AORTIC VALVE STENOSIS - SEVERITY

	Aortic sclerosis	Mild	Moderate	Severe
Aortic jet velocity (m/s)	<= 2.5 m/s	2.6 – 2.9	3.0 – 4.0	> 4.0
Mean gradient		<20 (<30 a)	20- 40 b (30-50 a)	> 40 b (>50 a)
AVA (cm ²)		> 1.5	1.0 – 1.5	<1
Index AVA (cm ² /m ²)		>0.85	0.60 - 0.85	<0.6
Velocity ratio		>0.50	0.25 - 0.50	<0.25

a – ESC guidelines, b – AHA/ACC guidelines

AORTIC REGURGITATION - SEVERITY

	Mild	Moderate	Severe
Specific signs for AR severity	Central jet width < 25% of LVOT Vena Contracta < 0.3 cms ² No or brief early diastolic flow reversal in descending aorta	Signs for AR mild present but no criteria for severity	Central jet width >= 65% of LVOT Vena contracts > 0.6 cm ²
Supportive signs	Pressure half time > 500 ms Normal LV size	Intermediate values	Pressure half time < 200 ms Holodiastolic aortic flow reversal in descending aorta Moderate or greater LV enlargement

	Reference value	Mild	Moderate	Severe
R Vol. ml/beat	<30	30 - 44	45 - 59	>= 60
RF %	< 30	30 - 39	40 - 49	>= 50
EROA cm ²	< 0.10	0.10 to 0.19	0.20 - 29	>= 0.30

EROA - effective regurgitant orifice area , RF – regurgitant fraction, LV – Left Ventricle, LVOT – Left ventricular outflow tract