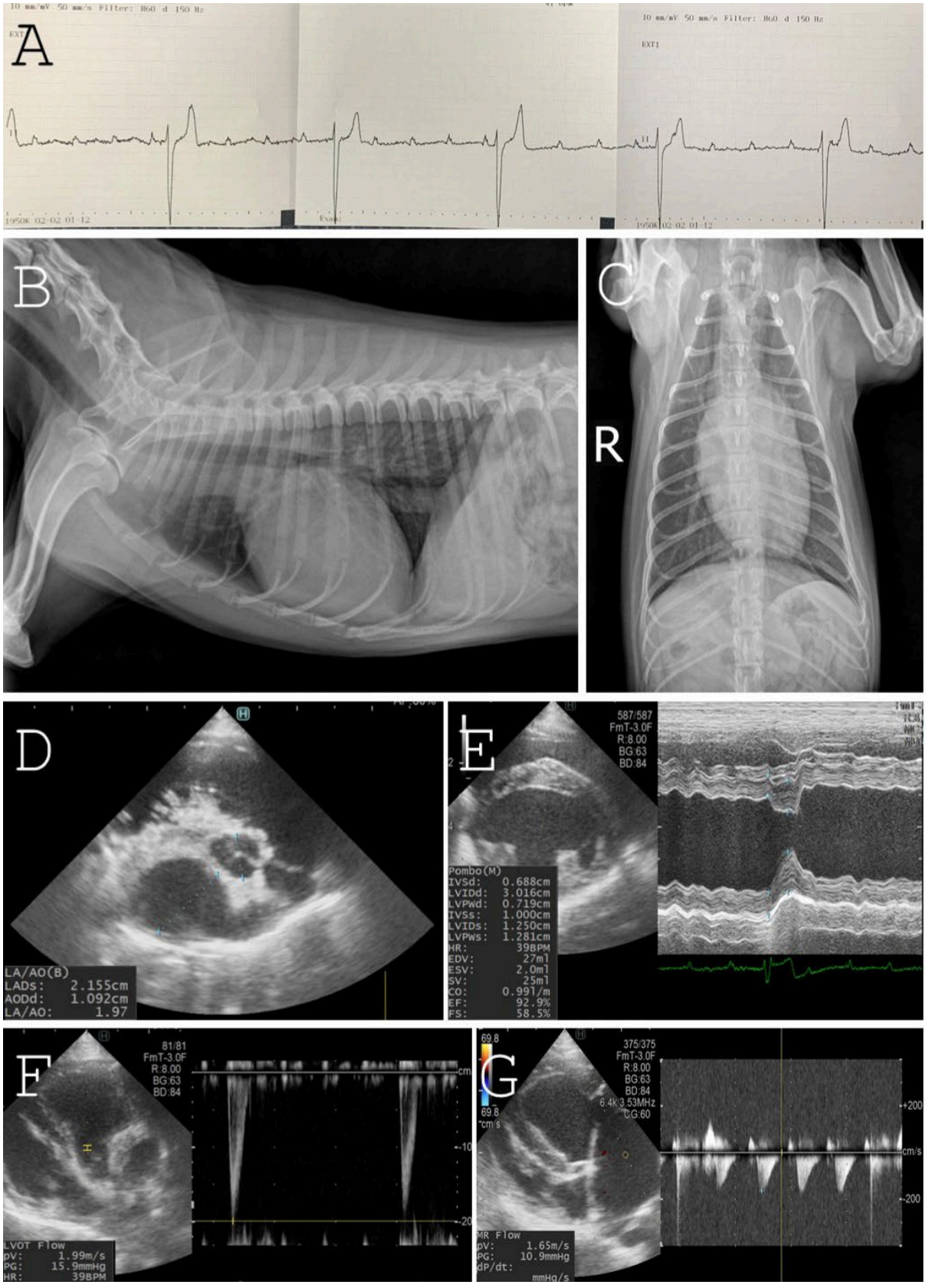

Figure S1. ECG, thoracic radiography and echocardiography of Case 2 at initial presentation. (A) ECG had blocked sinus P waves dissociated from QRS complexes, consistent with third-degree

(complete) AV block. (B-C) Thoracic radiographs revealed cardiac elongation, dorsal tracheal displacement and compression of the left main bronchus (VHS: 11.0; VLAS: 2.3). (D-E) Echocardiography demonstrated marked LA enlargement (LA/Ao 1.97) and mild LV dilation (LVIDd/Ao 3; LVIDdN 1.8). Fractional shortening was preserved at 58.5%. (F-G) Doppler studies revealed maximum velocities in the LVOT and RVOT measured at 1.99 and 1.41 m/s, respectively. despite no evidence of outflow tract obstruction. These findings suggested volume overload.

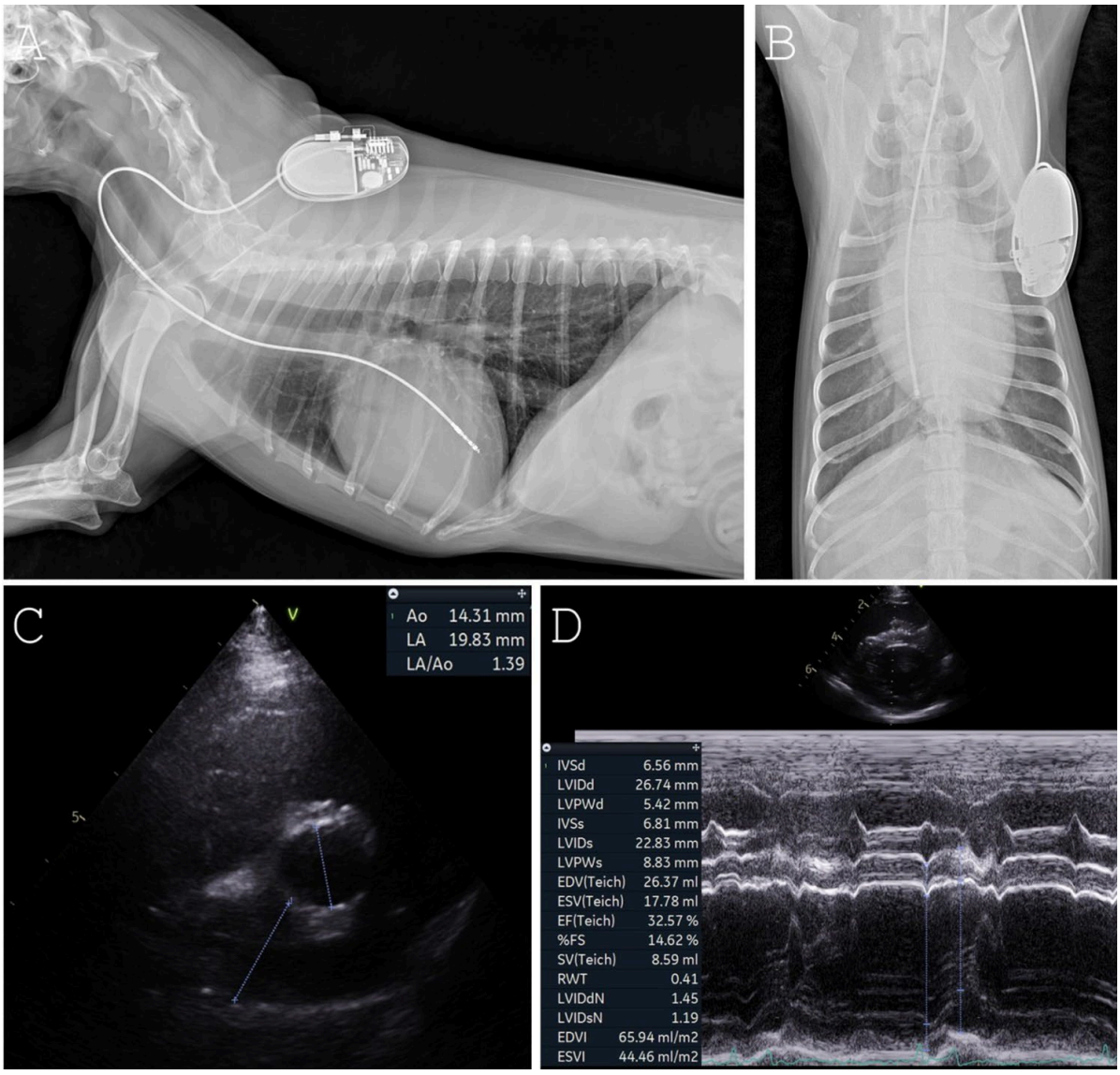

Figure S2. Thoracic radiography and echocardiography of Case 2 at 4 mo postpacemaker implantation. (A-B) Thoracic radiography indicated reduction in cardiac silhouette size (VHS: 10.2; VLAS: 1.8), with normalization of tracheal position and resolution of bronchial compression. (C-D) Echocardiography indicated reduced LA enlargement (LA/Ao 1.97 to 1.39) and LV diastolic dimension (LVIDd: 30 to 26.7 mm; LVIDdN: 1.78 to 1.57).

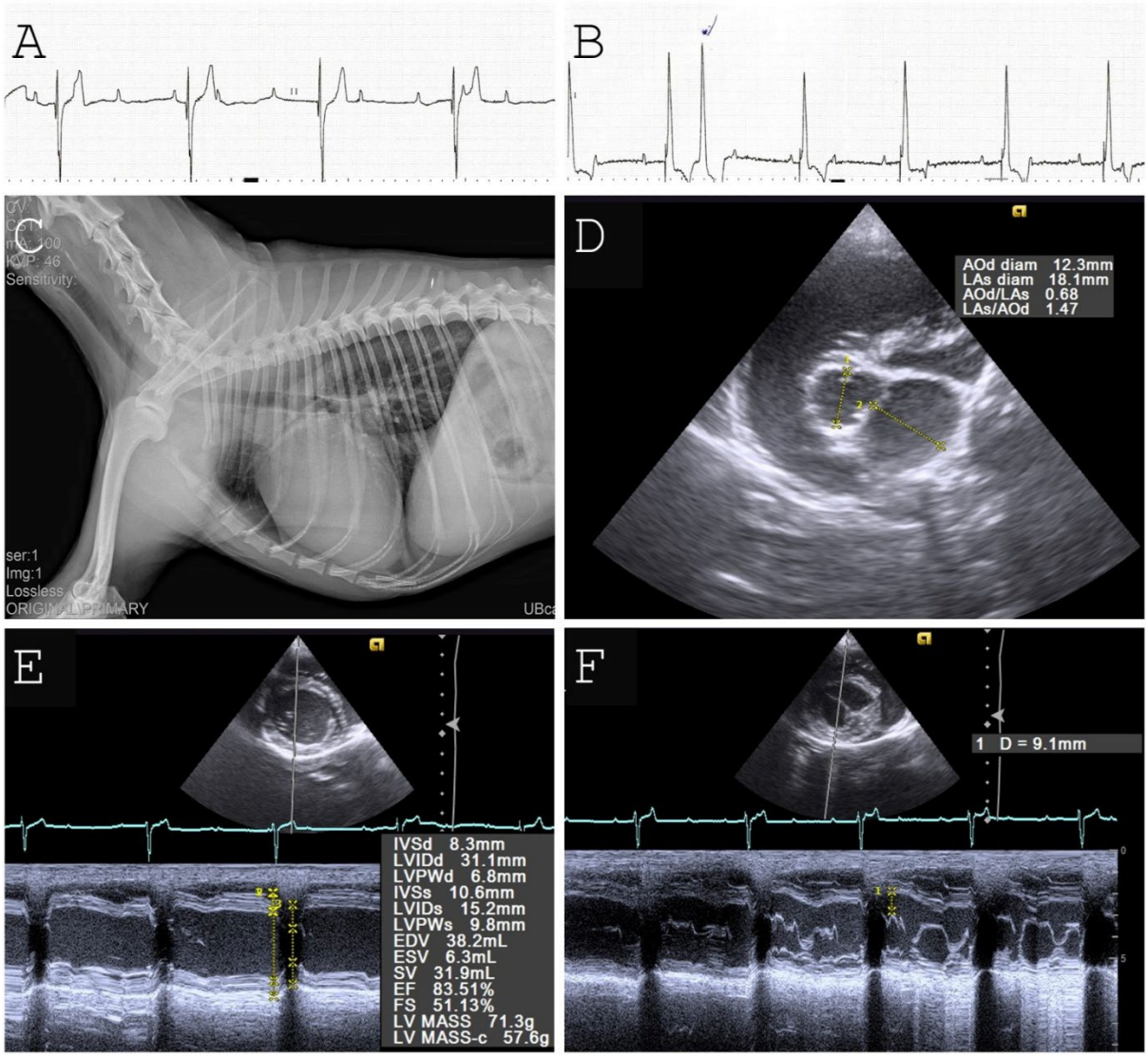

Figure S3. ECG, thoracic radiography and echocardiography of Case 3 at initial presentation. (A) ECG revealed an atrial rate of 140–150 bpm and a ventricular rate of 35–40 bpm. (B) Another ECG tracing showed P-QRS dissociation with a junctional escape beat, confirming third-degree AV block. (C) Thoracic radiography indicated cardiomegaly (VHS 12.2) without evidence of left atrial enlargement (VLAS 2.5). (D-F) Echocardiography demonstrated no significant LA enlargement with LA/Ao 1.47 but there was marked LV dilation (LVIDd 31.1 mm; LVIDd/Ao 2.5, LVIDdN 1.85), with EPSS of 9.1 mm.