Patient Demographics

Adult Echo SR Test Sample, Fname **Study Date: 08/07/2015**

Patient ID: 2141254 Accession #: 5746235 Alt ID: 457525323
DOB: 12/12/1966 Age: 48y Gender: M Ht: 6'0" Wt: 200lb BSA: 2.13 m²
Institution: Test Hospital
Referring Physician: B
Physician of Record: C Performed By: A
Comments: Test comments

Adult Echo: Study Info

Sys / Dias BP: 120 / 90 MAP: 100

- [x] Smoker
- [x] Hypertension
- [x] Pacemaker
- [x] Hx of Rheumatic Fever
- [x] Congestive Heart Failure

Surgeries: test

Indications

- [x] Murmur Type: S Grade: 1

Arrhythmia: A-Flutter

- [x] Chest Pain
- [x] Jugular Venous Distension
- [x] Dyspnea
- [x] Peripheral Edema
- [x] Fatigue
- [x] Ascites
- [x] Syncope
- [x] Infection
- [x] Dizziness
- [x] Fever of Unknown Origin
- [x] Hemoptysis
- [x] TIA/Stroke

Valve Replacement

Bioprosthetic
Type: test1
Date: 12/12/2000

Mechanical
Type: test2
Date: 12/12/2005

Adult Echo: Measurements and Calculations

2D

LVOT Diam	5.6 cm	SV (A2C)	176 ml	TV Alias Vel	77.0 cm/s
LVOT Area	24.6 cm²	EF (A2C)	37.4 %	TR Alias Vel	61.6 cm/s
LVIDd (2D)	5.96 cm	CO (A2C)	9.5 l/min	LPA Diam	5.7 cm
LVPWd (2D)	2.29 cm	CI (A2C)	4.5 l/min/m²	RPA Diam	2.4 cm
IVSs (2D)	2.69 cm	SI (A2C)	82.6 ml/m²	MPA Diam	2.3 cm
LVIDs (2D)	5.48 cm	CO (BP)	9.9 l/min	RA Width	5.20 cm
LVPWs (2D)	3.09 cm	CI (BP)	4.6 l/min/m²	RA Length	6.10 cm

EDV (2D-Teich)	177 ml	SI (BP)	85.9 ml/m²	RA A4Cs	
				Atrial Volume	80.6 ml
				Atrial Length	8.40 cm
				Atrial Area	28.9 cm²
ESV (2D-Teich)	146 ml	LVAd Sax Epi	65.0 cm²	RA A2Cs	
				Atrial Volume	186 ml
				Atrial Length	7.71 cm
				Atrial Area	39.6 cm²
SV (2D-Teich)	31.0 ml	LVAd Sax Endo	22.4 cm²	RA ESV-A/L	106.93 ml
FS (2D-Teich)	8.05 %	LVLd Apical	9.9 cm	RA A4C-A/L	
				Length	7.40 cm
				Area	32.1 cm²
EF (2D-Teich)	17.5 %	LV EDA	125 cm²	RA A2C-A/L	
				Length	7.90 cm
				Area	29.0 cm²
CO (2D-Teich)	1.67 l/min	LV ESA	106 cm²	RA ESA	83.5 cm²
CI (2D-Teich)	0.784 l/min/m²	LV FAC	15.2 %	RA ESV Index (A2C)	87.3 ml/m²
SI (2D-Teich)	14.6 ml/m²	LV Mass (A/L)	476 g	RA ESV Index (A4C)	37.8 ml/m²
EDV (2D-Cubed)	212 ml	LV Mass Index (A/L)	223.5 g/m²	RA ESV Index (BP)	57.3 ml/m²
ESV (2D-Cubed)	165 ml	LV Lat Wall	7.20 cm	RA ESV (BP)	122 ml
SV (2D-Cubed)	47.0 ml	LV Ant Wall	5.60 cm	RA Pressure	12 mmHg
FS (2D-Cubed)	8.05 %	LV Inf Wall	6.70 cm	IVC Diam	6.00 cm
EF (2D-Cubed)	22.2 %	LV Post Wall	6.80 cm	IVC Diam Exp	3.00 cm
CO (2D-Cubed)	2.54 l/min	IV Septum Wall	6.60 cm	IVC Diam Ins	8.00 cm
CI (2D-Cubed)	1.19 l/min/m²	IVSd (2D)	2.31 cm	AR VC	6.30 cm
SI (2D-Cubed)	22.1 ml/m²	RVIDd/LVIDd	0.666	AI Radius	2.1 cm
HR - LV	54 bpm	RV Base	6.00 cm	AI Alias Vel	35.6 cm/s
A4Cd		RV Mid	6.40 cm	Desc Ao Diam	2.7 cm
LV Vol	499 ml				
LV Length	10.4 cm				
LV Area	79.6 cm²				

A4Cs		RV Length	4.00 cm	Prox ascAo Diam	5.90 cm
LV Vol	313 ml				
LV Length	10.9 cm				
LV Area	61.9 cm²				
A2Cd		RVOT Prox	5.80 cm	Asc Ao Diam	1.9 cm
LV Vol	471 ml				
LV Length	10.9 cm				
LV Area	78.3 cm²				
A2Cs		RVOT Distal	5.10 cm	Ao Isthmus Diam	2.8 cm
LV Vol	293 ml				
LV Length	11.6 cm				
LV Area	62.4 cm²				
EDV (BP)	492 ml	RVOT Diam	1.8 cm	AoR Diam (2D)	3.1 cm
ESV (BP)	309 ml	RV Wall	4.90 cm	Ao Arch Diam	4.0 cm
SV (BP)	183 ml	RVAWd (2D)	3.19 cm	Ao Sinus Diam	6.90 cm
EF (BP)	37.2 %	RVIDd (2D)	3.97 cm	Ao STJ Diam	5.90 cm
LVd (A/L)		RV EDA	86.9 cm²	Ao Ann Diam	4.70 cm
Length	13.9 cm				
Area	55.4 cm²				
LVs (A/L)		RV ESA	69.3 cm²	Ao Ann Diam Ratio	1.79
Length	13.4 cm				
Area	22.4 cm²				
EDV (A/L)	187 ml	RV FAC	20.3 %	Ao Sinus Diam Ratio	1.37
ESV (A/L)	31.8 ml	RVOT Area	2.54 cm²	Ao STJ Diam Ratio	1.44
SV (A/L)	155 ml	LA Area	71.0 cm²	Ao Ann Area	17.5 cm²
EF (A/L)	83.0 %	LA Width	5.50 cm	Ao Ann-LCA Dist	7.30 cm
CO (A/L)	8.4 l/min	LA Length	7.00 cm	Ao Ann Major	6.10 cm
CI (A/L)	3.9 l/min/m²	LA Dimen (2D)	4.8 cm	Ao Ann Minor	3.40 cm
SI (A/L)	72.8 ml/m²	LA/Ao (2D)	1.55	Ao Ann-RCA Dist	6.70 cm
LVLd (A/L)	13.9 cm	LA A4Cs		Ao Ann-STJ Dist	8.20 cm
		Atrial Volume	217 ml		
		Atrial Length	12.7 cm		
		Atrial Area	55.5 cm²		
LVLs (A/L)	13.4 cm	LA A4C-A/L		Ao Sinus Area	33.9 cm²
		Length	8.60 cm		
		Area	23.7 cm²		

LVLd (A4C)	10.4 cm	LA A2Cs		Ao Sinus Major	8.90 cm
		Atrial Volume	284 ml		
		Atrial Length	14.1 cm		
		Atrial Area	66.0 cm²		
LVLs (A4C)	10.9 cm	LA A2C-A/L		Ao Sinus Minor	6.50 cm
		Length	6.00 cm		
		Area	25.7 cm²		
LVAd (A4C)	79.60 cm²	LA ESV-A/L	86.29 ml	Ao STJ Area	60.6 cm²
LVAs (A4C)	61.90 cm²	LA ESV Index (A4C)	101.9 ml/m²	Ao STJ Major	7.90 cm
EDV (A4C)	497 ml	LA ESV Index (A2C)	133.3 ml/m²	Ao STJ Minor	5.50 cm
ESV (A4C)	313 ml	LA ESV (BP)	260 ml	AV Area	19.2 cm²
LVLd (A2C)	10.9 cm	LA ESV Index (BP)	122.1 ml/m²	HR - AV	57 bpm
LVLs (A2C)	11.6 cm	MV Radius	1.6 cm	MV Ann Major	6.90 cm
LVAd (A2C)	78.30 cm²	MV Alias Vel	46.2 cm/s	MV Ann Minor	7.00 cm
LVAs (A2C)	62.40 cm²	MR Alias Vel	45.0 cm/s	MV Ant Leaflet	9.70 cm
EDV (A2C)	470 ml	MR Radius	3.1 cm	MV Post Leaflet	8.00 cm
ESV (A2C)	294 ml	MR VC	7.90 cm	MV Tenting	4.80 cm
LVAd (A/L)	55.40 cm²	MR Jet Area	82.5 cm²	MV Diam	2.1 cm
LVAs (A/L)	22.40 cm²	MVA (PISA)	7.86 cm²	MV Area (Planim)	10.2 cm²
LV Mass (Cubed)	231 g	TV Radius	0.9 cm	MV Area	10.2 cm²
LV Mass Index(Cubed)	108 g/m²	TV Annulus	2.70 cm	PVA Ann Area	39.0 cm²
IVS % (2D)	16.5 %	TV Diam	1.3 cm	PR VC	5.20 cm
LVPW % (2D)	34.9 %	TV Area	1.33 cm²	PE to Sept Wall	3.80 cm
IVS/LVPW (2D)	1.01	TVA (PISA)	3.01 cm²	PE to Lat Wall	7.00 cm
SV (A4C)	184 ml	SV (TV)	169 ml	PE to Ant Wall	4.60 cm
EF (A4C)	37.0 %	CO (TV)	12.0 l/min	PE to Inf Wall	4.40 cm
CO (A4C)	9.9 l/min	TR Jet Area	48.0 cm²	PE to RV	4.80 cm
CI (A4C)	4.6 l/min/m²	TR VC	4.30 cm	PE to RA	3.90 cm
SI (A4C)	86.4 ml/m²	TR Radius	1.7 cm	PE to Post Wall	3.50 cm

MMode

IVSd (MM)	1.78 cm	CO (MM-Cubed)	0.756 l/min	AoR Diam (MM)	1.7 cm
LVIDd (MM)	3.33 cm	CI (MM-Cubed)	0.355 l/min/m²	AV Cusp Sep	2.5 cm
LVPWd (MM)	1.69 cm	FS (MM-Cubed)	14.7 %	LA/Ao (MM)	1.65
IVSs (MM)	2.24 cm	SI (MM-Cubed)	6.57 ml/m²	MV Prop V	
				Slope	9.60 cm/s
				Time	475 ms
LVIDs (MM)	2.84 cm	IVS % (MM)	25.8 %	MAPSE	5.60 cm
LVPWs (MM)	1.87 cm	LVPW % (MM)	10.7 %	MV D-E Exc	
				Dist	2.7 cm

IVS/LVPW (MM)	1.05	EF (Dumesnil)	5891 %	MV D-E Slope	93.0 cm/s
EDV (MM-Teich)	45.1 ml	LV ET	257 ms	MV E-F Slope	18.0 cm/s
ESV (MM-Teich)	30.6 ml	LV PEP	102 ms	MV EPSS	2.5 cm
SV (MM-Teich)	14.5 ml	LV PEP/ET	0.40	MV E-E Sep	2.2 cm
FS (MM-Teich)	14.7 %	RVAWd (MM)	1.36 cm	MV A-C Interval	511 ms
EF (MM-Teich)	32.2 %	RVIDd (MM)	2.24 cm	Late Dias Slope	14.0 cm/s
CO (MM-Teich)	0.783 l/min	RV ET	243 ms	A Wave Amp	1.7 cm
CI (MM-Teich)	0.368 l/min/m²	RV PEP	109 ms	B-C Slope	11.1 cm/s
SI (MM-Teich)	6.81 ml/m²	RV PEP/ET	0.45	TAPSE	4.20 cm
EDV (MM-Cubed)	36.9 ml	LA Dimen (MM)	2.8 cm	TV D-E Exc Dist	3.4 cm
ESV (MM-Cubed)	22.9 ml	IVC Diam Exp(MM)	7.90 cm	TV D-E Slope	17.8 cm/s
SV (MM-Cubed)	14.0 ml	IVC Diam Ins(MM)	6.30 cm	TV E-F Slope	7.4 cm/s
EF (MM-Cubed)	37.9 %	AR Diam(MM)	3.20 cm		

Doppler

LV dP/dt	56 mmHg/s	AVA(3DQA-SV, VTI)	0.91 cm²	Med E` Vel	69.7 cm/s
Tei Index	3.02	AVA(VTI)/BSA	21.77	Lat E` Vel	53.9 cm/s
LVOT Vmax		PISA (AI)	27.71 cm²	E/Med E`	1.4
Max PG	13 mmHg				
Vmax	179 cm/s				
LVOT VTI		AI Vmax		E/Lat E`	1.8
Mean PG	6 mmHg	Max PG	9 mmHg		
VTI	108 cm	Vmax	149 cm/s		
Vmean	121 cm/s				
SV (LVOT)	2657 ml	AI Accel Time		Med S Vel	139 cm/s
		Slope	87.6 cm/s²		
		Time	975 ms		
CO (LVOT)	151.4 l/min	AI Dec Slope	218 cm/s²	Med A` Vel	129 cm/s

LV MPI	0.72	AI End Dias Vel		Lat S Vel	84.6 cm/s
		Vel	116 cm/s		
		PG	5 mmHg		
LVOT Accel Time		AI P½t		Lat A` Vel	87.9 cm/s
		P½t	215 ms		
Slope	208 cm/s²				
Time	430 ms				
Qp/Qs	0.1	AI VTI		E`/A` Medial	0.5
		Mean PG	5 mmHg		
		VTI	66.8 cm		
		Vmean	107 cm/s		
LVET (DOP)	444 ms	AI Flow Rate	986.5 ml/s	E`/A` Lateral	0.6
Time to Inf S	968 ms	AI ERO	6.62 cm²	Med E` Area	
				VTI	59.0 cm
				Vmax	129 cm/s
				Vmean	102 cm/s
Ant S Vel		AI Volume	442 ml	MV A Dur	214 ms
Vel	110 cm/s				
Ant E' Vel		AI Fraction	17 %	MV Accel Time	
Vel	91.7 cm/s			Slope	109 cm/s²
				Time	542 ms
Ant A' Vel		5mcg AV VTI		R to MV Closure	423 ms
Vel	52.9 cm/s	Mean PG	1 mmHg		
		VTI	14.6 cm		
		Vmean	36.3 cm/s		
Time to Ant S	655 ms	10mcg AV VTI		R to MV Open	451 ms
		Mean PG	3 mmHg		
		VTI	47.7 cm		
		Vmean	78.5 cm/s		
Post S Vel		15mcg AV VTI		MV R-R Interval	535 ms
Vel	59.6 cm/s	Mean PG	3 mmHg		
		VTI	42.4 cm		
		Vmean	70.1 cm/s		
Post E' Vel		20mcg AV VTI		PISA (MR)	60.38 cm²
Vel	89.1 cm/s	Mean PG	2 mmHg		
		VTI	31.7 cm		
		Vmean	49.5 cm/s		
Post A' Vel		Peak AV VTI		SV (MV)	788 ml
Vel	71.1 cm/s	Mean PG	1 mmHg		
		VTI	44.0 cm		
		Vmean	36.0 cm/s		

Time to Post S	173 ms	Recov AV VTI		CO (MV)	53.6 l/min
		Mean PG	2 mmHg		
		VTI	58.5 cm		
		Vmean	72.7 cm/s		
AS E' Vel		MR VTI		HR - TV	71 bpm
Vel	108 cm/s	Mean PG	4 mmHg		
		VTI	55.0 cm		
		Vmean	97.2 cm/s		
AS A' Vel		MR Vmax		TV VTI	
Vel	170 cm/s	Max PG	0 mmHg	Mean PG	8 mmHg
		Vmax	11.2 cm/s	VTI	127 cm
				Vmean	141 cm/s
AS S Vel		MR Flow Rate	2717.1 ml/s	TV Vmax	
Vel	39.7 cm/s			Max PG	12 mmHg
				Vmax	176 cm/s
Time to AS S	359 ms	MR ERO	242.60 cm²	TV Accel Time	
				Slope	202 cm/s²
				Time	423 ms
Inf A' Vel		MR Fraction	1693 %	TV Peak E Vel	
Vel	61.3 cm/s			Vel	130 cm/s
				PG	7 mmHg
Inf E' Vel		MR Volume	13343 ml	TV Peak A Vel	
Vel	26.6 cm/s			Vel	97.9 cm/s
				PG	4 mmHg
Inf S Vel		MR Alias Vel	45.0 cm/s	TV E/A	1.3
Vel	32.1 cm/s				
5mcg LVOT VTI		HR - MV	68 bpm	TV Alias Vel	77.0 cm/s
Mean PG	4 mmHg				
VTI	67.2 cm				
Vmean	93.4 cm/s				
10mcg LVOT VTI		MV Vmax		TR Alias Vel	61.6 cm/s
		Max PG	9 mmHg		
Mean PG	1 mmHg	Vmax	146 cm/s		
VTI	29.5 cm				
Vmean	47.0 cm/s				
15mcg LVOT VTI		MV Vmax-pr		TR Vmax	
		Max PG	5 mmHg	Max PG	9 mmHg
Mean PG	4 mmHg	Vmax	109 cm/s	Vmax	152 cm/s
VTI	51.4 cm				
Vmean	84.1 cm/s				

20mcg LVOT VTI		MV EOA-pr	56.53 cm²	TR VTI	
Mean PG	2 mmHg			Mean PG	8 mmHg
VTI	66.0 cm			VTI	103 cm
Vmean	62.2 cm/s			Vmean	141 cm/s
Peak LVOT VTI		MV DVI-pr	0.44	TR P1/2t	
Mean PG	1 mmHg			P½t	347 ms
VTI	54.7 cm				
Vmean	45.6 cm/s				
Recov LVOT VTI		MV P½t		PISA (TR)	18.16 cm²
Mean PG	2 mmHg	Vmax	152 cm/s		
VTI	46.2 cm	P½t	1258 ms		
Vmean	73.1 cm/s				
Rest LVOT VTI		MV P1/2t-pr		TR Flow Rate	1118.7 ml/s
Mean PG	1 mmHg	P½t	715 ms		
VTI	48.0 cm				
Vmean	49.7 cm/s				
VSD Vmax		MV VTI		TR ERO	7.36 cm²
Max PG	8 mmHg	Mean PG	8 mmHg		
Vmax	145 cm/s	VTI	77.3 cm		
		Vmean	138 cm/s		
RVOT Vmax		MV VTI-pr		RVSP	21 mmHg
Max PG	9 mmHg	Mean PG	1 mmHg		
Vmax	148 cm/s	VTI	47.0 cm		
		Vmean	47.9 cm/s		
RVOT VTI		MV Dec Slope	85.7 cm/s²	TR Fraction	449 %
Mean PG	5 mmHg				
VTI	63.8 cm				
Vmean	106 cm/s				
RV dP/dt	26.0 mmHg/s	MV Decel Time	188 ms	TR Volume	758 ml
RVET (DOP)	528 ms	IVCT	335 ms	TCOT	1173 ms
RV S Vel		IVRT	440 ms	Rest TR Vmax	
Vel	54.8 cm/s			Max PG	109 mmHg
				Vmax	522 cm/s
RV E' Vel		MVA (P½t)	0.17 cm²	Peak TR Vmax	
Vel	84.8 cm/s			Max PG	316 mmHg
				Vmax	889 cm/s
RV A' Vel		MVA (VTI)	34.37 cm²	Recov TR Vmax	
Vel	62.1 cm/s			Max PG	30 mmHg
				Vmax	272 cm/s

Time to RV S	398 ms	MV Peak E Vel		PVA (Vmax)	2.98 cm²
		Vel	94.5 cm/s		
		PG	4 mmHg		
SV (RVOT)	162 ml	MV Peak A Vel		PI Vmax	
		Vel	82.9 cm/s	Max PG	8 mmHg
		PG	3 mmHg	Vmax	138 cm/s
CO (RVOT)	9.4 l/min	MV E/A	1.1	PR P1/2t	
				P½t	908 ms
RV MPI	1.22	MV Alias Vel	46.2 cm/s	RPA Vmax	
				Max PG	25 mmHg
				Vmax	252 cm/s
AV Vmax		Late Dias Slope	14.0 cm/s	LPA Vmax	
Max PG	7 mmHg			Max PG	1 mmHg
Vmax	132 cm/s			Vmax	36.2 cm/s
AV Vmax-pr		A Wave Amp	1.7 cm	PV Vmax	
Max PG	9 mmHg			Max PG	6 mmHg
Vmax	151 cm/s			Vmax	126 cm/s
AV Accel Time		B-C Slope	11.1 cm/s	PV VTI	
Slope	161 cm/s²			Mean PG	5 mmHg
Time	387 ms			VTI	77.2 cm
				Vmean	114 cm/s
AV Decel Time	423 ms	Med A` Area		PV Accel Time	
		VTI	49.4 cm	Slope	173 cm/s²
		Vmax	96.0 cm/s	Time	264 ms
		Vmean	80.3 cm/s		
AV VTI		Lat E` Area		PVA (VTI)	2.10 cm²
Mean PG	4 mmHg	VTI	47.9 cm		
VTI	57.3 cm	Vmax	85.9 cm/s		
Vmean	102 cm/s	Vmean	76.1 cm/s		
AV VTI-pr		Lat A` Area		HR - PV	58 bpm
Mean PG	2 mmHg	VTI	101 cm		
VTI	17.1 cm	Vmax	162 cm/s		
Vmean	66.8 cm/s	Vmean	126 cm/s		
AV EOA-pr	155.37 cm²	Time to Med E`	405 ms	PI End Dias Vel	
				Vel	92.1 cm/s
				PG	3 mmHg
AV EOAI-pr	72.94 cm²/m²	Time to Med S	472 ms	Pulm Sys Vel	
				Vel	147 cm/s
				PG	9 mmHg

AV DVI-pr	1.19	Med Accel Time	627 ms	Pulm Dias Vel	
				Vel	173 cm/s
				PG	12 mmHg
AV P1/2t-pr		Med Decel Time	289 ms	Pulm A Revs Vel	
P½t	451 ms			Vel	133 cm/s
				PG	7 mmHg
Desc Ao Vmax		Time to Lat E`	486 ms	Pulm A Revs Dur	451 ms
Max PG	2 mmHg				
Vmax	72.0 cm/s				
Rest AV VTI		Time to Lat S	229 ms	Hepatic Sys Vel	
Mean PG	3 mmHg				
VTI	50.3 cm			Vel	93.7 cm/s
Vmean	85.3 cm/s			PG	4 mmHg
R to AV Open	387 ms	Lat Accel Time	408 ms	Hepatic Dias Vel	
				Vel	111 cm/s
				PG	5 mmHg
R to AV Closure	232 ms	Lat Decel Time	620 ms	Hep. A Revs Vel	
				Vel	117 cm/s
				PG	5 mmHg
AV R-R Interval	563 ms	Med IVRT	401 ms	Hep. A Revs Dur	250 ms
AV VR	1.36	Med IVCT	187 ms	Pulm S/D	0.8
AVA (Vmax)	33.36 cm²	Lat IVRT	257 ms	Hepatic S/D	0.8
AVA (VTI)	46.37 cm²	Lat IVCT	204 ms		
AVA(3DQ-SV, VTI)	1.65 cm²	MCOT	764 ms		

Left Ventricle

LVOT Diam		EDV (A2C)	470 ml	SI (A2C)	82.6 ml/m²
Dist	5.6 cm				
LVOT Area	24.6 cm²	EDV (A4C)	497 ml	LV ET	
				Time	257 ms
IVSd (MM)	1.78 cm	ESV (A2C)	294 ml	LV PEP	
				Time	102 ms
LVIDd (2D)		ESV (A4C)	313 ml	LV PEP/ET	0.40
Dist	5.96 cm				
LVIDd (MM)	3.33 cm	LVAd (A2C)	78.30 cm²	LVAd Sax Epi	
				Area	65.0 cm²

LVPWd (2D)		LVAd (A4C)	79.60 cm²	LVAd Sax Endo	
Dist	2.29 cm			Area	22.4 cm²
LVPWd (MM)	1.69 cm	LVAd (A/L)	55.40 cm²	LVLd Apical	
				Dist	9.9 cm
IVSd (2D)		LVAs (A2C)	62.40 cm²	LV EDA	
Dist	2.31 cm			Area	125 cm²
IVSs (2D)		LVAs (A4C)	61.90 cm²	LV ESA	
Dist	2.69 cm			Area	106 cm²
IVSs (MM)	2.24 cm	LVAs (A/L)	22.40 cm²	LV FAC	15.2 %
LVIDs (2D)		LVLd (A2C)	10.9 cm	LV Mass (A/L)	476 g
Dist	5.48 cm				
LVIDs (MM)	2.84 cm	LVLd (A4C)	10.4 cm	LV Mass Index (A/L)	223.5 g/m²
LVPWs (2D)		LVLs (A2C)	11.6 cm	LV Lat Wall	
Dist	3.09 cm			Dist	7.20 cm
LVPWs (MM)	1.87 cm	LVLs (A4C)	10.9 cm	LV Ant Wall	
				Dist	5.60 cm
EDV (2D-Teich)	177 ml	EDV (BP)	492 ml	LV Inf Wall	
				Dist	6.70 cm
EDV (MM-Teich)	45.1 ml	ESV (BP)	309 ml	LV Post Wall	
				Dist	6.80 cm
ESV (2D-Teich)	146 ml	SV (BP)	183 ml	LV dP/dt	56 mmHg/s
ESV (MM-Teich)	30.6 ml	EF (BP)	37.2 %	Tei Index	3.02
SV (2D-Teich)	31.0 ml	LVd (A/L)		LVOT VTI	
		Length	13.9 cm	Mean PG	6 mmHg
		Area	55.4 cm²	VTI	108 cm
				Vmean	121 cm/s
SV (MM-Teich)	14.5 ml	LVs (A/L)		SV (LVOT)	2657 ml
		Length	13.4 cm		
		Area	22.4 cm²		
FS (2D-Teich)	8.05 %	EDV (A/L)	187 ml	CO (LVOT)	151.4 l/min
FS (MM-Teich)	14.7 %	EDV (MM-Cubed)	36.9 ml	LV MPI	0.72
EF (2D-Teich)	17.5 %	ESV (A/L)	31.8 ml	Qp/Qs	0.1
EF (MM-Teich)	32.2 %	ESV (MM-Cubed)	22.9 ml	LVET (DOP)	
				Time	444 ms
CO (2D-Teich)	1.67 l/min	SV (A/L)	155 ml	Time to Inf S	
				Time	968 ms

CO (MM-Teich)	0.783 l/min	SV (MM-Cubed)	14.0 ml	Ant S Vel	
				Vel	110 cm/s
CI (2D-Teich)	0.784 l/min/m²	EF (A/L)	83.0 %	Ant E' Vel	
				Vel	91.7 cm/s
CI (MM-Teich)	0.368 l/min/m²	EF (MM-Cubed)	37.9 %	Ant A' Vel	
				Vel	52.9 cm/s
SI (2D-Teich)	14.6 ml/m²	CO (A/L)	8.4 l/min	Time to Ant S	
				Time	655 ms
SI (MM-Teich)	6.81 ml/m²	CO (MM-Cubed)	0.756 l/min	Post S Vel	
				Vel	59.6 cm/s
EDV (2D-Cubed)	212 ml	CI (A/L)	3.9 l/min/m²	Post E' Vel	
				Vel	89.1 cm/s
ESV (2D-Cubed)	165 ml	CI (MM-Cubed)	0.355 l/min/m²	Post A' Vel	
				Vel	71.1 cm/s
SV (2D-Cubed)	47.0 ml	SI (A/L)	72.8 ml/m²	Time to Post S	
				Time	173 ms
FS (2D-Cubed)	8.05 %	SI (MM-Cubed)	6.57 ml/m²	AS E' Vel	
				Vel	108 cm/s
EF (2D-Cubed)	22.2 %	LVLd (A/L)	13.9 cm	AS A' Vel	
				Vel	170 cm/s
CO (2D-Cubed)	2.54 l/min	LVLs (A/L)	13.4 cm	AS S Vel	
				Vel	39.7 cm/s
CI (2D-Cubed)	1.19 l/min/m²	LV Mass (Cubed)	231 g	Time to AS S	
				Time	359 ms
SI (2D-Cubed)	22.1 ml/m²	LV Mass Index(Cubed)	108 g/m²	Inf A' Vel	
				Vel	61.3 cm/s
HR - LV	54 bpm	IVS % (2D)	16.5 %	Inf E' Vel	
				Vel	26.6 cm/s
CO (BP)	9.9 l/min	IVS % (MM)	25.8 %	Inf S Vel	
				Vel	32.1 cm/s
CI (BP)	4.6 l/min/m²	LVPW % (2D)	34.9 %	LVOT Vmax	
				Max PG	13 mmHg
				Vmax	179 cm/s
SI (BP)	85.9 ml/m²	LVPW % (MM)	10.7 %	LVOT Accel Time	
				Slope	208 cm/s²
				Time	430 ms
Late Dias Slope		IVS/LVPW (2D)	1.01	5mcg LVOT VTI	
Slope	14.0 cm/s			Mean PG	4 mmHg
				VTI	67.2 cm
				Vmean	93.4 cm/s

A Wave Amp	1.7 cm	SV (A4C)	184 ml	10mcg LVOT VTI	
				Mean PG	1 mmHg
				VTI	29.5 cm
				Vmean	47.0 cm/s
B-C Slope		EF (A4C)	37.0 %	15mcg LVOT VTI	
Slope	11.1 cm/s				
				Mean PG	4 mmHg
				VTI	51.4 cm
				Vmean	84.1 cm/s
IVS/LVPW (MM)	1.05	CO (A4C)	9.9 l/min	20mcg LVOT VTI	
				Mean PG	2 mmHg
				VTI	66.0 cm
				Vmean	62.2 cm/s
FS (MM-Cubed)	14.7 %	CI (A4C)	4.6 l/min/m²	Peak LVOT VTI	
				Mean PG	1 mmHg
				VTI	54.7 cm
				Vmean	45.6 cm/s
EF (Dumesnil)	5891 %	SI (A4C)	86.4 ml/m²	Recov LVOT VTI	
				Mean PG	2 mmHg
				VTI	46.2 cm
				Vmean	73.1 cm/s
A4Cd		SV (A2C)	176 ml	Rest LVOT VTI	
LV Vol	499 ml			Mean PG	1 mmHg
LV Length	10.4 cm			VTI	48.0 cm
LV Area	79.6 cm²			Vmean	49.7 cm/s
A4Cs		EF (A2C)	37.4 %	VSD Vmax	
LV Vol	313 ml			Max PG	8 mmHg
LV Length	10.9 cm			Vmax	145 cm/s
LV Area	61.9 cm²				
A2Cd		CO (A2C)	9.5 l/min	IV Septum Wall	
LV Vol	471 ml				
LV Length	10.9 cm			Dist	6.60 cm
LV Area	78.3 cm²				
A2Cs		CI (A2C)	4.5 l/min/m²	RVIDd/LVIDd	0.666
LV Vol	293 ml				
LV Length	11.6 cm				
LV Area	62.4 cm²				

Right Ventricle

RV Base Dist	6.00 cm	RVIDd (MM)	2.24 cm	RV dP/dt	26.0 mmHg/s
RV Mid Dist	6.40 cm	RV EDA Area	86.9 cm²	RVET (DOP) Time	528 ms
RV Length Dist	4.00 cm	RV ESA Area	69.3 cm²	RV S Vel Vel	54.8 cm/s
RVOT Prox Dist	5.80 cm	RV FAC	20.3 %	RV E' Vel Vel	84.8 cm/s
RVOT Distal Dist	5.10 cm	RV ET Time	243 ms	RV A' Vel Vel	62.1 cm/s
RVOT Diam Dist	1.8 cm	RV PEP Time	109 ms	Time to RV S Time	398 ms
RV Wall Dist	4.90 cm	RV PEP/ET	0.45	RV MPI	1.22
RVAWd (2D) Dist	3.19 cm	RVOT Area	2.54 cm²	SV (RVOT)	162 ml
RVAWd (MM)	1.36 cm	RVOT Vmax		CO (RVOT)	9.4 l/min
		Max PG	9 mmHg		
		Vmax	148 cm/s		
RVIDd (2D) Dist	3.97 cm	RVOT VTI			
		Mean PG	5 mmHg		
		VTI	63.8 cm		
		Vmean	106 cm/s		

Left Atrium

LA Dimen (MM)	2.8 cm	LA A2Cs		LA A4C-A/L	
		Atrial Volume	284 ml	Length	8.60 cm
		Atrial Length	14.1 cm	Area	23.7 cm²
		Atrial Area	66.0 cm²		
LA Area Area	71.0 cm²	LA Dimen (2D) Dist	4.8 cm	LA ESV Index (A4C)	101.9 ml/m²
LA Width Dist	5.50 cm	LA/Ao (2D)	1.55	LA ESV Index (A2C)	133.3 ml/m²
LA Length Dist	7.00 cm	LA ESV-A/L	86.29 ml	LA ESV (BP)	260 ml
LA A4Cs		LA A2C-A/L		LA ESV Index (BP)	122.1 ml/m²
Atrial Volume	217 ml	Length	6.00 cm		
Atrial Length	12.7 cm	Area	25.7 cm²		
Atrial Area	55.5 cm²				

Right Atrium

RA Width		RA A2Cs		RA Pressure	12 mmHg
Dist	5.20 cm	Atrial Volume	186 ml		
		Atrial Length	7.71 cm		
		Atrial Area	39.6 cm²		
RA Length		RA ESV Index (A2C)	87.3 ml/m²	IVC Diam	
Dist	6.10 cm			Dist	6.00 cm
RA A4Cs		RA ESV Index (A4C)	37.8 ml/m²	IVC Diam Exp	
Atrial Volume	80.6 ml			Dist	3.00 cm
Atrial Length	8.40 cm				
Atrial Area	28.9 cm²				
RA A4C-A/L		RA ESV (BP)	122 ml	IVC Diam Ins	
Length	7.40 cm			Dist	8.00 cm
Area	32.1 cm²				
RA A2C-A/L		RA ESV Index (BP)	57.3 ml/m²	IVC Diam Exp(MM)	7.90 cm
Length	7.90 cm				
Area	29.0 cm²				
RA ESA		RA ESV-A/L	106.93 ml	IVC Diam Ins(MM)	6.30 cm
Area	83.5 cm²				

Aortic Valve

AR Diam(MM)	3.20 cm	Ao STJ Major Dist	7.90 cm	AVA (VTI)	46.37 cm²
AV Cusp Sep	2.5 cm	Ao STJ Minor Dist	5.50 cm	AVA(VTI)/BSA	21.77
AR VC Dist	6.30 cm	AV Area Area	19.2 cm²	AVA(3DQ-SV, VTI)	1.65 cm²
Desc Ao Diam Dist	2.7 cm	Asc Ao Diam Dist	1.9 cm	AVA(3DQA-SV, VTI)	0.91 cm²
Prox ascAo Diam Dist	5.90 cm	Ao Arch Diam Dist	4.0 cm	PISA (AI)	27.71 cm²
Ao Isthmus Diam Dist	2.8 cm	HR - AV	57 bpm	AI Vmax Max PG Vmax	9 mmHg 149 cm/s
AoR Diam (2D) Dist	3.1 cm	LA/Ao (MM)	1.65	AI Accel Time Slope Time	87.6 cm/s² 975 ms
AoR Diam (MM)	1.7 cm	AV Vmax Max PG Vmax	7 mmHg 132 cm/s	AI Dec Slope Slope	218 cm/s²
Ao Sinus Diam Dist	6.90 cm	AV Vmax-pr Max PG Vmax	9 mmHg 151 cm/s	AI End Dias Vel Vel PG	116 cm/s 5 mmHg
Ao STJ Diam Dist	5.90 cm	AV Accel Time Slope Time	161 cm/s² 387 ms	AI P½t P½t	215 ms
Ao Ann Diam Dist	4.70 cm	AV Decel Time Time	423 ms	AI VTI Mean PG VTI Vmean	5 mmHg 66.8 cm 107 cm/s
Ao Ann Diam Ratio	1.79	AV VTI Mean PG VTI Vmean	4 mmHg 57.3 cm 102 cm/s	AI Flow Rate	986.5 ml/s
Ao Sinus Diam Ratio	1.37	AV VTI-pr Mean PG VTI Vmean	2 mmHg 17.1 cm 66.8 cm/s	AI ERO	6.62 cm²

Ao STJ Diam Ratio	1.44	AV EOA-pr	155.37 cm²	AI Volume	442 ml
Ao Ann Area		AV EOAI-pr	72.94 cm²/m²	AI Fraction	17 %
Area	17.5 cm²				
Ao Ann-LCA Dist		AV DVI-pr	1.19	AI Radius	
				Dist	2.1 cm
Dist	7.30 cm				
Ao Ann Major		AV P1/2t-pr		AI Alias Vel	35.6 cm/s
Dist	6.10 cm	P½t	451 ms		
Ao Ann Minor		Desc Ao Vmax		5mcg AV VTI	
Dist	3.40 cm	Max PG	2 mmHg	Mean PG	1 mmHg
		Vmax	72.0 cm/s	VTI	14.6 cm
				Vmean	36.3 cm/s
Ao Ann-RCA Dist		Rest AV VTI		10mcg AV VTI	
		Mean PG	3 mmHg	Mean PG	3 mmHg
Dist	6.70 cm	VTI	50.3 cm	VTI	47.7 cm
		Vmean	85.3 cm/s	Vmean	78.5 cm/s
Ao Ann-STJ Dist		R to AV Closure		15mcg AV VTI	
				Mean PG	3 mmHg
Dist	8.20 cm	Time	232 ms	VTI	42.4 cm
				Vmean	70.1 cm/s
Ao Sinus Area		R to AV Open		20mcg AV VTI	
Area	33.9 cm²	Time	387 ms	Mean PG	2 mmHg
				VTI	31.7 cm
				Vmean	49.5 cm/s
Ao Sinus Major		AV R-R Interval		Peak AV VTI	
				Mean PG	1 mmHg
Dist	8.90 cm	Time	563 ms	VTI	44.0 cm
				Vmean	36.0 cm/s
Ao Sinus Minor		AV VR	1.36	Recov AV VTI	
				Mean PG	2 mmHg
Dist	6.50 cm			VTI	58.5 cm
				Vmean	72.7 cm/s
Ao STJ Area		AVA (Vmax)	33.36 cm²		
Area	60.6 cm²				

Mitral Valve

MV Prop V		MV P1/2t-pr		Time to Lat E`	
Slope	9.60 cm/s	P½t	715 ms	Time	486 ms
Time	475 ms				

MAPSE		MV VTI		Time to Lat S	
Dist	5.60 cm	Mean PG	8 mmHg	Time	229 ms
		VTI	77.3 cm		
		Vmean	138 cm/s		
MV Ann Major		MV VTI-pr		Lat Accel Time	
Dist	6.90 cm	Mean PG	1 mmHg	Time	408 ms
		VTI	47.0 cm		
		Vmean	47.9 cm/s		
MV Ann Minor		MV Dec Slope		Lat Decel Time	
Dist	7.00 cm	Slope	85.7 cm/s²	Time	620 ms
MV Ant Leaflet		MV Decel Time		Med IVRT	
Dist	9.70 cm			Time	401 ms
		Max PG	3 mmHg		
		Vmax	86.0 cm/s		
		Time	188 ms		
MV Post Leaflet		IVCT		Med IVCT	
Dist	8.00 cm	Time	335 ms	Time	187 ms
MV Tenting		IVRT		Lat IVRT	
Dist	4.80 cm	Time	440 ms	Time	257 ms
MV Diam		MVA (P½t)	0.17 cm²	Lat IVCT	
Dist	2.1 cm			Time	204 ms
MV Area (Planim)		MVA (VTI)	34.37 cm²	MCOT	
				Time	764 ms
Area	10.2 cm²				
MV Area	10.2 cm²	MV Peak E Vel		Med E` Vel	
		Vel	94.5 cm/s	Vel	69.7 cm/s
		PG	4 mmHg		
MV Radius		MV Peak A Vel		Lat E` Vel	
Dist	1.6 cm	Vel	82.9 cm/s	Vel	53.9 cm/s
		PG	3 mmHg		
MV Alias Vel	46.2 cm/s	MV E/A	1.1	E/Med E`	1.4
MR Radius		MVA (PISA)	7.86 cm²	E/Lat E`	1.8
Dist	3.1 cm				
MR VC		MV D-E Exc		Med S Vel	
Dist	7.90 cm	Dist	2.7 cm	Vel	139 cm/s
MR Jet Area		MV D-E Slope		Med A` Vel	
Area	82.5 cm²	Slope	93.0 cm/s	Vel	129 cm/s

MR VTI		MV E-F Slope		Lat S Vel	
Mean PG	4 mmHg	Slope	18.0 cm/s	Vel	84.6 cm/s
VTI	55.0 cm				
Vmean	97.2 cm/s				
MR Vmax		MV EPSS	2.5 cm	Lat A` Vel	
Max PG	0 mmHg			Vel	87.9 cm/s
Vmax	11.2 cm/s				
MR Flow Rate	2717.1 ml/s	MV E-E Sep	2.2 cm	E`/A` Medial	0.5
MR ERO	242.60 cm²	MV A-C Interval		E`/A` Lateral	0.6
		Time	511 ms		
MR Fraction	1693 %	Late Dias Slope		Med E` Area	
		Slope	14.0 cm/s	VTI	59.0 cm
				Vmax	129 cm/s
				Vmean	102 cm/s
MR Volume	13343 ml	A Wave Amp	1.7 cm	MV A Dur	
				Time	214 ms
MR Alias Vel	45.0 cm/s	B-C Slope		MV Accel Time	
		Slope	11.1 cm/s	Slope	109 cm/s²
				Time	542 ms
MR Alias Vel	45.0 cm/s	Med A` Area		R to MV Closure	
		VTI	49.4 cm		
		Vmax	96.0 cm/s	Time	423 ms
		Vmean	80.3 cm/s		
HR - MV	68 bpm	Lat E` Area		R to MV Open	
		VTI	47.9 cm	Time	451 ms
		Vmax	85.9 cm/s		
		Vmean	76.1 cm/s		
MV Vmax		Lat A` Area		MV R-R Interval	
Max PG	9 mmHg	VTI	101 cm		
Vmax	146 cm/s	Vmax	162 cm/s	Time	535 ms
		Vmean	126 cm/s		
MV Vmax-pr		Time to Med E`		PISA (MR)	60.38 cm²
Max PG	5 mmHg				
Vmax	109 cm/s	Time	405 ms		
MV EOA-pr	56.53 cm²	Time to Med S		SV (MV)	788 ml
		Time	472 ms		
MV DVI-pr	0.44	Med Accel Time		CO (MV)	53.6 l/min
		Time	627 ms		

MV P½t		Med Decel Time	
Vmax	152 cm/s	Time	289 ms
P½t	1258 ms		

Tricuspid Valve

TV Radius		CO (TV)	12.0 l/min	TR P1/2t	
Dist	0.9 cm			P½t	347 ms
TV Annulus		TV A-C		PISA (TR)	18.16 cm²
Dist	2.70 cm	Interval			
		Time	254 ms		
TV Alias Vel	77.0 cm/s	TV VTI		TR Flow Rate	1118.7 ml/s
		Mean PG	8 mmHg		
		VTI	127 cm		
		Vmean	141 cm/s		
TAPSE		TV Vmax		TR ERO	7.36 cm²
Dist	4.20 cm	Max PG	12 mmHg		
		Vmax	176 cm/s		
TV D-E Exc		TV Peak E Vel		TR Fraction	449 %
Dist	3.4 cm	Vel	130 cm/s		
		PG	7 mmHg		
TV D-E Slope		TV Peak A Vel		TCOT	
Slope	17.8 cm/s	Vel	97.9 cm/s	Time	1173 ms
		PG	4 mmHg		
TV E-F Slope		TV E/A	1.3	RVSP	21 mmHg
Slope	7.4 cm/s				
TV Diam		TR Jet Area		TR Volume	758 ml
Dist	1.3 cm	Area	48.0 cm²		
TV Area	1.33 cm²	TR VC		Rest TR Vmax	
		Dist	4.30 cm	Max PG	109 mmHg
				Vmax	522 cm/s
HR - TV	71 bpm	TR Radius		Peak TR Vmax	
		Dist	1.7 cm	Max PG	316 mmHg
				Vmax	889 cm/s
TV Accel Time		TR Alias Vel	61.6 cm/s	Recov TR Vmax	
Slope	202 cm/s²				
Time	423 ms			Max PG	30 mmHg
				Vmax	272 cm/s
TVA (PISA)	3.01 cm²	TR Vmax			
		Max PG	9 mmHg		
		Vmax	152 cm/s		

SV (TV)	169 ml	TR VTI	
		Mean PG	8 mmHg
		VTI	103 cm
		Vmean	141 cm/s

Pulmonic Valve and Vessels

LPA Diam		LPA Vmax		Pulm A Revs Vel	
Dist	5.7 cm	Max PG	1 mmHg	Vel	133 cm/s
		Vmax	36.2 cm/s	PG	7 mmHg
RPA Diam		PV Vmax		Pulm A Revs Dur	
Dist	2.4 cm	Max PG	6 mmHg	Time	451 ms
		Vmax	126 cm/s		
MPA Diam		PV VTI		Hepatic Sys Vel	
Dist	2.3 cm	Mean PG	5 mmHg	Vel	93.7 cm/s
		VTI	77.2 cm	PG	4 mmHg
		Vmean	114 cm/s		
PVA Ann Area		PV Accel Time		Hepatic Dias Vel	
Area	39.0 cm^2	Slope	173 cm/s^2	Vel	111 cm/s
		Time	264 ms	PG	5 mmHg
PR VC		PVA (VTI)	2.10 cm^2	Hep. A Revs Vel	
Dist	5.20 cm			Vel	117 cm/s
				PG	5 mmHg
PVA (Vmax)	2.98 cm^2	HR - PV	58 bpm	Hep. A Revs Dur	
				Time	250 ms
PI Vmax		PI End Dias Vel		Pulm S/D	0.8
Max PG	8 mmHg	Vel	92.1 cm/s		
Vmax	138 cm/s	PG	3 mmHg		
PR P1/2t		Pulm Sys Vel		Hepatic S/D	0.8
P½t	908 ms	Vel	147 cm/s		
		PG	9 mmHg		
RPA Vmax		Pulm Dias Vel			
Max PG	25 mmHg	Vel	173 cm/s		
Vmax	252 cm/s	PG	12 mmHg		

Additional Measurements

PE to Sept Wall		PE to Inf Wall		PE to Post Wall	
Dist	3.80 cm	Dist	4.40 cm	Dist	3.50 cm
PE to Lat Wall		PE to RV			
Dist	7.00 cm	Dist	4.80 cm		
PE to Ant Wall		PE to RA			
Dist	4.60 cm	Dist	3.90 cm		

3DQA

EF VOL-3DQA	
EF	51.3 %
EDV	102.0 ml
ESV	49.7 ml
SV	52.3 ml

3DQ

EF BP-3DQ	
EF	38.41 %
EDV	245.67 ml
ESV	151.30 ml
LV Mass ED	289.76 g
LV Mass ES	294.85 g

Signature

Signature:

Name(Print): Date: