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Failures after Aortic Valve Repair

Background

Valve Re-repair

- Mitral re-repair is a safe and reliable procedure in selected patients

What about re-repair of the aortic valve?



HOM aortic valve repair 1995-2017
 $n=2425$

External
aortic valve
repair 1995-
2017
 $n=12$

Reoperations after failed
aortic valve repair

$n=238$

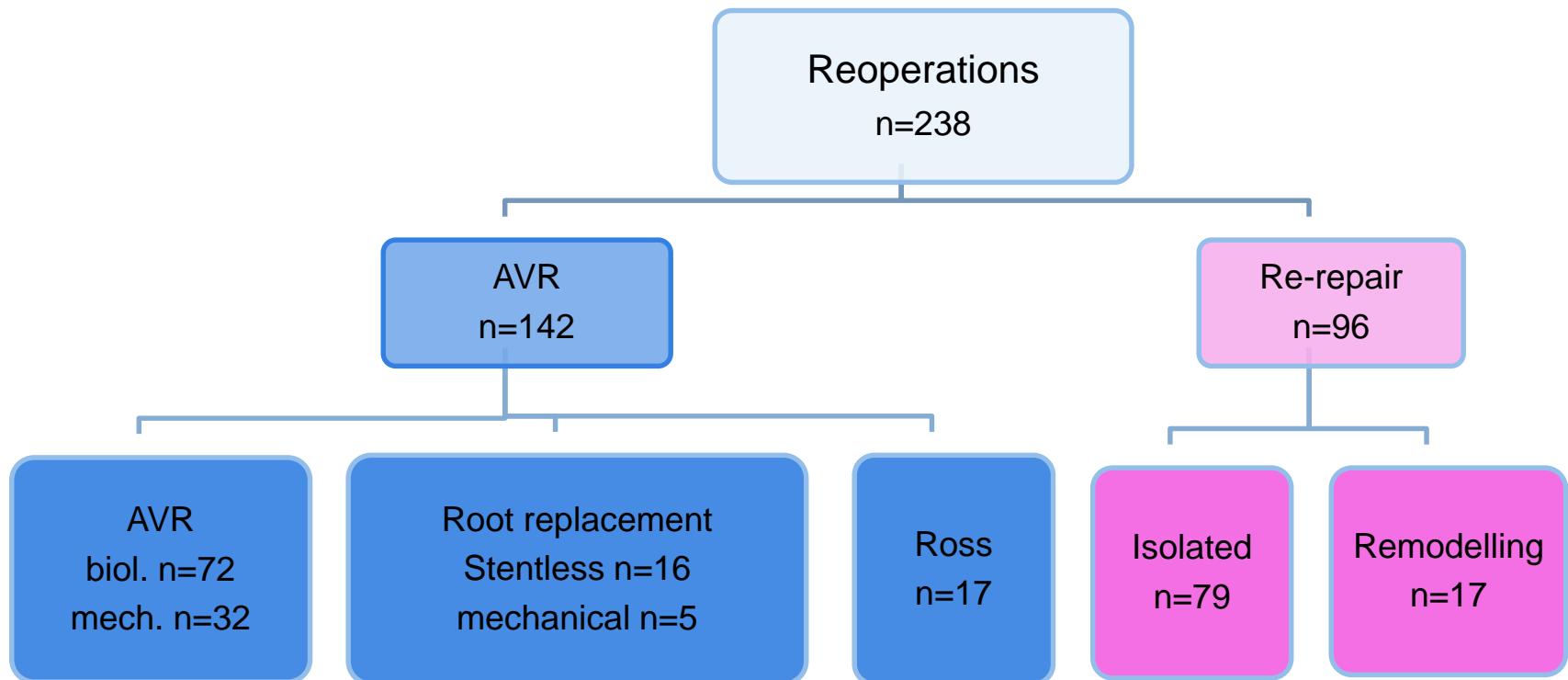
Reoperation after Aortic Valve Repair (Patient Data)

	Reoperations
Number	238
Age	43±15
Male (%)	56%
Time interval (1 st -2 nd) months	55±102
Valve morphology	
Unicuspid	64 (27%)
Bicuspid	105 (45%)
Tricuspid	69 (28%)

Mechanisms of Failure after Aortic Valve Repair

- **Calcification/ degeneration of cusp/ patch (n=112)**
- **Suture dehiscence (UAV>BAV) (n=57)**
- **Cusp prolapse (n=55)**
- **Annular dilatation (prior to annuloplasty) (n=33)**
- Cusp Retraction (n=18)
- Endocarditis (n=12)
- Cusp Perforation (healed endocarditis?) (n=6)
- Aortic Dissection (n=1)
- Aortic dilatation (n=2)

Surgical procedures in Reoperations



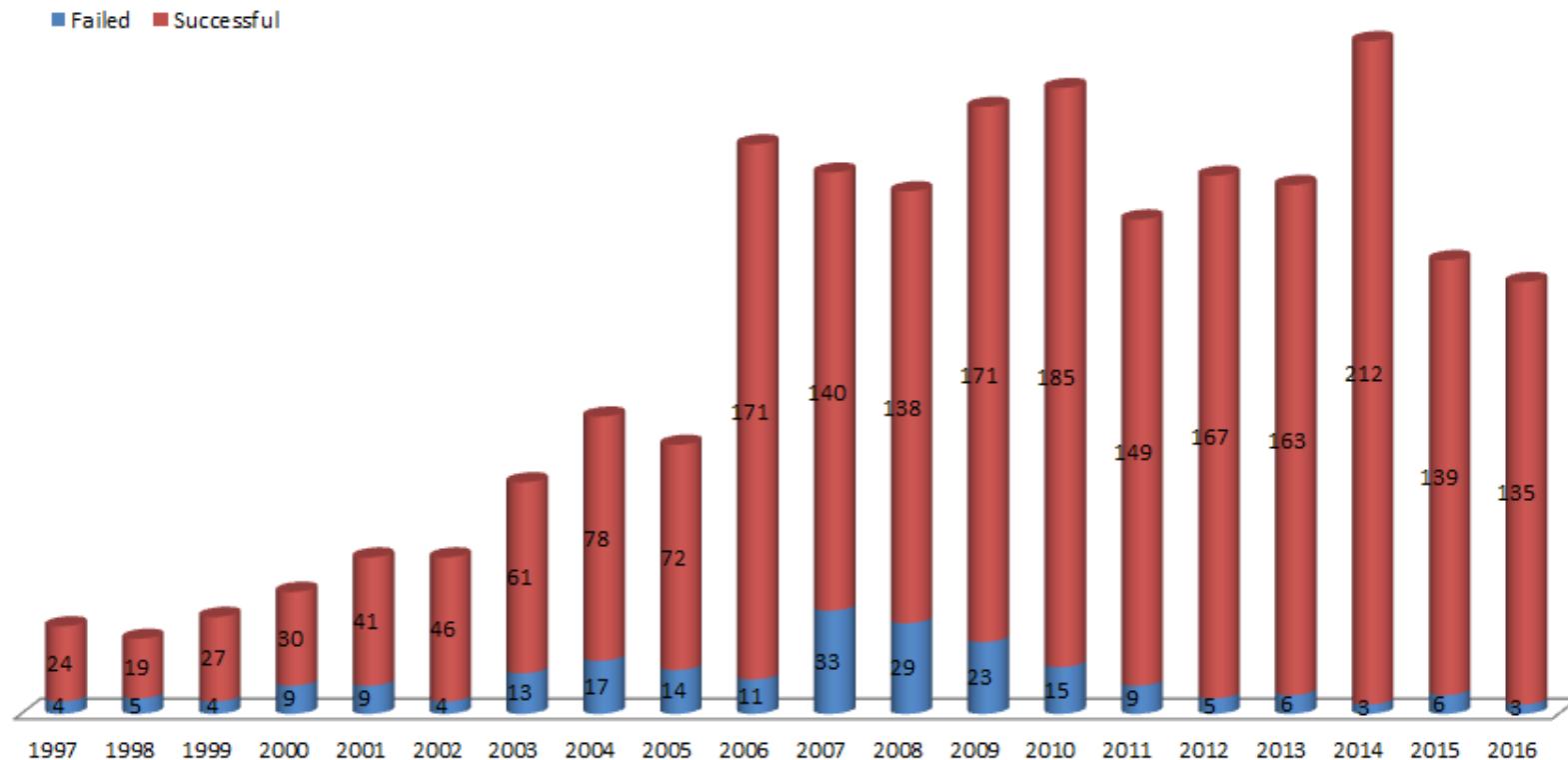
Titel des Vortrags und Verfasser (bitte im Folienmaster anpassen)

Re - AVR S/P BAV Reimplantation

M&M after Re-Repair

Reoperations n=238	
Mortality (In hospital)	5 (2.1%)
Pacemaker implantation	9 (3.7%)
RFB	9 (3.7%)
Valve associated complications	
Thrombembolic	0
Bleeding	4 (2%)
Endocarditis	9 (4%)

Proportion of Failure after Valve Repair (by year)



Conclusions

- Reoperation after aortic valve repair carries a low risk
- Re-repair is possible in a relevant proportion if the mechanism of failure can be clearly identified
 - Key components of the aortic valve are preserved
(commissural height, integrity of cusp tissue)
- Durability needs to be determined?
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