

## All Reviewers List

on 2/9/2023 16:19

### Transthoracic echo (TTE) complete

Name:		Date of Study:	2/6/23
MRN:		Ordering:	
DOB:		Indications:	S/P TAVR (transcatheter aortic valve replacement) [Z95.2 (ICD-10-CM)]
Gender Identity:	Male		
Height:	1.753 m (5' 9")		
Weight:	106 kg (234 lb)		
BSA:	2.21 m <sup>2</sup>		
BP:	142/75		

Interpreting Physicians

Performing Staff

 **Transthoracic echo (TTE) complete with or without micro-bubble contrast as needed per protocol: Patient Communication**

 Released

 Seen

## Cardiac Procedural History

### Past Surgical History

	Laterality	Date	Comments
Coronary angiography with LV and right heart	N/A	9/2/2021	
Coronary angiography with LV	N/A	11/25/2022	
Replacement Transcatheter Aortic Valve Endovascular (TAVR) with TEE	N/A	12/28/2022	
Coronary angiography with LV	N/A	8/3/2023	
Percutaneous coronary intervention (PCI)	N/A	8/3/2023	

## Interpretation Summary

Normal LV size and systolic function. LVEF 60-65%  
Normal RV size and systolic function  
There is a well seated TAVR aortic valve in place, without stenosis or regurgitation

In comparison to prior periprocedural TTE 12/28/2022, there are no significant changes

## Study Details

**Echo** An echo was performed using complete 2D, color flow Doppler and spectral Doppler. Overall the study quality was adequate. The study had technical difficulties. The study was difficult due to patient's body habitus. Good apical endocardial definition in off axis views.

**Rhythm** normal sinus

**Prior Study** Prior TTE study available for comparison. Prior study date: 10/12/2022.

## Myocardial Findings

<b>Left Ventricle</b>	Appears normal in size, thickness, motion, and function with an ejection fraction of 60-65%. E/e'=15
<b>Wall Motion</b>	The left ventricular wall motion is normal.
<b>Right Ventricle</b>	Cavity appears normal. Systolic function is normal. Normal tricuspid annular plane systolic excursion (TAPSE) > 1.7 cm.
<b>Left Atrium</b>	Left atrial volume index is normal.
<b>Right Atrium</b>	Cavity is normal.
<b>IAS</b>	Color Doppler indicates no evidence of shunting.
<b>IVS</b>	There is no visible ventricular septal defect.
<b>IVC/SVC</b>	The inferior vena cava demonstrates a diameter of <=21 mm and collapses >50%.
<b>Mitral Valve</b>	Mitral valve structure is normal. The leaflets appear mildly thickened. There is trace regurgitation. There is no evidence of mitral valve stenosis.
<b>Tricuspid Valve</b>	Tricuspid valve structure is normal. There is trace regurgitation. There is no evidence of tricuspid valve stenosis. The right ventricular systolic pressure is upper limit of normal (30-35 mmHg).
<b>Aortic Valve</b>	There is a TAVR bioprosthetic valve. The prosthetic valve appears well-seated and appears to be functioning normally. There is no regurgitation. The gradient recorded across the prosthetic aortic valve is within the expected range.
<b>Pulmonic Valve</b>	Pulmonic valve structure is normal. There is no regurgitation or stenosis.
<b>Aorta</b>	Appears normal in size.
<b>Pericardium</b>	There is no pericardial effusion.

## 2D Measurements

Volumes		Dimensions		Aortic Root - End Diastolic	
LVOT stroke volume	56.11 cm3	LVIDd	4.2 cm	Ao-sinuses	3.1 cm
EF	62 %	LVIDs	2.7 cm	Ao-st junc	3 cm
LVED vol by BP	66 mL	IVSd	1.1 cm	Ao-asc	3.6 cm
LVED vol index by BP	29.1 mL/m2	LVPWd	1 cm		
LVES vol by BP	25 mL	FS	36 %		
LVES vol index by BP	11 mL/m2				
LVED vol by MP	60 mL				
LVED vol index by MP	26.4 mL/m2				
LVES vol by MP	22 mL				
LVES vol index by MP	9.7 mL/m2				
LA vol by MP	28 cm3				
LA vol index by	14 mL/m2				

### Doppler Measurements - Aortic Valve

LVOT diameter	1.9 cm	AV LVOT	5 mmHg
LVOT area	2.83 cm <sup>2</sup>	peak	
LVOT peak vel	1.11 m/s	gradient	
LVOT peak VTI	19.8 cm		
AV peak vel	1.2 m/s		
AV VTI	22.8 cm		
AV VTI ratio	0.87		
AV area	2.6 cm <sup>2</sup>		
AV area index	1.1 cm <sup>2</sup> /m <sup>2</sup>		
AV mean gradient	2 mmHg		
AV peak gradient	6 mmHg		
AV velocity ratio	0.93		

### Doppler Measurements - Mitral Valve

MV VTI	34.7 cm	MV peak E vel	121 cm/s
MV mean gradient	3 mmHg	MV e'	8.6 cm/s
MV peak gradient	6 mmHg	tissue velocity lateral	
MV valve area by continuity eq	1.62 cm <sup>2</sup>	MV E/e' tissue velocity lateral	14.07
		MV e' tissue velocity medial	7.8 cm/s
		MV E/e' tissue velocity medial	15.51
		MV Peak A Vel	88 cm/s

### Doppler Measurements - Tricuspid Valve

RVSP	32 mmHg	TR peak gradient	29 mmHg	TR max vel	2.7 m/s
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### Doppler Measurements - Pulmonic Valve

PV peak gradient	3 mmHg	Pulmonic Valve Acceleration Time	108 ms
		PV PEAK VELOCITY	0.9 cm/s

### Doppler Measurements - Diastolic Filling

E/A ratio	1.38	E wave deceleration time	185 msec
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IVRT

79 msec

MV "A" wave duration

151 msec

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Pulm vein "A" wave  
duration

98 msec

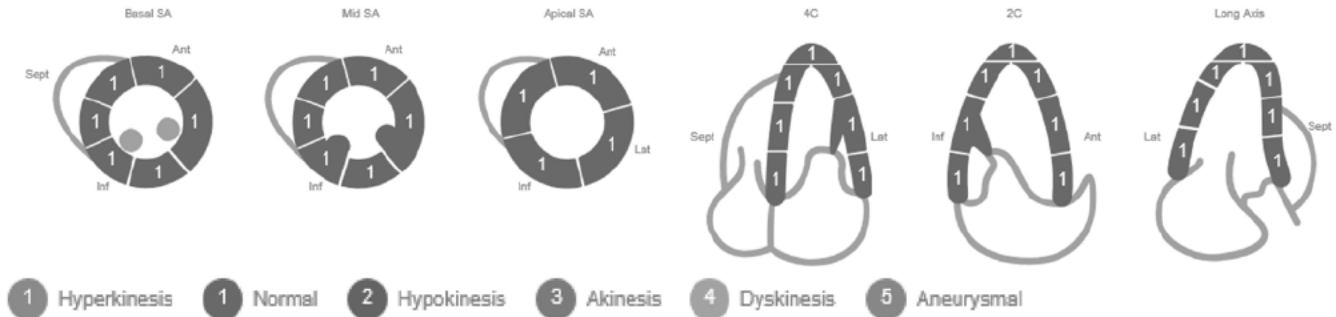
## Doppler Measurements - Shunt Ratio

LVOT stroke volume

56.11 cm<sup>3</sup>

## Wall Motion

Score Index: 1.00



## PACS Images

(Link Unavailable) Show images for Transthoracic echo (TTE) complete with or without micro-bubble contrast as needed per protocol

## Encounter-Level Documents on 02/06/2023:

Condition of Registration - Electronic signature on 2/6/2023 8:51 AM - E-signed

## Signed

Electronically signed by [REDACTED] on 2/6/23 at 1140 PST

## Printable Result Report

Result Report

## Encounter

View Encounter