STS/EACTS Latin America Cardiovascular Surgery Conference

Cartagena, Colombia

Hilton Cartagena

September 21-22, 2017

Rheumatic Mitral Valve Disease: Should the Valve Be Repaired?

Fernando Moraes

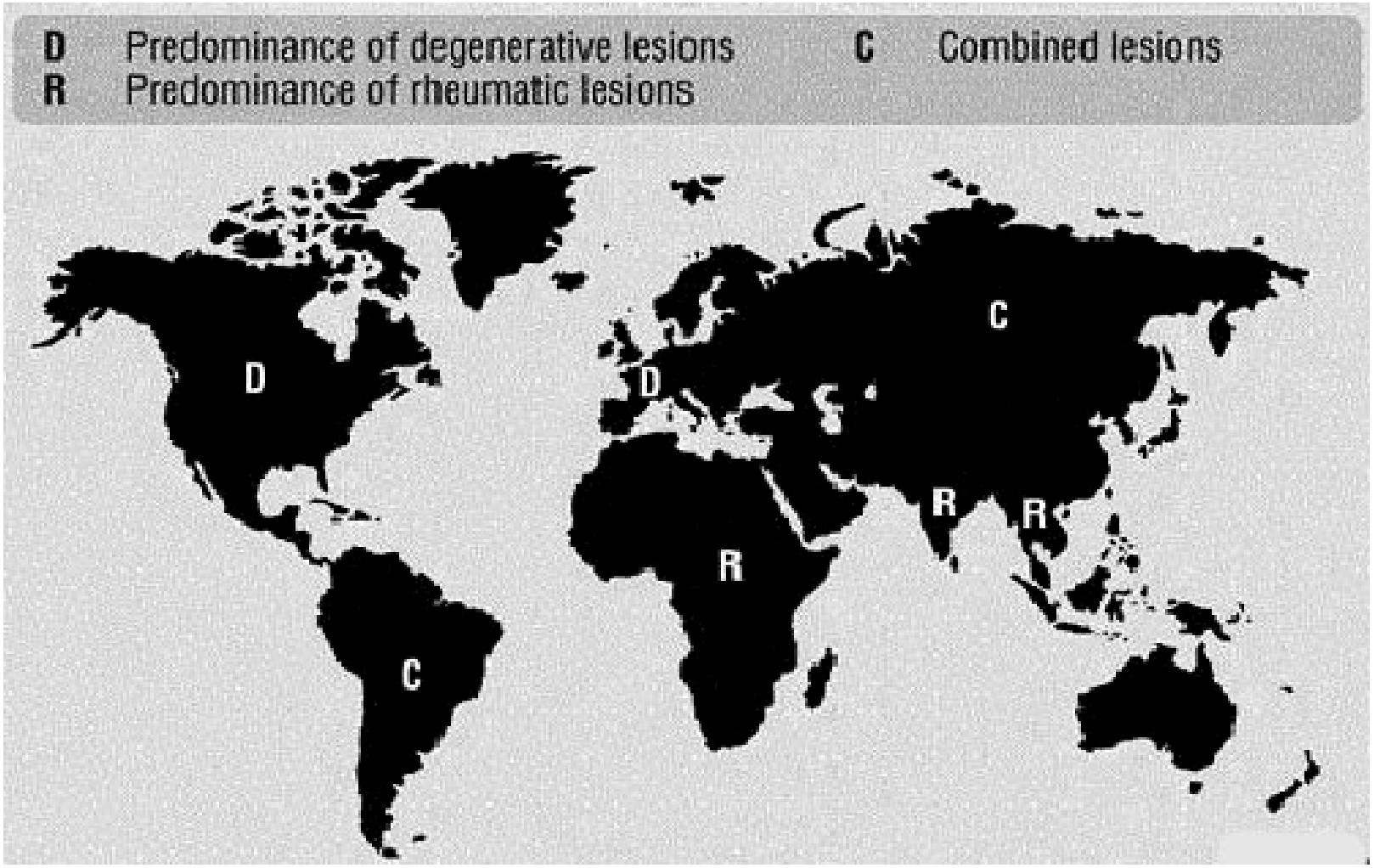
Con

Cartagena - 2017

DISCLOSURE

PROCTOR FOR LIVANOVA

EPIDEMIOLOGY



PREVALENCE = 16 MILLION (80% LOW AND MID INCOME COUNTRIES)

REPAIR X REPLACEMENT

THE RATIONAL?

FREEDOM FROM REDO
X
SURVIVAL

SPECTRUM OF THE DISEASE

- CHILDREN
- ACUTE PHASE
- YOUNG ADULTS
- OLDER(INSIDIOUS)
- ECHO ANALYSIS
- ISOLATED/MS + MR
- ASSOCIATION
- PROPHYLAXIS

Case 1

VNAPS, 62Y, FEMALE

MS = PBV 19Y AGO

NYHA = III LAST YEAR

ECHO= MS + MR

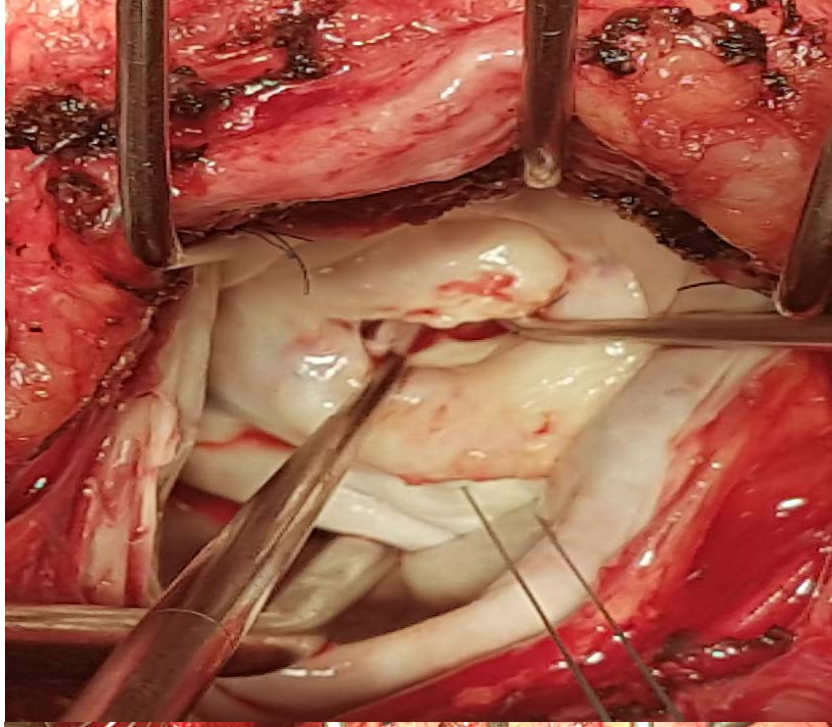
Case 2

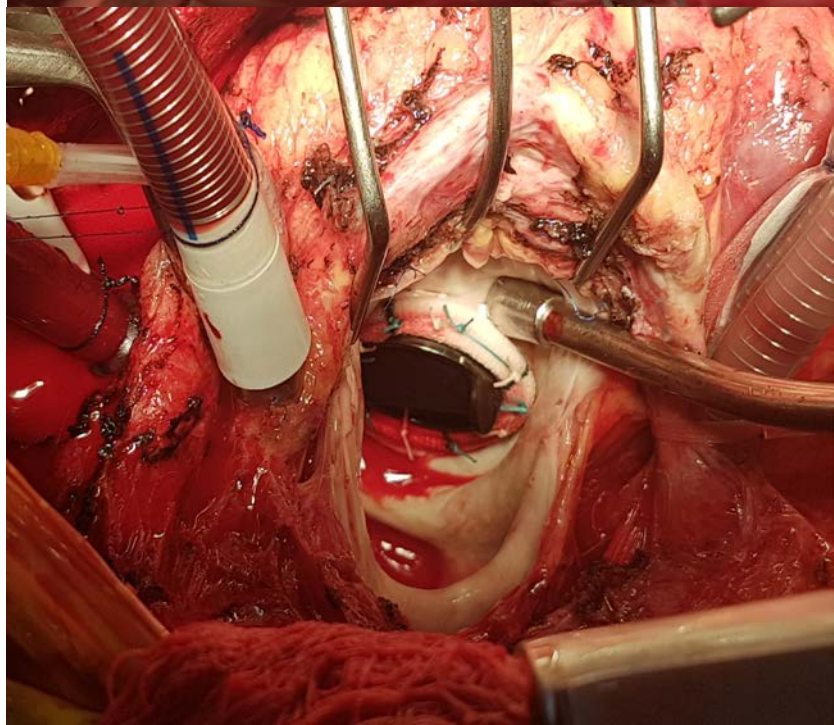
IFS, 36Y, MALE

M COMISSUROTOMY IN 1994. MV REPAIR 2011

AF + NYHA = III LAST YEAR

ECHO= MS



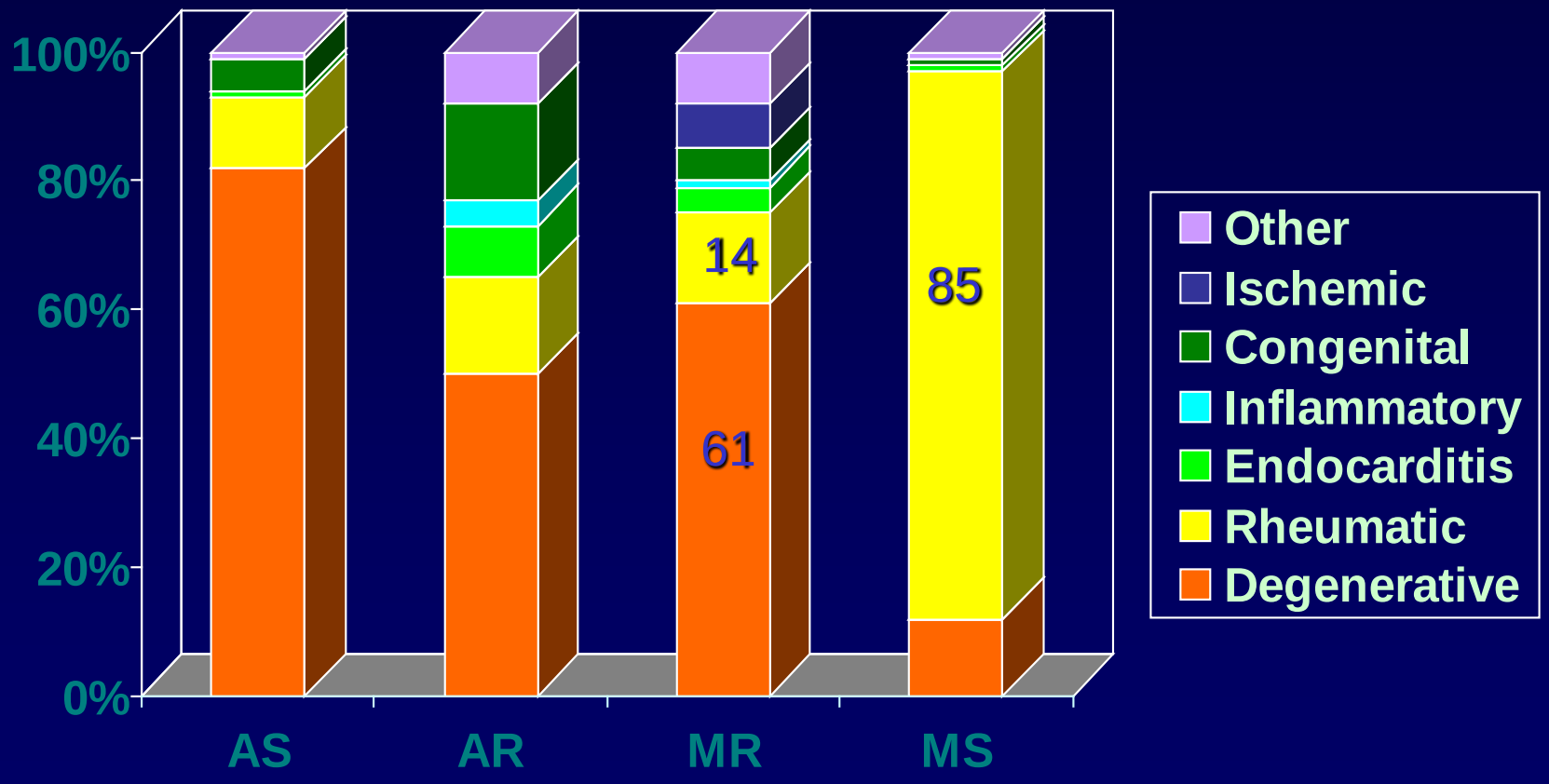


WHERE ARE THE EVIDENCES?

- Paucity of prospective clinical trials
- Most are retrospective single centres
- Small numbers
- Most Level of evidence C

Single Native Valve Disease

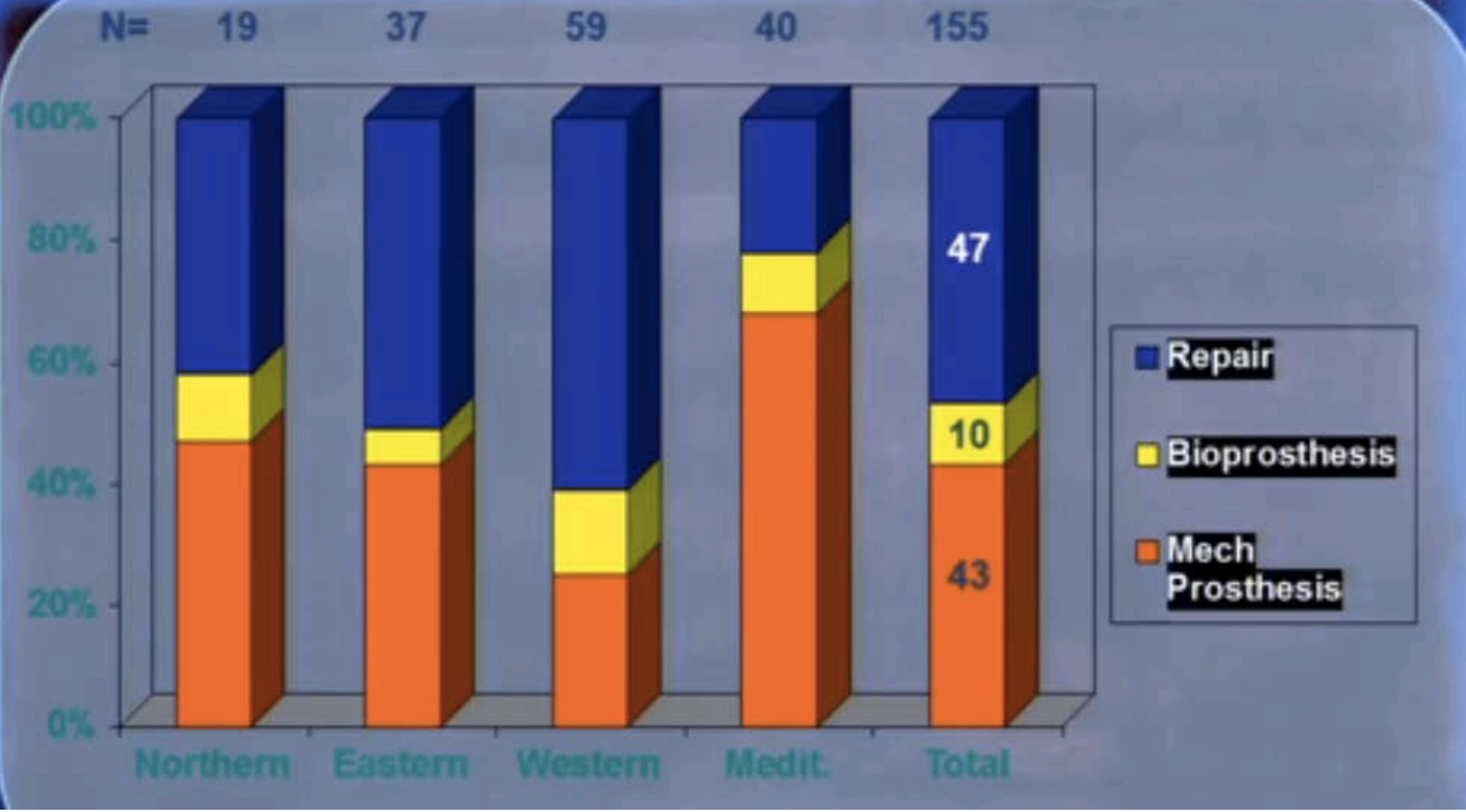
Etiology



B. Iung et al. Eur Heart J 2003;24:1231-43

Type of Intervention in MR

Regional Variation



BRAZIL

YEAR	2008	2009	2010	2011	2012	2013
REPLACEMENT	7371	7280	6939	7192	7411	7160
REPAIR	607	604	599	814	700	644

REF: DATASUS

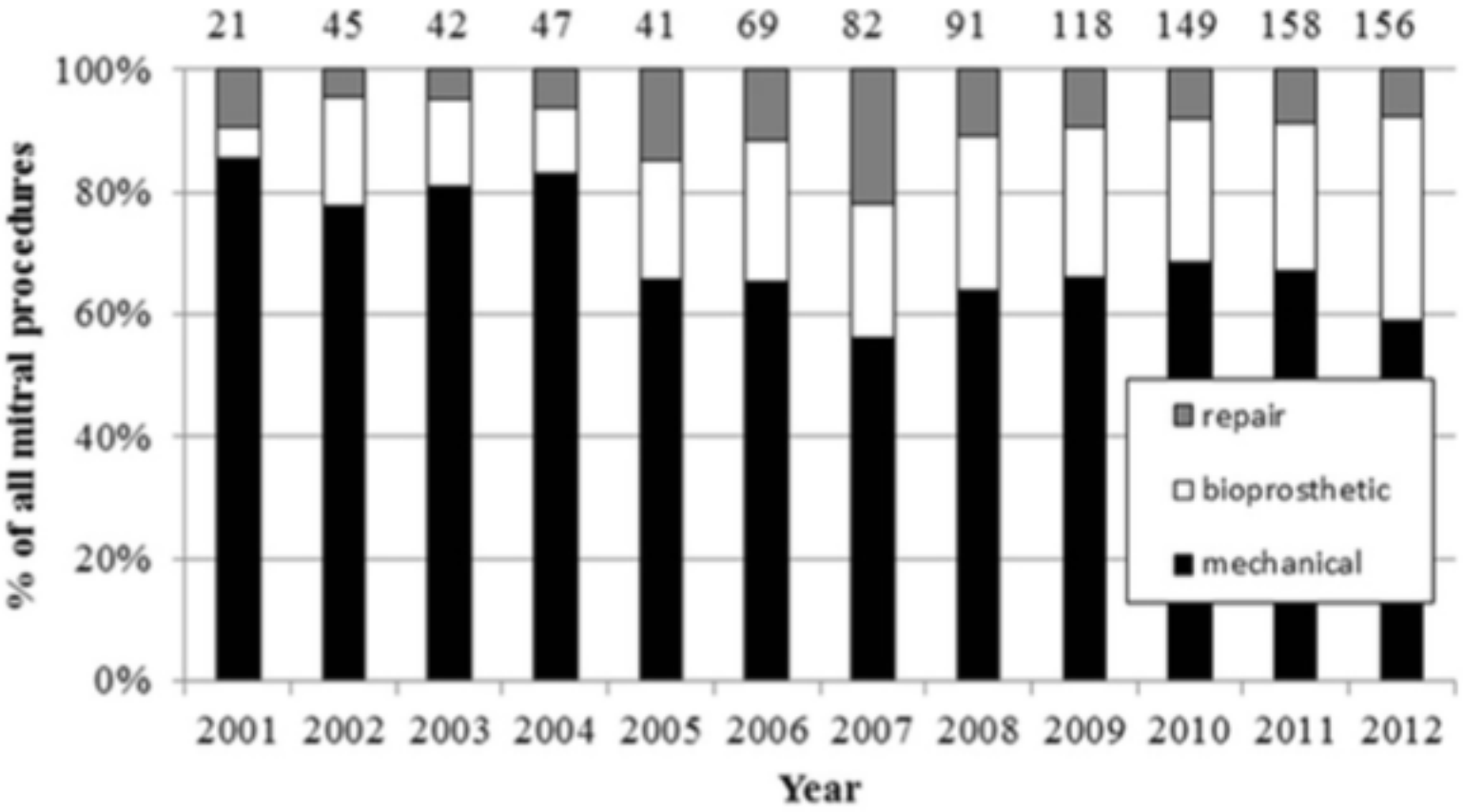
A REVIEW OF VALVE SURGERY FOR RHEUMATIC HEART DISEASE IN AUSTRALIA

Table 3 Association between different RHD-related valve disease requiring surgical management

% (95% CI)		
1 valve		
Mitral valve only	40.3	(37.7 – 42.9)
Aortic valve only	22.9	(20.7 – 25.2)
Tricuspid valve only	1.2	(0.7 – 2.0)
2 valves		
Mitral and aortic valves	20.6	(18.5 – 22.8)
Mitral and tricuspid valves	8.5	(7.1 – 10.1)
Aortic and tricuspid valves	0.7	(0.3 – 1.3)
3 valves		
Mitral, aortic and tricuspid valves	5.4	(4.2 – 6.7)

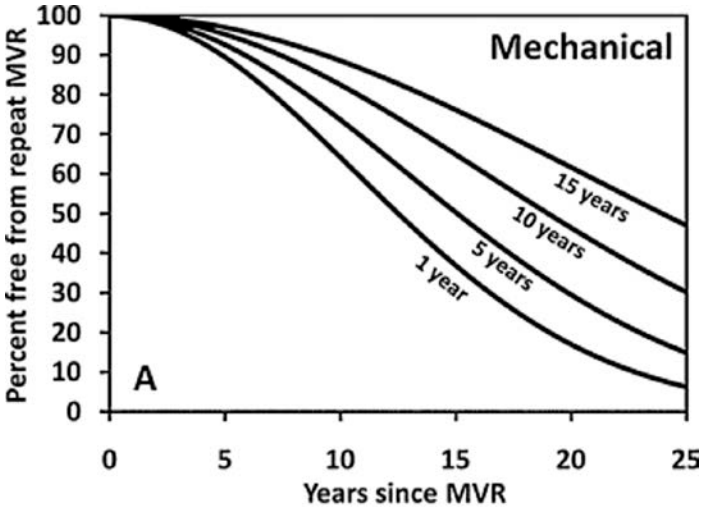
Russell et al. BMC Cardiovascular Disorders 2014, 14:134

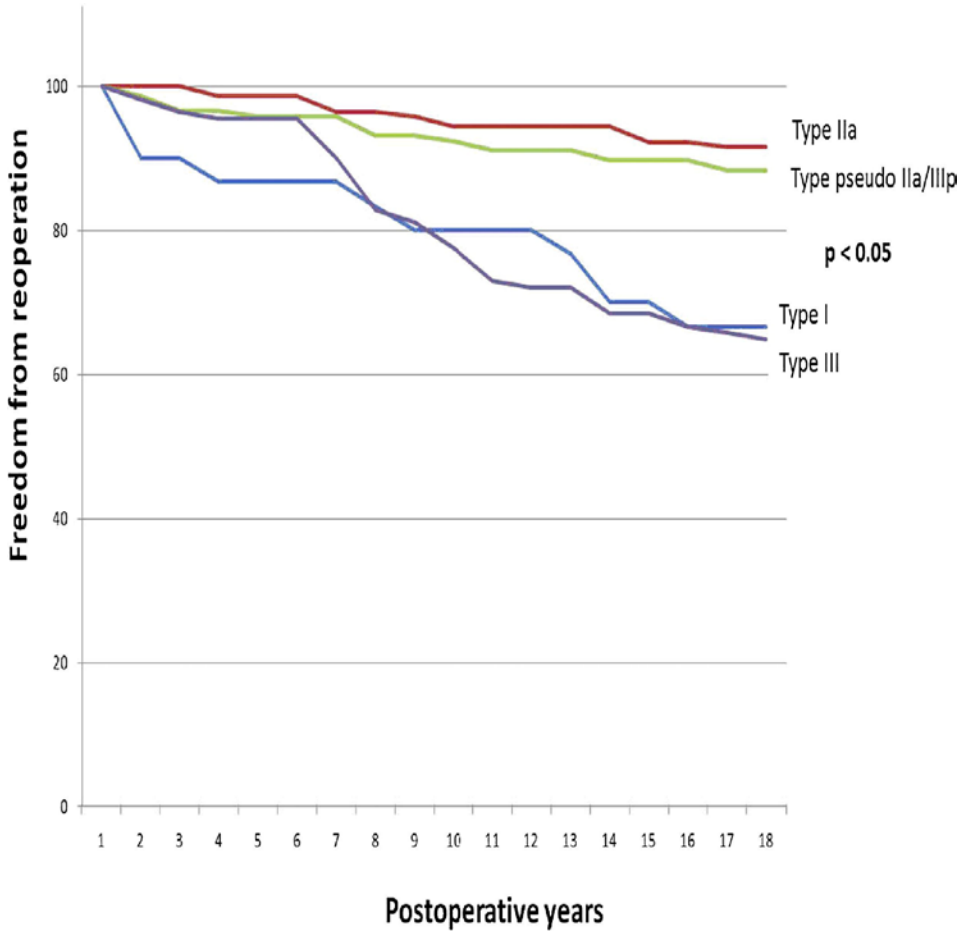
A REVIEW OF VALVE SURGERY FOR RHEUMATIC HEART DISEASE IN AUSTRALIA



Russell et al. BMC Cardiovascular Disorders 2014, 14:134

Outcomes and associated risk factors for mitral valve replacement in children

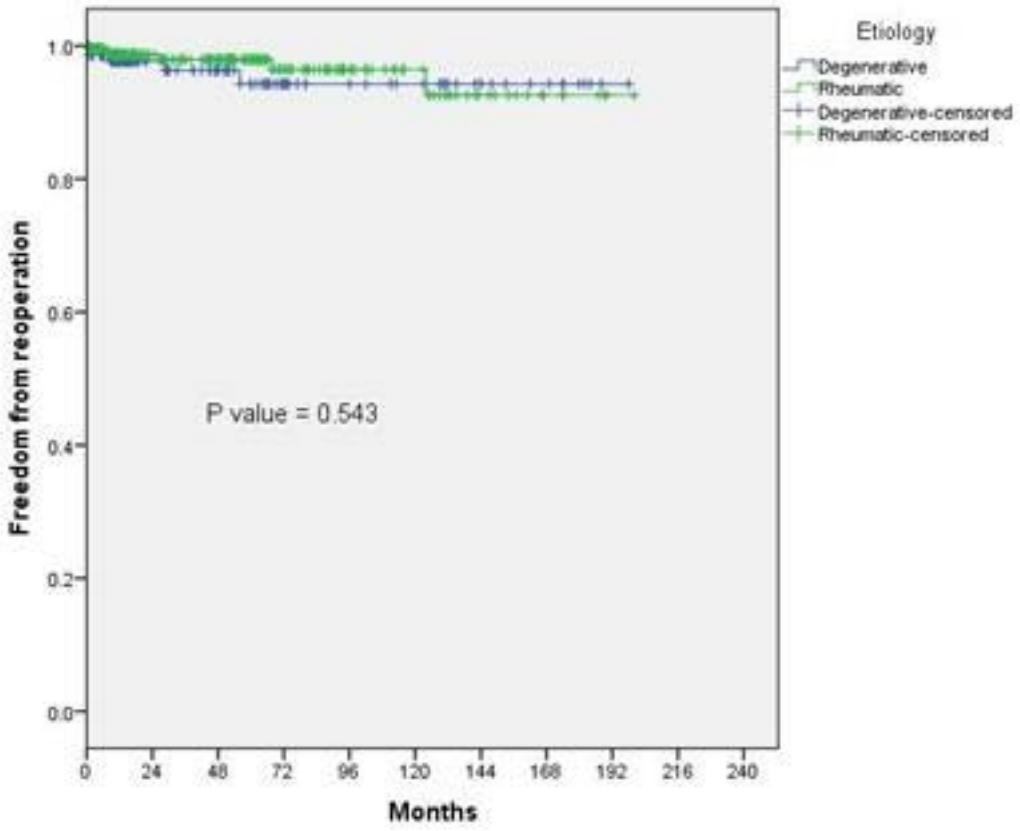




Alsoufi B et al. Eur J Cardiothorac Surg 2011;40:543-551

Seminars in Thoracic & Cardiovascular Surgery: Pediatric Cardiac Surgery Annual
Volume 15, Issue 1, Pages 80-87 (January 2012)

Comparative Long-Term Results of Mitral Valve Repair in Adults With Chronic Rheumatic Disease and Degenerative Disease: Is Repair in ‘Burnt-Out' Rheumatics Still Inferior to Degeneratives in the Current Era?



J Thorac Cardiovasc Surg. 2015 Mar;149(3):771-7

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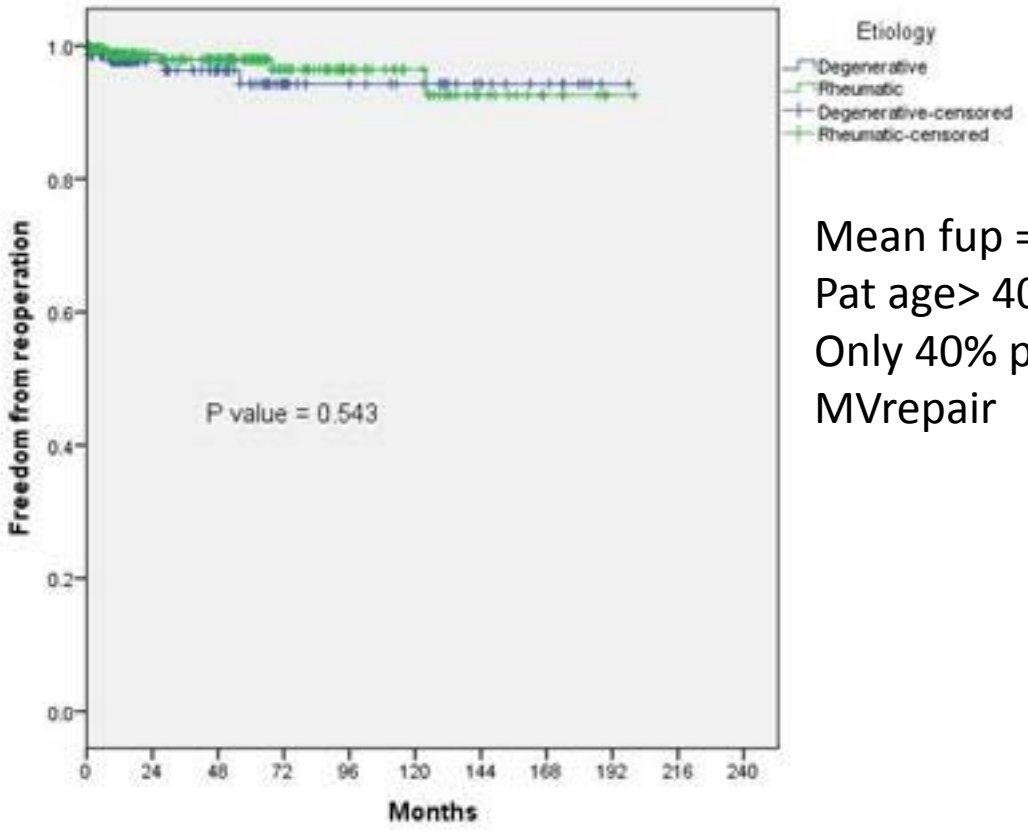
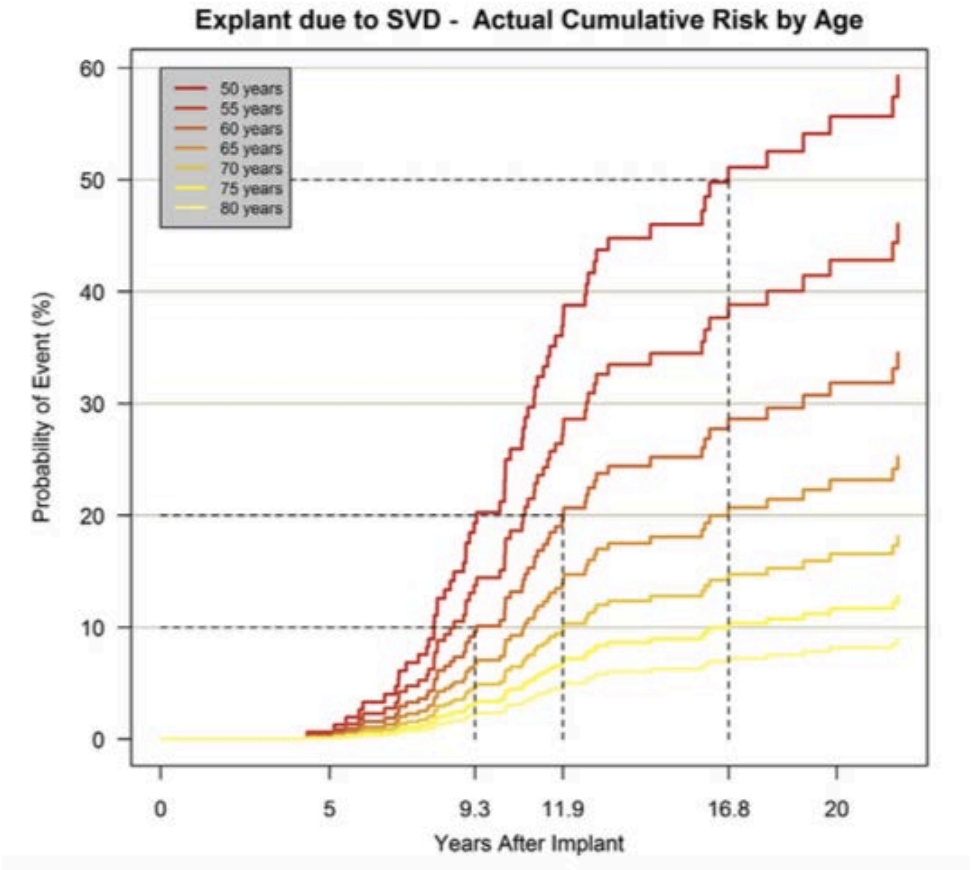


Mean fup = 4y(too short)
Pat age> 40y
Only 40% pat >40y had MVrepair

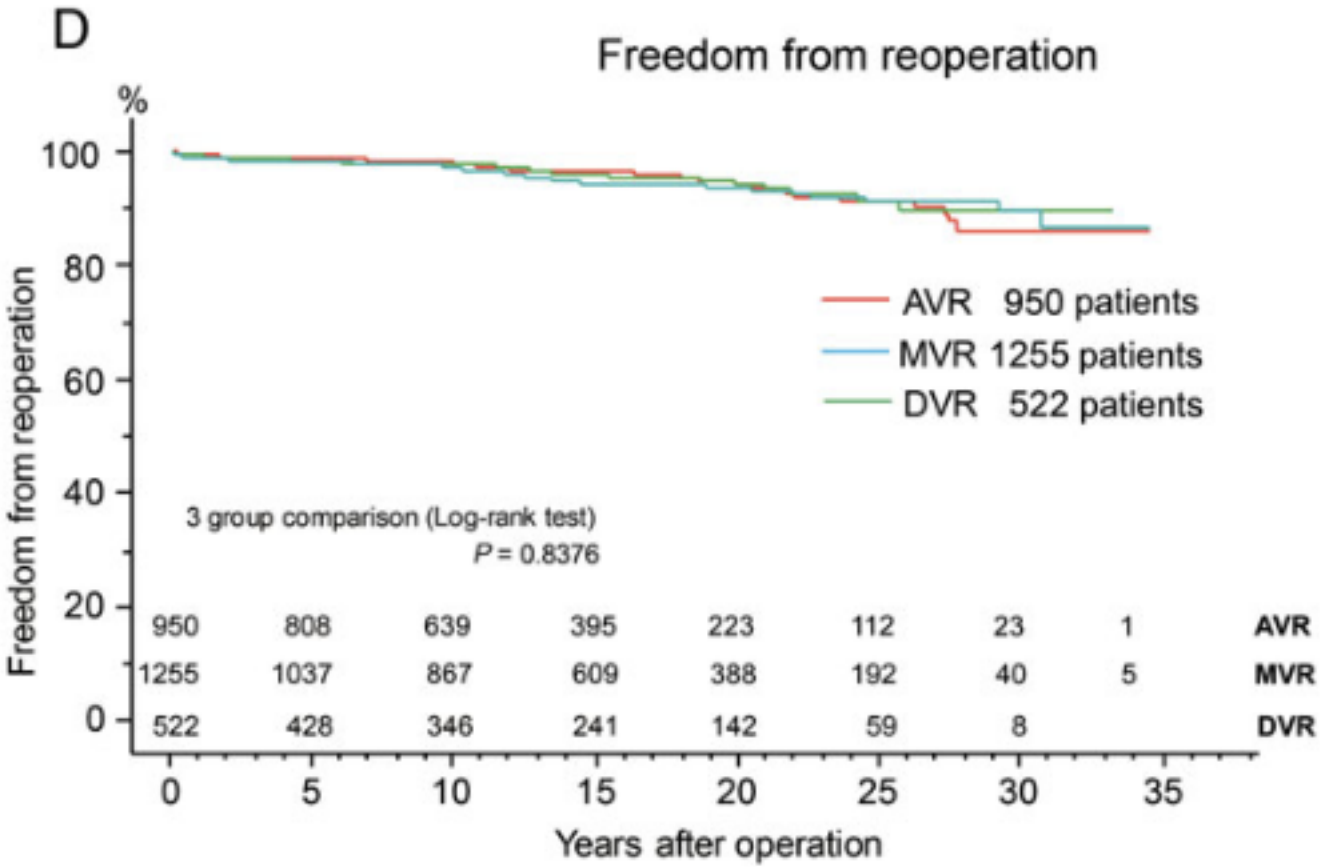
J Thorac Cardiovasc Surg. 2015 Mar;149(3):771-7

VERY LATE OUTCOMES FOR MITRAL VALVE REPLACEMENT WITH THE CARPENTIER-EDWARDS PERICARDIAL BIOPROSTHESIS: 25-YEAR FOLLOW-UP OF 450 IMPLANTATIONS



J Thorac Cardiovasc Surg 2014;148:2004-11

Bileaflet mechanical valve replacement: an assessment of outcomes with 30 years of follow-up



Interactive CardioVascular and Thoracic Surgery 23 (2016) 599–607

Repair vs Replacement : specific aspects in rheumatic disease

- ✓ It is a surgical challenge.
- ✓ It is a surgical dilema
- ✓ Role of echo is critical
- ✓ Young population
- ✓ Severity of lesions which influence suitability for repair and timing (early referall)
- ✓ Left ventricular issue
- ✓ Surgeon experience

"GOOD OPERATIONS ARE THOSE REPRODUCIBLE FOR MOST”

JOHN KIRKLIN