e dysfunction No No	d re-op th or m not a c gent	cardiovascular surgery ore re-op cardiovascular surgery ardiovascular surgery □ Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration Pulmonary Edema Pulmonary Embolus Rest Angina Shock, Circulatory Support Shock, No Circulatory Support Syncope Transplant Trauma USA Valve Dysfunction Worsening CP Other ction, prior to incision □ After incision made
Incidence Status:	□ NA, Not applicable (emergent or salvage case, or no risk more: □ First cardiovascular surgery □ Second re-op cardiovascular surgery □ Elective □ Urgent (If Urgent or Emergent choose the most pressing reason ♥) Urgent / Emergent reason: □ AMI □ Anatomy □ Aortic Aneurysm □ Aortic Dissection □ CHF □ Device Failure □ Diagnostic/Interventional Procedure Complice □ Endocarditis □ Failed Transcatheter Valve Therapy, acute at □ Failed Transcatheter Valve Therapy, subacute IABP □ Infected Device □ Intracardiac mass or thrombus □ Ongoing Ischemia e previously attempted during this admission, but canceled: □ Date of previous case: □ / □ / □ □ (mm/dd/yy)	Yes yy) on of and event	□ Third □ Fourt □ NA- □ Emer □ Struction alposition e dysfunction No □ Cardiac arrest	re-op th or m not a c gent gent crimdu crindu crindu	cardiovascular surgery ore re-op cardiovascular surgery ardiovascular surgery Emergent Salvage PCI Incomplete without clinical deterioration PCI or attempted PCI with Clinical Deterioration Pulmonary Edema Pulmonary Embolus Rest Angina Shock, Circulatory Support Shock, No Circulatory Support Syncope Transplant Trauma USA Valve Dysfunction Worsening CP Other

		Other Non-cardia	c □ Y	es □ No O	ther Cardiac	□ Yes □ No
Was the cur	rent procedure cance	eled: □ Yes □ No				
(If Yes→)	Canceled Timing:	☐ Prior to induction of a		_		cision made
	Canceled Reason:	☐ Anesthesiology event☐ Unanticipated tumor	☐ Cardiac arrest ☐ Donor Organ Un			
	Planned procedure		☐ Yes ☐ No		alve, Surgical	□ Yes □ No
		Mechanical Assist Device Other Non-cardiac	e □ Yes □ No □ Yes □ No		alve, Transcatheter ther Cardiac	□ Yes □ No □ Yes □ No
Initial Opera	ative Approach:	☐ Full conventional sternoton	ny 🔲 Left Tho	oracotomy	uioi caraiae	☐ Thoracoabdominal Incision
		☐ Partial sternotomy		noracotomy		☐ Percutaneous
		☐ Transverse sternotomy ☐ Right or left parasternal inc		l Thoracotomy (mini) Thoracotom	v right	☐ Port Access ☐ Other
		☐ Sub-xiphoid		(mini) Thoracotom		☐ None (canceled case)
		□ Sub-Costal		(mini) Thoracotom	y , bilateral	
		cedure: \square Yes, planned \square Yes \rightarrow) \square Used for entire of		part of the operation		
Coronary A	rtery Bypass: 🛮 Ye	es, planned Yes, unplanned				ie to unsuspected disease or
	□ No (If "Yes" comp	olete Section J) (If "Yes" complete Section K) (If	Vos) Did the surgeor	provide input for v	alva surgary data ab	estraction? Vos No
		Yes, planned \(\sigma\) Yes, unplanned			arve surgery data ab	suacion: Li Tes Li No
_	☐ Yes, unplanned	d due to unsuspected disease or	anatomy No(If "Yo	es" complete Section	M 2)	
		de input for aortic surgery data				
		es, planned)	
Other Cardi	ac Procedure, AFib	: \square Yes \square No (If Yes \rightarrow) (Com				de input for AFib data
	Yes No	DV DN geggy "	G (* 37)			
		☐ Yes ☐ No (If "Yes" complet taining to the surgery for whic		rm was initiated:		
					1	5
1	·	2	3		4	5
OP Entry D		7	8	a 24 ha alaak)	9	10
OR Entry D	te And Time:	_// '/:::	(mm/dd/vvvv hh:mm	- 24 hr clock)		
General And	esthesia: 🗆 Yes 🗀 1	No (If General Anesthesia No→)	Procedural Sedation	on : □ Yes □ No		
(If General A		ubation: Yes, prior to entering				
	(If Intubation Yes \rightarrow)	Intubation Date and Time: _	//	: (mr	n/dd/yyyy hh:mm - 24	hr clock)
		Initial Extubation Date and T	ime://	:	(mm/dd/yyyy hh:n	nm - 24 hr clock)
	n Start Date and Tin		: (mm/dd/yy	yy hh:mm - 24 hr clo	ck)	
	n Stop Date and Tin			yy hh:mm - 24 hr clo	ck)	
	End Date and Time: Antibiotic Selection	•	: (mm/dd/yyyy ate Antibiotic Adminis	hh:mm - 24 hr clock)	Appropriate Antil	piotic Discontinuation: ☐ Yes
☐ Exclusion			No Exclusion	uation Tilling. 🗆	□ No □ Exclusi	
Additional i	ntraoperative prophy	ylactic antibiotic dose given : [
	e Measured: Yes		perature Source:	Egophagaal	DD voneva materia	☐ Bladder ☐ Nasopharyngeal
(II 1 Cs ->)	Lowest Temperatur	e (°C) Temp			al \square Other \square Unl	1
				•	TT: 1 T .	CI.
CPB Utiliza	a-op Hemoglobin: _ .tion: None	Lowe	est Intra-op Hematocrit	:	Highest Intra-o	p Glucose:
CI D Cuitza	□ Combin	ation (If Combination→)	Combination Pla	n: □ Planned □	Unplanned (If Un	planned\()
			Unplanned Reason	on: 🗆 Exposure/v	isualization 🗆 1	Bleeding
			•	☐ Inadequate	size/ diffuse disease	of distal vessel
						tension/arrhythmias)
	□ Full	(If "Combination" or	"Full"↓)	□ Conduit qu	ality and/or trauma	□ Other
			n Insertion Site: (Select	all that apply ψ)		
		Aortic □ Y	es □ No	Axillary	□ Yes □ No	Other □ Yes □ No
			es □ No	Innominate	☐ Yes ☐ No	Oulei L 100 L NO
		Venous Cannulation	n Insertion Site: (Select	all that apply ψ)		
						
			es □ No es □ No	Pulmonary Vein Caval/Bicaval	☐ Yes ☐ No ☐ Yes ☐ No	
			es □ No es □ No	Other	☐ Yes ☐ No	
			es 🗆 No			

		Cardiopulmonary	Bypass T	ime (min	utes):							
Circulatory Arrest: ☐ Ye		With C. I.	1D C :	m.								
		est Without Cerebrest With Cerebral I				mın)						
	$(If Yes \rightarrow)$	Cerebral Perfusion)						
		Cerebral Perfusion					ade 🗆	Both an	tegrade aı	nd retrog	rade	
		ry Arrest Time:			(System	Calculation	on)					
Aortic Occlusion:	□ None – beati				☐ Aortic							
	☐ None – fibri	llating heart clamp" or "Balloon o	celusion" -	~)·	☐ Balloo Cross Cl			(min)			
Cardioplegia Delivery:		integrade \square Retro			Closs Cl	атр ттп	е	(111111)			
Curdiopiegia Benvery.		"Retrograde" or "Botl			oplegia u	sed: 🗆 I	Blood [☐ Crystal	lloid 🗆	Both	☐ Other	
Cerebral Oximetry Used:	□ Yes □ No											
Diffuse Aortic Calcificati												
Assessment of Ascending Assessment me			J Yes ⊔] Epiaorti			ed (If Ye □ CT sca		□ Othor	r diagnost	ia madal		
Assessment me	uiou.	IEE L	д Ергаоги	ic uitraso	una L	⊒ C1 SCa	11	□ Onlei	uiagiiosi	ic modai	ity	
Assessment of A	Aorta Plaque:	☐ Normal Aorta	/No or mi	nimal pla	ique		□ Extens	sive intim	al thicker	ning		
	•	☐ Protruding Atl	heroma <		•				eroma >=			
		☐ Mobile plaque	es				□ Not do	cumente	d			
Aortic Condition Altered												
Intraop Blood Products R (If No →) Intraop B	Blood Products:											
	od Cell Units:		Platelet U	nits:								
/ /	ozen Plasma Units		Cryopreci		its:							
Intraop Clotting Factors:											□ Yes □	l No
Intraop Antifibrinolytic N				d: 🗆 Yes	□ No	Tra	nexamic .	Acid: □	Yes □ N	No		
Intraoperative TEE Perform			(If Yes ↓)									
	evel aortic insuffi	ciency found:	oto 🗆 Ca	vioro 🗆 N	lot Doour	mantad						
	rtic Gradient:		ale 🗆 Se	evele 🗀 i	NOT DOCUI	nemeu						
	ravalvular leak:											
□ None	☐ Trivial/Trace	☐ Mild ☐ Moder	ate 🗆 Se	evere 🗆 N	lot Docur	nented						
Highest le	evel Mitral insuff	iciency found:										
		□ Mild □ Moder	rate \square Se	evere \square N	Not Docur	nented						
	tral Gradient: ravalvular leak:											
		□ Mild □ Moder	ate □ Se	vere \square N	Jot Docut	mented						
		sufficiency found:	ше 🗆 Бе	veic 🗖 i	tot Docui	пенес						
		☐ Mild ☐ Moder	ate 🗆 Se	evere 🗆 N	Not Docur	nented						
	cuspid Gradient:_											
	Paravalvular leal				L.D	. 1						
□ None	☐ Trivial/Trace	☐ Mild ☐ Moder	rate \square Se	evere \square	ot Docur	nented						
Ejection 1	Fraction Measure	d post procedure: [□ Yes □	No (If	Yes →)	Ejecti	on Fracti	on:				
Surgery followed by a pla						<u> </u>			-			
3 J												
I Canamana Damaga												
J. Coronary Bypass (If Coronary Artery Bypass	= Ves)											
Internal Mammary Artery		□ Yes □ No ((If yes→)	Total Nu	nber of D	istal Ana	stomoses	with IM.	A conduit	ts:		
(If no→) Reason for no		clavian stenosis	())		Previous						le) LAD o	disease
	☐ Prev	vious cardiac or tho	racic surg	gery 🗆	l Emerger	nt or salva	age proce	dure	☐ Othe	r	•	
		☐ Yes, skeletonize										
		technique: Direc			Thoraco	scopy [☐ Combi	nation [l Robotic	Assist		
<u> </u>		☐ Yes, skeletoniz			□ æ		П CI-	:4:	□ D-1-4	:- 4:-4		
(If not no→) Radial Artery (arteries) us		t technique: \square Direction (If yes \rightarrow) To										
		que: ☐ Endoscopio					/iui rauia	i artery co	Jiiduits			
		p Time:			. (open)							
Venous Conduit(s) used:		•		f Distal A	nastomos	es with v	enous co	nduits: _				
		Endoscopic 🗆 Dire	ect Vision									
	and Prep Time:											
Number of Distal Anasto		other arterial condu		_ onduita:							luits:	
		venous -arterial con total number of distal			the numb				ial compo	site conc	iuits:	
Proximal Technique: ☐ S										ed in situ	mammary	₍)
CABG NUMBER (one			1	2	3	4	5	6	7	8	9	10
GRAFT Yes		, , , , , , , , , , , , , , , , , , ,	NA									

	Left Main											<u> </u>	
	Proximal LA	4D											
	Mid LAD												
F-)	Distal LAD												
Ë	Diagonal 1											 	
DISTAL INSERTION SITE	Diagonal 2												
Z												<u> </u>	
<u> 1</u>	Diagonal 3											<u> </u>	<u> </u>
	Circumflex												
臺	Obtuse Marg	ginal 1										ļ l	İ
S	Obtuse Mar												
Ę	Obtuse Marg											 	
7		gmai 3										<u> </u>	├
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IS	RCA												
Ω	Acute Marg	inal (AM)										ļ l	İ
	Posterior De		PDA)										
	Posterolatera											-	
	Other	ar (I LD)										-	
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	In Situ Mam											<u> </u>	<u> </u>
	Ascending a									ļ			
Ħ	Descending	aorta											1
ΕĬ	Subclavian a												
∞	Innominate a											 	
PROXIMAL SITE								1	1	1		+	\vdash
₹	T-graft off S											<u> </u>	-
\square	T-graft off F												
2	T-graft off L											ļ l	İ
PF	T-graft off F	RIMA											
	Natural Y ve	ein graft											
	Other	Jiii grait											
	Vein graft											<u> </u>	
	In Situ LIM.												
	In Situ RIM	A										ļ l	İ
CONDUIT	Free IMA												
見	Composite a	rtery_vein											
Ō	Radial artery												
0			C									<u> </u>	
	Other arterie		ıft									<u> </u>	<u> </u>
	Synthetic gr												
DISTAL	End to Side											ļ l	İ
POSITION	Sequential (side to side)										
		Yes	<i>'</i>									 	
ENDARTERI	ECTOMY	No											
	_											<u> </u>	-
VEIN PATCE		Yes											
ANGIOPLAS	STY	No											
Expl	rosthesis Expla ant Position:	ant: □ Yes	S □ No (If Yes ↓) Aortic □ Mitral □	•	oid □ Pı								
	ant Type:		Mechanical Valve Leaflet Clip		prosthetic inscathete		☐ Hor	nograft er			Annulopl Unknown		ce
Expl	ant Etiology:		Endocarditis Failed Repair Hemolysis	□ Par	ompetenc nnus avalvular			sthetic De ng/Positio nosis		ie 🗆	Thrombos Other Unknown		
_	ond Valve Pros Explant Pos	sthesis Expl sition:	es □ No (If Yes→) Ex lant: □ Yes □ No (If □ Aortic □ Mitra	Yes↓) l □ T	ricuspid	□ Pulmo	onic	e Device l					
	Explant Ty	pe:	☐ Mechanical Valve☐ Leaflet Clip		Bioprosth Transcath			Homogr Other	aft		nuloplasty known	Device	
	Explant Eti	ology:	☐ Endocarditis		Incompete	ence		Prosthet	ic Deterio	oration	☐ Thron	nbosis	

No

☐ Pannus Formation

☐ Paravalvular leak

☐ Sizing/Positioning issue

Unique Device Identifier (UDI):_

☐ Stenosis

☐ Yes, planned ☐ Yes, unplanned due to surgical complication ☐ Yes, unplanned due to unsuspected

 \square Other

 \square Unknown

☐ Failed Repair

 $Explant\ Device\ known: \ \square\ Yes\ \ \square\ No\ \ (If\ Yes {\rightarrow}) \quad Explant\ model\#: \ \underline{\ }$

disease or anatomy \square No (If Yes \downarrow)

 \Box Hemolysis

Aortic Valve Procedure Performed:

Procedure Performed:					
\square Replacement (If Replacement \downarrow)					
Transcatheter Valve Replacement: ☐ Yes ☐ No	(If Yes ↓)				
Approach: 🗆 Transapical 🗀 Tra	nsaxillary 🛮 Transfem	oral □ Transaortic □	☐ Subclavian ☐ Otl	her	
Surgical valve Replacement: ☐ Yes ☐ No					
(If Yes →) Device type: ☐ Mechanica	al Bioprosthetic	Surgeon fashioned per	icardium (Ozaki) 🛚	Other	
(If Bioprosthetic→) Valve ty	pe: ☐ Stented ☐ Ster	tless subcoronary valv	e only Sutureless	/rapid deployment	
☐ Repair/Reconstruction (If Repair/Reconstruction ↓)					
Repair Type (Select all that apply)					
Commissural suture annuloplasty	□ Yes □ No	Ring annuloplas	ty	□ Yes □ No	
External Suture Annuloplasty	□ Yes □ No	(If Yes \rightarrow) Type:	☐ External Ring	☐ Internal Ring	
Leaflet plication	□ Yes □ No	Leaflet resection	suture	□ Yes □ No	
Nodular Release	□ Yes □ No	Leaflet Shaving		□ Yes □ No	
Leaflet free edge reinforcement	□ Yes □ No	Leaflet pericardi	al patch	□ Yes □ No	
Leaflet commissural resuspension	□ Yes □ No	Leaflet debriden	nent	□ Yes □ No	
suture Division of fused leaflet raphe	□ Yes □ No	Repair of peripro	osthetic leak	□ Yes □ No	
Aortic annular enlargement with patch ☐ Yes ☐ No		que: Nicks-Nunez			
Unknown			-		
Root Procedure \square Yes \square No (If Yes \downarrow) (For AV surge		_	ction M-2)		
Root Replacement with coronary Ostial Reimp	olantation (Bentall)	Yes □ No			
$\begin{array}{ccc} & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\$	prosthetic				
☐ Autograft with native p			nograft root replaceme	ent	
(If Bioprosthetic→) ☐ Stented va	-	tentless biologic full re	oot		
Valve Sparing root operation: ☐ Yes ☐ No (
☐ Resuspension AV without rep	_				
☐ Resuspension AV with replace	_	ì			
☐ Valve sparing root reimplanta					
☐ Valve sparing root remodeling					
☐ Valve sparing root reconstruct Major root reconstruction/ debridement with o	· ·	ah □ Vas □ No			
Patch used: ☐ Yes ☐ No (If Yes →) Patch type: ☐ Syn					
Aortic Valve Implant: \square Yes \square No (If Yes \downarrow)	uneuc 🗆 Bioprosuieuc	Li Autologous			
Implant Model Number:	Imr	olant Size:			
•				=	
Unique Device identifier (UDI):					
Mitral Valve Procedure Performed: ☐ Yes, planned disease or anatomy	\square Yes, unplanned due to \square No (If Yes \downarrow)	o surgical complicatio	n ∐ Yes, unplanned o	due to unsuspected	
Procedure Performed:	•				
☐ Repair (If Repair↓) Repair Approach: ☐ Transcatheter ☐ Surgical					
If Surgical (Select all that apply↓) Annuloplasty: □ Yes □ No					
Leaflet resection: ☐ Yes ☐ No (If Yes↓)					
Resection Type: ☐ Triangular ☐ Quadran Anterior resection: ☐ Yes					
(If Yes→) Location docu	ımented: □ Yes □ No	(If Yes↓)			
Anterior leafle Resection Posterior Resection: □ Yo	et resection location: es □ No	A1 □ Yes □ No	A2 □ Yes □ No	A3 □ Yes □ N	О
Location(s): (If Yes→) Location docu	ımented: □ Yes □ No	(If Yes↓)			
Posterior leaf	et resection location:	P1 □ Yes □ No	P2 □ Yes □ No	P3□ Yes □ No)
Commissure Resection: □	Yes No(If Yes I)				

N 1 1 (DEEE) F		Commissural resection locati	ion:	☐ Lateral (C1)	☐ Both ☐ Not	t Documented
Neochords (PTFE): □						
		eochords: ☐ Yes ☐ No Location documented: ☐ Yes	□ No (If Ves I)			
	(11 1 €S→)	Anterior neochord location:	$A1 \square Yes$	□ No A	∆2 □ Yes □ No	A3□ Yes □ No
Neochord		eochords:				
Location(s):	$(If Yes \rightarrow)$	Location documented: ☐ Yes			200	DODAY DAY
		Posterior Neochord location:	P1 □ Yes	⊔ No P	² □ Yes □ No	P3□ Yes □ No
	□ Commis	sure Neochords: ☐ Yes ☐ No	o(If Yes)			
		Commissure Neochord locati		☐ Lateral(C1)	□ Both □ No	ot Documented
Chordal/ Leaflet trans						
		Chordal/Leaflet transfer: ☐ Y				
	$(II Yes \rightarrow)$	Location documented: ☐ Yes Anterior chordal/leaflet trans		l Ves □ No	A2 □ Yes □ No	A3□ Yes □ No
Chordal/		Amerior chordal/leariet trans	ici iocation. 711 L	163 🗆 100	112 L 103 L 110	ASL ICS LINO
Leaflet Transfer	☐ Posterio	r Chordal/Leaflet transfer: 🗆 🗅	Yes □ No			
Location(s):	$(\text{If Yes}{\rightarrow})$	Location documented: ☐ Yes				
Zoeuton(o).		Posterior chordal/leaflet trans	sfer location: P1 □	Yes □ No	P2 □ Yes □ No	P3□ Yes □ No
	□ Commis	sure Chordal/Leaflet transfer:	□ Ves □ No(If Ves	1)		
	L Commis	Commissural chordal/leaflet			Lateral(C1) □ Bot	th Not Documented
Folding Plasty: ☐ Ye	s □ No			()	(,	
Sliding Plasty: ☐ Ye						
Annular decalcification						
Leaflet extension/repl		h: ∟ Yes ∟ No : □ Anterior □ Posterior □ Bot	th			
Edge to edge repair:		. Li Anterior Li Fosterior Li Bot	iii 🗀 Not Documented			
Mitral commissurotor		l No				
Mitral commissuropla						
Mitral cleft repair: (sc						
Mitral paraprosthetic		l Yes □ No				
Replacement (If Replac		la comente 🗆 Vac 🗖 No				
		lacement: ☐ Yes ☐ No or ☐ Posterior ☐ Both ☐ Non-	ρ			
Transcatheter replace			C			
Implant: ☐ Yes ☐ No (If Y						
		alve Bioprosthetic valve [☐ Annuloplasty devi	ce 🗆 Mitral L	eaflet clip 🛮 Tran	scatheter device
☐ Surgically implanted	transcatheter	device Other				
Implant Model Number			Implant Size:			
Implant Model Number: _			Implant Size: _			
Unique Device identifier ((UDI):		•			
Unique Device identifier (Tricuspid Valve Procedure Po	(UDI):	Yes, planned ☐ Yes, unplar	nned due to surgical of	complication		
Unique Device identifier (Tricuspid Valve Procedure Po	(UDI): erformed: ☐ ` ☐ Yes, unplan	Yes, planned	nned due to surgical of	complication		
Unique Device identifier (Tricuspid Valve Procedure Po E Repair : □ Yes □ No ()	(UDI):erformed: ☐ Yes, unplan	ned due to unsuspected diseas	nned due to surgical of	complication		
Unique Device identifier (Tricuspid Valve Procedure Pe Repair : Yes Annuloplasty	(UDI): erformed: ☐ ` ☐ Yes, unplan If Yes↓) ☐ Yes ☐ N	ned due to unsuspected diseas (o (If Yes\))	nned due to surgical of the or anatomy	complication o (If Yes \(\))		
Unique Device identifier (Tricuspid Valve Procedure Pe Repair : Yes Annuloplasty	(UDI):	ned due to unsuspected diseas o (If Yes↓) sty: □ Pericardium □Suture	nned due to surgical of the or anatomy	complication o (If Yes \(\))		
Unique Device identifier (Tricuspid Valve Procedure Po Repair : □ Yes □ No (Annuloplasty Type Leaflet Resect Replacement: □ Yes □ 3	(UDI):erformed: ☐ \(\) Yes, unplant If Yes\(\) ☐ Yes ☐ N of Annuloplation: ☐ Yes No (I	ned due to unsuspected diseas o (If Yes↓) sty: □ Pericardium □Suture □ No	nned due to surgical of the or anatomy	complication o (If Yes ↓) ☐ Prosthetic I		
Unique Device identifier (Tricuspid Valve Procedure Po Repair : Yes No (Annuloplasty Type Leaflet Resect Replacement: Yes Valvectomy: Yes No (Yes Yes No (Yes No (Yes No (Yes Yes No (Yes Yes No (Yes Yes No (Yes Yes Yes Yes No (Yes Yes Yes Yes Yes Yes Yes Yes	(UDI):	ned due to unsuspected diseas o (If Yes↓) sty: □ Pericardium □Suture □ No	nned due to surgical of the or anatomy N	complication o (If Yes ↓) ☐ Prosthetic I		
Unique Device identifier (Tricuspid Valve Procedure Po Repair : □ Yes □ No (Annuloplasty Type Leaflet Resect Replacement: □ Yes □ No (Valvectomy: □ Yes □ No ((UDI):	ned due to unsuspected diseas [o (If Yes↓) sty: □ Pericardium □ Suture □ No f Yes→) Transcatheter Repl	nned due to surgical of the or anatomy □ N □ Prosthetic Ring acement: □ Yes □	complication o (If Yes ↓) □ Prosthetic I	Band □ Other	
Unique Device identifier (Tricuspid Valve Procedure Po Repair : Yes No (Annuloplasty Type Leaflet Resect Replacement: Yes Valvectomy: Yes No (Yes Yes No (Yes No (Yes No (Yes Yes No (Yes Yes No (Yes Yes No (Yes Yes Yes Yes No (Yes Yes Yes Yes Yes Yes Yes Yes	(UDI):	ned due to unsuspected diseas [o (If Yes↓) sty: □ Pericardium □ Suture □ No f Yes→) Transcatheter Repl □ Mechanical Valve □ E	nned due to surgical of the or anatomy □ N □ Prosthetic Ring acement: □ Yes □ Bioprosthetic Valve	complication o (If Yes ↓) □ Prosthetic I No	Band □ Other	
Unique Device identifier (Tricuspid Valve Procedure Po Repair : □ Yes □ No (Annuloplasty Type Leaflet Resect Replacement: □ Yes □ No (Valvectomy: □ Yes □ No ((UDI):	Ined due to unsuspected diseas (nned due to surgical of the or anatomy □ N □ Prosthetic Ring acement: □ Yes □	complication o (If Yes ↓) □ Prosthetic I No	Band □ Other	
Unique Device identifier (Tricuspid Valve Procedure Po Repair : □ Yes □ No (Annuloplasty Type Leaflet Resect Replacement: □ Yes □ No (Valvectomy: □ Yes □ No ((UDI):	ned due to unsuspected diseas [o (If Yes↓) sty: □ Pericardium □ Suture □ No f Yes→) Transcatheter Repl □ Mechanical Valve □ E □ Annuloplasty □ T	nned due to surgical of the or anatomy □ N □ Prosthetic Ring acement: □ Yes □ Bioprosthetic Valve	complication o (If Yes ↓) □ Prosthetic F No □ Homo □ Other	Band □ Other	
Unique Device identifier (Tricuspid Valve Procedure Po Repair : □ Yes □ No (Annuloplasty Type Leaflet Resect Replacement: □ Yes □ No (Implant Type Implant Mod Unique Devi	(UDI):erformed: ☐ Yes, unplan If Yes, unplan If Yes↓) ☐ Yes ☐ No Of Annulopla ion: ☐ Yes No (If Yes↓) E: lel Number: ce Identifier (Ined due to unsuspected diseas [O (If Yes↓) sty: □ Pericardium □ Suture □ No f Yes→) Transcatheter Repl □ Mechanical Valve □ Annuloplasty □ T Device □ UDI): □ □	nned due to surgical of the or anatomy N N N N N N N N N N N N N N N N N N N	complication o (If Yes ↓) □ Prosthetic I No □ Homo □ Other	Band □ Other	
Unique Device identifier (Tricuspid Valve Procedure Po Repair : □ Yes □ No (Annuloplasty Type Leaflet Resect Replacement: □ Yes □ No (Implant Type Implant Mod Unique Devi	(UDI):	Ined due to unsuspected diseas To (If Yes↓)	nned due to surgical of the or anatomy N Prosthetic Ring accement: Yes Sioprosthetic Valve Cranscatheter Device Size:	complication o (If Yes ↓) □ Prosthetic F No □ Homo □ Other □	Band □ Other	
Unique Device identifier (Tricuspid Valve Procedure Porcedure Por	(UDI):	Ined due to unsuspected diseas [O (If Yes↓) sty: □ Pericardium □ Suture □ No f Yes→) Transcatheter Repl □ Mechanical Valve □ Annuloplasty □ T Device □ UDI): □ □	nned due to surgical of the or anatomy N Prosthetic Ring accement: Yes Sioprosthetic Valve Cranscatheter Device Size:	complication o (If Yes ↓) □ Prosthetic F No □ Homo □ Other □	Band □ Other	
Unique Device identifier (Tricuspid Valve Procedure Po Repair : □ Yes □ No (Annuloplasty Type Leaflet Resect Replacement: □ Yes □ No (Implant Type Implant Mod Unique Devi Pulmonic Valve Procedure Pe	c(UDI):erformed: □ \(\) Yes, unplant If Yes \(\) No (If Yes \(\)) If Yes \(\) No (If Yes \(\)) If Yes \(\) No (If Yes \(\)) If Yes \(\) No (If Yes \(\)) If Yes \(\) No (If Yes \(\)) If Yes, unplant	Ined due to unsuspected diseas To (If Yes↓)	nned due to surgical of the or anatomy N Prosthetic Ring accement: Yes Sioprosthetic Valve Cranscatheter Device Size:	complication o (If Yes ↓) □ Prosthetic F No □ Homo □ Other □	Band □ Other	
Unique Device identifier (Tricuspid Valve Procedure Po Repair : □ Yes □ No (Annuloplasty Type Leaflet Resect Replacement: □ Yes □ No (Implant Type Implant Mod Unique Devi Pulmonic Valve Procedure Pe Procedure Performed: □ Repair/Leaflet Reconst	c(UDI):erformed: □ \(\) Yes, unplant If Yes \(\) No (If Yes \(\)) If Yes \(\) No (If Yes \(\)) If Yes \(\) No (If Yes \(\)) If Yes \(\) No (If Yes \(\)) If Yes \(\) No (If Yes \(\)) If Yes, unplant	nned due to unsuspected diseas (o (If Yes↓) sty: □ Pericardium □ Suture □ No f Yes→) Transcatheter Repl □ Mechanical Valve □ Annuloplasty □ T Device □ UDI): □ (es, planned □ Yes, unplanned due to unsuspected disease	nned due to surgical of the or anatomy N Prosthetic Ring accement: Yes Bioprosthetic Valve Franscatheter Device Size: ned due to surgical of the or anatomy No	complication o (If Yes ↓) □ Prosthetic F No □ Homo □ Other □	Band □ Other	
Unique Device identifier (Tricuspid Valve Procedure Po Repair : □ Yes □ No (Annuloplasty Type Leaflet Resect Replacement: □ Yes □ No (Implant Type Implant Mod Unique Devi Pulmonic Valve Procedure Pe Procedure Performed: □ Repair/Leaflet Recons: □ Replacement (If R	(UDI):erformed: □ \(\) \(\) Yes, unplant of Annuloplation: □ Yes No (If Yes \(\)) \(\	Ined due to unsuspected diseas If (If Yes↓) If (If Yes↓	nned due to surgical of the or anatomy N Prosthetic Ring accement: Yes Bioprosthetic Valve Franscatheter Device Size: ned due to surgical of the or anatomy No	complication o (If Yes ↓) □ Prosthetic F No □ Homo □ Other □	Band □ Other	
Unique Device identifier (Tricuspid Valve Procedure Po Repair : □ Yes □ No (Annuloplasty Type Leaflet Resect Replacement: □ Yes □ No (Implant Type Implant Mod Unique Devi Pulmonic Valve Procedure Pe Procedure Performed: □ Repair/Leaflet Reconsi □ Replacement (If R	(UDI):erformed: □ \(\) \(\) Yes, unplant of Annuloplation: □ Yes No (If Yes \(\)) \(\	Ined due to unsuspected diseas If (If Yes↓) If (If Yes↓	nned due to surgical of the or anatomy N Prosthetic Ring accement: Yes Bioprosthetic Valve Franscatheter Device Size: ned due to surgical of the or anatomy No	complication o (If Yes ↓) □ Prosthetic F No □ Homo □ Other □	Band □ Other	
Unique Device identifier (Tricuspid Valve Procedure Po Repair : □ Yes □ No (Annuloplasty Type Leaflet Resect Replacement: □ Yes □ No (Implant Type Implant Mod Unique Devi Pulmonic Valve Procedure Pe Procedure Performed: □ Repair/Leaflet Recons: □ Replacement (If R	(UDI): erformed: □ Yes, unplant If Yes, unplant If Yes, unplant ion: □ Yes No (I No If Yes ↓) e: lel Number: ce Identifier (erformed: □ Y I Yes, unplant truction eplacement→)	Ined due to unsuspected diseas If (If Yes↓) If (If Yes↓	nned due to surgical de or anatomy N Prosthetic Ring acement: Yes Sioprosthetic Valve Granscatheter Device Size: ned due to surgical ce or anatomy No	complication o (If Yes ↓) □ Prosthetic F No □ Homo □ Other □	Band □ Other	
Unique Device identifier (Tricuspid Valve Procedure Po Repair: □ Yes □ No (Annuloplasty Type Leaflet Resect Replacement: □ Yes □ No (Implant Type Implant Mod Unique Devi Pulmonic Valve Procedure Pe Procedure Performed: □ Repair/Leaflet Reconss □ Replacement (If R □ Valvectomy Implant: □ Yes □ No (If Implant Type)	(UDI): erformed: □ Yes, unplant If Yes, unplant If Yes, unplant ion: □ Yes No (I No If Yes ↓) e: lel Number: ce Identifier (erformed: □ Y I Yes, unplant truction eplacement→)	In a due to unsuspected diseas To (If Yes↓)	nned due to surgical de or anatomy N Prosthetic Ring acement: Yes Sioprosthetic Valve Granscatheter Device Size: ned due to surgical ce or anatomy No	complication o (If Yes ↓) □ Prosthetic I No □ Homo □ Other □ complication o (If Yes ↓)	Band □ Other	
Unique Device identifier (Tricuspid Valve Procedure Policy Repair:	(UDI):	In a due to unsuspected diseas To (If Yes↓)	nned due to surgical of the or anatomy N N N N N N N N N N N N N N N N N N N	complication o (If Yes \pm) Prosthetic I No Homo Other complication o (If Yes \pm)	Band □ Other	Device
Unique Device identifier (Tricuspid Valve Procedure Policy Repair:	(UDI):	In a due to unsuspected diseas To (If Yes↓)	aned due to surgical of the or anatomy No	complication o (If Yes ↓) ☐ Prosthetic I No ☐ Homo ☐ Other — complication o (If Yes ↓) cricardium ☐ contact of the learning of the learni	Band □ Other graft Other	Device

	Implant Mode	el Number:	Siz	e:	
	Unique Devic	e Identifier (UDI):			
	l Cardiac Assist				
		☐ Yes ☐ No (If Yes ↓) ☐ Intraop ☐ Postop			
		• •	Procedural	Support Unstable	Angina
_	☐ CPB We	aning Failure	☐ Other		
		☐ Yes ☐ No (If Yes ↓)			
	RV □LV □ BiV	Intraop 🗆 Postop			
		: ☐ Hemodynamic instability ☐ CI	PB weaning	failure □ PCI failure □	Procedural support □Other
ECMO: □ Veno	o-venous Veno-	-arterial	to Veno-art		^^
ECMO In	itiated: Preop	☐ Intraop ☐ Postop ☐ Non-ope	rative		/ 1
Clinical li	ndication for ECMC	D: ☐ Cardiac Failure ☐ Respirator	ry Failure	☐ Hypotnermia ☐ Resci	ue/salvage 🗀 Otner
L.2 Ventricula	ar Assist Devices				
		be dropdown lists in software)			
			OD 4	·	
Timing:	1. Pre-Operative 2. Stand-alone V	e (during same hospitalization but no VAD procedure	t same OR tr	ip as CV surgical procedu	ire)
		n with CV surgical procedure (same	trip to the Ol	R)- planned	
	4. In conjunction	n with CV surgical procedure (same	trip to the O		
T 12 42		re (after surgical procedure during rec		(/AD) D	
Indication:	 Bridge to Train Bridge to Rec 		ght VAD (R' ft VAD (LV		Cardiac Transplant Recovery
	3. Destination		ventricular V		3. Device Transfer
	4. Post cardiotor		,		4. Device-Related Infection
	Failure		tal Artificial	Heart	5. Device Malfunction
	5. Device Malfu6. End of (device		1)		6. End of (device) Life
	7. Salvage	e) Life			
Device:	See VAD list				
Device.	See VAD list				
Was patient admi	itted with VAD 🗆 Y	Yes □ No			
$(If Yes \rightarrow)$		nplanted at another facility ☐ Yes ☐	l No		
	Insertion date:		1110		
	Indication:				
	Type:			1	
	Device Model Nu	mber:		UDI:	
	Previous VAD Ex	xplanted During This Admission:		☐ Yes, not during this	procedure
				☐ Yes, during this prod	
	~~~			□ No	
	(If "Yes, not durir	ng this procedure" or "Yes, during this pr	ocedure · · · · )	Reason:	
		(If "Yes, not during this pr	ocedure" →)	Date://	
Ventricular Assi	st Device Implanted	d during this hospitalization ☐ Yes			
	-	devices implanted ↓)			
VAD IMPLANT	$\Gamma(\mathbf{s})$	Initial implant	2nd devic	e implanted?□ Yes □	<b>3rd Device implanted?</b> $\square$ Yes $\square$ No (If Yes $\downarrow$ )
Timing				No (If Yes ↓)	1 65 \$)
Indication					
Туре					
Device					
Implant Date		_/_/	//	<del></del>	_/_/
UDI					
VAD was explar	nted	☐ Yes, not during this procedure	□ Ves no	t during this procedure	☐ Yes, not during this procedure
VAD was explai	ned .	☐ Yes, during this procedure		ring this procedure	☐ Yes, during this procedure
		□ No	□ No		□ No
Reason	41-1				
(If "Yes, not during "Yes, during this pr					
Date	)	_/_/	//		_/_/
(If "Yes, not during	g this procedure" $\rightarrow$ )				

M Od C P B 1												
M. Other Cardiac Procedures  (If Other Cardiac Procedure = Yes ↓) See Proc ID Table to determine whether these procedure.	lurae impact isolata procedura catagorias											
ASD repair- PFO type $\Box$ Yes $\Box$ No	Myocardial Stem Cell Therapy:   Yes  No											
ASD Repair- secundum or sinus venosus ☐ Yes ☐ No	Pulmonary ☐ Yes, Acute ☐ Yes, Chronic ☐ No Thromboembolectomy:											
AFib Intracardiac lesions (If yes, complete M-1) ☐ Yes ☐ No	Subaortic Stenosis Resection: ☐ Yes ☐ No (If Yes ↓)											
AFib Epicardial lesions (If yes, complete M-1) ☐ Yes ☐ No	Type: ☐ Muscle ☐ Ring ☐ Membrane ☐ Web ☐ Not Reported											
Atrial Appendage procedure: □ RAA □ LAA □ Both □ No (If not No ↓)	Surgical Ventricular Restoration: ☐ Yes ☐ No											
	ewing											
	☐ Stapler (noncutting) ☐ Epicardially applied occlusion device											
Arrhythmia Device: Pacemaker Pacemaker with CRT	Transmyocardial revascularization (TMR): ☐ Yes ☐ No											
☐ ICD ☐ ICD with CRT ☐ Implantable Recorder ☐ None	Tumor: ☐ Myxoma ☐ Fibroelastoma ☐ Hypernephroma ☐ Sarcoma											
	□ Other □ No											
Lead Insertion: ☐ Yes ☐ No	Transplant, Cardiac : ☐ Yes ☐ No											
Lead Extraction: Trauma, Cardiac: Yes No												
☐ Yes, planned ☐ Yes, unplanned due to surgical complication ☐ Yes, unplanned due to unsuspected disease or anatomy☐ No												
unplanned due to unsuspected disease or anatomy□ No  Congenital Defect Repair: (If yes, complete M-3) □ Yes □ No  VSD Repair:□ Yes-congenital □ Yes-acquired □ No												
LV Aneurysm Repair:	Other Cardiac Procedure											
M.1. Atrial Fibrillation Procedures												
(If Other Cardiac Procedure, AFib = Yes ↓)												
Lesion location: ☐ Primarily epicardial ☐ Primarily Intracardiac  Method of Lesion Creation: (Select all that apply↓)												
Radiofrequency	$(If Yes \rightarrow)$ Bipolar $\square$ Yes $\square$ No											
Cut-and-sew ☐ Yes ☐ No	r											
Cryo □ Yes □ No												
Lesions Documented: $\square$ Yes $\square$ No (If Yes $\downarrow$ )												
MITRAL ANNULUS  SVC  15b  15b  15c  17  15c  17  17  18  18  18  18  18  18  18  18	Epicardial Left Sided Lesions											
Lesions: (check all that apply ↓)  ☐ 1 Bilateral Pulmonary Vein Isolation	☐ 9 Intercaval Line to Tricuspid Annulus ("T" lesion)											
☐ 2 Box Lesion Only	□ 10 Tricuspid Cryo Lesion, Medial											
•												
	· · · · · · · · · · · · · · · · · · ·											
☐ 3b Superior Pulmonary Vein Connecting Lesion	☐ 12 Tricuspid Annular Line to RAA											
☐ 4 Posterior Mitral Annular Line Lesion	☐ 13 Tricuspid Cryo Lesion											
☐ 5 Pulmonary Vein Connecting Lesion to Anterior Mitral An	nulus   RAA Ligation/Removal/Obliteration											
☐ 6 Mitral Valve Annular Lesion	☐ 15a RAA Lateral Wall (Short)											
☐ 7 LAA /Removal/Obliteration	☐ 15b RAA Lateral Wall to "T" Lesion											
□ 8 Pulmonary Vein to LAA Lesion	☐ 16 Coronary Sinus Lesion											
- 0 I unifoliary veil to LAA Lesion	- 10 Colonary Sinus Lesion											

				raction Roth Angury	n and Dissaction Suddan	Dooth None Linknown						
		☐ Bicuspid AV	☐ Turner sy	yndrome □ Other □ No		- Syndronic						
	rvention:		Ulikilowii (II		Panair failura	Disease progression						
Location				керан Туре	(If Yes ↓)	(If Yes $\downarrow$ )						
		Select all that apply	Se	elect all that apply	Select all that apply	Select all that apply						
Root		☐ Yes ☐ No ☐ Open ☐ Endovascular ☐ Hybrid ☐ Yes ☐ No ☐ Yes ☐ No										
Ascending		□ Yes □ No			☐ Yes ☐ No	☐ Yes ☐ No						
Arch						☐ Yes ☐ No						
Descending				•								
				Endovascular ⊔ Hybrid	☐ Yes ☐ No	☐ Yes ☐ No						
				LN-								
	ype I: Iea				stal 🗆 Ic- iliac occluder							
□т	vpe II: ar				star 🗀 re- mae occiuder							
	) F				☐ IIb: two vessels or more							
□т	vpe III: le											
	JI				aration of modular component	s ☐ IIIb: endograft fractures or holes						
		,										
Infection:   Y	es 🗆 No	☐ Unknown (If Yes-	→) Aorta									
Trauma:	es 🗆 No	☐ Unknown (If Yes-	→) Location:	Select all that apply	-							
	Root A	scending Arch										
					Abdominal							
						☐ Yes ☐ No						
Presentation:						sis $\square$ Fatigue $\square$ Infection						
Drimary Indicat						ama						
1 mary marcat		☐ Infection ☐ Steno	sis □Coar	ctation								
	Etiolog	y: □ Pseudo	aneurysm 🗆									
(if	Select all that apply											
Aneurysm→)					Yes □ No							
		□ Relow										
	Marfam   Bhitesy-Dankos   Lovey-Detz   Non-Specific familial thoracia contic syndrome   British   AV   Tenner syndrome   Other   None   Urknown											
	Timing				S) Subacute (>2weeks -90	days) ☐ Chronic (>90 days)						
	Disecti			(If Vas -)	set://							
	Primary	/ tear										
		⊔ Below				ne 8 □ Zone 9 □ Zone 10 □ Zone 11						
		Below				ne 8 □ Zone 9 □ Zone 10 □ Zone 11						
	Petrog	ade extension: \( \subseteq \text{Vec}		nknown (If Vas I)								
	Kenogi				midascending     Midascendin	ng to distal ascending						
(if						ig to distar ascending						
Dissection→)		Post TEV	AR:	□ Yes □ No								
	Distal e	extension:   Yes   N	No 🗆 Unkno	wn (If Yes↓)								
		Distal Extension Loca										
		Distai Extension Loca	□Zc		□ Zone 4 □ Zone 5 □ Zone 6	5 □ Zone 7 □ Zone 8 □ Zone 9						
	Malner	fusion:   Ves   No			v)							
	maipei		- CHKHOWII			□ Vas □ No						
		•	ion		-							
		-										
		-			<del>-</del>							
		Left Common	Carotid	☐ Yes ☐ No	Iliofemoral	□ Yes □ No						
	1	Left Subclavia	n	☐ Yes ☐ No	Spinal	□ Yes □ No						

	Celia	С	□ Yes □	No				
	Lower Extremity Mo	otor Function:   No	deficit □ Wea	ıkness □ Paral	vsis □ Unknown			
	Lower Extremity Ser	nsory Deficit: 🗆 Ye			<i>you</i> = 0			
	Rupture: ☐ Yes ☐ I	No (If Yes ↓) Contained ruptur	•••					
		_	□ Yes		FI midagaandina [	7 Midagaanding	to distal assembling	
		Rupture Location	□ Zon	ie 1 □ Zone 2	ΓJ-midascending □ Zone 3 □ Zone □ Zone 10 □ Zone 10 □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □ Zone Io □	ie 4 □ Zone 5 □		
	Aorto-annular ectasi							
Root	Asymmetric Root Di Sinus of Valsalva an							
	Arch Type :	□ Left □			nt Left Subclavian:		☐ Yes ☐ N	
				ъ.				
	Aberrant Right Subc	lavian : ☐ Yes □	l No	Bovine	:		□ Yes □ N	0
Arch	Kommerell:		110				_ 10g _ 1	
Aicii	77 1 1 .		7.37	Patent i	nternal mammary a	artery bypass gra	ft:	
	Variant vertebral original	gin: ☐ Yes ☐	J NO				□ Yes □ N	[o
Assending		☐ Yes □						
Ascending	Asymmetric Dilatation		□ No □ Unk					
2.5	Proximal coronary b						`	
	ction aortic diameter me	asurements availabl		o (If Yes↓indi	cate maximal diamete		mm)	
Annulu	1S _	mm	Zone 2		mm	Zone 8		mm
Sinus s	segment _	mm	Zone 3		mm	Zone 9		mm
Sinotul	oular junction _	mm	Zone 4		mm	Zone 10		mm
Mid-as	cending _	mm	Zone 5		mm	Zone 11		mm
Distal A	Ascending _	mm	Zone 6		mm			
Zone 1	_	mm	Zone 7		mm			
	perative) diameter of tre	pated segment(s)	Zone /					
	•	ated segment(s)						
Annul	us _	mm	Zone 2	-	mm	Zone 8		mm
Sinus	segment _	mm	Zone 3	-	mm	Zone 9		mm
Sinotu	bular junction _	mm	Zone 4	_	mm	Zone 10		mm
Mid-a	scending _	mm	Zone 5	_	mm	Zone 11		mm
Distal	Ascending _	mm	Zone 6	_	mm			
Zone 1	1 _	mm	Zone 7	_	mm			
Intervention	<u> </u>							
	d Hybrid: ☐ Yes ☐ No ocedure: ☐ Yes ☐ No (							
	Distal Technique: ☐ O	pen   Clamped						
	Distal Site: ☐ Ascending	ng Aorta 🗆 Hemiard	ch □ Zone 1 □	Zone 2 $\square$ Zo	ne 3 □ Zone 4			
	Distal Extention: ☐ Ele	ephant trunk	zen Elephant tri	unk 🗆 No				
	Arch Branch Reimplan		$(\text{If Yes }\downarrow)$					
	Innominate: □			bclavian: \( \subseteq \text{Y}	_		l: □ Yes □ No Le	eft Common
Open Descend	Carotid: ☐ Yesting Thoracic Aorta or T		clavian: ☐ Yes rocedure: ☐ Ye		eft Vertebral: 🗆 Ye	es 🗆 No Otr	ner:   Yes   No	
-	mal Location: $\square$ Rever					Zone 5 □ Zone	6 □ Zone 7 □ Zo	ne 8 🗆 Zone 9
	ostal Reimplantation:	□ Yes □ No						
Distal	Location:	ne 3 □ Zone 4 □ 2	Zone 5 □ Zono	a 6 □ 7ona 7	□ 7one 8 □ 7on	a 0 □ 7ona 10 □	¬ 7one 11	
<b>T</b> 7:_				zo ⊔ Zone /	L Zone & L Zone	e ∌ ∟ Zone 10 l	□ Zone 11	
Visce	ral vessel intervention:			–				
		Celiac: Reimplan						
		Superior mesenteric	_					
	]	Right Renal:   Rei	mplantation	Branch Graft	⊔ None			

Left Renal: ☐ Reimj	olantation   Branch Graft   None										
Endovascular Procedure(s) : $\square$ Yes $\square$ No (If Yes $\downarrow$ )											
Access: ☐ Femoral ☐ Iliac ☐ Abdominal Aorta	☐ Lt. Subclavian ☐ Rt. Subclavian ☐ Ascending Aorta ☐ LV Apex										
Percutaneous Access: ☐ Yes ☐ No											
☐ Zone 1 ☐ Zone 2 [	□ Zone 1 □ Zone 2 □ Zone 3 □ Zone 4 □ Zone 5 □ Zone 6 □ Zone 7 □ Zone 8 □ Zone 9 □ Zone 10 □ Zone 11										
Distal landing zone: ☐ Below STJ ☐ STJ ☐ Zone 1 ☐ Zone 2 [	-midascending ☐ Midascending to distal ascending ☐ Zone 3 ☐ Zone 4 ☐ Zone 5 ☐ Zone 6 ☐ Zone 7 ☐ Zone 8 ☐ Zone 9										
☐ Zone 10 ☐ Zone 1 TAVR (for combination procedures): ☐ Yes ☐ N											
Ascending TEVAR : ☐ Dedicated IDE ☐ Off L	abel Stent   No										
Arch Vessel management											
Innominate: ☐ Native Flow ☐ Endovase	eular Branch Graft □ Endovascular Parallel Graft □ Extra-anatomic Bypass □ Fenestrated										
(If Extra-anatomic bypass→) Aorta-Innominate											
	tht subclavian										
(If Extra-anatomic bypass→) Aorta- left carotic	•										
	ft carotid $\square$ Yes $\square$ No Other $\square$ Yes $\square$ No										
	cular Branch Graft										
ACE	avian $\square$ Yes $\square$ No Left carotid- left subclavian $\square$ Yes $\square$ No Other $\square$ Yes $\square$ No										
Other Arch Vessel(s) Extra-anatomic bypass:											
.,	☐ Yes ☐ No (If Yes ↓)										
	Innominate – carotid ☐ Yes ☐ No Innominate- subclavian ☐ Yes ☐ No										
	Subclavian-subclavian ☐ Yes ☐ No Other ☐ Yes ☐ No										
Visceral Vessel management											
	ular Branch Graft										
(If Extra-anatomic bypass→) Aorta- celiac □	Yes □ No Iliac-celiac □ Yes □ No Other □ Yes □ No										
Superior ☐ Native Flow ☐ Endova mesenteric:	scular Branch Graft										
(If Extra-anatomic bypass→) Aorta- superior i	nesenteric □ Yes □ No										
Right renal: ☐ Native Flow ☐ Endovasc	ular Branch Graft										
(If Extra-anatomic bypass→) Aorta- right rena	l □ Yes □ No										
	eular Branch Graft										
	al □ Yes □ No										
	ed Graft										
	oral □ Yes □ No Other □ Yes □ No  Graft □ Extra-anatomic Bypass										
	oral □ Yes □ No Other □ Yes □ No										
Internal Iliac Preserved: ☐ Right Iliac only ☐ L											
Other Visceral Vessel(s) Extra-anatomic Bypass:	•										
Aorta-other □ Y											
Dissection proximal entry tear covered: ☐ Yes ☐	No Endoleak at end of procedure: $\square$ Yes $\square$ No (If Yes $\downarrow$ ) Type: $\square$ Ia $\square$ Ib $\square$ II $\square$ III $\square$ IV $\square$ V										
Conversion to open: $\square$ Yes $\square$ No (If Yes $\rightarrow$ ) Cor	version reason: ☐ Deployment failure ☐ Endoleak ☐ Rupture ☐ Occlusion/loss of branch										
Intraop Dissection Extension: ☐ None ☐ Antegra	nde □ Retrograde □ Both										
Unintentional rupture of dissection septum: □Ye	S □No (If Yes →)  □ Below STJ □ STJ-midascending □ Midascending-distal ascending □ Zone 1 □ Zone 2 □ Zone 3 □ Zone 4 □ Zone 5 □ Zone 6 □ Zone 7 □ Zone 8 □ Zone 9 □ Zone 10 □ Zone 11										
Spinal Drain Placement:   Pre- aortic procedure   Post											
IntraOp Motor Evoked Potential: ☐ Yes ☐ No	$(\mathrm{If}\ \ \mathrm{Yes} \to)\ \textbf{Documented}\ \textbf{MEP}\ \textbf{abnormality}\ \square\ \textbf{Yes}\ \square\ \textbf{No}\ \square\ \textbf{Unknown}$										
IntraOp Somatosensory Evoked Potential: ☐ Yes ☐ No	$(\text{If } Yes \rightarrow) \ \textbf{Documented SEP abnormality} \ \square \ Yes \ \square \ \textbf{No} \ \square \ \textbf{Unknown}$										
IntraOp EEG: ☐ Yes ☐ No	$(\text{If } Yes \rightarrow)  \textbf{Documented EEG abnormality}  \square  \textbf{Yes}  \square  \textbf{No}   \square  \textbf{Unknown}$										
IntraOp Intravascular Ultrasound(IVUS): ☐ Yes ☐ No	IntraOp Transcutaneous Doppler: ☐ Yes ☐ No										

		1			Τ	
Intraoperative Angiogram: □	Yes $\square$ No (If Yes $\rightarrow$ )	Volu	me of contrast:	ml	Fluoroscopy time	: min
Devices						
Device(s) Inserted:	☐ Yes ☐ No (If Yes, list proxi					
Location:	1 2 3 4	X. A. B. C. D. E. F. G.	Below sinotubular junc Sinotubular junc Mid ascending to Zone 1 (between Zone 2 (between Zone 3 (first 2 cm	ar juncti tion to n distal a innomin left card n. distal	nid ascending	id) avian) )
	8	H. I.	Zone 5 (mid deso Zone 6 (celiac to	cending	aorta to celiac)	51ta · 10)
	9	J. K. L.		infra-rer	nal abdominal aort	a)
	11 10	ninal aorta)				
Delivery Method:	1=Open 2= Endovascular		Zone 11 (externa			
Outcome:	1= Maldeployed 2= Deploye	ed and re	moved 3= Successi	fully depl	oyed	
Model Number:	Enter device model number					
UDI:	Enter unique device identifier	(not seri	al number)			
Location (Letter)	Delivery Method		Outcome		Model #	UDI
Diagnosis 1: (If the diagnoses"→)Diagnosis 3: Congenital Procedures: See	elect up to three most significa of "No additional congenital p	diagnos nt: (refe	es"→) Diagnosis 2 er to "Congenital D	2: Diagnose	_ (If not "No add s/Procedures List"	litional congenital document)
procedures →) Procedure	3:					
N. Other Non-Cardiac P	rocedures (If Other Non-Cardiac 1	Procedure	= Yes ↓)			
	☐ Yes, planned ☐ Yes, unplaned due to unsuspected disease or			ation		
Other Vascular:	, planned Yes, unplanned du	ie to surg	ical complication			
	to unsuspected disease or anatom, planned  Yes, unplanned du					
	to unsuspected disease or anatom planned  Yes, unplanned du					
	to unsuspected disease or anatom					
O. Post-Operative						
Peak Glucose within 18-24 ho		TT .	1:		D: 1	
Postoperative Creatinine Leve	el: Discharge ratively: \( \subseteq \text{Yes} \( \subseteq \text{No} \) (If Yes \( \psi \)	Hemogl	obin:	_	Discharge Hem	atocrit:
Red Blood Cell Units: _	Fresh Frozen Plasma		Cryo	precipita	te Units:	Platelet Units:
Extubated in OR:   Re-intubated /or intubated Por Total post-operative ventilation	No \(\superscript{INA}\) st Op During Hospital Stay: \(\superscript{INA}\) on hours \(\sumerscript{(System Calculation)}\)	Yes □ N	To (If yes $\rightarrow$ ) Addition	onal Hour	rs Ventilated:	
ICU Visit: ☐ Yes ☐ No (If Y	Yes →) Initial ICU Hours:					
Readmission to ICU: ☐ Yes	$\square$ No (If Yes $\rightarrow$ ) Additional ICU					
Level aortic insufficie Aortic Paravalvular le	valuate valve(s): □ Yes □ No (I ncy found: □ None □ Trivial/T ak: race □ Mild □ Moderate □ Se	race 🗆		□ Severe	☐ Not Documented	I
	ency found: None Trivial/T			□ Severe	☐ Not Documented	i

Mitral Daravalandar look			
Mitral Paravalvular leak:  ☐ None ☐ Trivial/Trace ☐ Mild ☐ Moderate ☐ Severe l	☐ Not Documented		
Level tricuspid insufficiency found: ☐ None ☐ Trivial/Trac		ate □ Severe □ Not Do	cumented
Level pulmonic insufficiency found: ☐ None ☐ Trivial/Tra			ocumented
Post Op Ejection Fraction: ☐ Yes ☐ No If Yes →)	Post Op Ejection F		
	Peak CKMB:	Peak Troponin I	Peak Troponin T
12-Lead EKG Findings:  ☐ Not performed ☐ No ischemic changes ☐ New ST chang	es	ical O-wave or LRRR	
□ New RBBB □ New AV Conduction			re-op EKG for comparison, transplant)
		•	
P. Postoperative Events			
	of procedure $\square$ Yes, ays of procedure $\square$ Y		but during hosp. for surgery ☐ No lure but during hosp. for surgery ☐ No
(If either Yes value →) Diagnosis Date:/// Thoracotomy: □ Yes, within 30 days of procedure □ Yes, >		re but during hosp. for su	rgery □ No
Conduit Harvest : ☐ Yes, within 30 days of procedure ☐ Yes	s, >30 days after proce	edure but during hosp. for	surgery   No
Cannulation Site: ☐ Yes, within 30 days of procedure ☐ Yes	s, >30 days after proce	edure but during hosp. for	surgery  No
Wound Intervention/Procedure: $\square$ Yes $\square$ No (If Yes $\downarrow$ )			
Wound Intervention – Open with Packing/Irrigation:		cision  Yes, secondary	
Wound Intervention – Wound Vac:		cision  Yes, secondary	
Secondary Procedure Muscle Flap: Secondary Procedure Omental Flap:	□ Yes □ No	cision   Yes, secondary	incision $\square$ Both $\square$ No
Other In Hospital Postoperative Event Occurred:   Yes No (If Y	res ↓)		
Operative ReOp for Bleeding /Tamponade: ☐ Yes ☐ No (If Yes →) Ble		□ Late	
ReOp for Valvular Dysfunction: ☐ Yes, surgical ☐ Yes, trans Reintervention for Myocardial Ischemia: ☐ Yes ☐ No	catheter □ No		
(If Yes →) Vessel: ☐ Native coronary ☐ Graft ☐ B	oth Intervent	tion Type: ☐ Surgery ☐ 1	PCL □ Both
Aortic Reintervention: $\square$ Yes $\square$ No (if yes $\rightarrow$ ) Type: $\square$ Open $\square$		non Type. — Surgery —	
ReOp for Other Cardiac Reasons: ☐ Yes ☐ No			
Returned to the OR for Other Non-Cardiac Reasons:   Yes			
Open chest with planned delayed sternal closure: ☐ Yes ☐ No Sternotomy Issue: ☐ Yes ☐ No (If Yes →) Sternal instability/		□ Vos. □ No.	
Infection	deniscence (sterne).	Li les Li No	
Sepsis: ☐ Yes ☐ No (If Yes →) Positive Blood Cultures: ☐	Yes □ No		
Neurologic, Central Postoperative Stroke: ☐ Yes, hemorrhagic ☐ Yes, ischemic	☐ Yes, undetermin	ed type □ No	
Transient Ischemic Attack (TIA): ☐ Yes ☐ No			
Encephalopathy:   None   Anoxic   Drug   Metabol	ic ☐ Mixed ☐ Unkı	nown	
Coma/unresponsive state (not stroke): ☐ Yes ☐ No Neurologic, Peripheral			
Lower Extremity Paralysis: ☐ Yes ☐ No (If Yes →) Paralysis	s Type:   Transient	☐ Permanent Paresis: □	Yes $\square$ No (If Yes $\rightarrow$ ) Paresis Type:
☐ Transient ☐ Permanent	o 1)per = 11amorene		= res = res (in res ) runesis rype.
Phrenic Nerve Injury: ☐ Yes ☐ No			
Recurrent Laryngeal Nerve Injury: ☐ Yes ☐ No			
Pulmonary Prolonged Ventilation: ☐ Yes ☐ No (OR exit time until initial ex	ktubation, plus any addit	ional reintubation hours)	
Pneumonia: ☐ Yes ☐ No Venous Thromboembolism – VTE: ☐ Yes ☐ No (If Yes ↓)			
Pulmonary Thromboembolism:   Yes   No			
Deep Venous Thrombosis: ☐ Yes ☐ No			
Pleural Effusion Requiring Drainage: ☐ Yes ☐ No			
Pneumothorax Requiring Intervention: ☐ Yes ☐ No			
Renal			
	d after Hospital Disch	narge: ☐ Yes ☐ No Permanent ☐ Unknown	
Ultra-Filtration Required: ☐ Yes ☐ No	I comporary L r		
Vascular			
Iliac/Femoral Dissection: ☐ Yes ☐ No			
Acute Limb Ischemia:  Yes No	(If Vas 1)		
Mechanical assist device related complication : ☐ Yes ☐ No  Cannula/Insertion site issue ☐ Yes ☐ No	(11 1 ES 1)		
Hemorrhagic: ☐ Yes ☐ No			
Thrombotic/Embolic:   Yes  No			
Hemolytic: □ Yes □ No			
Infection: ☐ Yes ☐ No			

Other mechanical assist device	related complication:   Yes	s 🗆 No
Other		
Rhythm Disturbance Requiring Permanent De	evice: $\square$ Pacemaker $\square$ IC	CD □ Pacemaker/ICD □ Other □None
Cardiac Arrest: ☐ Yes ☐ No Post Op Aortic Endoleak: ☐ Yes ☐ No (i	f vec \ ) Type: \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Aortic Rupture:   Yes No	тусѕ→) турс. ⊔ та ⊔ то ⊔	
Aortic Dissection: $\square$ Yes $\square$ No (if yes $\rightarrow$ ) T	ype: □Antegrade □ Retrogi	rade 🗆 Both
Aortic Side Branch malperfusion: ☐ Yes ☐ N		
Aortic stent graft induced entry tear: ☐ Yes ☐	∃ No	
Anticoagulant Event:   Yes No		
Pericardiocentesis:: ☐ Yes ☐ No Gastro-Intestinal Event: ☐ Yes ☐ No		
Liver Dysfunction/ Failure:   Yes INO  No		
Multi-System Failure: ☐ Yes ☐ No		
Atrial Fibrillation: ☐ Yes ☐ No		
Other:   Yes   No		
Q. Discharge / Mortality		
Date of Last Follow-up:/(	(mm/dd/yyyy)	
Status at 30 days After Surgery: ☐ Alive ☐ Dea		
Primary method used to verify 30-day status:	☐ Letter from m	patient or family ☐ Office visit >= 30 days after procedure ☐ Social Security Death Master File /NDI ☐ Other
Discharge/Mortality status: ☐ In hospital, alive ☐	Discharged alive, last know	
☐ Died in hospital ☐ Discharged alive, If Discharge/Mortality Status = "Discharged alive, last ki	died after discharge	ad aliva diad after discharge?"   )
Discharge Date//		ed anive, died anter discharge ( )
Discharge Location:	☐ Extended Care/Transit	tional Care Unit/Rehab
☐ Nursing		☐ Left AMA ☐ Other
Cardiac Rehabilitation Referral:	☐ Yes ☐ No ☐ Not Ap	
Smoking Cessation Counseling:	☐ Yes ☐ No ☐ Not Ap	pplicable
Medications Prescribed at Discharge		
Antiplatelet	Aspirin ADP Inhibitor	☐ Yes ☐ No ☐ Contraindicated ☐ Yes ☐ No ☐ Contraindicated
Antiplatelet	Other Antiplatelet	☐ Yes ☐ No ☐ Contraindicated
	Thrombin Inhibitors	☐ Yes ☐ No ☐ Contraindicated
	Warfarin (Coumadin)	☐ Yes ☐ No ☐ Contraindicated
Anticoagulant	Factor Xa inhibitors	☐ Yes ☐ No ☐ Contraindicated
	Novel Oral Anticoagulant	☐ Yes ☐ No ☐ Contraindicated
	Other Anticoagulant	☐ Yes ☐ No ☐ Contraindicated
ACE or ARB		☐ Yes ☐ No ☐ Contraindicated ☐ Not Indicated (no CHF or EF >
A : 1		40%)
Amiodarone  Beta Blocker		☐ Yes ☐ No ☐ Contraindicated ☐ Yes ☐ No ☐ Contraindicated
Lipid Lowering - Statin		☐ Yes ☐ No ☐ Contraindicated
Lipid Lowering - Other		☐ Yes ☐ No ☐ Contraindicated
If Discharge/Mortality Status = "Died in hospital" or "Di	scharged alive, died after discha	
Mortality - Date//	(mm/dd/yyyy)	
	☐ Cardiac ☐ Neurologic	☐ Renal ☐ Vascular ☐ Infection ☐ Pulmonary ☐ Unknown ☐
Other		
(If Discharge/Mortality Status = "Died in hospital↓)  In-Hospital death location: □ OR Duri	no Initial Surgery 🗆 OR dur	ring reoperation
(If Discharge/Mortality Status = "Discharged alive, died		ing respectation in respecta (other than ore)
Operative Death: ☐ Yes ☐ No	9	
Post Discharge death location: ☐ Home	Extended Care Facility	ty $\square$ Hospice $\square$ Acute Rehabilitation $\square$ Hospital during readmission
☐ Other ☐ Unknown		
R. Readmission		
(If Discharge/Mortality Status = "Discharged alive, last k	now status=alive" or "Discharge	ged alive, died after discharge" ↓)
Readmit: ☐ Yes ☐ No ☐ Unknown (If Yes ↓)	(mm/dd/yyyyy)	
Readmit Date:// Readmit Primary Reason:	(111111/44/2/2/2/)	
		☐ Pericardial Effusion and/or Tamponade
☐ Anticoagulation Complicat	ion - Pharmacological	☐ Pericarditis/Post Cardiotomy Syndrome
☐ Anticoagulation Complicat		☐ Pleural effusion requiring intervention
☐ Aortic Complication		□ Pneumonia
☐ Arrhythmia or Heart Block		☐ Renal Failure
☐ Blood Pressure (hyper or hy☐ Chest pain, noncardiac	ypotension)	☐ Renal Insufficiency ☐ Respiratory complication, Other

☐ Congestive Heart Failure	□ Sepsis
☐ Coronary Artery/Graft Dysfunction	□ Stroke
☐ Depression/psychiatric issue	□TIA
□ DVT	☐ Transfusion
☐ Electrolyte imbalance	☐ Transplant Rejection
☐ Endocarditis	□ VAD Complication
☐ Failure to thrive	□ Valve Dysfunction
☐ GI issue	☐ Vascular Complication, acute
☐ Infection, Conduit Harvest Site	☐ Wound, other (drainage, cellulitis)
☐ Infection, Deep Sternum / Mediastinitis	☐ Other – Related Readmission
☐ Mental status changes	☐ Other – Nonrelated Readmission
☐ Myocardial Infarction	☐ Other – Planned Readmission
□ PĒ	□ Unknown
Readmit Primary Procedure:	
☐ No Procedure Performed	☐ OR for Vascular Procedure
☐ Cath lab for Valve Intervention	☐ OR for Aorta Intervention
☐ Cath lab for Coronary Intervention (PCI)	☐ Pacemaker Insertion / AICD
☐ Dialysis	☐ Pericardiotomy / Pericardiocentesis
☐ OR for Bleeding	☐ Planned noncardiac procedure
☐ OR for Coronary Artery Intervention	☐ Thoracentesis/ Chest tube insertion
☐ OR for Sternal Debridement / Muscle Flap	□ Wound vac
☐ OR for Valve Intervention	☐ Other Procedure
	□ Unknown
(if OR for Aorta intervention→)	
Type: □ Open □ Endovascular	
Indication: ☐ Rupture ☐ Endoleak ☐ Infection ☐ Di	ssection ☐ Expansion ☐ Loss of side branch patency ☐ Other

	46		Adult C								
D: 1		sites pa	articipating				hesiology c				
	esthesiologist Name:				Primar	y Anesth	esiologist Nat	nonal Prov	/ider Numbe	er:	
☐ Ane ☐ Atte ☐ Atte ☐ Atte ☐ Surg	ogy Care Team Model: esthesiologist working alone ending anesthesiologist teach ending anesthesiologist teach ending anesthesiologist medi- ending anesthesiologist medi- geon medically directing CR NA practicing independently	ning/med cally dir cally dir NA	ically directing ecting CRNA (	house sta 1:4 ratio o	r less)	er)					
Pain Score l											
□ 0			3 🗆	4	□ 5	□ 6	□ 7	□ 8	□9	□ 10	□ Not Recorded
Algorithm to	o Guide Transfusion:		Yes, SCA/STS Yes, other algor No Algorithm u	rithm used			Cell S	aver Volui	me:		
Heparin Tot	tal Dose:		(If TotHep > 0 -	) Heparin	Mana	gement:					
					☐ Hepa		on based on act on based on hep				rstem)
Protamine T	Total Dose:		Antithrombi	in III Tota	al Dose	e:		Viscoel		g Used In No	traop: □ Yes
Volatile Ag	ent Used: ☐ Yes ☐ No										
(If Yes →)	Volatile Agent(s) used: Volatile Agent(s) timing		Isoflurane Sevoflurane Pre CPB Post CPB		□ Y	□ No fes □ No fes □ No		☐ Yes ☐ Yes ☐ During Cl Maintenant CPB)	PB	□ Yes	□ No
Intraop Infu		Intraoj	Infusion	☐ Yes	Intra	aop Mgs			Intraop		
Dexmedetor	midine:	Propot	fol:	□ No	Mid	lazolam:			Insulin To Dose:	otal _	
Pre Induction	on Systolic BP:			Pre Ind	uction	Diastolic	BP:		Pre Induct BP:	tion Mean	
Pre Induction	on Heart Rate:			1	Pulr	nonary A	rtery Catheter	r Used:	☐ Yes ☐ No		
Core Tempe	erature Source:	□ Esop □ Blac		Nasophar PA Cathe		rmistor	☐ Tympanic ☐ Rectal	Core Te	emp Max:		
Intra Op Nit	tric Oxide:	And	esth. Total Cr	ystalloid:	-			Anesth. S Colloid	Synthetic		
Anesthesiol	ogy Total Albumin:						Intraop Glue	cose Troug	gh:		
	odilators Used:		Yes □ No								
	ve Processed EEG (BIS):										
	nsesophageal Echo (TEE)										
(If Pre Proc TEE is Yes→)	Pre-procedure LVEF Mea	sured:		Yes □ N S→)	o(lf	LVEI	F:				
	Pre-procedure RV Function	n:		ormal Iild Dysfui	nction		Ioderate Dysfu evere Dysfunct		□ Not Ass	essed	
	Mitral Regurgitation:		□ N □ T	one race/trivial	l		Iild Ioderate		☐ Severe ☐ Not asse	essed	
	Mitral Stenosis:			one		□ N	Ioderate evere		□ Not Ass		
	Aortic Regurgitation:		□N	one	.1	$\square$ N	Iild		□ Severe	1	
	Aortic Stenosis:			race/trivia	àl	$\square$ N	Ioderate Ioderate		☐ Not asse		
							evere				
	Aortic Valve Area Assesse	ed:		es 🗆 No (	If Yes→		tic Valve Area:				
1	Tricuspid Regurgitation:		ПΝ	one		ПΝ	านส		☐ Severe		

	Patent Foramen Ovale:	☐ Trace/tri		□ Mode assessed	erate	]	☐ Not assessed	
	Ascending Aorta Assessed	☐ Yes  Maximal Ascending Aorta I						
	(If Yes→)	Maximal Ascending Aorta	Atheroma Thic	kness:				
		Ascending Aorta Atheroma	Mobility:		□ Yes	s □ No		
	Aortic Arch Visualized:	□ Yes □ N						
	(If Yes→)	Maximal Aortic Arch Ather	oma Thicknes	s:				
		Aortic Arch Atheroma Mob	oility:		□ Yes	s 🗆 No		
	onary Bypass Used: 🗆 Yes	s □ No						
(If CPB Use is Yes→)	Retrograde Autologous Prin	ning of CPB Circuit:			□ Yes	s 🗆 No		
	Total Crystalloid Administe	ered by Perfusion Team:						
	Total Synthetic Colloid Adı	ministered by Perfusion Team	n:					
	Total Albumin Administere	d by Perfusion Team:						
	Hemofiltration Volume Ren	noved by Perfusion Team:						
	Inotropes used to wean from	n CPB: □ Yes □ No						
	Vasopressors used to wean	from CPB: ☐ Yes ☐ No						
Post-Proced	ure Use Of Intraoperative	TEE: □ Yes □ No						
(If Post Proc TEE is Yes→)	Systolic Anterior Motion of		☐ Yes	□ No	□ Not	t assessed		
,	Return to CPB for Echo Re	lated Diagnosis:	□Yes	□ No				
	Post-Procedure LVEF Meas (If Yes→)		□ Yes	□ No				
		Post-Procedure LVEF:			_			
	Post-Procedure RV Functio			al Dysfunction		<ul><li>☐ Moderate Dys:</li><li>☐ Severe Dysfun</li></ul>		☐ Not Assessed
	ve cardiac arrest related to	anesthesia care: ☐ Yes	□ No					
Patient Died	I in the OR: $\square$ Yes $\square$ N	o						
(If OR Death is No→)	-	Entry to ICU/PACU: ☐ Yes  Post Op Core Temp:	□ No					
	Post-Op INR Measured upo	on admission to post op care le	ocation (PACU	J, ICU):		☐ Yes ☐ No		
	WBC Measured upon admi	NR:ssion to post op care location	(PACU, ICU)	<u> </u>		☐ Yes ☐ No		
	Platelets Measured upon ad	VBC :mission to post op care locati	on (PACU, IC	U):		□ Yes □ No		
	Hematocrit Measured upon	Platelet Count:admission to post op care loc	eation (PACU,	ICU):		☐ Yes ☐ No		
		Hematocrit:admission to post op care loc	ation (PACU,	ICU):		☐ Yes ☐ No		
	(lf Yes→) F Lactate Measured upon adn	Fibrinogen hission to post op care locatio	n (PACU, ICU	J):		☐ Yes ☐ No		
		Lactate:						
	Post Op Dexmedetomidine:		□ Yes □ N	[о				
	Post Op Propofol:		□ Yes □ N					
	Post Op Delirium:		□ Yes □ N					

Post Ot	) Heparin	Induced T	hrombocy	topenia:		☐ Yes ☐ l	No					
	ore POD		□ 3		□ 5	□ 6	□ 7	□ 8	□9	□ 10	☐ Not recorded	□NA
Pain Sc	ore Disch	narge:	□3	□ 4	□ 5	□ 6	□7	□ 8	□ 9	□ 10	☐ Not recorded	□NA