## DR STEPHEN VERNON

MBBS, B Med Sci, PhD, FRACP Consultant & Interventional Cardiologist



Our Ref: MRN 0198323 (SV:gts) 13 March 2025

Dr David Lifson 270 Victoria Avenue CHATSWOOD NSW 2067

Re: Ian Green DOB: 27/10/1946

23 Cobar Street Willoughby NSW 2068 Telephone No: 0424 807 457

## TRANSTHORACIC ECHOCARDIOGRAM REPORT

**CLINICAL DIAGNOSES:** Bioprosthetic aortic valve replacement. Patient-prosthesis mismatch. Increasing dyspnoea on exertion. Progress echocardiogram.

Height 1.82 m. Weight 97 kg. BSA 2.18 m<sup>2</sup>.

	Measurements	Normal Range
Aortic Outflow	4.4 cm	(2.0 - 3.7 cm)
LVOT		
Septal Thickness	1.2 cm	(0.7 - 1.1 cm)
Post LV Wall Thickness	1.3 cm	(0.7 - 1.1 cm)
LV End-diastolic Dimension	5.9 cm	(3.5 - 5.6 cm)
LV End-systolic Dimension	4.3 cm	(2.5 - 4.1 cm)
RV Internal Dimension		(0.7 - 2.3 cm)
LA Internal Dimension		(1.9 - 4.0 cm)
MV Peak E-wave: 1.06 m/s	Em (E'): 10.4 cm/s	Peak AV Flow Velocity: 4.26 m/s VTI: 114 cm
MV Peak A-wave: 0.60 m/s		Peak LVOT Flow Velocity: 1.4 m/s VTI: 36 cm
MV E/A: 1.8		TR Vmax: 3.4
	E/E' lateral 10.2	LAVI: 49 ml/m2 LAA: 32 cm <sup>2</sup> RAA: 32 cm <sup>2</sup>
Ascending aorta: 4.5 cm		TAPSE: 2.6 RVS':

## FINDINGS:

- 1. Mildly dilated left ventricle with normal systolic function. LVEF 55-60%. No regional wall motion abnormality.
- 2. Mild concentric left ventricular hypertrophy. Grade 2 diastolic dysfunction.
- 3. Normal right ventricular size and systolic function.
- 4. Severely dilated left atrium. Moderately dilated right atrium.
- 5. Mildly dilated aortic root and ascending aorta.
- 6. **Aortic valve**: Well seated bioprosthesis. Leaflets appeared mildly thickened with mild restriction of motion. Increased flow parameters suggestive of patient-prosthesis mismatch plus degree of prosthetic valve stenosis. PV 4.26 m/sec. MG 45 mmHg. DVI 0.34. AT 135 msec, AT/ET 0.38, AVAI 0.70 cm²/m². Mild-to-moderate transvalvular regurgitation. PHT 419 msec.
- 7. Mitral valve: Mildly thickened leaflets with normal function. Mild regurgitation.
- 8. Tricuspid valve: Normal structure, mild regurgitation.
- 9. **Pulmonary valve:** Normal structure, trivial regurgitation.
- 10. Estimated PASP 49 mmHg assuming right atrial pressure of 3 mmHg.
- 11. No intracardiac shunts, thrombus, masses or pericardial effusion detected.
- 12. Sinus rhythm 62 bpm.

**CONCLUSIONS:** Mildly dilated left ventricle with normal systolic function. LVEF 55-60%. Mild concentric left ventricular hypertrophy with grade 2 diastolic dysfunction. Normal right ventricular size and systolic function. Severely dilated left atrium. Moderately dilated right atrium. Well seated bioprosthetic aortic valve with mildly thickened leaflets and mild restriction of motion. Increased flow parameters suggestive of patient-prosthesis mismatch. Mild-to-moderate aortic valve regurgitation. Mild tricuspid regurgitation. Mild pulmonary hypertension. Mild-to-moderately dilated aortic

root and ascending aorta.

With best wishes Yours sincerely

Dr Stephen Vernon