Nine years of experience with the Melody valve for PPVI
Valve function remains preserved, incidence of endocarditis can be reduced.

University Hospitals Leuven, Belgium (1), University Hospitals UCL St Luc, Belgium (2), University Hospitals Ghent, Belgium (3), University Hospitals Brussels Reine Fabiola HUDERF, Belgium (4)

Introduction: worldwide the experience with the Melody valve for PPVI is growing and also the indications for use have been broadened. Endocarditis appears to be a serious threat.

Patients and methods: national data are collected from the Belgian registry which started in 2006. Four implant centers serving 11 million people. Follow-up data prospectively and ongoing collection: leaflet function (echo), re-interventions, mortality, endocarditis, X-ray (stent fractures).

Results: 222 valves have been implanted 2006-2015. The indication was PS 40%, PR 35% and mixed PS/PR 25%, male/female ratio 1.8, mean age at implant 20.7 y (3.9-81.6), original lesion : Fallot 50.4%, PS 9%, Arterial Trunc 8.6%, DORV with PS 17.1% and other 11.9%. Adequate pre-stenting in 218 pts. Follow-up data: at last follow-up median RVOT gradient 22 mmHg (5-30), median PI 0/4 (0-2). Endocarditis occurred in 14/206 (6.8%), freedom from endocarditis is 85% at 8 y; incidence dropped after firm recommendations of life-style (skin and dental care) and prophylaxis from 2.8%/y to < 0.6%/y. Overall survival was 98% at 9 years, no procedure or valve related deaths. Freedom from stent fractures was 80% at 9 y, but none was hemodynamically important and none did require intervention. Overall freedom from re-intervention was 96% at 9 y, mostly balloon dilation for somatic growth. Five valves were explanted: endocarditis (n=4), residual subPS (n=1).

Conclusion: With 9 years of follow-up the leaflet function remains well preserved. Adequate pre-stenting the RVOT prior to PPVI has abolished the risk of hemodynamic important stent. Endocarditis incidence was reduced after firm recommendations of life-style and prophylaxis.