

3D print cases n = 36	Infant Cases, less than 1 year old Age at 3D Imaging (days or months) n = 15	Pediatric Cases, 1-18 years old Age at 3D Imaging (years) n = 11	Adult Congenital cases, > 18 y/o old Age at 3D Imaging (years) n = 10	Weight at 3D Imaging (kg)	Reason for Printing	Modality
Dextrocardia, D-TGA, VSD, long segment arch narrowing, coarctation.	1 day			3.1	Trainee Education	CTA
Tetralogy of Fallot absent pulmonary valve.	4 days			2.3	Trainee Education	CTA
Double outlet right ventricle, Taussig Bing type, Interrupted aortic arch	5 days			3.3	Trainee Education	CTA
Mixed total anomalous pulmonary venous return.	16 days			2.3	Trainee Education	CTA
{I,D,X}, Viscero-atrial situs inversus, atrio-ventricular discordance, RV to aorta with pulmonary atresia (DORV). S/p central shunt, alpha-1 antitrypsin deficiency.	3			5.8	Surgical Planning and Counseling	MRI
Supero-inferior ventricles, non criss-cross inflows, large ASD & VSD, LPA stenosis, arch hypoplasia, left lung collapse.	4			5.9	Surgical Planning and Counseling	MRI
Double outlet right ventricle {S,D,D}, non-committed VSD, aorta remote from LV.	4			7.7	Surgical Planning and Counseling	MRI
Shone's complex; supra-mitral ring, mitral stenosis, LVOT obstruction, arch hypoplasia. Absent SVC. S/p arch reconstruction, followed by resection of supra-mitral ring, MS repair. Persistent MS.	5			5.9	Surgical Planning and Counseling	MRI
Tetralogy of Fallot, pulmonary atresia, multiple aortopulmonary collaterals.	6			6.0	Surgical Planning and Counseling	CTA
{I,D,D}, Heterotaxy, viscerio-atrial situs inversus, ASD, DORV, D-malposed great arteries, sub-PS, severe PS. Bilateral SVC, left-sided IVC, TAPVR to RA.	6			7.0	Trainee Education	CTA
Tetralogy of Fallot, pulmonary atresia, multiple aortopulmonary collaterals.	8			7.2	Surgical Planning and Counseling	CTA
Dextrocardia, viscerio-atrial situs inversus, DORV, L-malposed great arteries. S/P PA band and PDA ligation.	8			8.0	Surgical Planning and Counseling	MRI
Tetralogy of Fallot, pulmonary atresia, multiple aortopulmonary collaterals. Pre-surgery for staged unifocalization, Model 1	10			6.2	Surgical Planning and Counseling	CTA
Tet. PA MAPCAs, staged unifocalization. S/p unifocalization of right sided MAPCAs and small RPA to right modified mBTT shunt. Model 2	10			6.8	Surgical Planning and Counseling	CTA
Tet. PA MAPCAs, staged unifocalization. S/p RV-PA conduit placement, MAPCA unifocalization and takedown of bilateral BT shunts. VSD left open. Model 3	10			8.0	Trainee Education	CTA
Vascular ring, circumflex aortic arch		1.3		11.4	Surgical Planning and Counseling	MRI
Complete AV canal, DORV. S/p Glenn, PA band.		2.6		10.0	Surgical Planning and Counseling	MRI
{SLL}, DORV. Severe PS, s/p PDA stent, s/p Glenn.		2.8		15.3	Surgical Planning and Counseling	MRI
{S,D,L}, DORV, subpulmonic anterior malalignment VSD & muscular VSD.		3.6		12.2	Surgical Planning and Counseling	MRI
Heterotaxy, DORV, unbalanced AV canal, bilateral SVCs, left sided IVC, bilateral connection of the pulmonary veins to the right and left-sided atria. S/p bilateral bi-directional Glenn. 3D print for Fontan planning.		3.6		3.5	Surgical Planning and Counseling	CTA
{S,L,L}, congenitally corrected TGA, severe PS, small VSD, interrupted IVC with azygos continuation.		8.3		19.0	Surgical Planning and Counseling	MRI
S/p VSD repair X 2, severe aortic regurgitation.		10.0		35.4	Surgical Planning and Counseling	MRI
PAPVR of right upper and right middle pulmonary veins to SVC, sinus venosus ASD.		14.3		64.0	Surgical Planning and Counseling	MRI
Tetralogy of Fallot, absent pulmonary valve, s/p repair. 3D print for percutaneous pulmonary valve replacement.		15.0		49.0	Surgical Cath Intervention Planning and Counseling	MRI
Tricuspid atresia, Fontan, s/p Fontan fenestration occlusion.		16.6		45.0	Trainee Education	MRI
Tetralogy of Fallot, s/p repair.		16.8		60.0	Trainee Education	MRI
Bicuspid aortic valve, severely dilated aortic root and ascending aorta.			20	82.7	Trainee Education	CTA
Heterotaxy, unbalanced AV canal. S/p modified Fontan, LV to left SVC conduit.			23	44.7	Surgical Planning and Counseling	MRI
DORV, s/p VSD closure (Rastelli) and RV-PA conduit. Complex LVOT obstruction.			30	121.0	Surgical Planning and Counseling	MRI
Dextrocardia, DORV, s/p Fontan. Left SVC to left-sided superior cavo-pulmonary connection, right-sided IVC with Fontan baffle to LPA.			31	59.0	Trainee Education	MRI
D-Transposition of the great arteries, s/p atrial switch (Senning).			36	86.0	Trainee Education	MRI
DORV, D-malposition of the great arteries. H/o Blalock-Hanlon procedure (atrial septectomy), PA band in infancy. Followed by classic Glenn (SVC to RPA anastomosis), PA band takedown and modified Mustard procedure (IVC baffled to left atrium).			40	57.0	Surgical Planning and Counseling	MRI
DORV, s/p repair followed by RVOT reconstruction, subAS resection. Recurrent LVOT obstruction.			45	63.0	Surgical Planning and Counseling	MRI
Left dominant unbalanced AV canal, superior-inferior atria, DORV, Taussig Bing type, L-malposed great arteries. Sub-PS & PS.			45	65.0	Trainee Education	MRI
D TGA, s/p atrial switch (Mustard), systemic RV dysfunction. Multicolor and full thorax flexible model for VAD planning			50	101.6	Surgical Planning and Counseling	CTA
Aortic valve endocarditis s/p aortic valve replacement. Perivalve leak, s/p LVOT revision. Large LVOT pseudoaneurysm.			76	74.0	Surgical or Cath Intervention Planning and Counseling	CTA