INITIAL ANALYSIS OF MYOCARDIAL SAMPLES AND EXPLANTED MATERIALS FROM THE PEDIATRIC PATIENTS WITH COMPLEX CARDIAC DISEASES REGISTRY (PETTICOAT)



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Aim of the PETTICOAT registry: to accumulate and characterise myocardial samples and explanted cardiac materials from this patient collective, as well as to develop and improve protocols for the plastic embedding and staining of explanted conduits, stents and valves.

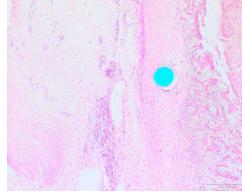
Tissue samples and/or explanted materials from 78 paediatric patients have been collected so far.

Spectrum of complex cardiac diseases included in the registry thus far:

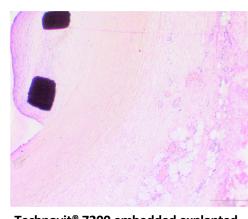
- Atrial septal defect
- Atrioventricular septal defect
- Coarcation of the aorta
- Dilated cardiomyopathy
- Double inlet left ventricle
- Double outlet right ventricle
- Hypertrophic cardiomyopathy,
 MYH7 mutation
- Hypoplastic aortic arch
- Hypoplastic left heart syndrome
- Loeys-Dietz syndrome

- Patent ductus arteriosus
- Pulmonary artery stenosis
- Restrictive cardiomyopathy
- Tetralogy of Fallot
- Truncus arteriosus communis

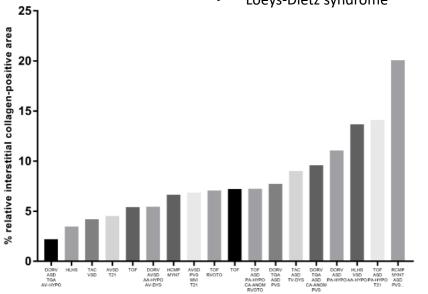
- Truncus arteriosus communis
- Transposition of the great arteries
- Ventricular outflow tract obstruction
- Ventricular septal defect etc.

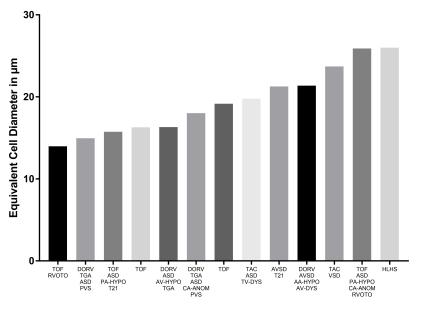


Technovit® 7200 embedded explanted pulmonary artery branch stent



Technovit® 7200 embedded explanted CoA stent





Conclusion: Congenital heart diseases with similar clinical presentation of right ventricular overload result in different intramyocardial collagen deposition and myocardial cell hypertrophy.

