STS Congenital Heart Surgery Data Summary
Infants

STS Period Ending 06/30/2018

Duke Clinical Research Institute

Table 1: Infants number submitted, in analysis, and operative mortality

	STS	
	Last 1 Year Jul 2017 - Jun 2018	Last Four Years Jul 2014 - Jun 2018
Number of Operations/Patients		
Operations in Analysis[1]	9,649	40,753
Patients in Analysis[2]	7,676	32,846
Operative Mortality[3]		
Number of Mortalities	202	843
Number Eligible	6,864	29,384
Mortality Percent	2.9%	2.9%
Mortality (95% CI)	(2.6 , 3.4)	(2.7 , 3.1)

[1]Analysis includes only operations classified as "CPB" or "No CPB, Cardiovascular"
[2]Patient Numbers represent distinct patient admissions
[3]Mortality numbers are patient-based only for admission in the analysis population at sites with adequate mortality data

Table 2: Primary diagnosis, 35 Most Frequent for Infants, Last 4 Years (Jul 2014 - Jun 2018)

Primary Diagnosis	STS N	STS % of All
VSD, Type 2 (Perimembranous) (Paramembranous) (Conoventricular)	5,353	13.1%
TOF, Pulmonary stenosis	3,751	9.2%
AVC (AVSD), Complete (CAVSD)	3,401	8.3%
Patent ductus arteriosus	2,670	6.6%
Hypoplastic left heart syndrome (HLHS)	2,259	5.5%
Open sternum with open skin (includes membrane placed to close skin)	2,213	5.4%
Coarctation of aorta	1,183	2.9%
Single ventricle, Tricuspid atresia	825	2.0%
Vascular ring	788	1.9%
Cardiac, Other	723	1.8%
Pulmonary atresia, VSD (Including TOF, PA)	642	1.6%
TOF	624	1.5%
DORV, TOF type	550	1.3%
Miscellaneous, Other	547	1.3%
Single ventricle, DILV	542	1.3%
Pulmonary atresia, IVS	510	1.3%
VSD, Multiple	469	1.2%
Pulmonary atresia, VSD-MAPCA	463	1.1%
ASD, Secundum	419	1.0%
Single ventricle, Heterotaxia syndrome	398	1.0%
DORV, VSD type	393	1.0%
VSD, Type 1 (Subarterial) (Supracristal) (Conal septal defect) (Infundibular)	366	0.9%
VSD, Type 4 (Muscular)	360	0.9%
DORV, TGA type	355	0.9%
Single ventricle, Unbalanced AV canal	346	0.8%
AVC (AVSD), Intermediate (transitional)	344	0.8%
VSD, Type 3 (Inlet) (AV canal type)	331	0.8%
Mitral regurgitation	314	0.8%
Aortic arch hypoplasia	302	0.7%
Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)	294	0.7%
TOF, AVC (AVSD)	287	0.7%
Pulmonary stenosis, Valvar	274	0.7%
Arrhythmia, Heart block, Acquired	265	0.7%
Coronary artery anomaly, Anomalous pulmonary origin (includes ALCAPA)	252	0.6%
Pericardial effusion	249	0.6%

Table 3: Primary procedure, 35 Most Frequent for Infants, Last 4 Years (Jul 2014 - Jun 2018)

Primary Procedure	STS N	STS % of All	STS % Mort.
VSD repair, Patch	5,074	13.8%	0.7%
AVC (AVSD) repair, Complete (CAVSD)	2,830	7.7%	2.5%
Delayed sternal closure	2,814	7.6%	0.2%
Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	2,302	6.2%	1.8%
TOF repair, Ventriculotomy, Transanular patch	1,909	5.2%	1.6%
Mediastinal exploration	1,309	3.6%	0.5%
Superior Cavopulmonary anastomosis(es) + PA reconstruction	1,162	3.2%	2.0%
TOF repair, Ventriculotomy, Nontransanular patch	1,084	2.9%	0.8%
PA banding (PAB)	966	2.6%	5.8%
TOF repair, No ventriculotomy	951	2.6%	0.4%
PDA closure, Surgical	890	2.4%	4.4%
Coarctation repair, End to end, Extended	667	1.8%	1.2%
Vascular ring repair	656	1.8%	0.3%
RVOT procedure	649	1.8%	1.5%
Pacemaker implantation, Permanent	640	1.7%	1.3%
Aortic arch repair	607	1.6%	3.6%
Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)	526	1.4%	6.3%
DORV, Intraventricular tunnel repair	512	1.4%	3.5%
PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	459	1.2%	2.0%
Transplant, Heart	440	1.2%	3.9%
Valvuloplasty, Mitral	429	1.2%	3.0%
TAPVC repair	353	1.0%	3.4%
Shunt, Systemic to pulmonary, Central (shunt from aorta)	335	0.9%	7.8%
Pulmonary venous stenosis repair	330	0.9%	8.5%
Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)	329	0.9%	2.4%
Valvuloplasty, Pulmonic	275	0.7%	2.2%
Coarctation repair, End to end	272	0.7%	0.7%
VSD repair, Primary closure	267	0.7%	0.4%
HemiFontan	238	0.6%	0.8%
AVC (AVSD) repair, Intermediate (Transitional)	228	0.6%	1.8%
Norwood procedure	226	0.6%	8.4%
TOF repair, RV-PA conduit	219	0.6%	2.7%
Conduit placement, RV to PA	218	0.6%	3.7%
Aortic arch repair + VSD repair	211	0.6%	2.8%
TOF - AVC (AVSD) repair	206	0.6%	8.3%