Supplementary material

Góreczny S, Szeliga J, Maksym Lazu M, et al. First Polish paediatric experience with percutaneous self-expandable pulmonary valve implantation. Kardiol Pol. 2023.

Table S1. Patient characteristics and measurements performed in non-invasive imaging and during cardiac catheterization

				Right ventricle outflow dimensions		
	PR fraction, %	RVEF, %	RVEDVi, ml/m^2	CMR or CT, mm	Angiography,mm	Balloon sizing, mm
Patient A	50	52	156	Largest — 28 Distal — 26	Proximal — 24 Largest — 29 Distal — 22	Proximal — 26 Largest — 30 Distal — 28
Patient B	34	59	161	Largest — 35 Distal — 23	Largest — 43 Distal — 21	Largest — 36 Distal — 23

Abbreviations: CMR, cardiac magnetic resonance; CT, computed tomography; PR, pulmonary regurgitation; RVEDVi, right ventricular end-diastolic volume index; RVEF, right ventricular ejection fraction

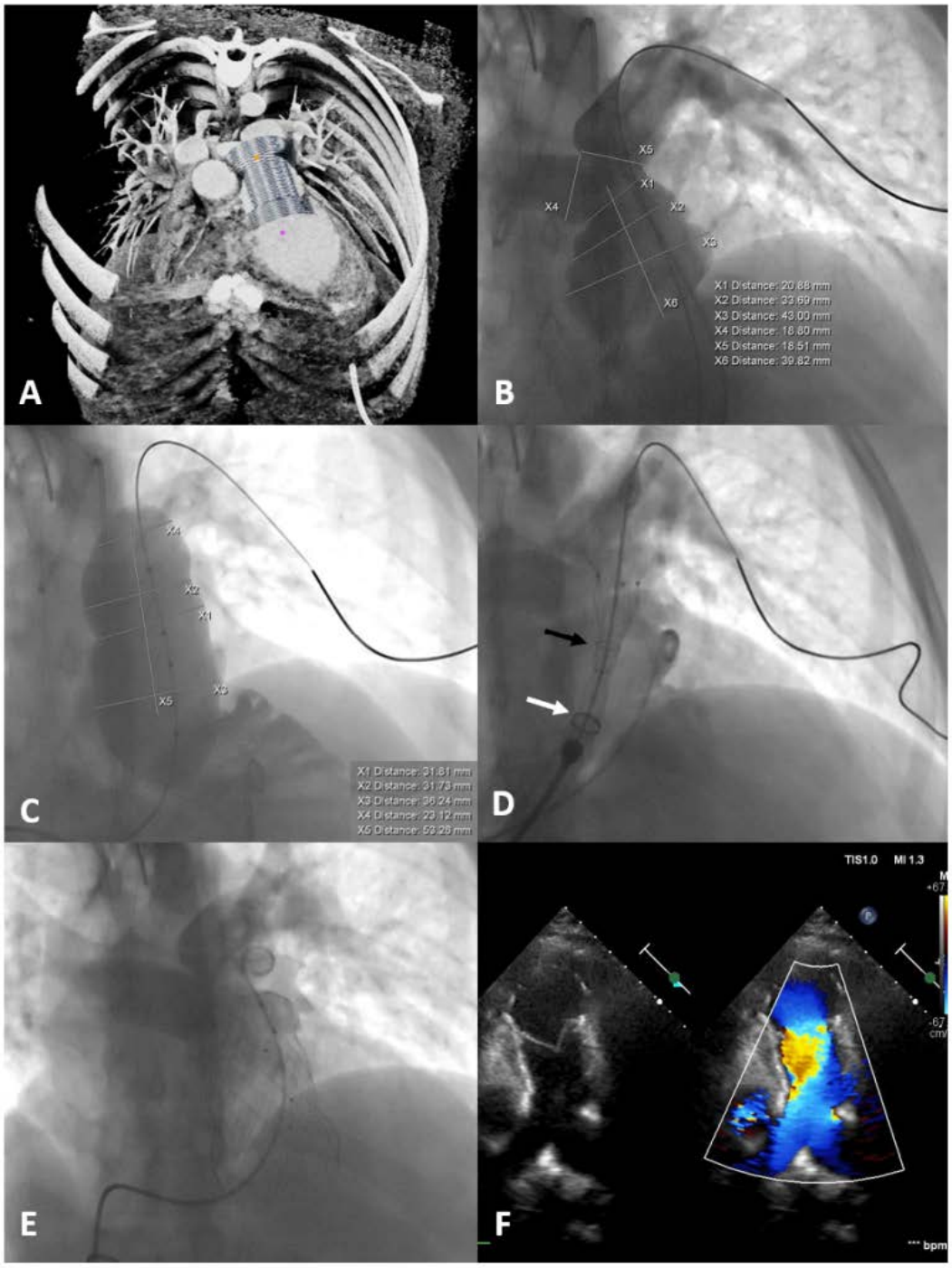

Figure S1. Percutaneous Venus P-valve (Venus MedTech) implantation in a 17 year old tetralogy of Fallot patient with conal branch crossing the right ventricular outflow tract after transannular patch repair in infancy and currently with significant pulmonary regurgitation. **A.** Virtual reality model processed from computed tomography scans with VMersive software (VR-Learning, Poland) to simulate 36 mm diameter and 25 mm length of Venus P-Valve. **B.** Initial angiogram with measurements showing conical shape of the outflow tract. **C.** Right ventricular outflow tract sizing with a 40 mm PTS-X balloon (NuMed). **D.** –The Venus P-valve partially opened in the proximal left pulmonary artery; the black arrow indicates the end of the

delivery system and the white arrow points to the end of a Dryseal sheath (Gore). **E.** The final angiogram shows a competent valve with unobstructed flow to pulmonary artery branches. **F.** The transthoracic echocardiogram after Venus P-valve implantation; visible leaflets of the valve

Annotation to Supplementary material*, Video S1*

Virtual reality model processed from computed tomography scans using VMersive software (VR-Learning, Poland). Anatomy evaluation analyzed on head-mounted screen and navigated by handheld controllers. These tools enable 360° rotation, zooming in/out, measuring, highlighting structures, and simulating the valve placement with its potential effect on adjacent structures.