

ADMINISTRATIVE

| | |
|---|---|
| Participant ID: ParticID (10) | Patient participating in STS-Related Clinical Trial: <input type="checkbox"/> None <input type="checkbox"/> Trial 1 <input type="checkbox"/> Trial 2 <input type="checkbox"/> Trial 3 <input type="checkbox"/> Trial 4 <input type="checkbox"/> Trial 5 <input type="checkbox"/> Trial 6 |
| | <i>(If not None→)</i> STS-Related Clinical Trial ID: ClinTrialPatID(82) |

DEMOGRAPHICS

| | | |
|--|--|---|
| Patient ID (software generated) PatID (90) | Patient Nat. ID (SSN): PatNationalID (110) | MRN: MedRecN (120) |
| Last Name: PatLName (140) | First Name: PatFName (150) | Middle Name: PatMName (170) |
| Region: PatRegion (180) | Postal Code: PatPostalCode (190) | Country: PatientCountry (201) |
| Birth Location Known: <input type="checkbox"/> Yes <input type="checkbox"/> No BirthLockKnown (202) | | |
| <i>(If Yes →)</i> Birth City: BirthCit (210) | Birth Region: BirthSta (220) | Birth Country: BirthCountry (231) |
| Mode of Delivery Known: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If Yes ↓)</i> DelivModeKnown (232) | | |
| Mode of Delivery: DelivMode (233) | | |
| <input type="checkbox"/> Spontaneous onset labor with vaginal delivery <input type="checkbox"/> Spontaneous onset labor with cesarean section <input type="checkbox"/> Induction of labor with vaginal delivery <input type="checkbox"/> Induction of labor with subsequent cesarean section <input type="checkbox"/> Scheduled cesarean section <input type="checkbox"/> Other cesarean section | | |
| Mother's Gravidity and Parity known: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If Yes ↓)</i> GravParKnown (234) | | |
| Mother's Gravidity: Gravidity (235) | | Mother's Parity: Parity (236) |
| APGAR Scores Known: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If Yes ↓)</i> ApgarKnown (237) | | |
| APGAR Score at 1 minute: Apgar1 (238) | | APGAR Score at 5 minutes: Apgar5 (239) |
| Mother's Name Known: <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| <i>(If Yes →)</i> Mother's Last Name: MatLName (250) | Mother's First Name: MatFName (260) | Mother's Middle Name: MatMName (280) |
| Mother's National ID Number (SSN) Known: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused | | |
| <i>(If Yes →)</i> Mother's National ID Number (SSN): MatSSN (300) | | |
| DOB: (mm/dd/yyyy) ___ / ___ / _____ DOB (310) | Birth Weight Known: <input type="checkbox"/> Yes <input type="checkbox"/> No | <i>(If Yes →)</i> Birth Weight (kg): BirthWtKg (330) |
| Gender: <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> Ambiguous Gender (340) | Premature Birth: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Premature (350) | |
| Gestational Age at Birth Known: <input type="checkbox"/> Yes <input type="checkbox"/> No GestAgeKnown (360) | <i>(If Yes →)</i> Gestational age at birth (in weeks): GestAgeWeeks (370) | |
| Multiple Gestation: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown MultGest (380) | Antenatal Diagnosis of Congenital Heart Disease: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown AntenatalDiag(381) | |
| Race Documented: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Patient declined to disclose <i>(If Yes ↓)</i> RaceDocumented (383) | | |
| <i>(select all that apply→)</i> | Caucasian: <input type="checkbox"/> Yes <input type="checkbox"/> No RaceCaucasian (390) | Black/African American: <input type="checkbox"/> Yes <input type="checkbox"/> No RaceBlack (400) |
| | Asian: <input type="checkbox"/> Yes <input type="checkbox"/> No RaceAsian (410) | Am Indian/Alaskan Native: <input type="checkbox"/> Yes <input type="checkbox"/> No RaceNativeAm (420) |
| | Native Hawaiian/Pacific Islander: <input type="checkbox"/> Yes <input type="checkbox"/> No RaceNativePacific (430) | Other: <input type="checkbox"/> Yes <input type="checkbox"/> No RaceOther (440) |
| Hispanic or Latino Ethnicity: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Documented Ethnicity (450) | | |
| Date of Last Follow-Up: (mm/dd/yyyy) ___ / ___ / _____ LFUDate (460) | | |
| Last follow-up NYHA Classification: LFUNYHA (470) <input type="checkbox"/> Not Assessed <input type="checkbox"/> NYHA 1 <input type="checkbox"/> NYHA 2 <input type="checkbox"/> NYHA 3 <input type="checkbox"/> NYHA 4 | | |
| Mortality Status at Last Follow-Up: <input type="checkbox"/> Alive <input type="checkbox"/> Dead LFUMortStat (480) | Mortality Date: (mm/dd/yyyy) ___ / ___ / _____ <i>(If Dead →)</i> MtDate (490) | |

NONCARDIAC CONGENITAL ANATOMIC ABNORMALITIES (select all that apply) NCAA (530)

- None
 - Major abnormality of head, Choanal atresia
 - Major abnormality of head, Cleft lip
 - Major abnormality of head, Cleft palate
 - Major abnormality of head
 - Major abnormality of brain, Hydrocephalus
 - Major abnormality of brain, Macrocephaly
 - Major abnormality of brain, Microcephaly
 - Major abnormality of brain
 - Major abnormality of spinal cord, Myelomeningocele
 - Major abnormality of spinal cord, Spina bifida
 - Major abnormality of spinal cord
 - Major abnormality of spine, Scoliosis
 - Major abnormality of spine
 - Major abnormality of larynx - trachea - or bronchus, Laryngomalacia
 - Major abnormality of larynx - trachea - or bronchus, Congenital tracheal stenosis
 - Major abnormality of larynx - trachea - or bronchus, Tracheomalacia
 - Major abnormality of larynx - trachea - or bronchus, Tracheoesophageal fistula (TEF)
 - Major abnormality of larynx - trachea - or bronchus, Bronchomalacia
 - Major abnormality of larynx - trachea - or bronchus
 - Major abnormality of lung, Congenital lobar emphysema (CLE)
 - Major abnormality of lung, Cystic congenital adenomatous malformation of the lung (CAM)
 - Major abnormality of lung, Cystic fibrosis
 - Major abnormality of lung, Pulmonary lymphangiectasia
 - Major abnormality of lung
 - Major abnormality of abdominal wall, Congenital diaphragmatic hernia (CDH)
 - Major abnormality of abdominal wall, Gastroschisis
 - Major abnormality of abdominal wall, Omphalocele
 - Major abnormality of gastrointestinal system, Biliary atresia
 - Major abnormality of gastrointestinal system, Duodenal atresia
 - Major abnormality of gastrointestinal system, Duodenal stenosis
 - Major abnormality of gastrointestinal system, Jejunal atresia
 - Major abnormality of gastrointestinal system, Jejunal stenosis
 - Major abnormality of gastrointestinal system, Ileal atresia
 - Major abnormality of gastrointestinal system, Ileal stenosis
 - Major abnormality of gastrointestinal system, Intestinal malrotation
 - Major abnormality of gastrointestinal system, Hirschsprung's disease (Congenital aganglionic megacolon)
 - Major abnormality of gastrointestinal system, Stenosis of large intestine
 - Major abnormality of gastrointestinal system, Atresia of large intestine
 - Major abnormality of gastrointestinal system, Atresia of rectum
 - Major abnormality of gastrointestinal system, Stenosis of rectum
 - Major abnormality of gastrointestinal system, Anal Atresia (imperforate anus)
 - Major abnormality of gastrointestinal system
 - Major abnormality of kidney - ureter - or bladder
 - Other
- (If NCAA is Other ↓)*

Major Noncardiac Abnormality- Other- Specify **NCAAothSp (540)**

CHROMOSOMAL ABNORMALITIES ChromAb (570)

- | | |
|--|-------------------------------------|
| <input type="checkbox"/> No chromosomal abnormality identified | <input type="checkbox"/> 5p |
| <input type="checkbox"/> 11p15.5 | <input type="checkbox"/> 6p12 |
| <input type="checkbox"/> 11q | <input type="checkbox"/> 7q11 |
| <input type="checkbox"/> 12p1.21 | <input type="checkbox"/> 7q11.23 |
| <input type="checkbox"/> 12p12.1 | <input type="checkbox"/> 7q32 |
| <input type="checkbox"/> 12q24 | <input type="checkbox"/> 7q34 |
| <input type="checkbox"/> 15q21.1 | <input type="checkbox"/> 8q12 |
| <input type="checkbox"/> 1q42.1 | <input type="checkbox"/> TGFB1 or 2 |
| <input type="checkbox"/> 20p12 | <input type="checkbox"/> Trisomy 08 |
| <input type="checkbox"/> 22q11 deletion | <input type="checkbox"/> Trisomy 09 |
| <input type="checkbox"/> 2p21 | <input type="checkbox"/> Trisomy 13 |
| <input type="checkbox"/> 3p22 | <input type="checkbox"/> Trisomy 18 |

- 45X0
- 47,XXY
- 4p
- 4p16

- Trisomy 21
- Other chromosomal abnormality
(If ChromAb is Other chromosomal abnormality ↓)

Chromosomal Abnormality - Other - Specify **ChromAbOthSp (580)**

SYNDROMES (select all that apply) Syndrome (610)

- | | |
|---|--|
| <input type="checkbox"/> No syndromic abnormality identified | <input type="checkbox"/> Long QT syndrome (Ward Romano syndrome) |
| <input type="checkbox"/> Alagille syndrome (intrahepatic biliary duct agenesis) | <input type="checkbox"/> Marfan syndrome |
| <input type="checkbox"/> Apert syndrome | <input type="checkbox"/> Marfan-like syndrome |
| <input type="checkbox"/> Brugada syndrome (Sudden unexplained nocturnal death syndrome) (SUNDS) | <input type="checkbox"/> Mucopolysaccharidosis type IH (Hurler syndrome) |
| <input type="checkbox"/> Cardiofaciocutaneous syndrome | <input type="checkbox"/> Mucopolysaccharidosis type IH/S (Hurler-Scheie syndrome) |
| <input type="checkbox"/> Carpenter syndrome | <input type="checkbox"/> Mucopolysaccharidosis type II (Hunter syndrome) |
| <input type="checkbox"/> Cat-eye syndrome | <input type="checkbox"/> Mucopolysaccharidosis type IS (Scheie syndrome) |
| <input type="checkbox"/> CHARGE Association | <input type="checkbox"/> Noonan syndrome |
| <input type="checkbox"/> Cornelia de Lange syndrome | <input type="checkbox"/> Patau syndrome (Trisomy 13) |
| <input type="checkbox"/> Costello syndrome | <input type="checkbox"/> Pierre Robin syndrome |
| <input type="checkbox"/> Cri-du-chat syndrome | <input type="checkbox"/> Prune Belly syndrome |
| <input type="checkbox"/> Deletion 10p syndrome | <input type="checkbox"/> Rethore syndrome (Trisomy 9) |
| <input type="checkbox"/> Deletion 8p syndrome | <input type="checkbox"/> Fetal Rubella syndrome (Congenital rubella syndrome) |
| <input type="checkbox"/> DiGeorge syndrome (velocardiofacial syndrome) (conotruncal anomaly face syndrome) (22q11 deletion) | <input type="checkbox"/> Rubinstein-Taybi syndrome |
| <input type="checkbox"/> Down syndrome (Trisomy 21) | <input type="checkbox"/> Short QT syndrome |
| <input type="checkbox"/> Edwards syndrome (Trisomy 18) | <input type="checkbox"/> Sickle cell disease |
| <input type="checkbox"/> Ehlers- Danlos Syndrome | <input type="checkbox"/> Sickle cell trait |
| <input type="checkbox"/> Ellis-van Creveld syndrome | <input type="checkbox"/> Situs inversus |
| <input type="checkbox"/> Fetal alcohol syndrome (FAS) | <input type="checkbox"/> Smith-Lemli-Opitz syndrome |
| <input type="checkbox"/> Fetal drug exposure | <input type="checkbox"/> Turner syndrome (45XO) |
| <input type="checkbox"/> Goldenhar syndrome | <input type="checkbox"/> VACTERL syndrome (VACTER/VATER/VATERR syndrome) |
| <input type="checkbox"/> Heterotaxy syndrome | <input type="checkbox"/> VACTERL-H syndrome (VATER association with hydrocephalus) (Briard-Evans syndrome) |
| <input type="checkbox"/> Heterotaxy syndrome, Asplenia syndrome | <input type="checkbox"/> von Willebrand disease (vWD) |
| <input type="checkbox"/> Heterotaxy syndrome, Polysplenia syndrome | <input type="checkbox"/> Warkany syndrome (Trisomy 8) |
| <input type="checkbox"/> Holt-Oram syndrome | <input type="checkbox"/> Williams syndrome (Williams-Beuren syndrome) |
| <input type="checkbox"/> Jacobsen syndrome | <input type="checkbox"/> Wolff-Parkinson-White syndrome (WPW syndrome) |
| <input type="checkbox"/> Kabuki syndrome | <input type="checkbox"/> Wolf-Hirschhorn syndrome |
| <input type="checkbox"/> Kartagener syndrome (Siewert syndrome) (Primary ciliary dyskinesia) | <input type="checkbox"/> Other syndromic abnormality |
| <input type="checkbox"/> Klinefelter syndrome (XXY Syndrome) | <i>(If Other Syndromic abnormality, Specify ↓)</i> |
| <input type="checkbox"/> LEOPARD syndrome | |
| <input type="checkbox"/> Loeys-Dietz syndrome | |

Syndrome – Other – Specify **SyndromeOthSp (620)**

HOSPITALIZATION

Hospital Name: _____

HospName (630)

Hospital Zip Code: _____ Hospital State: _____ Hospital National Provider Identifier: _____

HospZIP (640)

HospStat (650)

HospNPI (660)

Primary Payor: PayorPrim (771) *(If Primary not None or missing→)*

- None/self
- Medicare
- Medicaid
- Military Health
- Indian Health Service
- Correctional Facility
- State Specific Plan
- Other Government Insurance
- Commercial Health Insurance
- Health Maintenance Organization
- Non US Plan
- Charitable Care/Foundation Funding

(If Medicare→) Primary Payor Medicare Fee for Service: Yes No
PrimMCareFFS (772)

Secondary (supplemental) Payor: PayorSecond (773)

- None/self
- Medicare
- Medicaid
- Military Health
- Indian Health Service
- Correctional Facility
- State Specific Plan
- Other Government Insurance
- Commercial Health Insurance
- Health Maintenance Organization
- Non US Plan
- Charitable Care/Foundation Funding

(If Medicare→) Secondary Payor Medicare Fee for Service: Yes No
SecondMCareFFS (774)

Admission date: (mm/dd/yyyy) ___ / ___ / ___ AdmitDt (780)

Location From which Patient was Admitted: Home Other acute care center
AdmitFromLoc (781) Other chronic care center Born at operative center

Surgery date: (mm/dd/yyyy) ___ / ___ / ___ SurgDt (790)

Height (Cm): _____ Weight (Kg): _____ Age at time of surgery (in days): _____
HeightCm (800) WeightKg (810) AgeDays (820)

PREOPERATIVE FACTORS (select all that apply) PreopFactor (850)

- | | |
|--|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> No preoperative factors identified <input type="checkbox"/> Cardio-pulmonary resuscitation <input type="checkbox"/> Preoperative complete AV block <input type="checkbox"/> Preoperative/Preprocedural mechanical circulatory support (IABP, VAD, ECMO, or CPS) <input type="checkbox"/> Shock, Persistent at time of surgery <input type="checkbox"/> Shock, Resolved at time of surgery <input type="checkbox"/> Diabetes mellitus, Insulin dependent <input type="checkbox"/> Diabetes mellitus, Non-insulin dependent <input type="checkbox"/> Hypothyroidism <input type="checkbox"/> Currently taking steroids as treatment for adrenal insufficiency <input type="checkbox"/> Currently taking steroids for any reason other than treatment of adrenal insufficiency <input type="checkbox"/> Colostomy present <input type="checkbox"/> Enterostomy of small intestine present <input type="checkbox"/> Esophagostomy present <input type="checkbox"/> Gastrostomy present <input type="checkbox"/> Hepatic dysfunction <input type="checkbox"/> Necrotizing entero-colitis, Treated medically <input type="checkbox"/> Necrotizing entero-colitis, Treated surgically <input type="checkbox"/> Coagulation disorder, Hypercoagulable state | <ul style="list-style-type: none"> <input type="checkbox"/> Sepsis <input type="checkbox"/> Sepsis with positive blood culture <input type="checkbox"/> Preoperative neurological deficit <input type="checkbox"/> Seizure during lifetime <input type="checkbox"/> Seizure within 48 hours prior to surgery <input type="checkbox"/> Stroke, CVA, or Intracranial hemorrhage > Grade 2 during lifetime <input type="checkbox"/> Stroke, CVA, or Intracranial hemorrhage > Grade 2 within 48 hours prior to surgery <input type="checkbox"/> Renal dysfunction <input type="checkbox"/> Renal failure requiring dialysis <input type="checkbox"/> Mechanical ventilation to treat cardiorespiratory failure <input type="checkbox"/> Respiratory Syncytial Virus <input type="checkbox"/> Single lung <input type="checkbox"/> Tracheostomy present <input type="checkbox"/> Asthma <input type="checkbox"/> Bronchopulmonary Dysplasia (BPD) <input type="checkbox"/> ICD (AICD) ([automatic] implantable cardioverter defibrillator) present <input type="checkbox"/> Pacemaker present <input type="checkbox"/> Tobacco use <input type="checkbox"/> Family History of Coronary Artery Disease |
|--|--|

- Coagulation disorder, Hypocoagulable state not secondary to medication (intrinsic hypocoagulable state)
- Coagulation disorder, Hypocoagulable state secondary to medication
- Endocarditis
- Dyslipidemia
- Other preoperative factors

| DIAGNOSIS | | |
|---|---|--|
| Select ALL diagnosis that apply(↓) Diagnosis (890) | CIRCLE the ONE PRIMARY diagnosis for this operation PrimDiag (900) | Select the ONE FUNDAMENTAL diagnosis for this patient (↓) FundDiagnosis (382) |

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|----------------------------------|---|---|--|
| Septal Defects | ASD | <input type="checkbox"/> 10=PFO <input type="checkbox"/> 20= ASD, Secundum <input type="checkbox"/> 30= ASD, Sinus venosus <input type="checkbox"/> 40= ASD, Coronary sinus <input type="checkbox"/> 50= ASD, Common atrium (single atrium) <input type="checkbox"/> 2150= ASD, Postoperative interatrial communication | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> NA |
| | VSD | <input type="checkbox"/> 71= VSD, Type 1 (Subarterial) (Supracristal) (Conal septal defect) (Infundibular) <input type="checkbox"/> 73= VSD, Type 2 (Perimembranous) (Paramembranous) (Conoventricular) <input type="checkbox"/> 75= VSD, Type 3 (Inlet) (AV canal type) <input type="checkbox"/> 77= VSD, Type 4 (Muscular) <input type="checkbox"/> 79= VSD, Type: Gerbode type (LV-RA communication) <input type="checkbox"/> 80= VSD, Multiple | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| | AV Canal | <input type="checkbox"/> 100= AVC (AVSD), Complete (CAVSD) <input type="checkbox"/> 110= AVC (AVSD), Intermediate (transitional) <input type="checkbox"/> 120= AVC (AVSD), Partial (incomplete) (PAVSD) (ASD, primum) | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| | AP Window | <input type="checkbox"/> 140= AP window (aortopulmonary window) <input type="checkbox"/> 150= Pulmonary artery origin from ascending aorta (hemitruncus) | <input type="checkbox"/> <input type="checkbox"/> |
| | Truncus Arteriosus | <input type="checkbox"/> 160= Truncus arteriosus <input type="checkbox"/> 170= Truncal valve insufficiency <input type="checkbox"/> 2470= Truncal valve stenosis <input type="checkbox"/> 2010= Truncus arteriosus + Interrupted aortic arch | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> NA <input type="checkbox"/> |
| | Pulmonary Venous Anomalies | Partial Anomalous Pulmonary Venous Connection <input type="checkbox"/> 180= Partial anomalous pulmonary venous connection (PAPVC) <input type="checkbox"/> 190= Partial anomalous pulmonary venous connection (PAPVC), scimitar Total Anomalous Pulmonary Venous Connection <input type="checkbox"/> 200=Total anomalous pulmonary venous connection (TAPVC), Type1 (supracardiac) <input type="checkbox"/> 210=Total anomalous pulmonary venous connection (TAPVC), Type 2 (cardiac) <input type="checkbox"/> 220=Total anomalous pulmonary venous connection (TAPVC), Type 3 (infracardiac) <input type="checkbox"/> 230=Total anomalous pulmonary venous connection (TAPVC), Type 4 (mixed) | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Cor Triatriatum | <input type="checkbox"/> 250=Cor triatriatum | <input type="checkbox"/> | |
| Pulmonary Venous Stenosis | <input type="checkbox"/> 260=Pulmonary venous stenosis | <input type="checkbox"/> | |
| Systemic Venous Anomalies | Anomalous Systemic Venous Connection <input type="checkbox"/> 270=Systemic venous anomaly Systemic venous obstruction <input type="checkbox"/> 280=Systemic venous obstruction | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| Right Heart Lesions | Tetralogy of Fallot | <input type="checkbox"/> 290=TOF <input type="checkbox"/> 2140=TOF, Pulmonary stenosis <input type="checkbox"/> 300=TOF, AVC (AVSD) <input type="checkbox"/> 310=TOF, Absent pulmonary valve | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| | Pulmonary Atresia | <input type="checkbox"/> 320=Pulmonary atresia <input type="checkbox"/> 330=Pulmonary atresia, IVS | <input type="checkbox"/> <input type="checkbox"/> |

| | | | |
|---|--|---|--------------------------|
| | | <input type="checkbox"/> 340=Pulmonary atresia, VSD (Including TOF, PA) | <input type="checkbox"/> |
| | | <input type="checkbox"/> 350=Pulmonary atresia, VSD-MAPCA | <input type="checkbox"/> |
| | | <input type="checkbox"/> 360=MAPCA(s) (major aortopulmonary collateral[s]) (without PA-VSD) | <input type="checkbox"/> |
| | Tricuspid Valve Disease and Ebstein's Anomaly | <input type="checkbox"/> 370=Ebstein's anomaly | <input type="checkbox"/> |
| | | <input type="checkbox"/> 380=Tricuspid regurgitation, non-Ebstein's related | <input type="checkbox"/> |
| | | <input type="checkbox"/> 390=Tricuspid stenosis | <input type="checkbox"/> |
| | | <input type="checkbox"/> 400=Tricuspid regurgitation and tricuspid stenosis | <input type="checkbox"/> |
| | | <input type="checkbox"/> 410=Tricuspid valve, Other | <input type="checkbox"/> |
| | RVOT Obstruction and/or Pulmonary Stenosis | <input type="checkbox"/> 420=Pulmonary stenosis, Valvar | <input type="checkbox"/> |
| | | <input type="checkbox"/> 430=Pulmonary artery stenosis (hypoplasia), Main (trunk) | <input type="checkbox"/> |
| | | <input type="checkbox"/> 440=Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation) | <input type="checkbox"/> |
| | | <input type="checkbox"/> 450=Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation) | <input type="checkbox"/> |
| | | <input type="checkbox"/> 470=Pulmonary artery, Discontinuous | <input type="checkbox"/> |
| | | <input type="checkbox"/> 490=Pulmonary stenosis, Subvalvar | <input type="checkbox"/> |
| | | <input type="checkbox"/> 500=DCRV | <input type="checkbox"/> |
| | Pulmonary Valve Disease | <input type="checkbox"/> 510=Pulmonary valve, Other | <input type="checkbox"/> |
| | | <input type="checkbox"/> 530=Pulmonary insufficiency | <input type="checkbox"/> |
| | | <input type="checkbox"/> 540=Pulmonary insufficiency and pulmonary stenosis | <input type="checkbox"/> |
| Shunt failure | Shunt failure | <input type="checkbox"/> 2130=Shunt Failure | NA |
| Conduit failure | Conduit failure | <input type="checkbox"/> 520=Conduit failure | NA |
| Left Heart Lesions | Aortic Valve Disease | <input type="checkbox"/> 550=Aortic stenosis, Subvalvar | <input type="checkbox"/> |
| | | <input type="checkbox"/> 560=Aortic stenosis, Valvar | <input type="checkbox"/> |
| | | <input type="checkbox"/> 570=Aortic stenosis, Supravalvar | <input type="checkbox"/> |
| | | <input type="checkbox"/> 590=Aortic valve atresia | <input type="checkbox"/> |
| | | <input type="checkbox"/> 600=Aortic insufficiency | <input type="checkbox"/> |
| | | <input type="checkbox"/> 610=Aortic insufficiency and aortic stenosis | <input type="checkbox"/> |
| | | <input type="checkbox"/> 620=Aortic valve, Other | <input type="checkbox"/> |
| | Sinus of Valsalva Fistula/Aneurysm | <input type="checkbox"/> 630=Sinus of Valsalva aneurysm | <input type="checkbox"/> |
| | LV to Aorta Tunnel | <input type="checkbox"/> 640=LV to aorta tunnel | <input type="checkbox"/> |
| | Mitral Valve Disease | <input type="checkbox"/> 650=Mitral stenosis, Supravalvar mitral ring | <input type="checkbox"/> |
| <input type="checkbox"/> 660=Mitral stenosis, Valvar | | <input type="checkbox"/> | |
| <input type="checkbox"/> 670=Mitral stenosis, Subvalvar | | <input type="checkbox"/> | |
| <input type="checkbox"/> 680=Mitral stenosis, Subvalvar, Parachute | | <input type="checkbox"/> | |
| <input type="checkbox"/> 695=Mitral stenosis | | <input type="checkbox"/> | |
| <input type="checkbox"/> 700=Mitral regurgitation and mitral stenosis | | <input type="checkbox"/> | |
| | <input type="checkbox"/> 710=Mitral regurgitation | <input type="checkbox"/> | |
| | <input type="checkbox"/> 720=Mitral valve, Other | <input type="checkbox"/> | |
| Hypoplastic Left Heart Syndrome | <input type="checkbox"/> 730=Hypoplastic left heart syndrome (HLHS) | <input type="checkbox"/> | |
| Shone's syndrome | <input type="checkbox"/> 2080=Shone's syndrome {CANNOT BE PRIMARY DIAGNOSIS} | <input type="checkbox"/> | |
| Cardiomyopathy | | <input type="checkbox"/> 740=Cardiomyopathy (including dilated, restrictive, and hypertrophic) | <input type="checkbox"/> |
| | | <input type="checkbox"/> 750=Cardiomyopathy, End-stage congenital heart disease | <input type="checkbox"/> |
| Pericardial Disease | | <input type="checkbox"/> 760=Pericardial effusion | <input type="checkbox"/> |
| | | <input type="checkbox"/> 770=Pericarditis | <input type="checkbox"/> |
| | | <input type="checkbox"/> 780=Pericardial disease, Other | <input type="checkbox"/> |
| Single Ventricle | | <input type="checkbox"/> 790=Single ventricle, DILV | <input type="checkbox"/> |
| | | <input type="checkbox"/> 800=Single ventricle, DIRV | <input type="checkbox"/> |
| | | <input type="checkbox"/> 810=Single ventricle, Mitral atresia | <input type="checkbox"/> |
| | | <input type="checkbox"/> 820=Single ventricle, Tricuspid atresia | <input type="checkbox"/> |

| | | | |
|---|--|---|--------------------------|
| | | <input type="checkbox"/> 830=Single ventricle, Unbalanced AV canal | <input type="checkbox"/> |
| | | <input type="checkbox"/> 840=Single ventricle, Heterotaxia syndrome | <input type="checkbox"/> |
| | | <input type="checkbox"/> 850=Single ventricle, Other | <input type="checkbox"/> |
| | | <input type="checkbox"/> 851=Single ventricle + Total anomalous pulmonary venous connection (TAPVC) | <input type="checkbox"/> |
| Transposition of the Great Arteries | Congenitally Corrected TGA | <input type="checkbox"/> 870=Congenitally corrected TGA | <input type="checkbox"/> |
| | | <input type="checkbox"/> 872=Congenitally corrected TGA, IVS | <input type="checkbox"/> |
| | | <input type="checkbox"/> 874=Congenitally corrected TGA, IVS-LVOTO | <input type="checkbox"/> |
| | | <input type="checkbox"/> 876=Congenitally corrected TGA, VSD | <input type="checkbox"/> |
| | | <input type="checkbox"/> 878=Congenitally corrected TGA, VSD-LVOTO | <input type="checkbox"/> |
| | Transposition of the Great Arteries | <input type="checkbox"/> 880=TGA, IVS | <input type="checkbox"/> |
| | | <input type="checkbox"/> 890=TGA, IVS-LVOTO | <input type="checkbox"/> |
| | | <input type="checkbox"/> 900=TGA, VSD | <input type="checkbox"/> |
| <input type="checkbox"/> 910=TGA, VSD-LVOTO | | <input type="checkbox"/> | |
| DORV | <input type="checkbox"/> 930=DORV, VSD type | <input type="checkbox"/> | |
| | <input type="checkbox"/> 940=DORV, TOF type | <input type="checkbox"/> | |
| | <input type="checkbox"/> 950=DORV, TGA type | <input type="checkbox"/> | |
| | <input type="checkbox"/> 960=DORV, Remote VSD (uncommitted VSD) | <input type="checkbox"/> | |
| | <input type="checkbox"/> 2030=DORV + AVSD (AV Canal) | <input type="checkbox"/> | |
| | <input type="checkbox"/> 975=DORV, IVS | <input type="checkbox"/> | |
| DOLV | | <input type="checkbox"/> 980=DOLV | <input type="checkbox"/> |
| Thoracic Arteries and Veins | Coarctation of Aorta and Aortic arch hypoplasia | <input type="checkbox"/> 990=Coarctation of aorta | <input type="checkbox"/> |
| | | <input type="checkbox"/> 1000=Aortic arch hypoplasia | <input type="checkbox"/> |
| | | <input type="checkbox"/> 92=VSD + Aortic arch hypoplasia | <input type="checkbox"/> |
| | | <input type="checkbox"/> 94=VSD + Coarctation of aorta | <input type="checkbox"/> |
| | Coronary Artery Anomalies | <input type="checkbox"/> 1010=Coronary artery anomaly, Anomalous aortic origin of coronary artery (AAOCA) | <input type="checkbox"/> |
| | | <input type="checkbox"/> 1020=Coronary artery anomaly, Anomalous pulmonary origin (includes ALCAPA) | <input type="checkbox"/> |
| | | <input type="checkbox"/> 1030=Coronary artery anomaly, Fistula | <input type="checkbox"/> |
| | | <input type="checkbox"/> 1040=Coronary artery anomaly, Aneurysm | <input type="checkbox"/> |
| | | <input type="checkbox"/> 2420=Coronary artery anomaly, Ostial atresia | <input type="checkbox"/> |
| | | <input type="checkbox"/> 1050=Coronary artery anomaly, Other | <input type="checkbox"/> |
| | Interrupted Arch | <input type="checkbox"/> 1070=Interrupted aortic arch | <input type="checkbox"/> |
| | | <input type="checkbox"/> 2020=Interrupted aortic arch + VSD | <input type="checkbox"/> |
| | | <input type="checkbox"/> 2000=Interrupted aortic arch + AP window (aortopulmonary window) | <input type="checkbox"/> |
| | Patent Ductus Arteriosus | <input type="checkbox"/> 1080=Patent ductus arteriosus | <input type="checkbox"/> |
| Vascular rings and Slings | <input type="checkbox"/> 1090=Vascular ring | <input type="checkbox"/> | |
| | <input type="checkbox"/> 1100=Pulmonary artery sling | <input type="checkbox"/> | |
| Aortic Aneurysm | <input type="checkbox"/> 1110=Aortic aneurysm (including pseudoaneurysm) | <input type="checkbox"/> | |
| Aortic Dissection | <input type="checkbox"/> 1120=Aortic dissection | <input type="checkbox"/> | |
| Thoracic and Mediastinal Disease | Lung Disease | <input type="checkbox"/> 1130=Lung disease, Benign | <input type="checkbox"/> |
| | | <input type="checkbox"/> 1140=Lung disease, Malignant | <input type="checkbox"/> |
| | Tracheal | <input type="checkbox"/> 1160=Tracheal stenosis | <input type="checkbox"/> |
| | | <input type="checkbox"/> 2430=Tracheomalacia | <input type="checkbox"/> |
| | | <input type="checkbox"/> 1170=Airway disease | <input type="checkbox"/> |
| | Pleural Disease | <input type="checkbox"/> 1430=Pleural disease, Benign | <input type="checkbox"/> |
| | | <input type="checkbox"/> 1440=Pleural disease, Malignant | <input type="checkbox"/> |
| | | <input type="checkbox"/> 1450=Pneumothorax | <input type="checkbox"/> |
| | | <input type="checkbox"/> 1460=Pleural effusion | <input type="checkbox"/> |
| <input type="checkbox"/> 1470=Chylothorax | | <input type="checkbox"/> | |

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|---|--|--------------------------|
| | <input type="checkbox"/> 1480=Empyema | <input type="checkbox"/> |
| Esophageal Disease | <input type="checkbox"/> 1490=Esophageal disease, Benign | <input type="checkbox"/> |
| | <input type="checkbox"/> 1500=Esophageal disease, Malignant | <input type="checkbox"/> |
| Mediastinal Disease | <input type="checkbox"/> 1505=Mediastinal disease | <input type="checkbox"/> |
| | <input type="checkbox"/> 1510=Mediastinal disease, Benign | <input type="checkbox"/> |
| | <input type="checkbox"/> 1520=Mediastinal disease, Malignant | <input type="checkbox"/> |
| Diaphragmatic Disease | <input type="checkbox"/> 1540=Diaphragm paralysis | <input type="checkbox"/> |
| | <input type="checkbox"/> 1550=Diaphragm disease, Other | <input type="checkbox"/> |
| Chest Wall | <input type="checkbox"/> 2160=Rib tumor, Benign | <input type="checkbox"/> |
| | <input type="checkbox"/> 2170=Rib tumor, Malignant | <input type="checkbox"/> |
| | <input type="checkbox"/> 2180=Rib tumor, Metastatic | <input type="checkbox"/> |
| | <input type="checkbox"/> 2190=Sternal tumor, Benign | <input type="checkbox"/> |
| | <input type="checkbox"/> 2200=Sternal tumor, Malignant | <input type="checkbox"/> |
| | <input type="checkbox"/> 2210=Sternal tumor, Metastatic | <input type="checkbox"/> |
| Pectus Excavatum, Carinatum | <input type="checkbox"/> 2220=Pectus carinatum | <input type="checkbox"/> |
| | <input type="checkbox"/> 2230=Pectus excavatum | <input type="checkbox"/> |
| Thoracic Outlet | <input type="checkbox"/> 2240=Thoracic outlet syndrome | <input type="checkbox"/> |
| Electrophysiological | <input type="checkbox"/> 1180=Arrhythmia | <input type="checkbox"/> |
| | <input type="checkbox"/> 2440=Arrhythmia, Atrial, Atrial fibrillation | <input type="checkbox"/> |
| | <input type="checkbox"/> 2450=Arrhythmia, Atrial, Atrial flutter | <input type="checkbox"/> |
| | <input type="checkbox"/> 2460=Arrhythmia, Atrial, Other | <input type="checkbox"/> |
| | <input type="checkbox"/> 2050=Arrhythmia, Junctional | <input type="checkbox"/> |
| | <input type="checkbox"/> 2060=Arrhythmia, Ventricular | <input type="checkbox"/> |
| | <input type="checkbox"/> 1185=Arrhythmia, Heart block | <input type="checkbox"/> |
| | <input type="checkbox"/> 1190=Arrhythmia, Heart block, Acquired | <input type="checkbox"/> |
| | <input type="checkbox"/> 1200=Arrhythmia, Heart block, Congenital | <input type="checkbox"/> |
| | <input type="checkbox"/> 1220=Arrhythmia, Pacemaker, Indication for replacement | NA |
| Miscellaneous, Other | <input type="checkbox"/> 1230=Atrial Isomerism, Left <i>{CANNOT BE PRIMARY DIAGNOSIS}</i> | NA |
| | <input type="checkbox"/> 1240=Atrial Isomerism, Right <i>{CANNOT BE PRIMARY DIAGNOSIS}</i> | NA |
| | <input type="checkbox"/> 2090=Dextrocardia <i>{CANNOT BE PRIMARY DIAGNOSIS}</i> | NA |
| | <input type="checkbox"/> 2100=Levocardia <i>{CANNOT BE PRIMARY DIAGNOSIS}</i> | NA |
| | <input type="checkbox"/> 2110=Mesocardia <i>{CANNOT BE PRIMARY DIAGNOSIS}</i> | NA |
| | <input type="checkbox"/> 2120=Situs inversus <i>{CANNOT BE PRIMARY DIAGNOSIS}</i> | NA |
| | <input type="checkbox"/> 1250=Aneurysm, Ventricular, Right (including pseudoaneurysm) | <input type="checkbox"/> |
| | <input type="checkbox"/> 1260=Aneurysm, Ventricular, Left (including pseudoaneurysm) | <input type="checkbox"/> |
| | <input type="checkbox"/> 1270=Aneurysm, Pulmonary artery | <input type="checkbox"/> |
| | <input type="checkbox"/> 1280=Aneurysm, Other | <input type="checkbox"/> |
| | <input type="checkbox"/> 1290=Hypoplastic RV | <input type="checkbox"/> |
| | <input type="checkbox"/> 1300=Hypoplastic LV | <input type="checkbox"/> |
| | <input type="checkbox"/> 2070=Postoperative bleeding | NA |
| | <input type="checkbox"/> 1310=Mediastinitis | <input type="checkbox"/> |
| | <input type="checkbox"/> 1320=Endocarditis | <input type="checkbox"/> |
| | <input type="checkbox"/> 1325=Rheumatic heart disease <i>{CANNOT BE PRIMARY DIAGNOSIS}</i> | <input type="checkbox"/> |
| | <input type="checkbox"/> 1330=Prosthetic valve failure | NA |
| <input type="checkbox"/> 1340=Myocardial infarction | <input type="checkbox"/> | |
| <input type="checkbox"/> 1350=Cardiac tumor | <input type="checkbox"/> | |

- 1360=Pulmonary AV fistula
- 1370=Pulmonary embolism
- 1385=Pulmonary vascular obstructive disease
- 1390=Pulmonary vascular obstructive disease (Eisenmenger's)
- 1400=Primary pulmonary hypertension
- 1410=Persistent fetal circulation
- 1420=Meconium aspiration
- 2250=Kawasaki Disease
- 1560=Cardiac, Other
- 1570=Thoracic and/or mediastinal, Other
- 1580=Peripheral vascular, Other
- 2260=Complication of cardiovascular catheterization procedure NA
- 2270=Complication of cardiovascular catheterization procedure, Device embolization NA
- 2280=Complication of cardiovascular catheterization procedure, Device malfunction NA
- 2290=Complication of cardiovascular catheterization procedure, Perforation NA
- 2300=Complication of interventional radiology procedure NA
- 2310=Complication of interventional radiology procedure, Device embolization NA
- 2320=Complication of interventional radiology procedure, Device malfunction NA
- 2330=Complication of interventional radiology procedure, Perforation NA
- 2340=Foreign body, Intracardiac foreign body NA
- 2350=Foreign body, Intravascular foreign body NA
- 2360=Open sternum with closed skin NA
- 2370=Open sternum with open skin (includes membrane placed to close skin) NA
- 2380=Retained sternal wire causing irritation NA
- 2390=Syncope NA
- 2400=Trauma, Blunt
- 2410=Trauma, Penetrating
- 7000=Normal heart
- 7777=Miscellaneous, Other

STATUS POST (No "Status post – diagnoses" can be a primary diagnosis or fundamental diagnosis)

Septal Defects

ASD

- 4010=Status post - PFO, Primary closure
- 4020=Status post - ASD repair, Primary closure
- 4030=Status post - ASD repair, Patch
- 4040=Status post - ASD repair, Device
- 6110=Status post - ASD repair, Patch + PAPVC repair
- 4050=Status post - ASD, Common atrium (single atrium), Septation
- 4060=Status post - ASD creation/enlargement
- 4070=Status post - ASD partial closure
- 4080=Status post - Atrial septal fenestration
- 4085=Status post - Atrial fenestration closure

VSD

- 4100=Status post - VSD repair, Primary closure
- 4110=Status post - VSD repair, Patch
- 4120=Status post - VSD repair, Device
- 4130=Status post - VSD, Multiple, Repair
- 4140=Status post - VSD creation/enlargement
- 4150=Status post - Ventricular septal fenestration

AV Canal

- 4170=Status post - AVC (AVSD) repair, Complete (CAVSD)
- 4180=Status post - AVC (AVSD) repair, Intermediate (Transitional)
- 4190=Status post - AVC (AVSD) repair, Partial (Incomplete) (PAVSD)

| | | |
|-----------------------------------|---|---|
| | | <input type="checkbox"/> 6300=Status post - Valvuloplasty, Common atrioventricular valve <input type="checkbox"/> 6250=Status post - Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve <input type="checkbox"/> 6230=Status post - Valve replacement, Common atrioventricular valve |
| | AP Window | <input type="checkbox"/> 4210=Status post - AP window repair <input type="checkbox"/> 4220=Status post - Pulmonary artery origin from ascending aorta (hemitruncus) repair |
| | Truncus Arteriosus | <input type="checkbox"/> 4230=Status post - Truncus arteriosus repair <input type="checkbox"/> 4240=Status post - Valvuloplasty, Truncal valve <input type="checkbox"/> 6290=Status post - Valvuloplasty converted to valve replacement in the same operation, Truncal valve <input type="checkbox"/> 4250=Status post - Valve replacement, Truncal valve <input type="checkbox"/> 6220=Status post - Truncus + Interrupted aortic arch repair (IAA) repair |
| Pulmonary Venous Anomalies | Partial Anomalous Pulmonary Venous Connection | <input type="checkbox"/> 4260=Status post - PAPVC repair <input type="checkbox"/> 4270=Status post - PAPVC, Scimitar, Repair <input type="checkbox"/> 6120=Status post - PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage) |
| | Total Anomalous Pulmonary Venous Connection | <input type="checkbox"/> 4280=Status post - TAPVC repair <input type="checkbox"/> 6200=Status post - TAPVC repair + Shunt - systemic-to-pulmonary |
| Cor Triatriatum | | <input type="checkbox"/> 4290=Status post - Cor triatriatum repair |
| Pulmonary Venous Stenosis | | <input type="checkbox"/> 4300=Status post - Pulmonary venous stenosis repair |
| Systemic Venous Anomalies | Anomalous Systemic Venous Connection | <input type="checkbox"/> 4310=Status post - Atrial baffle procedure (non-Mustard, non-Senning) <input type="checkbox"/> 4330=Status post - Anomalous systemic venous connection repair |
| | Systemic venous obstruction | <input type="checkbox"/> 4340=Status post - Systemic venous stenosis repair |
| Right Heart Lesions | Tetralogy of Fallot | <input type="checkbox"/> 4350=Status post - TOF repair, No ventriculotomy <input type="checkbox"/> 4360=Status post - TOF repair, Ventriculotomy, Nontransannular patch <input type="checkbox"/> 4370=Status post - TOF repair, Ventriculotomy, Transannular patch <input type="checkbox"/> 4380=Status post - TOF repair, RV-PA conduit <input type="checkbox"/> 4390=Status post - TOF - AVC (AVSD) repair <input type="checkbox"/> 4400=Status post - TOF - Absent pulmonary valve repair |
| | Pulmonary Atresia/VSD | <input type="checkbox"/> 4420=Status post - Pulmonary atresia - VSD (including TOF, PA) repair <input type="checkbox"/> 6700=Status post - Pulmonary atresia - VSD - MAPCA repair, Complete single stage repair (1-stage that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit]) <input type="checkbox"/> 6710=Status post - Pulmonary atresia - VSD - MAPCA repair, Status post prior complete unifocalization (includes VSD closure + RV to PA connection [with or without conduit]) <input type="checkbox"/> 6720=Status post - Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalization (includes completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit]) <input type="checkbox"/> 6730=Status post - Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Complete unifocalization (all usable MAPCA[s] are incorporated) <input type="checkbox"/> 6740=Status post - Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Incomplete unifocalization (not all usable MAPCA[s] are incorporated) <input type="checkbox"/> 6750=Status post - Unifocalization MAPCA(s), Unilateral pulmonary unifocalization <input type="checkbox"/> 4440=Status post - Unifocalization MAPCA(s) <input type="checkbox"/> 4450=Status post - Occlusion of MAPCA(s) |
| | Tricuspid Valve Disease and Ebstein's Anomaly | <input type="checkbox"/> 4460=Status post - Valvuloplasty, Tricuspid <input type="checkbox"/> 6280=Status post - Valvuloplasty converted to valve replacement in the same operation, Tricuspid <input type="checkbox"/> 4465=Status post - Ebstein's repair <input type="checkbox"/> 4470=Status post - Valve replacement, Tricuspid (TVR) <input type="checkbox"/> 4480=Status post - Valve closure, Tricuspid (exclusion, univentricular approach) <input type="checkbox"/> 4490=Status post - Valve excision, Tricuspid (without replacement) |

| | | |
|---------------------------|--|--|
| | | <input type="checkbox"/> 4500=Status post - Valve surgery, Other, Tricuspid |
| | RVOT Obstruction, IVS Pulmonary Stenosis | <input type="checkbox"/> 4510=Status post - RVOT procedure <input type="checkbox"/> 4520=Status post - 1 1/2 ventricular repair <input type="checkbox"/> 4530=Status post - PA, reconstruction (plasty), Main (trunk) <input type="checkbox"/> 4540=Status post - PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation) <input type="checkbox"/> 4550=Status post - PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation) <input type="checkbox"/> 4570=Status post - DCRV repair |
| | Pulmonary Valve Disease | <input type="checkbox"/> 4590=Status post - Valvuloplasty, Pulmonic <input type="checkbox"/> 6270=Status post - Valvuloplasty converted to valve replacement in the same operation, Pulmonic <input type="checkbox"/> 4600=Status post - Valve replacement, Pulmonic (PVR) <input type="checkbox"/> 4630=Status post - Valve excision, Pulmonary (without replacement) <input type="checkbox"/> 4640=Status post - Valve closure, Semilunar <input type="checkbox"/> 4650=Status post - Valve surgery, Other, Pulmonic |
| Conduit operations | Conduit operations | <input type="checkbox"/> 4610=Status post - Conduit placement, RV to PA <input type="checkbox"/> 4620=Status post - Conduit placement, LV to PA <input type="checkbox"/> 5774=Status post - Conduit placement, Ventricle to aorta <input type="checkbox"/> 5772=Status post - Conduit placement, Other |
| | Conduit Stenosis / Insufficiency | <input type="checkbox"/> 4580=Status post - Conduit reoperation |
| Left Heart Lesions | Aortic Valve Disease | <input type="checkbox"/> 4660=Status post - Valvuloplasty, Aortic <input type="checkbox"/> 6240=Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic <input type="checkbox"/> 6310=Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure <input type="checkbox"/> 6320=Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-Konno procedure <input type="checkbox"/> 4670=Status post - Valve replacement, Aortic (AVR) <input type="checkbox"/> 4680=Status post - Valve replacement, Aortic (AVR), Mechanical <input type="checkbox"/> 4690=Status post - Valve replacement, Aortic (AVR), Bioprosthetic <input type="checkbox"/> 4700=Status post - Valve replacement, Aortic (AVR), Homograft <input type="checkbox"/> 4715=Status post - Aortic root replacement, Bioprosthetic <input type="checkbox"/> 4720=Status post - Aortic root replacement, Mechanical <input type="checkbox"/> 4730=Status post - Aortic root replacement, Homograft <input type="checkbox"/> 4735=Status post - Aortic root replacement, Valve sparing <input type="checkbox"/> 4740=Status post - Ross procedure <input type="checkbox"/> 4750=Status post - Konno procedure <input type="checkbox"/> 4760=Status post - Ross-Konno procedure <input type="checkbox"/> 4770=Status post - Other annular enlargement procedure <input type="checkbox"/> 4780=Status post - Aortic stenosis, Subvalvar, Repair <input type="checkbox"/> 6100=Status post - Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS <input type="checkbox"/> 4790=Status post - Aortic stenosis, Supraaortic, Repair <input type="checkbox"/> 4800=Status post - Valve surgery, Other, Aortic |
| | Sinus of Valsalva Aneurysm | <input type="checkbox"/> 4810=Status post - Sinus of Valsalva, Aneurysm repair |
| | LV to Aorta Tunnel | <input type="checkbox"/> 4820=Status post - LV to aorta tunnel repair |
| | Mitral Valve Disease | <input type="checkbox"/> 4830=Status post - Valvuloplasty, Mitral <input type="checkbox"/> 6260=Status post - Valvuloplasty converted to valve replacement in the same operation, Mitral <input type="checkbox"/> 4840=Status post - Mitral stenosis, Supraaortic mitral ring repair <input type="checkbox"/> 4850=Status post - Valve replacement, Mitral (MVR) <input type="checkbox"/> 4860=Status post - Valve surgery, Other, Mitral |

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| | Hypoplastic Left Heart and Related malformations | <input type="checkbox"/> 4870=Status post - Norwood procedure <input type="checkbox"/> 4880=Status post - HLHS biventricular repair <input type="checkbox"/> 6755=Status post - Conduit insertion right ventricle to pulmonary artery + Intraventricular tunnel left ventricle to neo-aorta + arch reconstruction (Rastelli and Norwood type arch reconstruction) (Yasui) |
| Hybrid | | <input type="checkbox"/> 6160=Status post - Hybrid Approach "Stage 1", Application of RPA & LPA bands <input type="checkbox"/> 6170=Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) <input type="checkbox"/> 6180=Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands <input type="checkbox"/> 6140=Status post - Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Aortic arch repair (Norwood [Stage 1] + Superior Cavopulmonary anastomosis(es) + PA Debanding) <input type="checkbox"/> 6150=Status post - Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Without aortic arch repair <input type="checkbox"/> 6760=Status post – Hybrid Approach, Transcardiac balloon dilatation <input type="checkbox"/> 6770=Status post – Hybrid Approach, Transcardiac transcatheter device placement |
| Cardiomyopathy | | <input type="checkbox"/> 1590=Status post - Transplant, Heart <input type="checkbox"/> 1610=Status post - Transplant, Heart and lung <input type="checkbox"/> 4910=Status post - Partial left ventriculectomy (LV volume reduction surgery) (Batista) |
| Pericardial Disease | | <input type="checkbox"/> 4920=Status post - Pericardial drainage procedure <input type="checkbox"/> 4930=Status post - Pericardiectomy <input type="checkbox"/> 4940=Status post - Pericardial procedure, Other |
| Single Ventricle | | <input type="checkbox"/> 4950=Status post - Fontan, Atrio-pulmonary connection <input type="checkbox"/> 4960=Status post - Fontan, Atrio-ventricular connection <input type="checkbox"/> 4970=Status post - Fontan, TCPC, Lateral tunnel, Fenestrated <input type="checkbox"/> 4980=Status post - Fontan, TCPC, Lateral tunnel, Nonfenestrated <input type="checkbox"/> 5000=Status post - Fontan, TCPC, External conduit, Fenestrated <input type="checkbox"/> 5010=Status post - Fontan, TCPC, External conduit, Nonfenestrated <input type="checkbox"/> 6780=Status post - Fontan, TCPC, Intra/extracardiac conduit, Fenestrated <input type="checkbox"/> 6790=Status post - Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated <input type="checkbox"/> 7310=Status post - Fontan, TCPC, External conduit, hepatic veins to pulmonary artery, Fenestrated <input type="checkbox"/> 7320=Status post - Fontan, TCPC, External conduit, hepatic veins to pulmonary artery, Nonfenestrated <input type="checkbox"/> 5025=Status post - Fontan revision or conversion (Re-do Fontan) <input type="checkbox"/> 5030=Status post - Fontan, Other <input type="checkbox"/> 6340=Status post - Fontan + Atrioventricular valvuloplasty <input type="checkbox"/> 5035=Status post - Ventricular septation |
| Transposition of the Great Arteries | Congenitally Corrected TGA | <input type="checkbox"/> 5050=Status post - Congenitally corrected TGA repair, Atrial switch and ASO (double switch) <input type="checkbox"/> 5060=Status post - Congenitally corrected TGA repair, Atrial switch and Rastelli <input type="checkbox"/> 5070=Status post - Congenitally corrected TGA repair, VSD closure <input type="checkbox"/> 5080=Status post - Congenitally corrected TGA repair, VSD closure and LV to PA conduit <input type="checkbox"/> 5090=Status post - Congenitally corrected TGA repair, Other |
| | Transposition of the Great Arteries | <input type="checkbox"/> 5110=Status post - Arterial switch operation (ASO) <input type="checkbox"/> 5120=Status post - Arterial switch operation (ASO) and VSD repair <input type="checkbox"/> 5123=Status post - Arterial switch procedure + Aortic arch repair <input type="checkbox"/> 5125=Status post - Arterial switch procedure and VSD repair + Aortic arch repair <input type="checkbox"/> 5130=Status post - Senning <input type="checkbox"/> 5140=Status post - Mustard <input type="checkbox"/> 5145=Status post - Atrial baffle procedure, Mustard or Senning revision <input type="checkbox"/> 5150=Status post - Rastelli <input type="checkbox"/> 5160=Status post - REV |

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| | | <input type="checkbox"/> 6190=Status post - Aortic root translocation over left ventricle (Including Nikaidoh procedure) <input type="checkbox"/> 6210=Status post - TGA, Other procedures (Kawashima, LV-PA conduit, other) | |
| DORV | | <input type="checkbox"/> 5180=Status post - DORV, Intraventricular tunnel repair | |
| DOLV | | <input type="checkbox"/> 5200=Status post - DOLV repair | |
| Thoracic Arteries and Veins | Coarctation of Aorta and Aortic arch hypoplasia | <input type="checkbox"/> 5210=Status post - Coarctation repair, End to end <input type="checkbox"/> 5220=Status post - Coarctation repair, End to end, Extended <input type="checkbox"/> 5230=Status post - Coarctation repair, Subclavian flap <input type="checkbox"/> 5240=Status post - Coarctation repair, Patch aortoplasty <input type="checkbox"/> 5250=Status post - Coarctation repair, Interposition graft <input type="checkbox"/> 5260=Status post - Coarctation repair, Other <input type="checkbox"/> 5275=Status post - Coarctation repair + VSD repair <input type="checkbox"/> 5280=Status post - Aortic arch repair <input type="checkbox"/> 5285=Status post - Aortic arch repair + VSD repair | |
| | Coronary Artery Anomalies | <input type="checkbox"/> 5290=Status post - Coronary artery fistula ligation <input type="checkbox"/> 5291=Status post - Anomalous origin of coronary artery from pulmonary artery repair <input type="checkbox"/> 5300=Status post - Coronary artery bypass <input type="checkbox"/> 5305=Status post - Anomalous aortic origin of coronary artery (AAOCA) repair <input type="checkbox"/> 5310=Status post - Coronary artery procedure, Other | |
| | Interrupted Arch | <input type="checkbox"/> 5320=Status post - Interrupted aortic arch repair | |
| | Patent Ductus Arteriosus | <input type="checkbox"/> 5330=Status post - PDA closure, Surgical <input type="checkbox"/> 5340=Status post - PDA closure, Device | |
| | Vascular Rings and Slings | <input type="checkbox"/> 5360=Status post - Vascular ring repair <input type="checkbox"/> 5365=Status post - Aortopexy <input type="checkbox"/> 5370=Status post - Pulmonary artery sling repair | |
| | Aortic Aneurysm | <input type="checkbox"/> 5380=Status post - Aortic aneurysm repair | |
| | Aortic Dissection | <input type="checkbox"/> 5390=Status post - Aortic dissection repair | |
| | Thoracic and Mediastinal Disease | Lung Disease | <input type="checkbox"/> 5400=Status post - Lung biopsy <input type="checkbox"/> 1600=Status post - Transplant, lung(s) <input type="checkbox"/> 5420=Status post - Lung procedure, Other |
| | | Tracheal Stenosis | <input type="checkbox"/> 5440=Status post - Tracheal procedure |
| | | Chest Wall | <input type="checkbox"/> 6800=Status post - Muscle flap, Trunk (i.e. intercostal, pectus, or serratus muscle) <input type="checkbox"/> 6810=Status post - Muscle flap, Trunk (i.e. latissimus dorsi) <input type="checkbox"/> 6820=Status post - Removal, Sternal wire <input type="checkbox"/> 6830=Status post - Rib excision, Complete <input type="checkbox"/> 6840=Status post - Rib excision, Partial <input type="checkbox"/> 6850=Status post - Sternal fracture, Open treatment <input type="checkbox"/> 6860=Status post - Sternal resection, Radical resection of the sternum <input type="checkbox"/> 6870=Status post - Sternal resection, Radical resection of the sternum with mediastinal lymphadenectomy <input type="checkbox"/> 6880=Status post - Tumor of chest wall, Excision including ribs <input type="checkbox"/> 6890=Status post - Tumor of chest wall, Excision including ribs, With reconstruction <input type="checkbox"/> 6900=Status post - Tumor of soft tissue of thorax, Excision of deep subfascial or intramuscular tumor <input type="checkbox"/> 6910=Status post - Tumor of soft tissue of thorax, Excision of subcutaneous tumor <input type="checkbox"/> 6920=Status post - Tumor of soft tissue of thorax, Radical resection |
| Neck | | <input type="checkbox"/> 6930=Status post - Hyoid myotomy and suspension <input type="checkbox"/> 6940=Status post - Muscle flap, Neck <input type="checkbox"/> 6950=Status post - Procedure on neck <input type="checkbox"/> 6960=Status post - Tumor of soft tissue of neck, Excision of deep subfascial or intramuscular tumor <input type="checkbox"/> 6970=Status post - Tumor of soft tissue of neck, Excision of subcutaneous tumor <input type="checkbox"/> 6980=Status post - Tumor of soft tissue of neck, Radical resection | |

| | | |
|---|-----------------------------|--|
| | Pectus Excavatum, Carinatum | <input type="checkbox"/> 6990=Status post - Pectus bar removal <input type="checkbox"/> 7005=Status post - Pectus bar repositioning <input type="checkbox"/> 7010=Status post - Pectus repair, Minimally invasive repair (Nuss), With thoracoscopy <input type="checkbox"/> 7020=Status post - Pectus repair, Minimally invasive repair (Nuss), Without thoracoscopy <input type="checkbox"/> 7030=Status post - Pectus repair, Open repair |
| | Thoracic Outlet | <input type="checkbox"/> 7040=Status post - Division of scalenus anticus, With resection of a cervical rib <input type="checkbox"/> 7050=Status post - Division of scalenus anticus, Without resection of a cervical rib <input type="checkbox"/> 7060=Status post - Rib excision, Excision of a cervical rib <input type="checkbox"/> 7070=Status post - Rib excision, Excision of a cervical rib, With sympathectomy <input type="checkbox"/> 7080=Status post - Rib excision, Excision of first rib <input type="checkbox"/> 7090=Status post - Rib excision, Excision of first rib, With sympathectomy |
| | Thorax | <input type="checkbox"/> 7100=Status post - Procedure on thorax |
| Electrophysiological | | <input type="checkbox"/> 5450=Status post - Pacemaker implantation, Permanent <input type="checkbox"/> 5460=Status post - Pacemaker procedure <input type="checkbox"/> 6350=Status post - Explantation of pacing system <input type="checkbox"/> 5470=Status post - ICD (AICD) implantation <input type="checkbox"/> 5480=Status post - ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure <input type="checkbox"/> 5490=Status post - Arrhythmia surgery - atrial, Surgical Ablation <input type="checkbox"/> 5500=Status post - Arrhythmia surgery - ventricular, Surgical Ablation |
| Interventional Cardiology Procedures | | <input type="checkbox"/> 6500=Status post - Cardiovascular catheterization procedure, Diagnostic <input type="checkbox"/> 6520=Status post - Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained <input type="checkbox"/> 6550=Status post - Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration <input type="checkbox"/> 6540=Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration <input type="checkbox"/> 6510=Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained <input type="checkbox"/> 6530=Status post - Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion <input type="checkbox"/> 6410=Status post - Cardiovascular catheterization procedure, Therapeutic <input type="checkbox"/> 6670=Status post - Cardiovascular catheterization procedure, Therapeutic, Adjunctive therapy <input type="checkbox"/> 6570=Status post - Cardiovascular catheterization procedure, Therapeutic, Balloon dilation <input type="checkbox"/> 6590=Status post - Cardiovascular catheterization procedure, Therapeutic, Balloon valvotomy <input type="checkbox"/> 6600=Status post - Cardiovascular catheterization procedure, Therapeutic, Coil implantation <input type="checkbox"/> 6610=Status post - Cardiovascular catheterization procedure, Therapeutic, Device implantation <input type="checkbox"/> 7110=Status post - Cardiovascular catheterization procedure, Therapeutic, Device implantation attempted <input type="checkbox"/> 6690=Status post - Cardiovascular catheterization procedure, Therapeutic, Electrophysiological ablation <input type="checkbox"/> 7120=Status post - Cardiovascular catheterization procedure, Therapeutic, Intravascular foreign body removal <input type="checkbox"/> 6640=Status post - Cardiovascular catheterization procedure, Therapeutic, Perforation (establishing interchamber and/or intervessel communication) <input type="checkbox"/> 6580=Status post - Cardiovascular catheterization procedure, Therapeutic, Septostomy <input type="checkbox"/> 6620=Status post - Cardiovascular catheterization procedure, Therapeutic, Stent insertion <input type="checkbox"/> 6630=Status post - Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation <input type="checkbox"/> 6650=Status post - Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion <input type="checkbox"/> 6660=Status post - Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve |
| Palliative Procedures | | <input type="checkbox"/> 5590=Status post - Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS) <input type="checkbox"/> 5600=Status post - Shunt, Systemic to pulmonary, Central (shunt from aorta) <input type="checkbox"/> 7130=Status post - Shunt, Systemic to pulmonary, Central (shunt from aorta) Central shunt with an end-to-side connection between the transected main pulmonary artery and the side of the ascending aorta (i.e. Mee shunt) |

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| | <ul style="list-style-type: none"> <input type="checkbox"/> 7230=Status post – Shunt, Systemic to pulmonary, Potts – Smith type (descending aorta to pulmonary artery) <input type="checkbox"/> 5610=Status post - Shunt, Systemic to pulmonary, Other <input type="checkbox"/> 5630=Status post - Shunt, Ligation and takedown <input type="checkbox"/> 6095=Status post - Shunt, Reoperation <input type="checkbox"/> 5640=Status post - PA banding (PAB) <input type="checkbox"/> 5650=Status post - PA debanding <input type="checkbox"/> 7200=Status post - PA band adjustment <input type="checkbox"/> 5660=Status post - Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction) <input type="checkbox"/> 5670=Status post - Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn) <input type="checkbox"/> 5680=Status post - Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn) <input type="checkbox"/> 5690=Status post - Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn) <input type="checkbox"/> 5700=Status post - HemiFontan <input type="checkbox"/> 6330=Status post - Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty <input type="checkbox"/> 6130=Status post - Superior Cavopulmonary anastomosis(es) + PA reconstruction <input type="checkbox"/> 7300=Status post - Takedown of superior cavopulmonary anastomosis <input type="checkbox"/> 7140=Status post - Hepatic vein to azygous vein connection, Direct <input type="checkbox"/> 7150=Status post - Hepatic vein to azygous vein connection, Interposition graft <input type="checkbox"/> 7160=Status post - Kawashima operation (superior cavopulmonary connection in setting of interrupted IVC with azygous continuation) <input type="checkbox"/> 5710=Status post - Palliation, Other |
| Fetal Interventions | <ul style="list-style-type: none"> <input type="checkbox"/> 7240=Status post – Attempted fetal intervention, percutaneous transcatheter directed at interatrial septum <input type="checkbox"/> 7250=Status post – Attempted fetal intervention, percutaneous transcatheter directed at aortic valve <input type="checkbox"/> 7260=Status post – Attempted fetal intervention, percutaneous transcatheter directed at pulmonic valve <input type="checkbox"/> 7270=Status post – Attempted fetal intervention “open” (maternal laparotomy with hysterotomy), directed at interatrial septum <input type="checkbox"/> 7280=Status post – Attempted fetal intervention “open” (maternal laparotomy with hysterotomy), directed at aortic valve <input type="checkbox"/> 7290=Status post – Attempted fetal intervention “open” (maternal laparotomy with hysterotomy), directed at pulmonic valve |
| Mechanical Support | <ul style="list-style-type: none"> <input type="checkbox"/> 6360=Status post - ECMO cannulation <input type="checkbox"/> 6370=Status post - ECMO decannulation <input type="checkbox"/> 5910=Status post - ECMO procedure <input type="checkbox"/> 5900=Status post - Intraaortic balloon pump (IABP) insertion <input type="checkbox"/> 5920=Status post - Right/left heart assist device procedure <input type="checkbox"/> 6390=Status post - VAD explantation <input type="checkbox"/> 6380=Status post - VAD implantation <input type="checkbox"/> 7170=Status post - VAD change out |
| Anesthetic procedures | <ul style="list-style-type: none"> <input type="checkbox"/> 6420=Status post - Echocardiography procedure, Sedated transesophageal echocardiogram <input type="checkbox"/> 6430=Status post - Echocardiography procedure, Sedated transthoracic echocardiogram <input type="checkbox"/> 6435=Status post - Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia <input type="checkbox"/> 6440=Status post - Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan) <input type="checkbox"/> 6450=Status post - Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI) <input type="checkbox"/> 6460=Status post - Radiology procedure on cardiac patient, Diagnostic radiology <input type="checkbox"/> 6470=Status post - Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient <input type="checkbox"/> 6480=Status post - Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient <input type="checkbox"/> 6490=Status post - Radiology procedure on cardiac patient, Therapeutic radiology |

Miscellaneous Procedures

- 5720=Status post - Aneurysm, Ventricular, Right, Repair
- 5730=Status post - Aneurysm, Ventricular, Left, Repair
- 5740=Status post - Aneurysm, Pulmonary artery, Repair
- 5760=Status post - Cardiac tumor resection
- 5780=Status post - Pulmonary AV fistula repair/occlusion
- 5790=Status post - Ligation, Pulmonary artery
- 5802=Status post - Pulmonary embolectomy, Acute pulmonary embolus
- 5804=Status post - Pulmonary embolectomy, Chronic pulmonary embolus
- 5810=Status post - Pleural drainage procedure
- 5820=Status post - Pleural procedure, Other
- 5830=Status post - Ligation, Thoracic duct
- 5840=Status post - Decortication
- 5850=Status post - Esophageal procedure
- 5860=Status post - Mediastinal procedure
- 5870=Status post - Bronchoscopy
- 5880=Status post - Diaphragm plication
- 5890=Status post - Diaphragm procedure, Other
- 5930=Status post - VATS (video-assisted thoracoscopic surgery)
- 5940=Status post - Minimally invasive procedure
- 5950=Status post - Bypass for noncardiac lesion
- 5960=Status post - Delayed sternal closure
- 5970=Status post - Mediastinal exploration
- 5980=Status post - Sternotomy wound drainage
- 7180=Status post - Intravascular stent removal
- 7220= Status post – Removal of transcatheter delivered device from heart
- 7210= Status post – Removal of transcatheter delivered device from blood vessel
- 5990=Status post - Thoracotomy, Other
- 6000=Status post - Cardiotomy, Other
- 6010=Status post - Cardiac procedure, Other
- 6020=Status post - Thoracic and/or mediastinal procedure, Other
- 6030=Status post - Peripheral vascular procedure, Other
- 6040=Status post - Miscellaneous procedure, Other
- 11777=Status post - Other procedure

PROCEDURES

Select **ALL** procedures that apply. (↓)
 Procedure (930)

Circle the **ONE** PRIMARY procedure for this operation.
 PrimProc (940)

Septal Defects

ASD

- 10= PFO, Primary closure
- 20= ASD repair, Primary closure
- 30= ASD repair, Patch
- 40= ASD repair, Device
- 2110= ASD repair, Patch + PAPVC repair
- 50= ASD, Common atrium (single atrium), Septation
- 60= ASD creation/enlargement
- 70= ASD partial closure
- 80= Atrial septal fenestration
- 85= Atrial fenestration closure

VSD

- 100= VSD repair, Primary closure
- 110= VSD repair, Patch
- 120= VSD repair, Device

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| | | <input type="checkbox"/> 130= VSD, Multiple, Repair <input type="checkbox"/> 140= VSD creation/enlargement <input type="checkbox"/> 150= Ventricular septal fenestration |
| | AV Canal | <input type="checkbox"/> 170= AVC (AVSD) repair, Complete (CAVSD) <input type="checkbox"/> 180= AVC (AVSD) repair, Intermediate (Transitional) <input type="checkbox"/> 190= AVC (AVSD) repair, Partial (Incomplete) (PAVSD) <input type="checkbox"/> 2300= Valvuloplasty, Common atrioventricular valve <input type="checkbox"/> 2250= Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve <input type="checkbox"/> 2230= Valve replacement, Common atrioventricular valve |
| | AP Window | <input type="checkbox"/> 210= AP window repair <input type="checkbox"/> 220= Pulmonary artery origin from ascending aorta (hemitruncus) repair |
| | Truncus Arteriosus | <input type="checkbox"/> 230= Truncus arteriosus repair <input type="checkbox"/> 240= Valvuloplasty, Truncal valve <input type="checkbox"/> 2290= Valvuloplasty converted to valve replacement in the same operation, Truncal valve <input type="checkbox"/> 250= Valve replacement, Truncal valve <input type="checkbox"/> 2220= Truncus + Interrupted aortic arch repair (IAA) repair |
| Pulmonary Venous Anomalies | Partial Anomalous Pulmonary Venous Connection | <input type="checkbox"/> 260= PAPVC repair <input type="checkbox"/> 270= PAPVC, Scimitar, Repair <input type="checkbox"/> 2120= PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage) |
| | Total Anomalous Pulmonary Venous Connection | <input type="checkbox"/> 280= TAPVC repair <input type="checkbox"/> 2200= TAPVC repair + Shunt - systemic-to-pulmonary |
| Cor Triatriatum | | <input type="checkbox"/> 290= Cor triatriatum repair |
| Pulmonary Venous Stenosis | | <input type="checkbox"/> 300= Pulmonary venous stenosis repair |
| Systemic Venous Anomalies | Anomalous Systemic Venous Connection | <input type="checkbox"/> 310= Atrial baffle procedure (non-Mustard, non-Senning) <input type="checkbox"/> 330= Anomalous systemic venous connection repair |
| | Systemic venous obstruction | <input type="checkbox"/> 340= Systemic venous stenosis repair |
| | Tetralogy of Fallot | <input type="checkbox"/> 350= TOF repair, No Ventriculotomy <input type="checkbox"/> 360= TOF repair, Ventriculotomy, Nontransannular patch <input type="checkbox"/> 370= TOF repair, Ventriculotomy, Transannular patch <input type="checkbox"/> 380= TOF repair, RV-PA conduit <input type="checkbox"/> 390= TOF - AVC (AVSD) repair <input type="checkbox"/> 400= TOF - Absent pulmonary valve repair |
| | Pulmonary Atresia/VSD | <input type="checkbox"/> 420= Pulmonary atresia - VSD (including TOF, PA) repair <input type="checkbox"/> 2700= Pulmonary atresia - VSD – MAPCA repair, Complete single stage repair (1 stage that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit]) <input type="checkbox"/> 2710= Pulmonary atresia - VSD – MAPCA repair, Status post prior complete unifocalization (includes VSD closure + RV to PA connection [with or without conduit]) <input type="checkbox"/> 2720= Pulmonary atresia - VSD – MAPCA repair, Status post prior incomplete unifocalization (includes completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit]) <input type="checkbox"/> 2730= Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Complete unifocalization (all usable MAPCA[s] are incorporated) <input type="checkbox"/> 2740= Unifocalization MAPCA(s), Bilateral pulmonary unifocalization - Incomplete unifocalization (not all usable MAPCA[s] are incorporated) <input type="checkbox"/> 2750= Unifocalization MAPCA(s), Unilateral pulmonary unifocalization <input type="checkbox"/> 440= Unifocalization MAPCA(s) <input type="checkbox"/> 450= Occlusion of MAPCA(s) |
| Right Heart Lesions | Tricuspid Valve Disease and Ebstein's Anomaly | <input type="checkbox"/> 460= Valvuloplasty, Tricuspid (do not use this code if tricuspid valve malfunction is secondary to Ebstein's anomaly. Use 465= Ebstein's repair) <input type="checkbox"/> 2280= Valvuloplasty converted to valve replacement in the same operation, Tricuspid |

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| | | <input type="checkbox"/> 465= Ebstein's repair <input type="checkbox"/> 470= Valve replacement, Tricuspid (TVR) <input type="checkbox"/> 480= Valve closure, Tricuspid (exclusion, univentricular approach) <input type="checkbox"/> 490= Valve excision, Tricuspid (without replacement) <input type="checkbox"/> 500= Valve surgery, Other, Tricuspid |
| | RVOT Obstruction, IVS Pulmonary Stenosis | <input type="checkbox"/> 510= RVOT procedure <input type="checkbox"/> 520= 1 1/2 ventricular repair <input type="checkbox"/> 530= PA, reconstruction (plasty), Main (trunk) <input type="checkbox"/> 540= PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation) <input type="checkbox"/> 550= PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation) <input type="checkbox"/> 570= DCRV repair |
| | Pulmonary Valve Disease | <input type="checkbox"/> 590= Valvuloplasty, Pulmonic <input type="checkbox"/> 2270= Valvuloplasty converted to valve replacement in the same operation, Pulmonic <input type="checkbox"/> 600= Valve replacement, Pulmonic (PVR) <input type="checkbox"/> 630= Valve excision, Pulmonary (without replacement) <input type="checkbox"/> 640= Valve closure, Semilunar <input type="checkbox"/> 650= Valve surgery, Other, Pulmonic |
| Conduit operations | Conduit operations | <input type="checkbox"/> 610= Conduit placement, RV to PA <input type="checkbox"/> 620= Conduit placement, LV to PA <input type="checkbox"/> 1774= Conduit placement, Ventricle to aorta <input type="checkbox"/> 1772= Conduit placement, Other |
| | Conduit Stenosis / Insufficiency | <input type="checkbox"/> 580= Conduit reoperation |
| Left Heart Lesions | Aortic Valve Disease | <input type="checkbox"/> 660= Valvuloplasty, Aortic <input type="checkbox"/> 2240= Valvuloplasty converted to valve replacement in the same operation, Aortic <input type="checkbox"/> 2310= Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure <input type="checkbox"/> 2320= Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-Konno procedure <input type="checkbox"/> 670= Valve replacement, Aortic (AVR) <input type="checkbox"/> 680= Valve replacement, Aortic (AVR), Mechanical <input type="checkbox"/> 690= Valve replacement, Aortic (AVR), Bioprosthetic <input type="checkbox"/> 700= Valve replacement, Aortic (AVR), Homograft <input type="checkbox"/> 715= Aortic root replacement, Bioprosthetic <input type="checkbox"/> 720= Aortic root replacement, Mechanical <input type="checkbox"/> 730= Aortic root replacement, Homograft <input type="checkbox"/> 735= Aortic root replacement, Valve sparing <input type="checkbox"/> 740= Ross procedure <input type="checkbox"/> 750= Konno procedure <input type="checkbox"/> 760= Ross-Konno procedure <input type="checkbox"/> 770= Other annular enlargement procedure <input type="checkbox"/> 780= Aortic stenosis, Subvalvar, Repair <input type="checkbox"/> 2100= Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS <input type="checkbox"/> 790= Aortic stenosis, Supravalvar, Repair <input type="checkbox"/> 800= Valve surgery, Other, Aortic |
| | Sinus of Valsalva Aneurysm | <input type="checkbox"/> 810= Sinus of Valsalva, Aneurysm repair |
| | LV to Aorta Tunnel | <input type="checkbox"/> 820= LV to aorta tunnel repair |
| | Mitral Valve Disease | <input type="checkbox"/> 830= Valvuloplasty, Mitral <input type="checkbox"/> 2260= Valvuloplasty converted to valve replacement in the same operation, Mitral <input type="checkbox"/> 840= Mitral stenosis, Supravalvar mitral ring repair |

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| | | <input type="checkbox"/> 850= Valve replacement, Mitral (MVR) <input type="checkbox"/> 860= Valve surgery, Other, Mitral |
| | Hypoplastic Left Heart and Related malformations | <input type="checkbox"/> 870= Norwood procedure <input type="checkbox"/> 880= HLHS biventricular repair <input type="checkbox"/> 2755= Conduit insertion right ventricle to pulmonary artery + Intraventricular tunnel left ventricle to neo-aorta + arch reconstruction (Rastelli and Norwood type arch reconstruction) (Yasui) |
| Hybrid | | <input type="checkbox"/> 2160= Hybrid Approach "Stage 1", Application of RPA & LPA bands <input type="checkbox"/> 2170= Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) <input type="checkbox"/> 2180= Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands <input type="checkbox"/> 2140= Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Aortic arch repair (Norwood [Stage 1] + Superior Cavopulmonary anastomosis(es) + PA Debanding) <input type="checkbox"/> 2150= Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Without aortic arch repair <input type="checkbox"/> 2760= Hybrid Approach, Transcardiac balloon dilatation <input type="checkbox"/> 2770= Hybrid Approach, Transcardiac transcatheter device placement |
| Cardiomyopathy | | <input type="checkbox"/> 890= Transplant, Heart <input type="checkbox"/> 900= Transplant, Heart and lung <input type="checkbox"/> 910= Partial left ventriculectomy (LV volume reduction surgery) (Batista) |
| Pericardial Disease | | <input type="checkbox"/> 920= Pericardial drainage procedure <input type="checkbox"/> 930= Pericardiectomy <input type="checkbox"/> 940= Pericardial procedure, Other |
| Single Ventricle | | <input type="checkbox"/> 950= Fontan, Atrio-pulmonary connection <input type="checkbox"/> 960= Fontan, Atrio-ventricular connection <input type="checkbox"/> 970= Fontan, TCPC, Lateral tunnel, Fenestrated <input type="checkbox"/> 980= Fontan, TCPC, Lateral tunnel, Nonfenestrated <input type="checkbox"/> 1000= Fontan, TCPC, External conduit, Fenestrated <input type="checkbox"/> 1010= Fontan, TCPC, External conduit, Nonfenestrated <input type="checkbox"/> 2780= Fontan, TCPC, Intra/extracardiac conduit, Fenestrated <input type="checkbox"/> 2790= Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated <input type="checkbox"/> 3310 = Fontan, TCPC, External conduit, hepatic veins to pulmonary artery, Fenestrated <input type="checkbox"/> 3320 = Fontan, TCPC, External conduit, hepatic veins to pulmonary artery, Nonfenestrated <input type="checkbox"/> 1025= Fontan revision or conversion (Re-do Fontan) <input type="checkbox"/> 1030= Fontan, Other <input type="checkbox"/> 2340= Fontan + Atrioventricular valvuloplasty <input type="checkbox"/> 1035= Ventricular septation |
| Transposition of the Great Arteries | Congenitally Corrected TGA | <input type="checkbox"/> 1050=Congenitally corrected TGA repair, Atrial switch and ASO (double switch) <input type="checkbox"/> 1060= Congenitally corrected TGA repair, Atrial switch and Rastelli <input type="checkbox"/> 1070= Congenitally corrected TGA repair, VSD closure <input type="checkbox"/> 1080= Congenitally corrected TGA repair, VSD closure and LV to PA conduit <input type="checkbox"/> 1090= Congenitally corrected TGA repair, Other |
| | Transposition of the Great Arteries | <input type="checkbox"/> 1110= Arterial switch operation (ASO) <input type="checkbox"/> 1120= Arterial switch operation (ASO) and VSD repair <input type="checkbox"/> 1123= Arterial switch procedure + Aortic arch repair <input type="checkbox"/> 1125= Arterial switch procedure and VSD repair + Aortic arch repair <input type="checkbox"/> 1130= Senning <input type="checkbox"/> 1140= Mustard <input type="checkbox"/> 1145= Atrial baffle procedure, Mustard or Senning revision <input type="checkbox"/> 1150= Rastelli <input type="checkbox"/> 1160= REV |

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| | | <input type="checkbox"/> 2190= Aortic root translocation over left ventricle (Including Nikaidoh procedure) <input type="checkbox"/> 2210= TGA, Other procedures (Kawashima, LV-PA conduit, other) |
| DORV | | <input type="checkbox"/> 1180= DORV, Intraventricular tunnel repair |
| DOLV | | <input type="checkbox"/> 1200= DOLV repair |
| Thoracic Arteries and Veins | Coarctation of Aorta and Aortic arch hypoplasia | <input type="checkbox"/> 1210= Coarctation repair, End to end <input type="checkbox"/> 1220= Coarctation repair, End to end, Extended <input type="checkbox"/> 1230= Coarctation repair, Subclavian flap <input type="checkbox"/> 1240= Coarctation repair, Patch aortoplasty <input type="checkbox"/> 1250= Coarctation repair, Interposition graft <input type="checkbox"/> 1260= Coarctation repair, Other <input type="checkbox"/> 1275= Coarctation repair + VSD repair <input type="checkbox"/> 1280= Aortic arch repair <input type="checkbox"/> 1285= Aortic arch repair + VSD repair |
| | Coronary Artery Anomalies | <input type="checkbox"/> 1290= Coronary artery fistula ligation <input type="checkbox"/> 1291= Anomalous origin of coronary artery from pulmonary artery repair <input type="checkbox"/> 1300= Coronary artery bypass <input type="checkbox"/> 1305= Anomalous aortic origin of coronary artery (AAOCA) repair <input type="checkbox"/> 1310= Coronary artery procedure, Other |
| | Interrupted Arch | <input type="checkbox"/> 1320= Interrupted aortic arch repair |
| | Patent Ductus Arteriosus | <input type="checkbox"/> 1330= PDA closure, Surgical <input type="checkbox"/> 1340= PDA closure, Device |
| | Vascular Rings and Slings | <input type="checkbox"/> 1360= Vascular ring repair <input type="checkbox"/> 1365= Aortopexy <input type="checkbox"/> 1370= Pulmonary artery sling repair |
| | Aortic Aneurysm | <input type="checkbox"/> 1380= Aortic aneurysm repair |
| | Aortic Dissection | <input type="checkbox"/> 1390= Aortic dissection repair |
| | Lung Disease | <input type="checkbox"/> 1400= Lung biopsy <input type="checkbox"/> 1410= Transplant, lung(s) <input type="checkbox"/> 1420= Lung procedure, Other |
| | Tracheal Stenosis | <input type="checkbox"/> 1440= Tracheal procedure |
| | Thoracic and Mediastinal Disease | Chest Wall |
| Neck | | <input type="checkbox"/> 2930= Hyoid myotomy and suspension <input type="checkbox"/> 2940= Muscle flap, Neck <input type="checkbox"/> 2950= Procedure on neck <input type="checkbox"/> 2960= Tumor of soft tissue of neck, Excision of deep subfascial or intramuscular tumor <input type="checkbox"/> 2970= Tumor of soft tissue of neck, Excision of subcutaneous tumor |

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| | <input type="checkbox"/> 2980= Tumor of soft tissue of neck, Radical resection |
| Pectus Excavatum, Carinatum | <input type="checkbox"/> 2990= Pectus bar removal <input type="checkbox"/> 3000= Pectus bar repositioning <input type="checkbox"/> 3010= Pectus repair, Minimally invasive repair (Nuss), With thoracoscopy <input type="checkbox"/> 3020= Pectus repair, Minimally invasive repair (Nuss), Without thoracoscopy <input type="checkbox"/> 3030= Pectus repair, Open repair |
| | <input type="checkbox"/> 3040= Division of scalenus anticus, With resection of a cervical rib <input type="checkbox"/> 3050= Division of scalenus anticus, Without resection of a cervical rib <input type="checkbox"/> 3060= Rib excision, Excision of a cervical rib <input type="checkbox"/> 3070= Rib excision, Excision of a cervical rib, With sympathectomy <input type="checkbox"/> 3080= Rib excision, Excision of first rib <input type="checkbox"/> 3090= Rib excision, Excision of first rib, With sympathectomy |
| Thorax | <input type="checkbox"/> 3100= Procedure on thorax |
| Electrophysiological | <input type="checkbox"/> 1450= Pacemaker implantation, Permanent <input type="checkbox"/> 1460= Pacemaker procedure <input type="checkbox"/> 2350= Explantation of pacing system <input type="checkbox"/> 1470= ICD (AICD) implantation <input type="checkbox"/> 1480= ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure <input type="checkbox"/> 1490= Arrhythmia surgery - atrial, Surgical Ablation <input type="checkbox"/> 1500= Arrhythmia surgery - ventricular, Surgical Ablation |
| Interventional Cardiology Procedures | <input type="checkbox"/> 2500= Cardiovascular catheterization procedure, Diagnostic <input type="checkbox"/> 2520= Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained <input type="checkbox"/> 2550= Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration <input type="checkbox"/> 2540= Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration <input type="checkbox"/> 2510= Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained <input type="checkbox"/> 2530= Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion <input type="checkbox"/> 2410= Cardiovascular catheterization procedure, Therapeutic <input type="checkbox"/> 2670= Cardiovascular catheterization procedure, Therapeutic, Adjunctive therapy <input type="checkbox"/> 1540= Cardiovascular catheterization procedure, Therapeutic, Balloon dilation <input type="checkbox"/> 2590= Cardiovascular catheterization procedure, Therapeutic, Balloon valvotomy <input type="checkbox"/> 1580= Cardiovascular catheterization procedure, Therapeutic, Coil implantation <input type="checkbox"/> 1560= Cardiovascular catheterization procedure, Therapeutic, Device implantation <input type="checkbox"/> 3110= Cardiovascular catheterization procedure, Therapeutic, Device implantation attempted <input type="checkbox"/> 2690= Cardiovascular catheterization procedure, Therapeutic, Electrophysiological ablation <input type="checkbox"/> 3120= Cardiovascular catheterization procedure, Therapeutic, Intravascular foreign body removal <input type="checkbox"/> 2640= Cardiovascular catheterization procedure, Therapeutic, Perforation (establishing interchamber and/or intervessel communication) <input type="checkbox"/> 2580= Cardiovascular catheterization procedure, Therapeutic, Septostomy <input type="checkbox"/> 1550= Cardiovascular catheterization procedure, Therapeutic, Stent insertion <input type="checkbox"/> 2630= Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation <input type="checkbox"/> 2650= Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion <input type="checkbox"/> 2660= Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve |
| Palliative Procedures | <input type="checkbox"/> 1590= Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS) <input type="checkbox"/> 1600= Shunt, Systemic to pulmonary, Central (shunt from aorta) <input type="checkbox"/> 3130= Shunt, Systemic to pulmonary, Central (shunt from aorta) Central shunt with an end-to-side connection between the transected main pulmonary artery and the side of the ascending aorta (i.e. Mee shunt) <input type="checkbox"/> 3230= Shunt, Systemic to pulmonary, Potts – Smith type (descending aorta to pulmonary artery) |

| | |
|---------------------------------|---|
| | <ul style="list-style-type: none"> <input type="checkbox"/> 1610= Shunt, Systemic to pulmonary, Other <input type="checkbox"/> 1630= Shunt, Ligation and takedown <input type="checkbox"/> 2095= Shunt, Reoperation <input type="checkbox"/> 1640= PA banding (PAB) <input type="checkbox"/> 1650= PA debanding <input type="checkbox"/> 3200= PA band adjustment <input type="checkbox"/> 1660= Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction) <input type="checkbox"/> 1670= Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn) <input type="checkbox"/> 1680= Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn) <input type="checkbox"/> 1690= Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn) <input type="checkbox"/> 1700= HemiFontan <input type="checkbox"/> 2330= Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty <input type="checkbox"/> 2130= Superior Cavopulmonary anastomosis(es) + PA reconstruction <input type="checkbox"/> 3300 = Takedown of superior cavopulmonary anastomosis <input type="checkbox"/> 3140= Hepatic vein to azygous vein connection, Direct <input type="checkbox"/> 3150= Hepatic vein to azygous vein connection, Interposition graft <input type="checkbox"/> 3160= Kawashima operation (superior cavopulmonary connection in setting of interrupted IVC with azygous continuation) <input type="checkbox"/> 1710= Palliation, Other |
| Fetal Interventions | <ul style="list-style-type: none"> <input type="checkbox"/> 3240=Attempted fetal intervention, percutaneous trans-catheter directed at interatrial septum <input type="checkbox"/> 3250=Attempted fetal intervention, percutaneous trans-catheter directed at aortic valve <input type="checkbox"/> 3260=Attempted fetal intervention, percutaneous trans-catheter directed at pulmonic valve <input type="checkbox"/> 3270=Attempted fetal intervention "open" (maternal laparotomy with hysterotomy), directed at interatrial septum <input type="checkbox"/> 3280=Attempted fetal intervention "open" (maternal laparotomy with hysterotomy), directed at aortic valve <input type="checkbox"/> 3290=Attempted fetal intervention "open" (maternal laparotomy with hysterotomy), directed at pulmonic valve |
| Mechanical Support | <ul style="list-style-type: none"> <input type="checkbox"/> 2360= ECMO cannulation <input type="checkbox"/> 2370= ECMO decannulation <input type="checkbox"/> 1910= ECMO procedure <input type="checkbox"/> 1900= Intraaortic balloon pump (IABP) insertion <input type="checkbox"/> 1920= Right/left heart assist device procedure <input type="checkbox"/> 2390= VAD explantation <input type="checkbox"/> 2380= VAD implantation <input type="checkbox"/> 3170= VAD change out |
| Anesthetic procedures | <ul style="list-style-type: none"> <input type="checkbox"/> 2420= Echocardiography procedure, Sedated transesophageal echocardiogram <input type="checkbox"/> 2430= Echocardiography procedure, Sedated transthoracic echocardiogram <input type="checkbox"/> 2435= Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia <input type="checkbox"/> 2440= Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan) <input type="checkbox"/> 2450= Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI) <input type="checkbox"/> 2460= Radiology procedure on cardiac patient, Diagnostic radiology <input type="checkbox"/> 2470= Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient <input type="checkbox"/> 2480= Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient <input type="checkbox"/> 2490= Radiology procedure on cardiac patient, Therapeutic radiology |
| Miscellaneous Procedures | <ul style="list-style-type: none"> <input type="checkbox"/> 1720= Aneurysm, Ventricular, Right, Repair <input type="checkbox"/> 1730= Aneurysm, Ventricular, Left, Repair |

- 1740= Aneurysm, Pulmonary artery, Repair
- 1760= Cardiac tumor resection
- 1780= Pulmonary AV fistula repair/occlusion
- 1790= Ligation, Pulmonary artery
- 1802= Pulmonary embolectomy, Acute pulmonary embolus
- 1804= Pulmonary embolectomy, Chronic pulmonary embolus
- 1810= Pleural drainage procedure
- 1820= Pleural procedure, Other
- 1830= Ligation, Thoracic duct
- 1840= Decortication
- 1850= Esophageal procedure
- 1860= Mediastinal procedure
- 1870= Bronchoscopy
- 1880= Diaphragm plication
- 1890= Diaphragm procedure, Other
- 1930= VATS (video-assisted thoracoscopic surgery)
- 1940= Minimally invasive procedure
- 1950= Bypass for noncardiac lesion
- 1960= Delayed sternal closure
- 1970= Mediastinal exploration
- 1980= Sternotomy wound drainage
- 3180= Intravascular stent removal
- 3220= Removal of transcatheter delivered device from heart
- 3210= Removal of transcatheter delivered device from blood vessel
- 1990= Thoracotomy, Other
- 2000= Cardiotomy, Other
- 2010= Cardiac procedure, Other
- 2020= Thoracic and/or mediastinal procedure, Other
- 2030= Peripheral vascular procedure, Other
- 2040= Miscellaneous procedure, Other
- 2050= Organ procurement
- 7777= Other procedure

Operation Canceled or Aborted

Canceled operation
Aborted operation

- 7800= Operation canceled before skin incision
- 7810= Operation aborted after skin incision

PROCEDURE SPECIFIC FACTORS

Indicate if any of the following is the Primary procedure PSFPrimProc (949)

None of the listed procedures below (if none, skip to Operative section)

If one of the following is the Primary procedure, specify whether the procedure specific factors apply

VSD repair, Primary closure

VSD repair, Patch

VSD repair, Device

Apical VSD PSFApicalVSD (950)

Yes No

Straddling AV valve PSFStradAVVal (951)

Yes No

If the following is the Primary procedure, specify whether the procedure specific factors apply

TOF - AVC (AVSD) repair

Major coronary crossing RVOT - Coronary anomaly restricting RVOT enlargement PSFMajCorRVOT(952)

Yes No

VSD, Multiple, Repair PSFVSDMultRep (953)

Yes No

Restrictive VSD PSFRestrictVSD (954)

Yes No

Hypoplastic branch pulmonary arteries (diminished pulmonary vascular bed) PSFHypoBrPulmArt (955)

Yes No

AV Valve regurgitation grade 3 and 4 (Severe AV Valve regurgitation) PSFAVRegurg34 (956)

Yes No

Double orifice left atrioventricular valve PSFDoubOrif (957)

Yes No

Single papillary muscle in the left ventricle and/or parachute left atrioventricular valve PSFSingPap (958)

Yes No

Hypoplastic posterior mural leaflet PSFHypoPostMLeaf (959)

Yes No

Atrioventricular septal defect with ventricular imbalance: dominant left ventricle, hypoplastic right ventricle PSFASDDomLeft (960)

Yes No

Atrioventricular septal defect with ventricular imbalance: dominant right ventricle, hypoplastic left ventricle PSFASDDomRight (961)

Yes No

Common atrioventricular valve with unbalanced commitment of valve to left ventricle PSFCAVLeft (962)

Yes No

Common atrioventricular valve with unbalanced commitment of valve to right ventricle PSFCAVRight (963)

Yes No

If one of the following is the Primary procedure, specify whether the procedure specific factors apply

TOF repair, No ventriculotomy

TOF repair, Ventriculotomy, Nontransannular patch

TOF repair, Ventriculotomy, Transannular patch

TOF repair, RV-PA conduit

TOF - Absent pulmonary valve repair

Pulmonary atresia - VSD - MAPCA repair, Complete single stage repair (1-stage that includes bilateral pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])

Pulmonary atresia - VSD - MAPCA repair, Status post prior complete unifocalization (includes VSD closure + RV to PA connection [with or without conduit])

Pulmonary atresia - VSD - MAPCA repair, Status post prior incomplete unifocalization (includes completion of pulmonary unifocalization + VSD closure + RV to PA connection [with or without conduit])

Pulmonary atresia - VSD (including TOF, PA) repair

Major coronary crossing RVOT - Coronary anomaly restricting RVOT enlargement PSFMajCorRVOT(952)

Yes No

VSD, Multiple, Repair PSFVSDMultRep (953)

Yes No

Restrictive VSD PSFRestrictVSD (954)

Yes No

Hypoplastic branch pulmonary arteries (diminished pulmonary vascular bed) PSFHypoBrPulmArt (955)

Yes No

If one of the following is the Primary procedure, specify whether the procedure specific factors apply

AVC (AVSD) repair, Complete (CAVSD)

AV Valve regurgitation grade 3 and 4 (Severe AV Valve regurgitation) PSFAVRegurg34 (956)

Yes No

Double orifice left atrioventricular valve PSFDoubOrif (957)

Yes No

Single papillary muscle in the left ventricle and/or parachute left atrioventricular valve PSFSingPap (958)

Yes No

Hypoplastic posterior mural leaflet PSFHypoPostMLeaf (959)

Yes No

Atrioventricular septal defect with ventricular imbalance: dominant left ventricle and hypoplastic right ventricle PSFASDDomLeft (960)

Yes No

Atrioventricular septal defect with ventricular imbalance: dominant right ventricle and hypoplastic left ventricle PSFASDDomRight (961)

Yes No

Common atrioventricular valve with unbalanced commitment of valve to left ventricle PSFCAVLeft (962)

Yes No

Common atrioventricular valve with unbalanced commitment of valve to right ventricle PSFCAVRight (963)

Yes No

If one of the following is the Primary procedure, specify whether the procedure specific factors apply

- Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)
- Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)
- Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)
- HemiFontan
- Superior Cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty
- Superior Cavopulmonary anastomosis(es) + PA reconstruction

- AV Valve regurgitation grade 3 and 4 (Severe AV Valve regurgitation) PSFAVRegurg34 (956) Yes No
- Moderate to severe systemic ventricular dysfunction PSFModSevSVD (964) Yes No
- Hypoplastic branch pulmonary arteries (diminished pulmonary vascular bed) PSFHypoBrPulmArt (955) Yes No
- Systemic ventricular outflow tract obstruction (subaortic obstruction) PSFSysVentObs (965) Yes No
- Ventricular dominance PSFVentDom(966):
 - Left Ventricular dominance
 - Right Ventricular dominance
 - Balanced
 - Indeterminate Ventricular dominance

If one of the following is the Primary procedure, specify whether the procedure specific factors apply

- Fontan, Atrio-pulmonary connection
- Fontan, Atrio-ventricular connection
- Fontan, TCPC, Lateral tunnel, Fenestrated
- Fontan, TCPC, Lateral tunnel, Nonfenestrated
- Fontan, TCPC, External conduit, Fenestrated
- Fontan, TCPC, External conduit, Nonfenestrated
- Fontan, TCPC, Intra/extracardiac conduit, Fenestrated
- Fontan, TCPC, Intra/extracardiac conduit, Nonfenestrated
- Fontan, TCPC, External conduit, hepatic veins to pulmonary artery, Fenestrated
- Fontan, TCPC, External conduit, hepatic veins to pulmonary artery, Nonfenestrated
- Fontan, Other
- Fontan + Atrioventricular valvuloplasty
- Fontan revision or conversion (Re-do Fontan)

- AV Valve regurgitation grade 3 and 4 (Severe AV Valve regurgitation) PSFAVRegurg34 (956) Yes No
- Moderate to severe systemic ventricular dysfunction PSFModSevSVD (964) Yes No
- Hypoplastic branch pulmonary arteries (diminished pulmonary vascular bed) PSFHypoBrPulmArt (955) Yes No
- Systemic ventricular outflow tract obstruction (subaortic obstruction) PSFSysVentObs (965) Yes No
- Ventricular dominance PSFVentDom(966):
 - Left Ventricular dominance
 - Right Ventricular dominance
 - Balanced
 - Indeterminate Ventricular dominance

If one of the following is the Primary procedure, specify whether the procedure specific factors apply

- Arterial switch operation (ASO)
- Arterial switch procedure + Aortic arch repair

- Posterior coronary loop: circumflex coming off the RCA PSFPostLoopCirc (970) Yes No
- Posterior coronary loop: left trunk coming off the RCA PSFPostLoopLeftTrunc (971) Yes No
- Double coronary loops: inverted origin of right & left coronary arteries PSFDoubleLoops (972) Yes No
- Single coronary ostium PSFSingOst (973) Yes No
- Intramural coronary PSFIntramuralCor (974) Yes No
- Large infundibular coronary artery from LAD PSFLgInfundArt (975) Yes No
- Malaligned commissures PSFMalComm (976) Yes No
- Take down of a commissure PSFTakeDownComm (977) Yes No
- Aorto-pulmonary diameter mismatch PSFAortoPulMis (978) Yes No
- Side by side vessels PSFSidebySide (979) Yes No
- Posterior native aorta PSFPostNatAorta (980) Yes No
- Subaortic obstruction/ conal septum malalignment PSFSubAObs (981) Yes No
- Bicuspid native aortic valve (Bicuspid neopulmonary valve) PSFBicusNatAortic (982) Yes No
- Bicuspid native pulmonary valve (Bicuspid neo-aortic valve) PSFBicusNatPulm (983) Yes No

If one of the following is the Primary procedure, specify whether the procedure specific factors apply

- Arterial switch operation (ASO) and VSD repair
- Arterial switch procedure and VSD repair + Aortic arch repair
 - Posterior coronary loop: circumflex coming off the RCA PSFPostLoopCirc (970) Yes No
 - Posterior coronary loop: left trunk coming off the RCA PSFPostLoopLeftTrunc (971) Yes No
 - Double coronary loops: inverted origin of right & left coronary arteries PSFDoubleLoops (972) Yes No
 - Single coronary ostium PSFSingOst (973) Yes No
 - Intramural coronary PSFIntramuralCor (974) Yes No
 - Large infundibular coronary artery from LAD PSFLgInfundArt (975) Yes No
 - Malaligned commissures PSFMalComm (976) Yes No
 - Take down of a commissure PSFTakeDownComm (977) Yes No
 - Aorto-pulmonary diameter mismatch PSFAortoPulMis (978) Yes No
 - Side by side vessels PSFSidebySide (979) Yes No
 - Posterior native aorta PSFPostNatAorta (980) Yes No
 - Subaortic obstruction/ conal septum malalignment PSFSubAObs (981) Yes No
 - Bicuspid native aortic valve (Bicuspid neopulmonary valve) PSFBicusNatAortic (982) Yes No
 - Bicuspid native pulmonary valve (Bicuspid neoaortic valve) PSFBicusNatPulm (983) Yes No
 - Apical VSD PSFApicalVSD (950) Yes No
 - Straddling AV valve PSFStradAVVal (951) Yes No

If one of the following is the Primary procedure, specify whether the procedure specific factors apply

- Truncus arteriosus repair
- Truncus + Interrupted aortic arch repair (IAA) repair
 - Truncus type 3 (PA Branches from PDA or descending aorta) PSFTruncType3 (984) Yes No
 - Abnormal coronary PSFAbnormalCor (985) Yes No
 - Truncal valve regurgitation (moderate to severe) PSFTruncValRegurg (986) Yes No
 - Truncal valve stenosis (moderate to severe) PSFTruncValSten (987) Yes No

If the following is the Primary procedure, specify whether the procedure specific factors apply

- Norwood procedure
 - Source of pulmonary blood flow: Shunt - systemic artery-to-pulmonary artery PSFSrcPulFloShuntSys (988) Yes No
 - Source of pulmonary blood flow: Shunt - ventricle-to-pulmonary artery PSFSrcPulFloShuntVent (989) Yes No
 - Source of pulmonary blood flow: Superior caval vein-to-pulmonary artery PSFSrcPulFloSuper (990) Yes No
 - Ascending aorta < 2 mm PSFAscAortaLT2 (991) Yes No
 - Aortic atresia PSFAortAtresia (992) Yes No
 - Aortic stenosis PSFAortSten (993) Yes No
 - Mitral atresia PSFMitralAtresia (994) Yes No
 - Mitral stenosis PSFMitralSten (995) Yes No
 - Sinusoids PSFSinusoids (996) Yes No
 - Intact atrial septum PSFIntactAtrSep (997) Yes No
 - Obstructed pulmonary venous return with severely restrictive ASD PSFObsPulVenRet (998) Yes No
 - AV Valve regurgitation grade 3 and 4 (Severe AV Valve regurgitation) PSFAVRegurg34 (956) Yes No
 - Aberrant right subclavian artery PSFAberrantRtSubclav (999) Yes No
 - Ventricular dominance PSFVentDom(966):
 - Left Ventricular dominance
 - Right Ventricular dominance
 - Balanced
 - Indeterminate Ventricular dominance

If the following is the Primary procedure, specify whether the procedure specific factors apply

Ebstein's repair

Tricuspid Valve Repair **PSFTVRep(1001)**

If Yes→ Monocusp **PSFTVRepMono(1002)**

Bileaflet repair **PSFTVRepBiLeaf(1004)**

Cone repair (360° leaflet approximation) **PSFTVRepCone(1006)**

Sebening stitch (anterior RV papillary muscle to ventricular septum) **PSFSebening (1008)**

Annular reduction **PSFAnnRed (1009)**

If Yes→ Plication **PSFAnnRedPlic (1010)**

Partial ring (c-shaped anterior & inferior annulus) **PSFAnnRedPartial(1012)**

Eccentric ring (inferior annulus) **PSFAnnRedEccent (1014)**

Atrialized RV plication **PSFAtrialRVPlic (1016)**

Atrialized RV resection **PSFAtrialRVRes (1018)**

ASD/PFO closure **PSFASDPFO (1020)**

Reduction atrioplasty **PSFRedAtrio (1022)**

Arrhythmia surgery **PSFArrSurg (1023)**

If Yes→ Cavotricuspid isthmus ablation **PSFArrSurgCavo (1024)**

Modified right atrial maze **PSFArrSurgModMaze (1026)**

Left atrial Cox maze **PSFArrSurgCoxMaze (1028)**

Pulmonary vein isolation **PSFArrSurgPulIso (1030)**

Bidirectional cavopulmonary anastomosis **PSFBiCavoAnast (1032)**

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No Subtotal

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

OPERATIVE

Procedure Location:

ProcLoc (1054)

Cardiac OR

General OR

Hybrid Suite

Cath lab

ICU

CVICU

NICU

PICU

SICU

Radiology Suite

Procedure Room

Other

Status: **Status (1055)**

Elective

Urgent

Emergent

Salvage

Operation Type:

OpType (1056)

CPB Cardiovascular

No CPB Cardiovascular

CPB Non-Cardiovascular

ECMO

Thoracic

Interventional Cardiology

VAD with CPB

VAD without CPB

NonCardiac/NonThoracic Procedure w/ Anesthesia

Other

Near Infrared Spectroscopy (NIRS) Cerebral Metrics Used: **NIRSCerUsed (1057)**

Yes No

If NIRSCerUsed is Yes→

NIRS Cerebral Metrics Used Preoperatively **NIRSCerPre (1058)**

Yes No

NIRS Cerebral Metrics Used Intraoperatively **NIRSCerIntra (1059)**

Yes No

NIRS Cerebral Metrics Used Postoperatively **NIRSCerPost (1060)**

Yes No

Near Infrared Spectroscopy (NIRS) Somatic Metrics Used: **NIRSSomUsed(1061)**

Yes No

If NIRSSomUsed is Yes→

NIRS Somatic Metrics Used Preoperatively **NIRSSomPre (1062)**

Yes No

NIRS Somatic Metrics Used Intraoperatively **NIRSSomIntra (1063)**

Yes No

NIRS Somatic Metrics Used Postoperatively **NIRSSomPost (1064)**

Yes No

OR Entry Time: (00:00 – 23:59) __:__:__ **OREntryT (1065)**

Skin Incision Start Time: (00:00 – 23:59) __:__:__ **SISStartT (1066)**

Endotracheal Intubation Performed: Yes No (If Yes ↓) **Intubate (1067)**

Intubation Date/Time: **IntubateDT (1068)**

(mm/dd/yyyy 00:00 – 23:59) __/__/____ :__

Initial Extubation Date/Time: **ExtubateDT (1069)**

(mm/dd/yyyy 00:00 – 23:59) __/__/____ :__

Extubated in OR: **ExtubInOR (1070)** Yes No

Re-Intubated After Initial Postoperative Extubation: Yes No (If Yes ↓) **ReIntubate (1071)**

Final Extubation Date/Time: (mm/dd/yyyy 00:00 – 23:59) __/__/____ :__ **FinExtubDT (1072)**

Time of Skin Closure: (00:00 – 23:59) __:__:__

SISStopT (1073)

OR Exit Time: (00:00 – 23:59) __:__:__

ORExitT (1074)

Extended Through Midnight: Yes No

MultiDay (1075)

If Op type is: "NonCardiac/NonThoracic Procedure w/Anesthesia" or "Interventional Cardiology" → Skip to Complications section.

Surgeon:

Surgeon (1076)

Surgeon NPI:

SurgNPI (1078)

Taxpayer Identification Number:

TIN (1079)

Reoperation Within This Admission: **ReOpInAdm (1080)** Yes – Planned reoperation

Yes – Unplanned reoperation

No

| | | | | | | | |
|--|--|---|--|--|---|---|---|
| Number of Prior Cardiothoracic Operations: PrvCtOpN (1090) | Number of Prior CPB Cardiothoracic Operations: PrvOClOpN (1100) | | | | | | |
| <i>(If operation type is No CPB Cardiovascular →)</i> Cross Clamp Time – No CPB: (minutes): XClampTmNC (1130) | | | | | | | |
| <i>(If operation type is CPB Cardiovascular or VAD w/ CPB or CPB NonCardiovascular ↓)</i> CPB Blood Prime: <input type="checkbox"/> Yes <input type="checkbox"/> No CPB Time (min): _____ Cross Clamp Time - CPB:(min): _____ Circulatory Arrest Time (min): _____ CPBPrimed (1140) <input type="checkbox"/> No CPBTm (1150) _____ XClampTm (1160) _____ DHCATm (1170) _____ | | | | | | | |
| Patient Temperature Monitoring Site : (If Yes, Lowest Core Temperature recorded at site): Bladder: <input type="checkbox"/> Yes <input type="checkbox"/> No TempSiteBla (1180) _____ <i>(If Yes →)</i> _____ °C LowCTmpBla (1190) Esophageal: <input type="checkbox"/> Yes <input type="checkbox"/> No TempSiteEso (1200) _____ <i>(If Yes →)</i> _____ °C LowCTmpEso (1210) Nasopharyngeal: <input type="checkbox"/> Yes <input type="checkbox"/> No TempSiteNas (1220) _____ <i>(If Yes →)</i> _____ °C LowCTmpNas (1230) Rectal: <input type="checkbox"/> Yes <input type="checkbox"/> No TempSiteRec (1240) _____ <i>(If Yes →)</i> _____ °C LowCTmpRec (1250) Tympanic: <input type="checkbox"/> Yes <input type="checkbox"/> No TempSiteTym (1260) _____ <i>(If Yes →)</i> _____ °C LowCTmpTym (1270) Other: <input type="checkbox"/> Yes <input type="checkbox"/> No TempSiteOth (1280) _____ <i>(If Yes →)</i> _____ °C LowCTmpOth (1290) | | | | | | | |
| Cooling Time: (minutes) CoolTime (1300) _____ Rewarming Time: (minutes) RewarmTime (1310) _____ Cerebral Perfusion Utilized: CPerfUtil (1320) <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If Yes ↓)</i> Cerebral Perfusion Time: _____ <i>(minutes)</i> CPerfTime (1330) Cerebral Perfusion Cannulation Site: <table style="width:100%; border:none;"> <tr> <td style="width:50%; border:none;"> Innominate Artery <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanInn (1340) Right Axillary Artery <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanRAx (1360) Left Carotid Artery <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanLCar (1380) </td> <td style="width:50%; border:none;"> Right Subclavian <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanRSub(1350) Right Carotid Artery <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanRCar (1370) Superior Vena Cava <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanSVC (1390) </td> </tr> </table> | | Innominate Artery <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanInn (1340) Right Axillary Artery <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanRAx (1360) Left Carotid Artery <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanLCar (1380) | Right Subclavian <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanRSub(1350) Right Carotid Artery <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanRCar (1370) Superior Vena Cava <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanSVC (1390) | | | | |
| Innominate Artery <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanInn (1340) Right Axillary Artery <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanRAx (1360) Left Carotid Artery <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanLCar (1380) | Right Subclavian <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanRSub(1350) Right Carotid Artery <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanRCar (1370) Superior Vena Cava <input type="checkbox"/> Yes <input type="checkbox"/> No CPerfCanSVC (1390) | | | | | | |
| Cerebral Perfusion Periods: CPerfPer (1400) _____ Cerebral Perfusion Flow Rate: CPerfFlow (1410) _____ <i>(mL/kg) per minute</i> Cerebral Perfusion Temperature: CPerfTemp (1420) _____ °C | | | | | | | |
| Arterial Blood Gas Management During Cooling: ABldGasMgt (1430) <table style="width:100%; border:none;"> <tr> <td style="width:50%; border:none;"><input type="checkbox"/> Alpha STAT</td> <td style="width:50%; border:none;"><input type="checkbox"/> pH STAT</td> </tr> <tr> <td style="border:none;"><input type="checkbox"/> pHSTAT cooling/Alpha STAT rewarming</td> <td style="border:none;"><input type="checkbox"/> Other Combination</td> </tr> </table> | | <input type="checkbox"/> Alpha STAT | <input type="checkbox"/> pH STAT | <input type="checkbox"/> pHSTAT cooling/Alpha STAT rewarming | <input type="checkbox"/> Other Combination | | |
| <input type="checkbox"/> Alpha STAT | <input type="checkbox"/> pH STAT | | | | | | |
| <input type="checkbox"/> pHSTAT cooling/Alpha STAT rewarming | <input type="checkbox"/> Other Combination | | | | | | |
| Hematocrit Prior to Circulatory Arrest or Cerebral Perfusion: HCTPriCircA (1440) _____ <input type="checkbox"/> Retrograde <input type="checkbox"/> Both Cardioplegia Delivery: CplegiaDeliv (1450) <input type="checkbox"/> None <input type="checkbox"/> Antegrade <input type="checkbox"/> Retrograde <input type="checkbox"/> Both <i>If CplegiaDeliv is Antegrade, Retrograde or Both ↓</i> Cardioplegia Type: <input type="checkbox"/> Blood <input type="checkbox"/> Crystalloid <input type="checkbox"/> Both <input type="checkbox"/> Other CPlegiaType (1460) Cardioplegia Solution: <input type="checkbox"/> del Nido <input type="checkbox"/> Celsior CPlegiaSolution (1470) <input type="checkbox"/> Custodiol / Bretschneider (HTK) <input type="checkbox"/> Roe's Solution <input type="checkbox"/> Buckberg <input type="checkbox"/> Microplegia with Potassium <input type="checkbox"/> Plegisol / St. Thomas <input type="checkbox"/> Microplegia with Adenocaine <input type="checkbox"/> University of Wisconsin <input type="checkbox"/> Other Cardioplegia Number of Doses:CPlegiaDose(1490) _____ | | | | | | | |
| Hematocrit - First after initiating CPB: HCTFirst (1640) _____ Ultrafiltration performed After CPB:Ultrafiltration (1670) Hematocrit - Last Measured During CPB: HCTLast (1650) _____ <input type="checkbox"/> No Hematocrit – Post CPB, Post Protamine: HCTPost (1660) _____ <input type="checkbox"/> Yes, Modified Ultrafiltration (MUF) <input type="checkbox"/> Yes, Conventional Ultrafiltration (CUF) <input type="checkbox"/> Yes, MUF and CUF | | | | | | | |
| Pulmonary Vascular Resistance Measured: <input type="checkbox"/> Yes <input type="checkbox"/> No PVRMeas (1770) <i>(If Yes and WeightKg ≥40 →)</i> PVR: _____ <i>(Wood units)</i> PVR (1780) <i>(If Yes and WeightKg <40 →)</i> PVR Index: _____ <i>(Wood units x m2)</i> PVRI (1790) | | | | | | | |
| Blood and Blood Related Products (Including CPB Blood Prime Units) | | | | | | | |
| Autologous Transfusion: <input type="checkbox"/> Yes <input type="checkbox"/> No AutologousTrans (2461) Cell Saver/Salvage Reinfused: <input type="checkbox"/> Yes <input type="checkbox"/> No CellSavSal (2462) | | | | | | | |
| Transfusion of Non-Autologous Blood Products During or After Procedure: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Patient/family refused TransfusBldProdAny (2743) <i>(If Yes →)</i> Transfusion of Blood Products During Procedure: <input type="checkbox"/> Yes <input type="checkbox"/> No Transfusion (2744) <i>(If Yes ↓)</i> <table style="width:100%; border:none;"> <tr> <td style="width:50%; border:none;"># Units Packed Red Blood Cells _____ BldProdPRBCDur (2751) _____ <i>(0-100)</i></td> <td style="width:50%; border:none;"># Units Fresh Frozen Plasma _____ BldProdFFPDur (2754) _____ <i>(0-100)</i></td> </tr> <tr> <td style="border:none;"># Units Fresh Plasma _____ BldProdFreshPDur (2757) _____ <i>(0-100)</i></td> <td style="border:none;"># Units Single Donor Pheresis Platelets _____ BldProdSnglPlatDur (2760) _____ <i>(0-100)</i></td> </tr> <tr> <td style="border:none;"># Units Individual Platelets _____ BldProdIndPlatDur (2763) _____ <i>(0-100)</i></td> <td style="border:none;"># Units Cryoprecipitate _____ BldProdCryoDur (2766) _____ <i>(0-100)</i></td> </tr> </table> | | # Units Packed Red Blood Cells _____ BldProdPRBCDur (2751) _____ <i>(0-100)</i> | # Units Fresh Frozen Plasma _____ BldProdFFPDur (2754) _____ <i>(0-100)</i> | # Units Fresh Plasma _____ BldProdFreshPDur (2757) _____ <i>(0-100)</i> | # Units Single Donor Pheresis Platelets _____ BldProdSnglPlatDur (2760) _____ <i>(0-100)</i> | # Units Individual Platelets _____ BldProdIndPlatDur (2763) _____ <i>(0-100)</i> | # Units Cryoprecipitate _____ BldProdCryoDur (2766) _____ <i>(0-100)</i> |
| # Units Packed Red Blood Cells _____ BldProdPRBCDur (2751) _____ <i>(0-100)</i> | # Units Fresh Frozen Plasma _____ BldProdFFPDur (2754) _____ <i>(0-100)</i> | | | | | | |
| # Units Fresh Plasma _____ BldProdFreshPDur (2757) _____ <i>(0-100)</i> | # Units Single Donor Pheresis Platelets _____ BldProdSnglPlatDur (2760) _____ <i>(0-100)</i> | | | | | | |
| # Units Individual Platelets _____ BldProdIndPlatDur (2763) _____ <i>(0-100)</i> | # Units Cryoprecipitate _____ BldProdCryoDur (2766) _____ <i>(0-100)</i> | | | | | | |

| | | | | | |
|---|---|---------|---|-------|---------|
| # Units Fresh Whole Blood BldProdFreshWBDur (2769) | _____ | (0-100) | # Units Whole Blood BldProdWBDur (2772) | _____ | (0-100) |
| (If Yes →) Transfusion of Blood Products within 24 hours post procedure: <input type="checkbox"/> Yes <input type="checkbox"/> No TransfusBldProdLT24 (2779) (If Yes ↓) | | | | | |
| # Units Packed Red Blood Cells BldProdPRBCLT24 (2780) | _____ | (0-100) | # Units Fresh Frozen Plasma BldProdFFPLT24 (2781) | _____ | (0-100) |
| # Units Fresh Plasma BldProdFreshPLT24 (2782) | _____ | (0-100) | # Units Single Donor Pheresis Platelets BldProdSnglPlatLT24 (2783) | _____ | (0-100) |
| # Units Individual Platelets BldProdIndPlatLT24 (2784) | _____ | (0-100) | # Units Cryoprecipitate BldProdCryoLT24 (2785) | _____ | (0-100) |
| # Units Fresh Whole Blood BldProdFreshWBLT24 (2786) | _____ | (0-100) | # Units Whole Blood BldProdWBLT (2787) | _____ | (0-100) |
| (If Yes →) Transfusion of Blood Products after 24 hours post procedure: <input type="checkbox"/> Yes <input type="checkbox"/> No TransfusBldProdGT24 (2788) (If Yes ↓) | | | | | |
| # Units Packed Red Blood Cells BldProdPRBCGT24 (2789) | _____ | (0-100) | # Units Fresh Frozen Plasma BldProdFFPGT24 (2790) | _____ | (0-100) |
| # Units Fresh Plasma BldProdFreshPGT24 (2791) | _____ | (0-100) | # Units Single Donor Pheresis Platelets BldProdSnglPlatGT24 (2792) | _____ | (0-100) |
| # Units Individual Platelets BldProdIndPlatGT24 (2793) | _____ | (0-100) | # Units Cryoprecipitate BldProdCryoGT24 (2794) | _____ | (0-100) |
| # Units Fresh Whole Blood BldProdFreshWBG24 (2795) | _____ | (0-100) | # Units Whole Blood BldProdWBG24 (2796) | _____ | (0-100) |
| (If Yes →) Directed Donor Units: <input type="checkbox"/> Yes <input type="checkbox"/> No DirDonorUnits (2797) | | | | | |
| Antifibrinolytics Used Intraoperatively: <input type="checkbox"/> Yes <input type="checkbox"/> No AntifibUsage (2798) | | | | | |
| (If Yes →) Epsilon Amino-Caproic Acid (Amicar, EACA) Used: <input type="checkbox"/> Yes <input type="checkbox"/> No AntifibEpUse (2799) | | | | | |
| (If Yes →) Epsilon Amino-Caproic Acid (Amicar, EACA) Load mg/kg: | _____ | (0-300) | AntifibEpLoad (2800) | | |
| Epsilon Amino-Caproic Acid (Amicar, EACA) Pump Prime mg/kg: | _____ | (0-300) | AntifibEpPrime (2801) | | |
| (If AntifinEpPrime > 0) Was Epsilon Amino-Caproic Acid (Amicar, EACA) dosed as mg/ml of Pump Prime: | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown AntifibEpPrimeDose (2802) | | | | |
| Epsilon Amino-Caproic Acid (Amicar, EACA) Infusion rate mg/kg/hr:: | _____ | (0-200) | AntifibEplnfRate (2803) | | |
| Tranexamic Acid Used: <input type="checkbox"/> Yes <input type="checkbox"/> No AntifibTranexUse (2804) | | | | | |
| (If Yes →) Tranexamic Acid Load mg/kg: | _____ | (0-150) | AntifibTranexLoad (2805) | | |
| Tranexamic Acid Pump Prime mg/kg: | _____ | (0-150) | AntifibTranexPrime (2806) | | |
| (If AntifibTranexPrime > 0) Was Tranexamic Acid dosed as mg/ml of Pump Prime: | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown AntifibTranexPrimeDose (2807) | | | | |
| Tranexamic Acid Infusion rate mg/kg/hr:: | _____ | (0-50) | AntifibTranexInfRate (2809) | | |
| Trasylol (Aprotinin) Used: <input type="checkbox"/> Yes <input type="checkbox"/> No AntifibTrasylUse (2810) | | | | | |
| (If Yes →) Trasylol (Aprotinin) Load cc/kg: | _____ | (0-10) | AntifibTrasylLoad (2811) | | |
| Trasylol (Aprotinin) Pump Prime cc/kg: | _____ | (0-10) | AntifibTrasylPrime (2812) | | |
| Trasylol (Aprotinin) Infusion rate cc/kg/hr:: | _____ | (0-10) | AntifibTrasylInfRate (2813) | | |
| Procoagulant Used Intraoperatively: <input type="checkbox"/> Yes <input type="checkbox"/> No ProcoagUsage (2815) | | | | | |
| (If Yes →) Factor VIIa (Novoseven) Usage: <input type="checkbox"/> Yes <input type="checkbox"/> No ProcoagFactorVIIa (2816) | | | | | |
| (If Yes →) Factor VIIa (Novoseven) mcg/kg Dose 1: | _____ | (1-200) | ProcoagFactorVIIa1 (2817) | | |
| Factor VIIa (Novoseven) mcg/kg Dose 2: | _____ | (0-200) | ProcoagFactorVIIa2 (2818) | | |
| (If Dose 2 > 0 →) Factor VIIa (Novoseven) mcg/kg Dose 3: | _____ | (0-200) | ProcoagFactorVIIa3 (2819) | | |
| Prothrombin Complex Concentrate-4 (PCC-4, KCentra) Usage: <input type="checkbox"/> Yes <input type="checkbox"/> No ProComplexCon4 (2823) | | | | | |
| (If Yes →) Prothrombin Complex Concentrate-4 (PCC-4, KCentra) units/kg Dose 1: | _____ | (1-100) | ProComplexCon4Ds1 (2824) | | |
| Prothrombin Complex Concentrate-4 (PCC-4, KCentra) units/kg Dose 2: | _____ | (0-100) | ProComplexCon4Ds2 (2825) | | |
| (If Dose 2 > 0 →) Prothrombin Complex Concentrate-4 (PCC-4, KCentra) units/kg Dose 3: | _____ | (0-100) | ProComplexCon4Ds3 (2826) | | |
| Prothrombin Complex Concentrate-4 with Factor VIIa (FEIBA) Usage: <input type="checkbox"/> Yes <input type="checkbox"/> No ProComplexCon4W7a (2827) | | | | | |
| (If Yes →) Prothrombin Complex Concentrate-4 with Factor VIIa (FEIBA) units/kg Dose 1: | _____ | (1-200) | ProComplexCon4W7a1 (2828) | | |
| Prothrombin Complex Concentrate-4 with Factor VIIa (FEIBA) units/kg Dose 2: | _____ | (0-200) | ProComplexCon4W7a2 (2829) | | |

| | | |
|---|---|-------------------|
| <i>(If Dose 2 > 0 →)</i> | Prothrombin Complex Concentrate-4 with Factor VIIa (FEIBA) units/kg Dose 1: ProComplxCon4W7a3 (2830) | _____ (0-200) |
| <i>(If Yes →)</i> | Prothrombin Complex Concentrate-3 (PCC-3, ProfilNine-SD) Usage: <input type="checkbox"/> Yes <input type="checkbox"/> No ProComplxCon3 (2831) Prothrombin Complex Concentrate-3 (PCC-3, ProfilNine-SD) units/kg Dose 1: ProComplxCon3Ds1 (2832) | _____ (1-5) |
| | Prothrombin Complex Concentrate-3 (PCC-3, ProfilNine-SD) units/kg Dose 2: ProComplxCon3Ds2 (2833) | _____ (0-5) |
| <i>(If Dose 2 > 0 →)</i> | Prothrombin Complex Concentrate-3 (PCC-3, ProfilNine-SD) units/kg Dose 3: ProComplxCon3Ds3 (2834) | _____ (0-5) |
| Octaplex Prothrombin Concentrate Usage: <input type="checkbox"/> Yes <input type="checkbox"/> No Octaplex (2835) | | |
| <i>(If Yes →)</i> | Octaplex Prothrombin Concentrate – units Dose 1: OctaplexDs1 (2836) | _____ (1-6000) |
| | Octaplex Prothrombin Concentrate – units Dose 2: OctaplexDs2 (2837) | _____ (0-6000) |
| <i>(If Dose 2 > 0 →)</i> | Octaplex Prothrombin Concentrate – units Dose 3: OctaplexDs3 (2838) | _____ (0-6000) |
| Fibrinogen Concentrate Usage: <input type="checkbox"/> Yes <input type="checkbox"/> No ProcoagFibrin (2840) | | |
| <i>(If Yes →)</i> | Fibrinogen Concentrate mg/kg – Dose 1 ProcoagFibrin1 (2841) | _____ (1-100) |
| | Fibrinogen Concentrate mg/kg – Dose 2 ProcoagFibrin2 (2842) | _____ (0-100) |
| <i>(If Dose 2 > 0 →)</i> | Fibrinogen Concentrate mg/kg – Dose 3 ProcoagFibrin3 (2843) | _____ (0-100) |
| Antithrombin 3 Concentrate (AT3) Usage: <input type="checkbox"/> Yes <input type="checkbox"/> No ProcoagAntithrom (2844) | | |
| <i>(If Yes →)</i> | Antithrombin 3 Concentrate (AT3) units Dose 1: ProcoagAntithrom1 (2845) | _____ (1-5000) |
| | Antithrombin 3 Concentrate (AT3) units Dose 2: ProcoagAntithrom2 (2846) | _____ (0-5000) |
| <i>(If Dose 2 > 0 →)</i> | Antithrombin 3 Concentrate (AT3) units Dose 3 ProcoagAntithrom3 (2847) | _____ (0-5000) |
| Desmopressin (DDAVP) Usage: <input type="checkbox"/> Yes <input type="checkbox"/> No ProcoagDesmo (2848) | | |
| <i>(If Yes →)</i> | Desmopressin (DDAVP) mcg/kg Dose 1: ProcoagDesmo1 (2849) | _____ (0.01-6.00) |
| | Desmopressin (DDAVP) mcg/kg Dose 2: ProcoagDesmo2 (2850) | _____ (0-6.00) |
| <i>(If Dose 2 > 0 →)</i> | Desmopressin (DDAVP) mcg/kg Dose 3: ProcoagDesmo3 (2851) | _____ (0-6.00) |
| Point of Care Coagulation Testing Used Intraoperatively: <input type="checkbox"/> Yes <input type="checkbox"/> No POCCoagTstUtil (2852) | | |
| <i>(If Yes →)</i> | Thromboelastography (TEG): <input type="checkbox"/> Yes <input type="checkbox"/> No POCCoagTstTEG (2853) | |
| | ROTEM: <input type="checkbox"/> Yes <input type="checkbox"/> No POCCoagTstROTEM (2854) | |
| | Sonoclot: <input type="checkbox"/> Yes <input type="checkbox"/> No POCCoagTstSon (2855) | |
| | Heparin Concentration (Hepcon, HMS): <input type="checkbox"/> Yes <input type="checkbox"/> No POCCoagTstHep (2856) | |
| | INR/PT/aPPP (iStat or equivalent): <input type="checkbox"/> Yes <input type="checkbox"/> No POCCoagTstINR (2857) | |

CABG PROCEDURES

If Op Type is CBP or No CBP Cardiovascular ↓

Coronary Artery Bypass (CAB): **OpCAB (2900) Yes No *(If Yes ↓)***

Number of Distal Arterial Anast: **DistArt (2910)** _____ Number of Distal Vein Anast: **DistVein (2920)** _____

Internal Mammary Artery (IMA) Used: **IMAArtUs (2930)** Left IMA Right IMA
 Both IMAs No IMA

VALVE PROCEDURES

If Op Type is CBP or No CBP Cardiovascular ↓

Valve Operation: **OpValve (2940) Yes No *(If Yes ↓)***

Valve Device Explanted and/or Implanted: No Yes, Explanted Yes, Implanted Yes, Explanted and Implanted
ValExImp (3140)

If Yes, Explanted or Yes, explanted and Implanted, complete one column per explant ↓

EXPLANT(S)

| | | | |
|---|---|---|---|
| Valve Explant #1 | 2nd Explant: <input type="checkbox"/> Yes <input type="checkbox"/> No ValEx2 (3160) <i>If Yes ↓ (if no skip to implant)</i> | 3rd Explant: <input type="checkbox"/> Yes <input type="checkbox"/> No ValEx3 (3180) <i>If Yes ↓ (if no skip to implant)</i> | 4th Explant: <input type="checkbox"/> Yes <input type="checkbox"/> No ValEx4 (3200) <i>If Yes ↓ (if no skip to implant)</i> |
| Valve Explant Type #1 ValExType1 (3150) | Valve Explant Type #2 ValExType2 (3170) | Valve Explant Type #3 ValExType3 (3190) | Valve Explant Type #4 ValExType4 (3210) |

- Mechanical
 - Bioprosthetic
 - Homograft/Allograft
 - Autograft
 - Annuloplasty Band/Ring
 - Mitral Clip
 - Surgeon Fashioned
 - Other
- Valve Explant #1 UDI:

ValExpUDI1 (3151)

- Mechanical
 - Bioprosthetic
 - Homograft/Allograft
 - Autograft
 - Annuloplasty Band/Ring
 - Mitral Clip
 - Surgeon Fashioned
 - Other
- Valve Explant #2 UDI:

ValExpUDI2 (3171)

- Mechanical
 - Bioprosthetic
 - Homograft/Allograft
 - Autograft
 - Annuloplasty Band/Ring
 - Mitral Clip
 - Surgeon Fashioned
 - Other
- Valve Explant #3 UDI:

ValExpUDI3 (3191)

- Mechanical
 - Bioprosthetic
 - Homograft/Allograft
 - Autograft
 - Annuloplasty Band/Ring
 - Mitral Clip
 - Surgeon Fashioned
 - Other
- Valve Explant #4 UDI:

ValExpUDI4 (3211)

If Yes, Implanted or Yes, Explanted and Implanted, complete one column per implant ↓

IMPLANT(S)

Valve Implant Location #1
VallmpLoc1 (3220)

- Aortic
- Mitral
- Tricuspid
- Pulmonic
- Common AV
- Truncal

Valve Implant Type #1
VallmpType1 (3230)

- Surgeon Fashioned
- Autograft
- Commercially supplied

If Surgeon fashioned ↓

- Material #1:**
VallmpSFMat1 (3240)
- PTFE (Gore-Tex)
 - Pericardium
 - Other

If Commercially Supplied ↓

- Model #1:** _____
VallmpComMod1 (3250)
Device Size #1: _____
VallmpComSz1 (3260)
UDI#1 _____
VallmpUDI1 (3261)

2nd Implant: Yes No
Vallmp2 (3270)

If Yes ↓ (if no skip to VAD proc)

Valve Implant Location #2
VallmpLoc2 (3280)

- Aortic
- Mitral
- Tricuspid
- Pulmonic
- Common AV
- Truncal

Valve Implant Type #2
VallmpType2 (3290)

- Surgeon Fashioned
- Autograft
- Commercially supplied

If Surgeon fashioned ↓

- Material #2:**
VallmpSFMat2 (3300)
- PTFE (Gore-Tex)
 - Pericardium
 - Other

If Commercially Supplied ↓

- Model #2:** _____
VallmpComMod2 (3310)
Device Size #2: _____
VallmpComSz2 (3320)
UDI#2 _____
VallmpUDI2 (3321)

3rd Implant: Yes No
Vallmp3 (3330)

If Yes ↓ (if no skip to VAD proc)

Valve Implant Location #3
VallmpLoc3 (3340)

- Aortic
- Mitral
- Tricuspid
- Pulmonic
- Common AV
- Truncal

Valve Implant Type #3
VallmpType3 (3350)

- Surgeon Fashioned
- Autograft
- Commercially supplied

If Surgeon fashioned ↓

- Material #3:**
VallmpSFMat3 (3360)
- PTFE (Gore-Tex)
 - Pericardium
 - Other

If Commercially Supplied ↓

- Model #3:** _____
VallmpComMod3 (3370)
Device Size #3: _____
VallmpComSz3 (3380)
UDI#3 _____
VallmpUDI3 (3381)

4th Implant: Yes No
Vallmp4 (3390)

If Yes ↓ (if no skip to VAD proc)

Valve Implant Location #4
VallmpLoc4 (3400)

- Aortic
- Mitral
- Tricuspid
- Pulmonic
- Common AV
- Truncal

Valve Implant Type #4
VallmpType4 (3410)

- Surgeon Fashioned
- Autograft
- Commercially supplied

If Surgeon fashioned ↓

- Material #4:**
VallmpSFMat4 (3420)
- PTFE (Gore-Tex)
 - Pericardium
 - Other

If Commercially Supplied ↓

- Model #4:** _____
VallmpComMod4 (3430)
Device Size #4: _____
VallmpComSz4 (3440)
UDI#4 _____
VallmpUDI4 (3441)

VAD PROCEDURES

VAD Explanted and/or Implanted:
VADExImp (3460)

If Implanted or Explanted and Implanted ↓

Indication: VADInd (3500)

Implant Type: VImpTy (3560)

Product: VProdTy (3570)

Implant UDI: VADImpUDI (3571)

- No Yes, Explanted Yes, Implanted Yes, Explanted and Implanted

- Bridge to Transplantation
- Bridge to Recovery
- Destination
- Postcardiotomy Ventricular failure
- Device malfunction
- End of Life
- RVAD LVAD BiVAD TAH (total artificial heart)

(choose from VAD List) _____

If Explanted or Explanted and Implanted ↓

Explant Reason: VExpRsn (3610)

- Cardiac Transplant Recovery Device Transfer

Explant UDI: **VADExpUDI (3611)**

If Explanted, Implanted or Explanted and Implanted indicate whether VAD related complications occurred ↓

- | | | |
|---|--|---|
| Intracranial Bleed: <input type="checkbox"/> Yes <input type="checkbox"/> No PVCmpBld (3850) | Embolic Stroke: <input type="checkbox"/> Yes <input type="checkbox"/> No PVCmpEst (3860) | Driveline/Cannula Infection: <input type="checkbox"/> Yes <input type="checkbox"/> No PVCmpDCI (3870) |
| Pump Pocket Infection: <input type="checkbox"/> Yes <input type="checkbox"/> No PVCmpPPI (3880) | Endocarditis: <input type="checkbox"/> Yes <input type="checkbox"/> No PVCmpEnd (3890) | Device Malfunction: <input type="checkbox"/> Yes <input type="checkbox"/> No PVCmpMal (3900) |
| Bowel Obstruction: <input type="checkbox"/> Yes <input type="checkbox"/> No PVCmpBO (3910) | Hemolysis: <input type="checkbox"/> Yes <input type="checkbox"/> No PVCmpHemo (3920) | |

COMPLICATIONS Complication (4200)

Assign complication(s) to the operation that is most closely associated with the complication

- 15= No complications *OR select ALL that apply: (↓)*
- 16= No complications during the intraop or postop time periods (No complications prior to discharge & no complications within ≤ 30 days of surgery)
- 350= Intraoperative death or intraoperative death
- 360= Unplanned readmission to the hospital within 30 days of surgery or intervention
- 370= Multi-System Organ Failure (MSOF) = Multi-Organ Dysfunction Syndrome (MODS)
- 30= Unexpected Cardiac arrest during or following procedure (Periop/Periprocedural = Intraop/Intraoperative and/or Postop/Postoperative)
- 80= Cardiac dysfunction resulting in low cardiac output
- 384= Cardiac failure (severe cardiac dysfunction)
- 280= Endocarditis-postoperative infective endocarditis
- 110= Pericardial effusion, Requiring drainage
- 390= Pulmonary hypertension
- 140= Pulmonary hypertensive crisis (PA pressure > systemic pressure)
- 130= Pulmonary vein obstruction
- 120= Systemic vein obstruction
- 240= Bleeding, Requiring reoperation
- 102= Sternum left open, Planned
- 104= Sternum left open, Unplanned
- 22= Unplanned cardiac reoperation during the postoperative or postoperative time period, exclusive of reoperation for bleeding
- 24= Unplanned interventional cardiovascular catheterization procedure during the postoperative or postoperative time period
- 26= Unplanned non-cardiac reoperation during the postoperative or postoperative time period
- 40= Postoperative/Postoperative mechanical circulatory support (IABP, VAD, ECMO, or CPS)
- 72= Arrhythmia requiring drug therapy
- 73= Arrhythmia requiring electrical cardioversion or defibrillation
- 74= Arrhythmia necessitating pacemaker, Permanent pacemaker
- 75= Arrhythmia necessitating pacemaker, Temporary pacemaker
- 210= Chylothorax
- 200= Pleural effusion, Requiring drainage
- 180= Pneumonia
- 190= Pneumothorax, Requiring drainage or evacuation
- 150= Postoperative/Postoperative respiratory insufficiency requiring mechanical ventilatory support > 7 days
- 160= Postoperative/Postoperative respiratory insufficiency requiring reintubation
- 170= Respiratory failure, Requiring tracheostomy
- 230= Renal failure - acute renal failure, Acute renal failure requiring dialysis at the time of hospital discharge
- 223= Renal failure - acute renal failure, Acute renal failure requiring temporary dialysis with the need for dialysis not present at hospital discharge
- 224= Renal failure - acute renal failure, Acute renal failure requiring temporary hemofiltration with the need for dialysis not present at hospital discharge
- 290= Sepsis
- 320= Neurological deficit, Neurological deficit persisting at discharge
- 325= Neurological deficit, Transient neurological deficit not present at discharge
- 300= Paralyzed diaphragm (possible phrenic nerve injury)
- 400= Peripheral nerve injury, Neurological deficit persisting at discharge

- 331= Seizure
- 410= Spinal cord injury, Neurological deficit persisting at discharge
- 420= Stroke
- 440= Subdural Bleed
- 450= Intraventricular hemorrhage (IVH) > grade 2
- 470= Thrombus, Intracardiac
- 480= Thrombus, Central vein
- 510= Thrombosis/thromboembolism, Pulmonary artery
- 490= Thrombus, Peripheral deep vein
- 500= Thrombosis, Systemic to pulmonary shunt
- 310= Vocal cord dysfunction (possible recurrent laryngeal nerve injury)
- 250= Wound dehiscence (sterile)
- 255= Wound dehiscence (sterile), Median sternotomy
- 520= Sternal instability (sterile)
- 261= Wound infection
- 262= Wound infection-Deep wound infection
- 270= Wound infection-Mediastinitis
- 263= Wound infection-Superficial wound infection
- 430= Anesthesia – related complication
- 460= Complication of cardiovascular catheterization procedure
- 900= Other complication
- 901= Other operative/procedural complication

DISCHARGE/READMISSION

Date of Hospital Discharge: **HospDischDt (4220)** (mm/dd/yyyy) ___ / ___ / _____

Mortality Status at Hospital Discharge: **MtHospDisStat (4230)** Alive Dead

(If Alive →) Discharge Location: **DisLoctn (4240)** Home Other Acute Care Center Other Chronic Care Center

VAD Discharge Status: **VADDiscS(4245)** No VAD this admission Discharged w/ VAD VAD removed prior to discharge Expired in Hospital

Date of Database Discharge: **DBDischDt (4250)** (mm/dd/yyyy) ___ / ___ / _____

Mortality Status at Database Discharge: **MtDBDisStat (4260)** Alive Dead Unknown (If Alive ↓)

Readmission within 30 days: Yes No (If Yes →)
Readmit30 (4270)

Readmission Date: (mm/dd/yyyy) ___ / ___ / _____
ReadmitDt (4280)

(If Yes →) Primary Readmission Reason (select one ↓): **ReadmitRsn (4290)**

- | | |
|--|--|
| <input type="checkbox"/> Thrombotic Complication | <input type="checkbox"/> Neurologic Complication |
| <input type="checkbox"/> Hemorrhagic Complication | <input type="checkbox"/> Respiratory Complication/Airway Complication |
| <input type="checkbox"/> Stenotic Complication | <input type="checkbox"/> Septic/Infectious Complication |
| <input type="checkbox"/> Arrhythmia | <input type="checkbox"/> Cardiovascular Device Complications |
| <input type="checkbox"/> Congestive Heart Failure | <input type="checkbox"/> Residual/Recurrent Cardiovascular Defects |
| <input type="checkbox"/> Embolic Complication | <input type="checkbox"/> Failure to Thrive |
| <input type="checkbox"/> Cardiac Transplant Rejection | <input type="checkbox"/> VAD Complications |
| <input type="checkbox"/> Myocardial Ischemia | <input type="checkbox"/> Gastrointestinal Complication |
| <input type="checkbox"/> Renal Failure | <input type="checkbox"/> Other Cardiovascular Complication |
| <input type="checkbox"/> Pericardial Effusion and/or Tamponade | <input type="checkbox"/> Other - Readmission related to this index operation |
| <input type="checkbox"/> Pleural Effusion | <input type="checkbox"/> Other - Readmission not related to this index operation |

Status at 30 days after surgery: **Mt30Stat (4300)** Alive Dead Unknown

30 Day Status Method of Verification: Evidence of life or death in Medical Record Contact w/ patient or family
Mt30StatMeth (4310) Contact w/ medical provider Office visit to provider ≥ 30 days post op SSDMF Other

Operative Mortality: **MtOpD (4330)** Yes No

CHSS Eligibility: **CHSSElig (4331)** Eligible & Enrolled Eligible, but declined enrollment Eligible, but not invited to participate
 Eligible, but institution not CHSS participant Eligible, but not enrolled, other reason Not Eligible

PATIENT PROCESS MEASURES

(if Op Type CPB , No CPB Cardiovascular , or CPB Noncardiovascular ↓)

Patient care discussed at preop multidisciplinary planning conference: Yes No **CareDiscussed(4340)**

If No → Reason care was not discussed: Urgent/Emergent/Salvage Case Patient admitted between conferences

CareDiscussedRsn (4350)

Program does not routinely discuss all cases Program does not have regular conferences

Other

Transesophageal Echo (TEE) available for case: Yes No **TEEAvail (4370)**

If Yes → Intraop TEE performed: Yes No **TEEEpicEchoPerf (4380)**

Pre-op Antibiotic Prophylaxis given: Yes No **PreopAntiProph (4400)**

If Yes → Cephalosporin Yes No

PreopAntiProphCeph (4410)

Penicillin or related med Yes No

PreopAntiProphPen (4420)

Aminoglycoside Yes No

PreopAntiProphAmino (4430)

Vancomycin Yes No

PreopAntiProphVan (4440)

Other Yes No

PreopAntiProphOth (4450)

Antibiotic Start time: (00:00 – 23:59) __:__:__ **PreopAntiProphTime (4470)**

Conventional Pre-procedure Time Out: Yes No

ConvTimeOut (4480)

Surgeon shares essential elements of operative plan: Yes No

PreProcBrief (4490)

Postprocedure debriefing: Yes No

PostProcDebrief (4500)

Hand-off protocol at the time of transfer to ICU: Yes- all required team members present

HandoffProtocol (4510)

Yes- not all required team members present

No

If yes-not all required team members present →

Anesthesiologist: Attended hand-off Did not attend hand-off

HandoffAnesth (4520)

Surgeon: Attended hand-off Did not attend hand-off

HandoffSurg (4530)

ICU MD: Attended hand-off Did not attend hand-off

HandoffPhysStaff (4540)

Nurse: Attended hand-off Did not attend hand-off

HandoffNursing (4550)

Patient died or had major postoperative complication(s): Yes No

PostOpComp (4560)

If Yes → Management and outcomes reviewed: Reviewed at conference

PostOpReview (4570)

Scheduled for review at conference

Not reviewed or scheduled for review

Program does not have scheduled conferences

If Reviewed → Review Date: (mm/dd/yyyy) ____ / ____ / _____

PostOpReviewDate (4580)



ANESTHESIA Administrative

Anesthesiologist Present: Yes No (AnesPresent (4581))
 Primary Anesthesiologist Attending: PrimAnesName (4590) _____
 (If Yes→) Primary Anesthesiologist National Provider Identifier: PrimAnesNPI (4600) _____
 Secondary Anesthesiologist Attending: SecAnes (4610) Yes No
 Fellow or Resident Present FelRes (4630) Yes No
 Mid-Level provider CRNA/AA Present CRNA (4640) Yes No

ANESTHESIA Preoperative

Preoperative Medication Category: PreopMedCat (4700) (within 24 hours unless listed otherwise)
 5= None (If not None, select all pre-operative medications that apply: ↓)
 10= Amiodarone 190= Heparin
 20= Angiotension Converting Enzyme (ACE) Inhibitors 220= Heparin, Low molecular weight
 760= Angiotension Receptor Blockers (ARB) 710= Inotropes Not Otherwise Listed
 700= Anti-arrhythmics Not Otherwise Listed 210= Insulin
 770= Anticoagulents Not Otherwise Listed 230= Milrinone
 30= Anti-reflux Meds (H2 antagonists,PPI, propulsives) 240= Narcotics
 40= Anti-seizure medications 250= Nitric Oxide
 50= Aspirin (within 5 days) 260= Nitroglycerin
 60= Benzodiazepines 270= Nitroprusside
 70= Beta Blockers 280= Norepinephrine (Levophed)
 80= Birth Control (Oral, IM) 290= PDE-5 Inhibitors (e.g., Sildenafil)
 200= Bronchodilators, Inhaled 300= Platelet inhibitors other than Aspirin (e.g.,Plavix) (within 5 days)
 90= Calcium Channel Blockers 310= Prostacyclin (e.g., Flolan, Remodulin)
 100= Calcium Chloride Infusion 320= Prostaglandin
 750= Clonidine 330= Psychiatric Medications (including ADHD and antidepressants)
 110= Coumadin 340= Statins
 740= Dexmedetomidine 350= Steroids (oral / IV)
 120= Digoxin 360= Thyroid Hormone
 130= Direct Thrombin Inhibitors (e.g., argatroban) 370= Transplant Rejection Inhibition Meds (other than steroids)
 140= Diuretics 720= Vasoconstrictors Not Otherwise Listed
 150= Dobutamine 730= Vasodilators Not Otherwise Listed
 160= Dopamine 380= Vasopressin
 170= Endothelin Antagonist (e.g., Bosentan) 900= Other
 180= Epinephrine

Preoperative Sedation PreopSed Yes No (4710)
 (If Yes→) Preoperative Sedation Route IM IV Nasal PO (Oral) Rectal PreopSedRte (4720)
 (If Yes, select all pre-operative sedation drugs that apply: ↓)

| | |
|--|--|
| Atropine PreopSedDrugAtro (4730) <input type="checkbox"/> Yes <input type="checkbox"/> No | Ketamine PreopSedDrugKet (4770) <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Demerol PreopSedDrugDem (4740) <input type="checkbox"/> Yes <input type="checkbox"/> No | Lorazepam PreopSedDrugLoraz (4780) <input type="checkbox"/> Yes <input type="checkbox"/> No |
| DexmedetomidinePreopSedDrugDex(4741) <input type="checkbox"/> Yes <input type="checkbox"/> No | Midazolam PreopSedDrugMidaz (4790) <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Diazepam PreopSedDrugDiaz (4750) <input type="checkbox"/> Yes <input type="checkbox"/> No | Morphine PreopSedDrugMorph (4800) <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Fentanyl PreopSedDrugFent (4751) <input type="checkbox"/> Yes <input type="checkbox"/> No | Pentobarbital PreopSedDrugPent (4810) <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Glycopyrrolate PreopSedDrugGlyco (4760) <input type="checkbox"/> Yes <input type="checkbox"/> No | |

Preoperative Oxygen Saturation: PreopO2Sat (4820) _____ %
 Preoperative Oxygen Supplementation PreopOxygen (4830) Yes No

Date and Time of Transport to Procedure Location Or Anesthesia Start Time: mm/dd/yyyy hh:mm__/__/_____:__PLocTransDT (4840)

ANESTHESIA Monitoring

Arterial Line: Yes No ArtLine (4850) (If Yes →) Type: (Select all that apply)

| | | | |
|---|--|---------------------------------------|--|
| Radial ArtLineTypeRad (4860) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Brachial ArtLineTypeBrach (4870) | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Axillary ArtLineTypeAx (4880) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Femoral ArtLineTypeFem (4890) | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Ulnar ArtLineTypeUlnar (4900) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Dorsalis Pedis ArtLineTypeDors (4910) | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Posterior Tibial ArtLineTypePost (4920) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Umbilical ArtLineTypeCent (4930) | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Arterial line in-situ pre procedure: | <input type="checkbox"/> Yes <input type="checkbox"/> No ArtLinePreProc (4931) | | |

Cutdown: Yes No Cutdown (4940) (If Yes →) Type: (Select all that apply)

| | | | |
|--------------------------|--|---------------------------|--|
| Radial CutdownRad (4950) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Femoral CutdownFem (4960) | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Ulnar CutdownUln (4970) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Other CutdownOth (4980) | <input type="checkbox"/> Yes <input type="checkbox"/> No |

Percutaneous Central Pressure: Yes No PercCentPress (4990) (If Yes →) Location: (Select all that apply)

| | | | |
|--|--|---|--|
| Right Internal Jugular PCPLocRJug (5000) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Left Internal Jugular PCPLocLJug (5010) | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Right Subclavian PCPLocRSub (5020) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Left Subclavian PCPLocLSub (5030) | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Right Femoral Vein PCPLocRFem (5040) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Left Femoral Vein PCPLocLFem (5050) | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| PICC PCPLocPICC (5051) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Other PCPLocOth (5060) | <input type="checkbox"/> Yes <input type="checkbox"/> No |

CVP or PICC in situ pre procedure: Yes No CVPPICCPreProc (5062)

CVP Placed by Anesthesia CVPPlaced (5070) Yes No

Surgeon Placed lines INSTEAD of Anesthesia Placed Central Lines: Yes No SurgMonLines(5071)

Swan-Ganz Catheter SGCath (5080) Yes No

Oximetric Central Line (ScVO2) ScVO2 (5090) Yes No

Ultrasound Guidance Used for Line Placement: None Central venous line Arterial line Both arterial & venous lines

Neurologic Monitoring: Yes No NeuroMonitor (5110)

(If Yes →)

| | |
|----------------------|--|
| Bispectral Index | <input type="checkbox"/> Yes <input type="checkbox"/> No NeuroMonBIS (5130) |
| Transcranial Doppler | <input type="checkbox"/> Yes <input type="checkbox"/> No NeuroMonTCD (5140) |
| NIRS (Cerebral) | <input type="checkbox"/> Yes <input type="checkbox"/> No NeuroMonNIRS (5141) |
| Other | <input type="checkbox"/> Yes <input type="checkbox"/> No NeuroMonOth (5150) |

Lowest Recorded Intraoperative Temperature: _____ °C LowIntraopTemp (5160)

Lowest Intraoperative Temperature Site: Nasal Esophageal Bladder Rectal Axillary Skin Tympanic Other IntraopTempSite (5170)

Transesophageal Echocardiography TEE (5180) Yes No

ANESTHESIA Anesthetic Technique

Date and Time of Induction: mm/dd/yyyy hh:mm__/__/_____:__ InductionDT (5190)

Induction Type:

| | | | |
|--------------------|---|-------------------|---|
| Inhalation | <input type="checkbox"/> Yes <input type="checkbox"/> No IndTypeInh (5200) (If Yes →) | Sevoflurane | <input type="checkbox"/> Yes <input type="checkbox"/> No IndAgentInhalSevo (5220) |
| | | Isoflurane | <input type="checkbox"/> Yes <input type="checkbox"/> No IndAgentInhalIso (5230) |
| Intravenous | <input type="checkbox"/> Yes <input type="checkbox"/> No IndTypeIV (5240) (If Yes →) | Sodium Thiopental | <input type="checkbox"/> Yes <input type="checkbox"/> No IndAgentIVSodT (5260) |
| | | Ketamine | <input type="checkbox"/> Yes <input type="checkbox"/> No IndAgentIVKet (5270) |
| | | Etomidate | <input type="checkbox"/> Yes <input type="checkbox"/> No IndAgentIVETom (5280) |
| | | Propofol | <input type="checkbox"/> Yes <input type="checkbox"/> No IndAgentIVProp (5290) |
| | | Fentanyl | <input type="checkbox"/> Yes <input type="checkbox"/> No IndAgentIVFent (5300) |
| | | Midazolam | <input type="checkbox"/> Yes <input type="checkbox"/> No IndAgentIVMid (5310) |
| | | Dexmedetomidine | <input type="checkbox"/> Yes <input type="checkbox"/> No IndAgentIVDex (5320) |
| | | Sufentanil | <input type="checkbox"/> Yes <input type="checkbox"/> No IndAgentIVSuf (5330) |
| | | Remifentanyl | <input type="checkbox"/> Yes <input type="checkbox"/> No IndAgentIVRem (5340) |
| Intramuscular (IM) | <input type="checkbox"/> Yes <input type="checkbox"/> No IndTypeIM (5350) (If Yes →) | Ketamine | <input type="checkbox"/> Yes <input type="checkbox"/> No IndAgentIMKet (5370) |

Midazolam

 Yes No **IndAgentIMMid (5380)****Regional Anesthetic** Yes No **RegionalAnes (5400)**

(If Yes →) **Regional Anesthetic Site:** **RegAnesSite (5410)**
 Thoracic Epidural Catheter Lumbar Epidural Catheter Caudal Epidural Catheter
 Lumbar Epidural -Single shot Caudal Epidural – Single shot Lumbar Intrathecal -Single Shot
 Paravertebral Block-Single shot Paravertebral Block – Catheter Other

(If Yes →) **Regional Anesthetic Drug:**
 (Select all that apply)

| | | | |
|---|--|---|--|
| Bupivacaine RegAnesDrugBup (5420) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Bupivacaine/Fentanyl RegAnesDrugBupFen (5430) | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Clonidine RegAnesDrugClon (5440) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Fentanyl RegAnesDrugFen (5450) | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Hydromorphone RegAnesDrugHydro (5460) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Lidocaine RegAnesDrugLido (5470) | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Morphine RegAnesDrugMorph (5480) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Ropivacaine RegAnesDrugRop (5490) | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Ropivacaine/Fentanyl RegAnesDrugRopFen (5500) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Tetracaine RegAnesDrugTetra (5510) | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | | Other RegAnesDrugOth (5520) | <input type="checkbox"/> Yes <input type="checkbox"/> No |

Intercostal Nerve Infiltration by Surgeon or Anesthesia: **IntNerveInf (5530)** Yes NoRegional Field Block by Surgeon or Anesthesia: **RegFieldBlock (5540)** Yes No**ANESTHESIA Airway**Airway In-situ (ETT or Tracheostomy): Yes No **AirwayInsitu (5550)**(If Yes →) ETT or Tracheostomy Replaced for Procedure: Yes No **AirwayReplaced (5551)**

Airway Type: No airway support Simple face mask Bag-mask Nasal cannulae Laryngeal Mask Airway (LMA)
 Endotracheal intubation Tracheostomy **AirwayType (5560)**

(If LMA →) **Airway Size (mm):** 1.0 1.5 2.0 2.5 3.0 4.0 5.0
AirwaySizeLMA (5570)

(If Endotracheal intubation →) **Airway Size (mm):** 2.5 3.0 3.5 4.0 4.5 5.0
 5.5 6.0 6.5 7.0 7.5 8.0
 Other Size not listed (DLETT, Tracheotomy)

(If Endotracheal intubation or Trach →) **Cuffed** **Cuffed (5590)** Yes No

Airway Site: **AirwaySite (5600)** Oral Nasal Tracheostomy

Endobronchial Isolation (DLETT, Bronchial Blocker) Yes No **Endobronclso (5610)**

(If Yes →) **Endobronchial Isolation Method:** **EndobronchIsoMeth (5611)**
 Double lumen ETT Arndt Bronchial Blocker Fogarty Catheter
 Intentional Mainstem ETT Uninvent ETT Other

ICU Type Ventilator Used Intraop: Yes No **ICUTypeVent (5620)**Anesthesia Ready / End of Induction: mm/ dd/ yyyy hh : mm / / : **EndOfInductDT (5621)****ANESTHESIA Intraoperative Pharmacology (including CPB)** **IntraopPharm (6140)**Intraoperative Medications: None (If not None, select all intra-operative medications that apply: ↓)

- | | |
|--|---|
| <input type="checkbox"/> 450= 5-HT3 Agents (e.g., Ondansetron) | <input type="checkbox"/> 190= Magnesium Sulfate |
| <input type="checkbox"/> 520= Acetaminophen | <input type="checkbox"/> 210= Milrinone |
| <input type="checkbox"/> 20= Adenosine bolus | <input type="checkbox"/> 430= Narcotic |
| <input type="checkbox"/> 50= Amiodarone | <input type="checkbox"/> 230= Nesiritide Infusion |
| <input type="checkbox"/> 440= Benzodiazepine | <input type="checkbox"/> 240= Nicardipine Infusion |
| <input type="checkbox"/> 420= Bronchodilator - Inhaled | <input type="checkbox"/> 250= Nitric Oxide inhalation |

- 70= Calcium Chloride infusion
- 75= Calcium Gluconate infusion
- 480= Desflurane
- 80= Dexmetomidine (Precedex)
- 90= Dobutamine infusion
- 100= Dopamine infusion
- 110= Epinephrine (Adrenalin) infusion
- 120= Esmolol
- 510= Fenoldopam infusion
- 140= Furosemide
- 370= Inotrope, Other
- 150= Insulin
- 460= Isoflurane
- 170= Isoproterenol infusion
- 490= Ketamine
- 530= Ketorolac
- 540= Levosimendan
- 260= Nitroglycerin (Tridil) infusion
- 270= Nitroprusside (Nipride)
- 180= Norepinephrine (Levophed) infusion
- 280= Phenoxybenzamine bolus
- 290= Phentolamine (Regitine)
- 300= Phenylephrine infusion
- 500= Procainamide
- 310= Propofol (Diprivan) infusion
- 320= Prostaglandin infusion
- 470= Sevoflurane
- 400= Sodium Bicarbonate bolus
- 160= Steroids IV/CPB (Hydrocortisone/Methylprednisolone/Dexamethasone)
- 340= Thyroid Hormone
- 410= Tromethamine (THAM) bolus
- 390= Vasoconstrictor, Other
- 380= Vasodilator, Other
- 360= Vasopressin infusion

ANESTHESIA Pharmacology On Arrival To ICU/PACU ICU Pharm (6170)

Medications Given At Time Of Transfer: None (If not None, select all medications that apply: ↓)

- | | |
|--|---|
| <ul style="list-style-type: none"> <input type="checkbox"/> 20= Aminocaproic Acid (Amicar) infusion <input type="checkbox"/> 30= Amiodarone infusion <input type="checkbox"/> 40= Aprotinin (Trasylol) infusion <input type="checkbox"/> 370= Benzodiazepine infusion <input type="checkbox"/> 50= Calcium Chloride infusion <input type="checkbox"/> 60= Calcium Gluconate infusion <input type="checkbox"/> 70= Dexmetomidine (Precedex) infusion <input type="checkbox"/> 80= Dobutamine infusion <input type="checkbox"/> 90= Dopamine infusion <input type="checkbox"/> 100= Epinephrine (Adrenalin) infusion <input type="checkbox"/> 340= Esmolol infusion <input type="checkbox"/> 390= Fenoldopam infusion <input type="checkbox"/> 310= Inotrope, Other <input type="checkbox"/> 120= Insulin infusion <input type="checkbox"/> 130= Isoproterenol infusion <input type="checkbox"/> 400= Levosimendan <input type="checkbox"/> 350= Local Anesthetic infusion via catheter (On-Q, Pleural catheter) <input type="checkbox"/> 150= Milrinone infusion | <ul style="list-style-type: none"> <input type="checkbox"/> 170= Muscle Relaxant infusion <input type="checkbox"/> 360= Narcotic infusion <input type="checkbox"/> 180= Nesiritide Infusion <input type="checkbox"/> 190= Nicardipine infusion <input type="checkbox"/> 200= Nitric Oxide inhalation <input type="checkbox"/> 210= Nitroglycerin (Tridil) infusion <input type="checkbox"/> 220= Nitroprusside (Nipride) infusion <input type="checkbox"/> 230= Norepinephrine (Levophed) infusion <input type="checkbox"/> 240= Phentolamine (Regitine) infusion <input type="checkbox"/> 250= Phenylephrine infusion <input type="checkbox"/> 380= Procainamide bolus/infusion <input type="checkbox"/> 260= Propofol (Diprivan) infusion <input type="checkbox"/> 270= Prostaglandin infusion <input type="checkbox"/> 280= Thyroid Hormone infusion <input type="checkbox"/> 290= Tranexamic Acid infusion <input type="checkbox"/> 330= Vasoconstrictor, Other <input type="checkbox"/> 320= Vasodilator, Other <input type="checkbox"/> 300= Vasopressin infusion |
|--|---|

ANESTHESIA ICU/PACU Care

Date and Time of ICU/PACU Arrival: ICUArrDT (6180) (mm/dd/yyyy 00:00 – 23:59) __/__/____ :__

Initial FiO2: _____ InitialFiO2 (6190) | Mechanical circulatory support(ECMO/VAD) : Yes No MechCircSup (6200)

ICU/PACU Arrival labs Yes No (If Yes →)

| | | |
|--------------------|----------------|-------------------|
| pH: _____ | pCO2: _____ | pO2: _____ |
| ICUPACULabs (6211) | pH (6220) | pCO2 (6230) |
| Base Excess: _____ | Lactate: _____ | Hematocrit: _____ |
| BaseExcess (6250) | Lactate (6260) | Hematocrit (6270) |

Initial pulse oximeter _____ % InitPulseOx (6280) | Temperature on ICU/PACU Arrival: _____ ° C TempICUArr (6290)

Temperature Measurement Site: Forehead scan Tympanic membrane Skin Rectal Bladder
TempSite (6300) Oral Axillary Other

Need for Temporary Pacemaker on Arrival In ICU/PACU: Yes No TempPace (6310)

(If Yes →) Site of Temporary Pace Maker: Epicardial Transvenous
TempPaceSite (6320)

(If Yes →) Type of Temporary Pacing: Atrial Atrio-ventricular Ventricular Other
TempPaceType (6330)

Disposition Under Anesthesia: Discharged as planned after PACU/Recovery Admit to hospital floor as planned
DispUnderAnes (6340) Admit to ICU as planned Unplanned admit to hospital or ICU
 Other location not listed above Patient expired under anesthetic management

Peri-Anesthetic Demise: (within 24 hr of last anesthetic end time) Yes No PeriAnesDemise (6350)

ANESTHESIA Adverse Events AnesAdvEvent (6380)

If Anesthesia Adverse Event is not 'None' or missing:

Additional Intervention Required:

AnesAdvEventInt (6381)

Circle EACH event that required additional intervention.

Anesthesia adverse events: None (If not None, select all adverse events that apply: ↓)

- | | |
|---|---|
| <input type="checkbox"/> 20= Oral/Nasal Injury-Bleeding | <input type="checkbox"/> 210= Anaphylaxis/Anaphylactoid Reaction |
| <input type="checkbox"/> 30= Respiratory Arrest | <input type="checkbox"/> 220= Non-allergic Drug Reaction |
| <input type="checkbox"/> 40= Difficult Intubation/Reintubation | <input type="checkbox"/> 230= Medication Administration |
| <input type="checkbox"/> 50= Stridor / Sub-glottic Stenosis | <input type="checkbox"/> 240= Medication Dosage |
| <input type="checkbox"/> 60= Extubation | <input type="checkbox"/> 250= Intraoperative Recall |
| <input type="checkbox"/> 70= Endotracheal Tube Migration | <input type="checkbox"/> 260= Malignant Hyperthermia |
| <input type="checkbox"/> 80= Airway Injury | <input type="checkbox"/> 270= Protamine Reaction |
| <input type="checkbox"/> 410= Hemoptysis | <input type="checkbox"/> 280= Cardiac Arrest - related to anesthesia care |
| <input type="checkbox"/> 450= Laryngospasm requiring medication | <input type="checkbox"/> 490= Cardiac Arrest - unrelated to anesthesia care |
| <input type="checkbox"/> 400= Bronchospasm | <input type="checkbox"/> 510= Hypercyanotic Episode (Tet Spell) unrelated to manipulation |
| <input type="checkbox"/> 470= Unplanned need to remain intubated post-procedure due to anesthesia factors | <input type="checkbox"/> 500= Pulmonary Hypertensive Crisis unrelated to manipulation |
| <input type="checkbox"/> 90= Arrhythmia - Central Venous Line Placement | <input type="checkbox"/> 290= TEE related esophageal bleeding / rupture |
| <input type="checkbox"/> 100= Myocardial Injury - Central Venous Line Placement | <input type="checkbox"/> 300= TEE related esophageal chemical burn |
| <input type="checkbox"/> 110= Vascular Compromise - Central Venous Line Placement | <input type="checkbox"/> 310= TEE related airway compromise |
| <input type="checkbox"/> 120= Pneumothorax - Central Venous Line Placement | <input type="checkbox"/> 315= TEE related hemodynamic compromise |
| <input type="checkbox"/> 130= Vascular Access | <input type="checkbox"/> 320= TEE related extubation |
| <input type="checkbox"/> 140= Hematoma requiring relocation of catheter placement | <input type="checkbox"/> 330= Complications during patient transfer |
| <input type="checkbox"/> 150= Arterial Puncture | <input type="checkbox"/> 340= Peripheral Nerve Injury due to positioning |
| <input type="checkbox"/> 160= Intravenous/Intra-arterial Air Embolism | <input type="checkbox"/> 370= Anesthesia Equipment Malfunction/ Failure |
| <input type="checkbox"/> 350= Arterial Line Placement- Extremity ischemia | <input type="checkbox"/> 390= Integument Injury (skin breakdown or dehiscence) |
| <input type="checkbox"/> 380= Intravenous Infiltration | <input type="checkbox"/> 480= Ocular Injury (corneal abrasion or injury) |
| <input type="checkbox"/> 170= Bleeding - Regional Anesthetic Site | <input type="checkbox"/> 420= Postop Nausea/Vomiting requiring admission |
| <input type="checkbox"/> 180= Intrathecal Puncture - Regional | <input type="checkbox"/> 430= Vomiting or Aspiration on Induction/Emergence |
| <input type="checkbox"/> 190= Local Anesthetic Toxicity - Regional | <input type="checkbox"/> 440= Emergence Delirium requiring Medication |
| <input type="checkbox"/> 200= Neurologic Injury - Regional | <input type="checkbox"/> 900= Other |