

STS/EACTS Latin America Cardiovascular Surgery Conference

November 15-17, 2018

Hilton Cartagena | Cartagena, Colombia



Aortic root replacement in elderly patients

Valve sparing, “Wheat Procedure” or Bentall

E. Turner MD FCS(SA)

Instituto Nacional del Tórax - Clínica Santa María

Santiago Chile

STS/EACTS Latin America Cardiovascular Surgery Conference

November 15-17, 2018

Hilton Cartagena | Cartagena, Colombia



The Society
of Thoracic
Surgeons



EACTS
European Association for Cardio-Thoracic Surgery

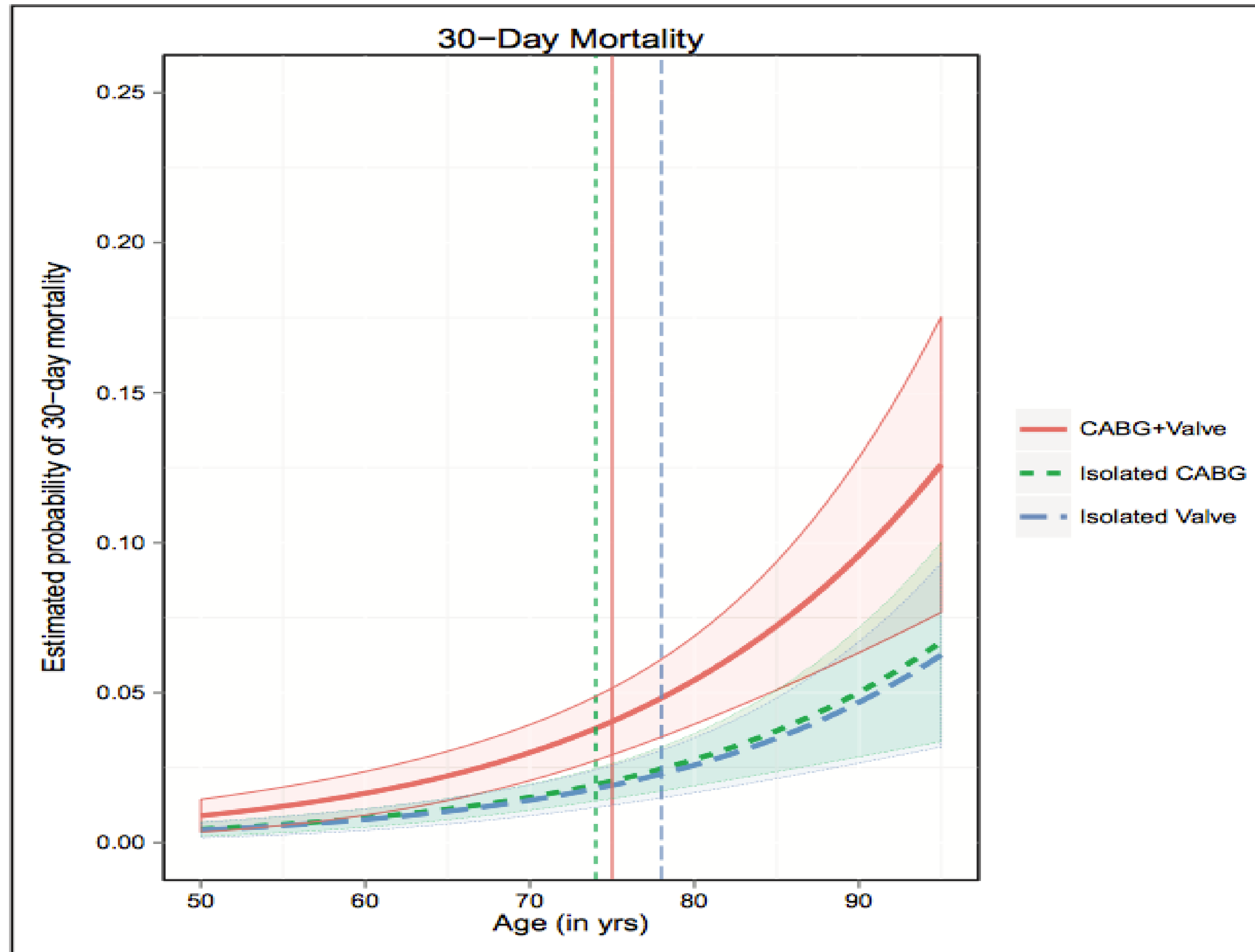
No Disclosures



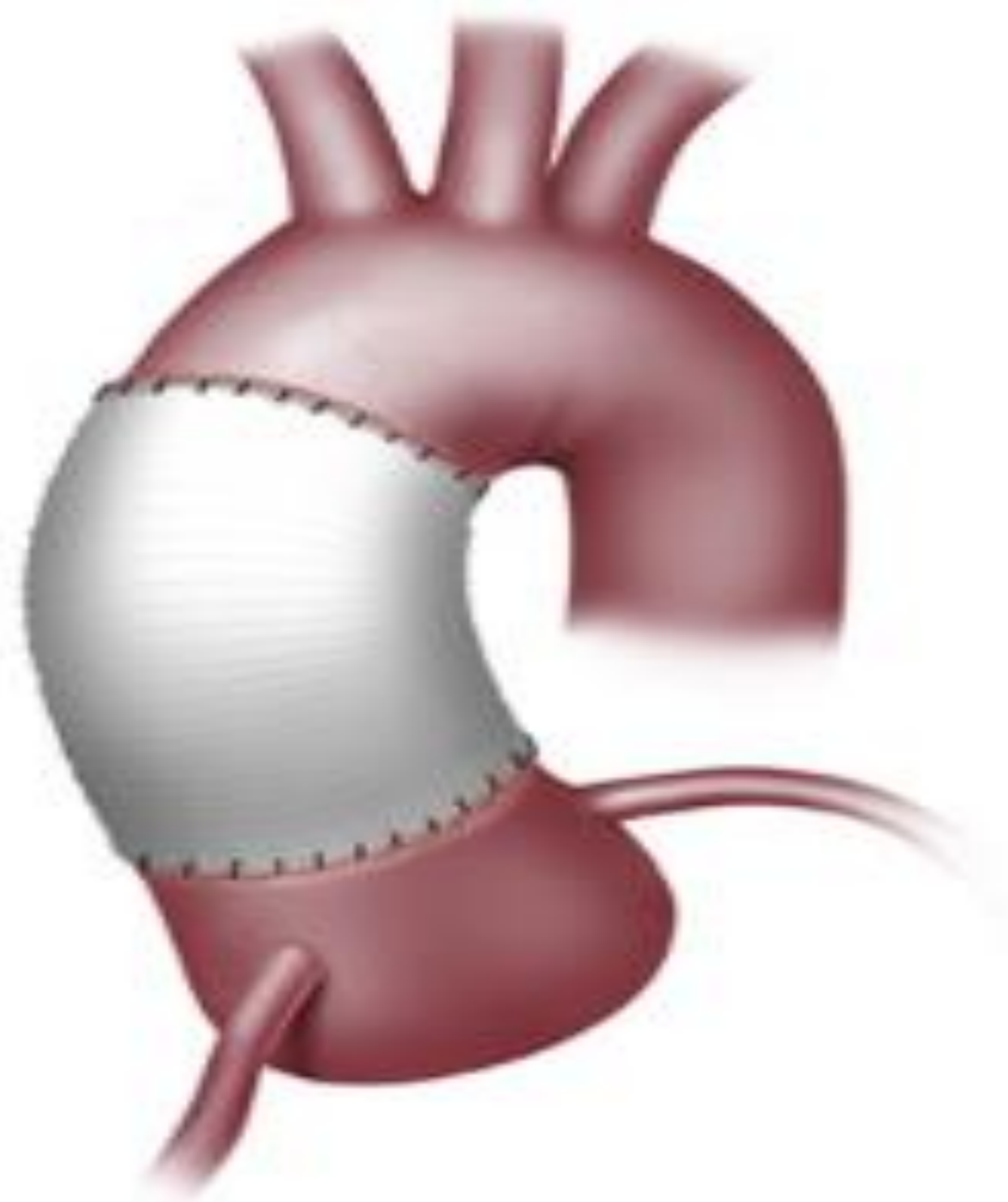
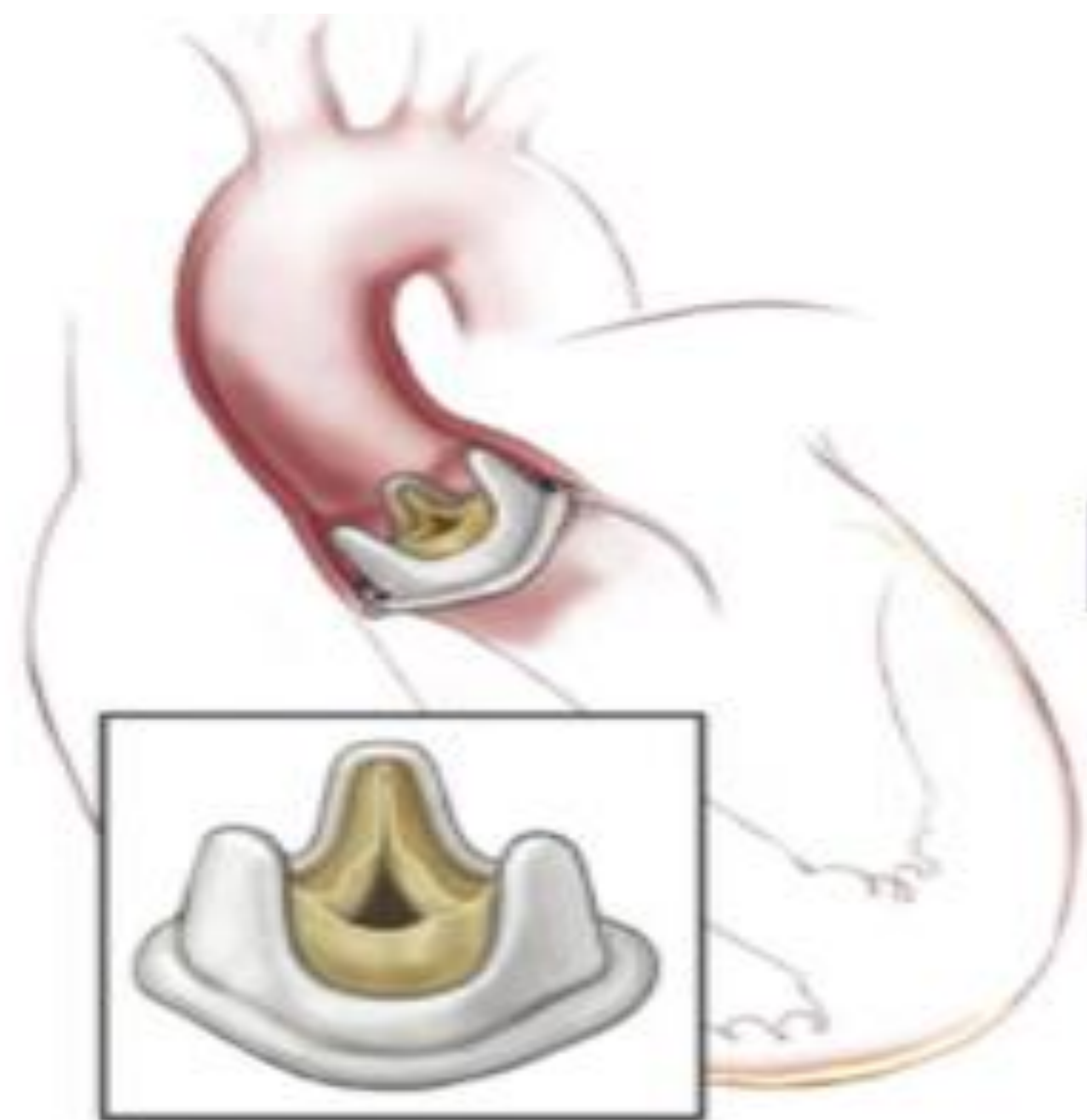
- 1 Age and operative mortality and morbidity
- 2 Why are we operating? Valve, Root or Ascending
- 3 Is it a good idea to do a valve sparing operation in the elderly?
- 4 Increasing lesion complexity
- 5 Root replacement: options
- 6 Operative results and long term survival

Derivation and Validation of Prognosis-Based Age Cutoffs to Define Elderly in Cardiac Surgery

Afilalo Circ Cardiovasc Qual Outcomes 2016;9:424-431

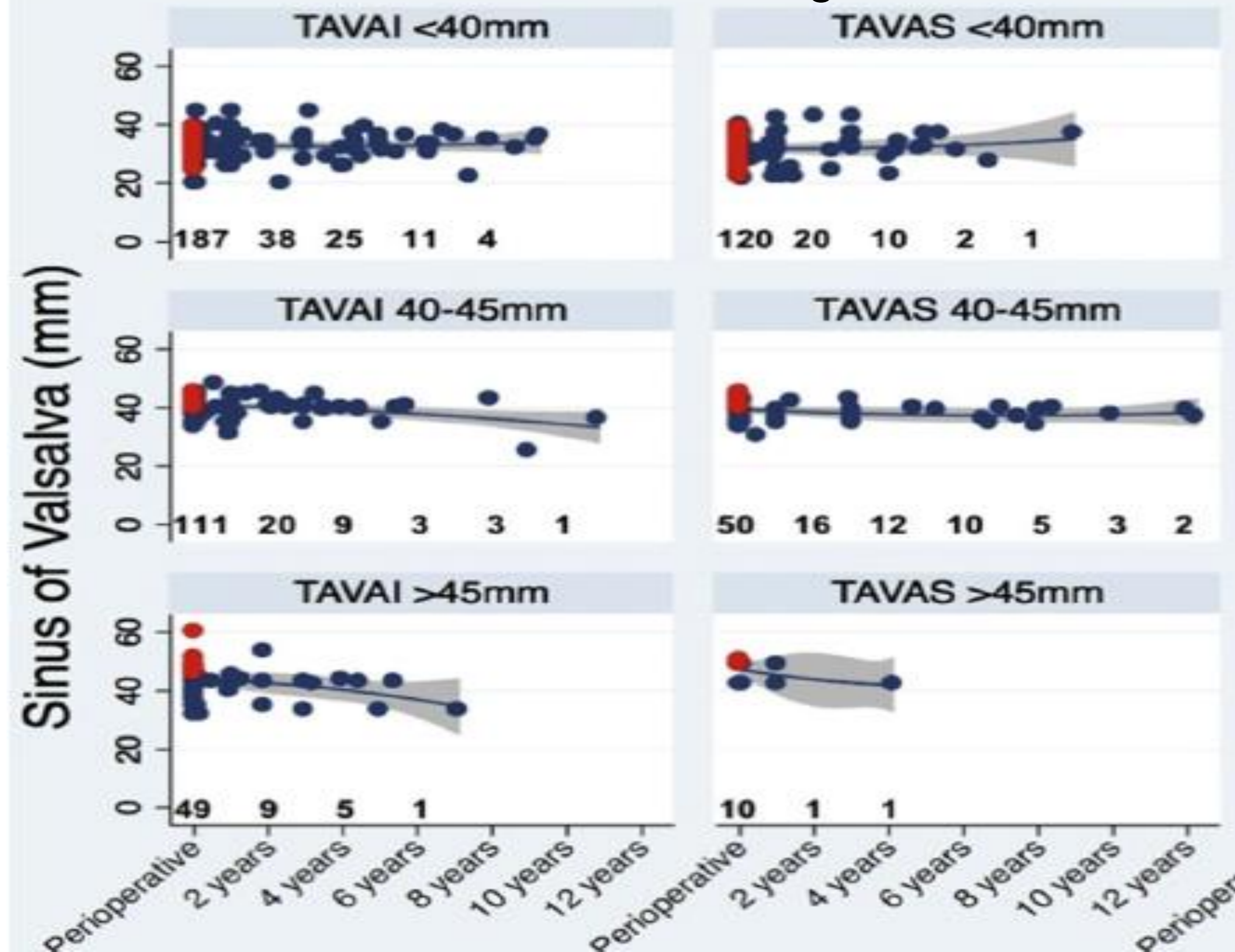




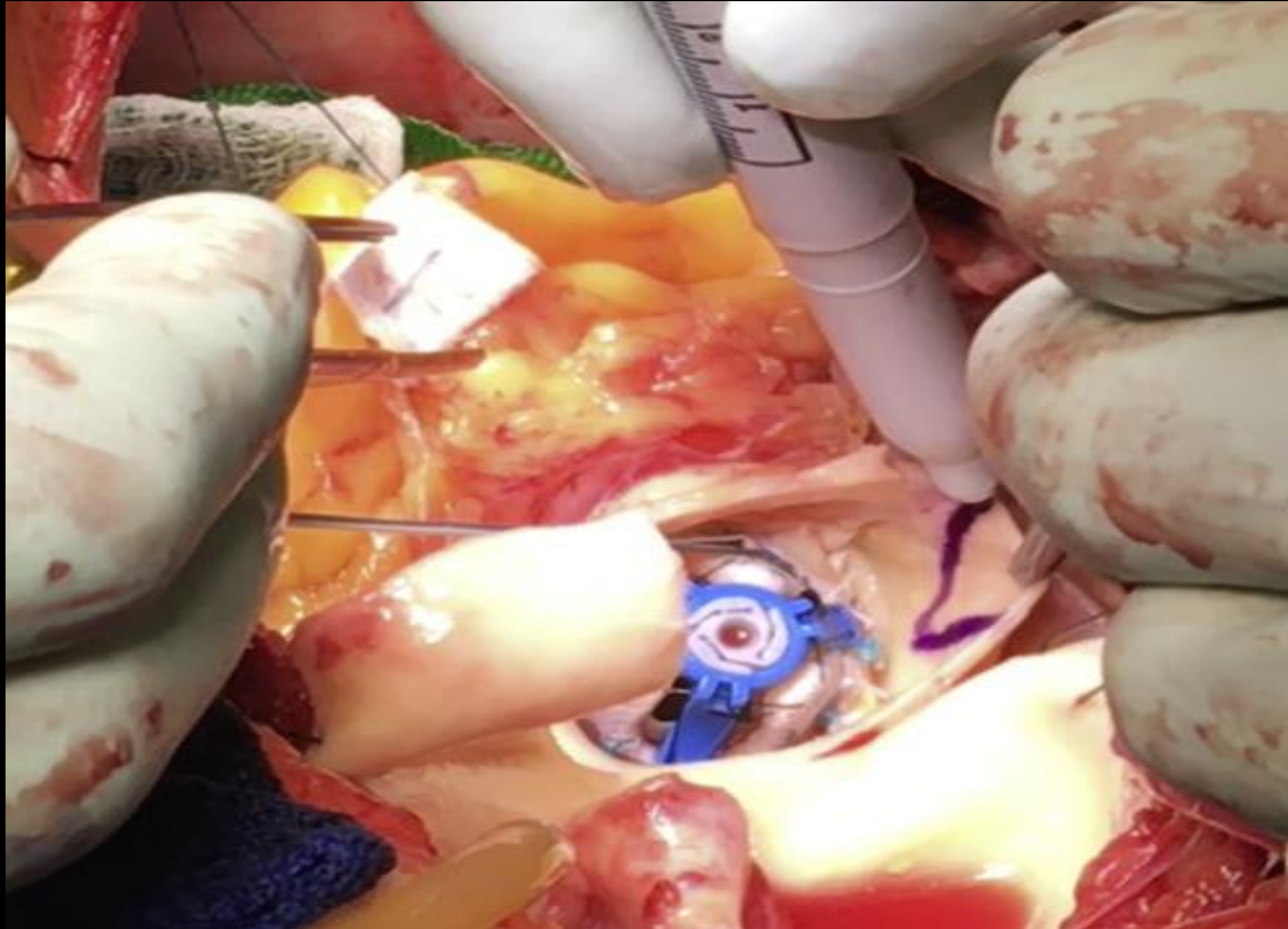


Fate of remnant sinuses of Valsalva in patients with bicuspid and trileaflet valves undergoing aortic valve, ascending aorta, and aortic arch replacement

Milewski J Thorac Cardiovasc Surg 2017;154:421-32



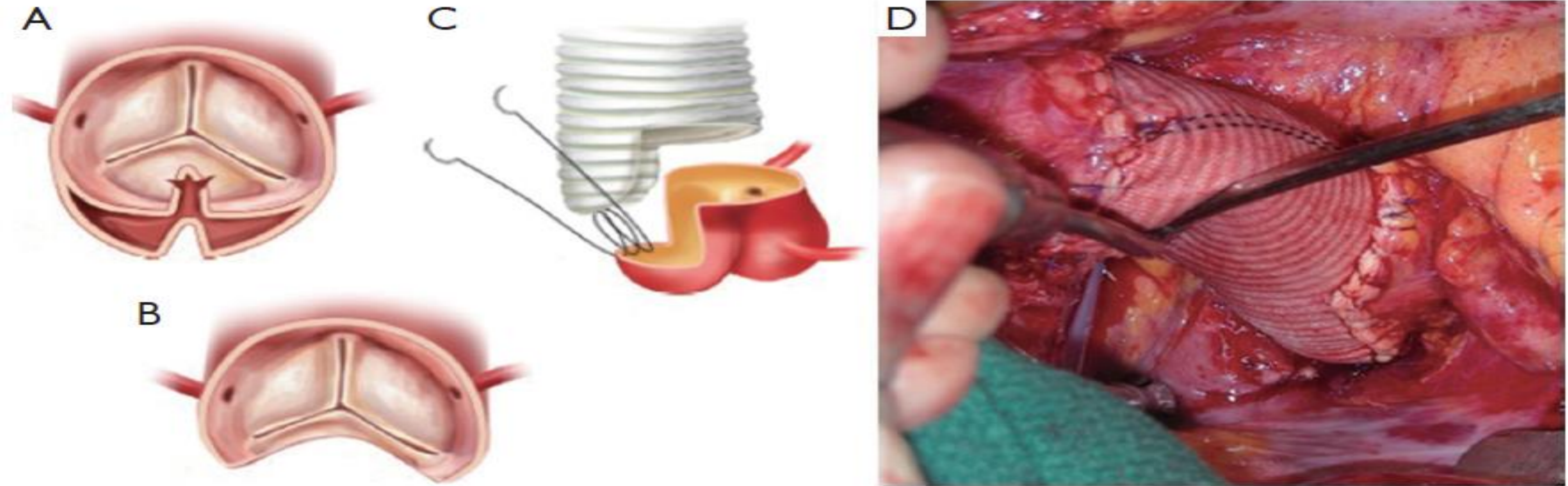
Validation of the “V” John A. Elefteriades, MD, Bulat A. Ziganshin, MD, PhD



Pat number	Preop root diam (cm)	Postop root diam (cm)
1	4.71	3.96
2	4.36	3.96
3	4.35	3.90
4	4.16	3.96
5	3.82	3.75
6	4.97	3.47
7	4.57	3.93
8	4.30	3.94
9	4.02	N.A.
10	4.16	3.58
11	3.92	3.61
Mean	4.30	3.81

“Partial Yacoub”

Ann Cardiothorac Surg 2016;5:275-295



Root Replacement Options

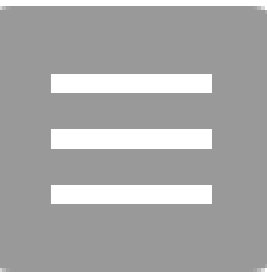




AMERICAN ASSOCIATION
FOR THORACIC SURGERY
A Century of Modeling Excellence



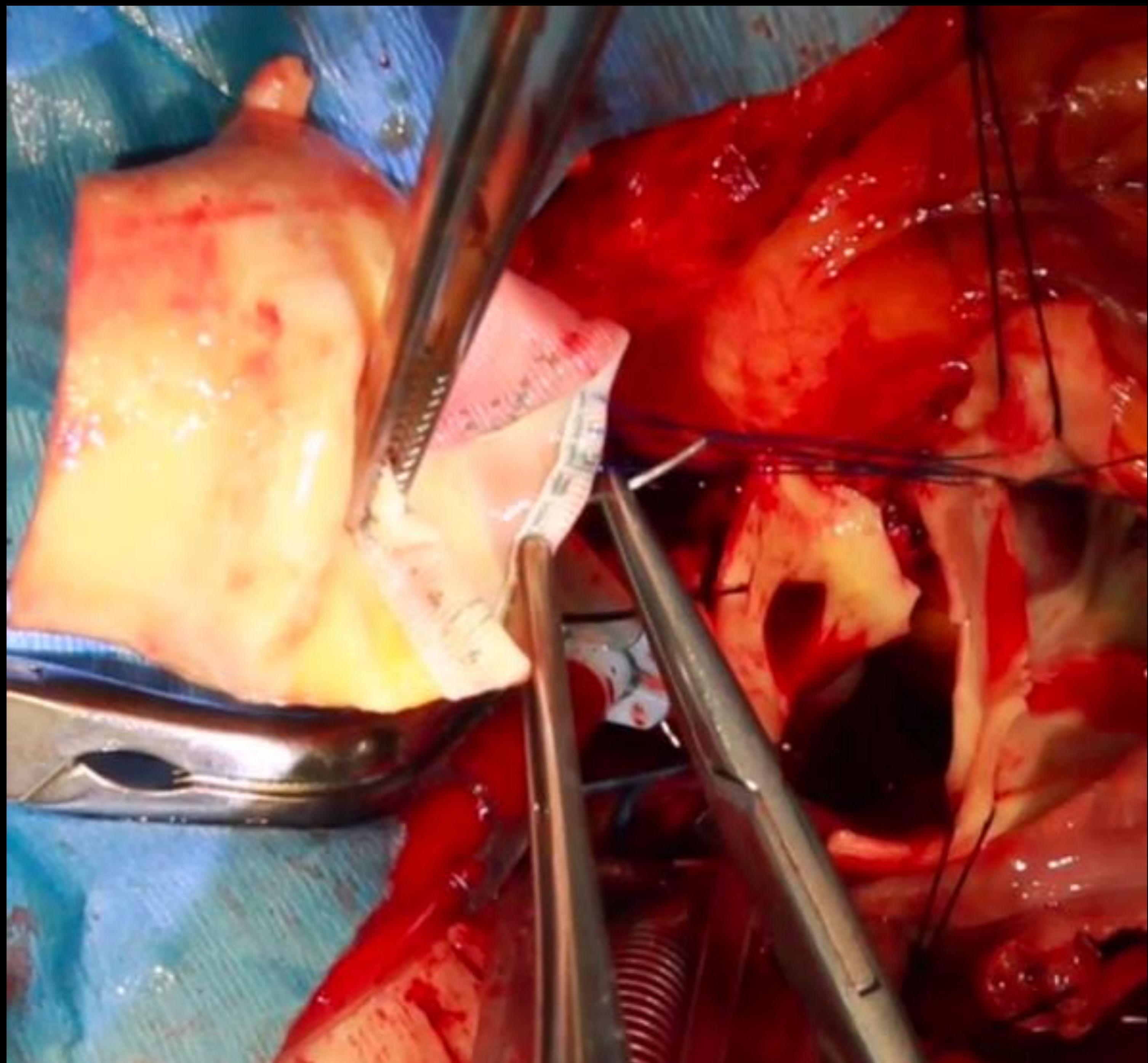
Source: Cohn LH: Cardiac Surgery in The Adult, 4th Edition.
www.accesssurgery.com
Copyright © The McGraw-Hill Companies, Inc. All rights reserved.



1. Twenty-Year Survival Following the Freestyle versus Homograft Aortic Root Replacement Prospective Randomized Trial

Giovanni Melina¹, Fabio De Robertis¹, Jullien A. Gaer¹, Emiliano Angeloni², Toufan Bahrami¹, Elena Bellazzi¹, Ismail El-Hamamsy³, Cesare Quarto¹, Ulrich Rosendahl¹, *John R. Pepper¹, *Magdi H. Yacoub⁴

¹Royal Brompton and Harefield NHS Foundation Trust, London, United Kingdom; ²Ospedale Sant'Andrea, Rome, Italy; ³Montreal Heart Institute, Montreal, QC, Canada; ⁴Imperial College, London, United Kingdom

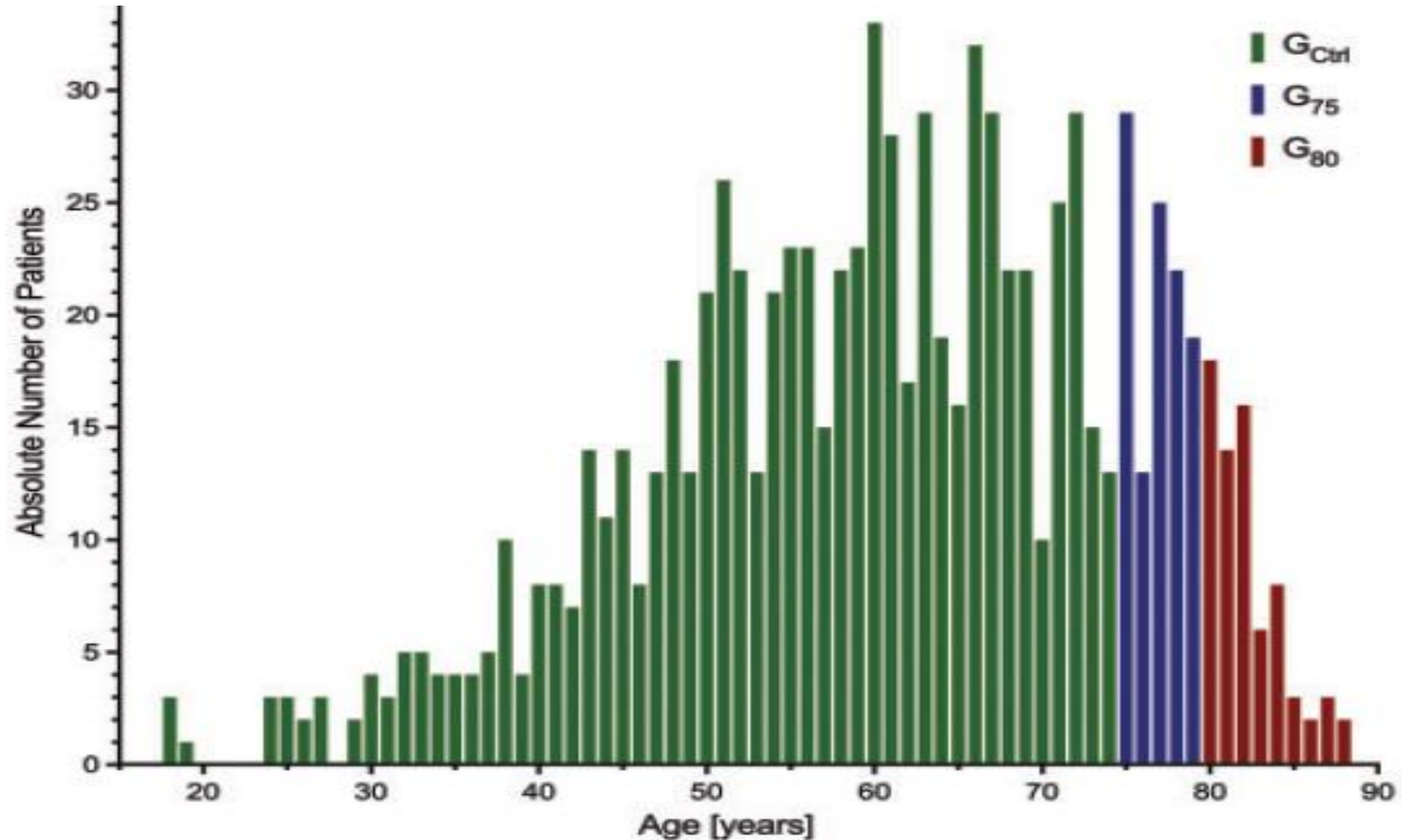


Cite this article as: Peterss S, Mansour AM, Zafar MA, Thombre K, Rizzo JA, Ziganshin BA *et al.* Elective surgery for ascending aortic aneurysm in the elderly: should there be an age cut-off? *Eur J Cardiothorac Surg* 2017;51:965–70.

Elective surgery for ascending aortic aneurysm in the elderly: should there be an age cut-off?†

Sven Peterss^{a,b,†}, Ahmed M. Mansour^{a,†}, Mohammad A. Zafar^a, Kabir Thombre^a, John A. Rizzo^{a,c},
Bulat A. Ziganshin^{a,d}, Umer M. Darr^e and John A. Elefteriades^{a,*}

Elective surgery for ascending aortic aneurysm in the elderly: should there be an age cut-off?†



Elective surgery for ascending aortic aneurysm in the elderly: should there be an age cut-off?†

	<75 (727)	75-79(108)	>80 (72)
	%	%	%
Bentall	42	27	18
Root sparing	58	73	82
With AVR	36	47	39
Hemiarch	44	56	28
Arch replacement	7.3	15	14
CPBP (min)	149	156	161
X-Clamp (min)	102	100	100
HCA (min)	28	30	30

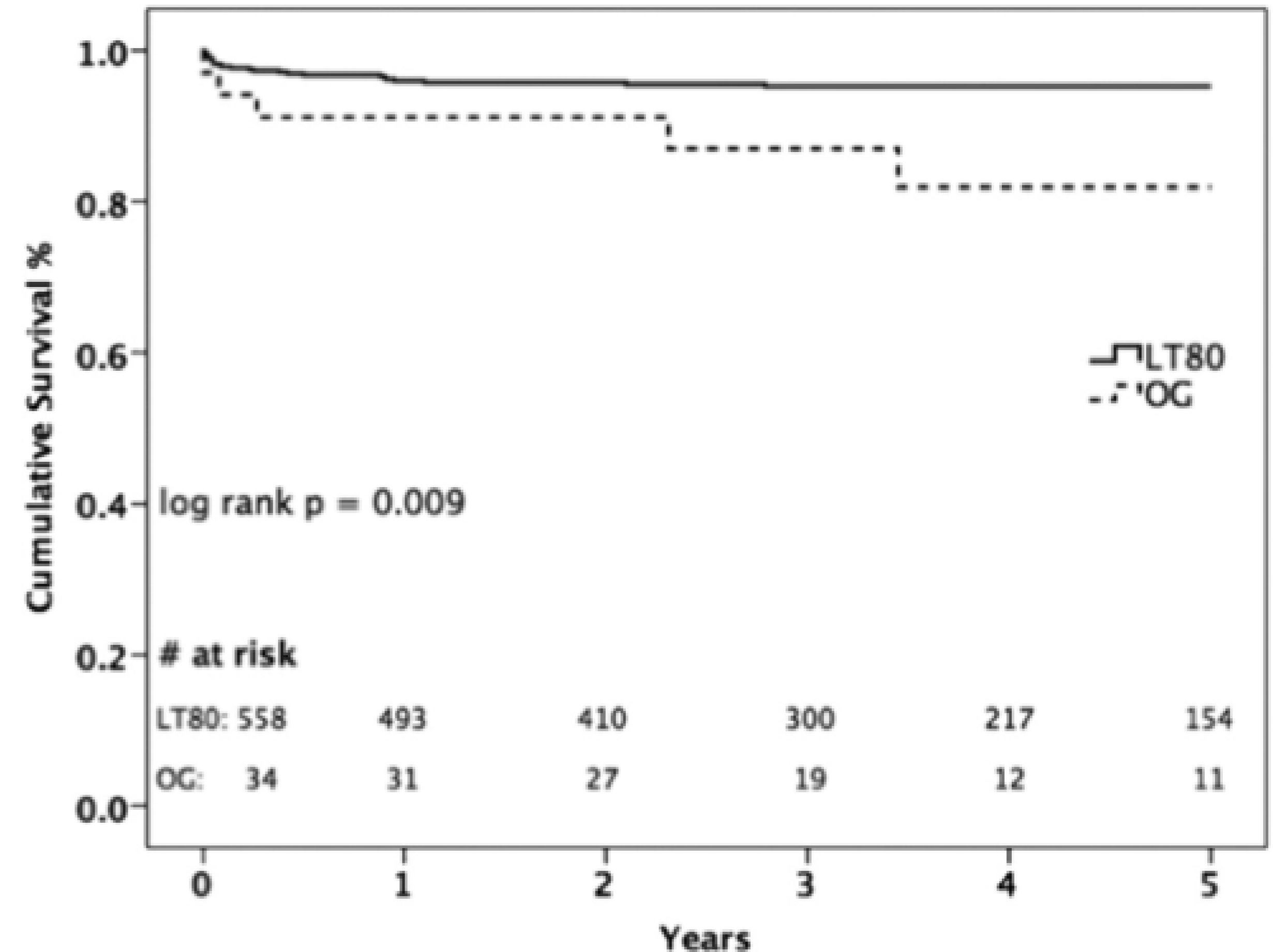
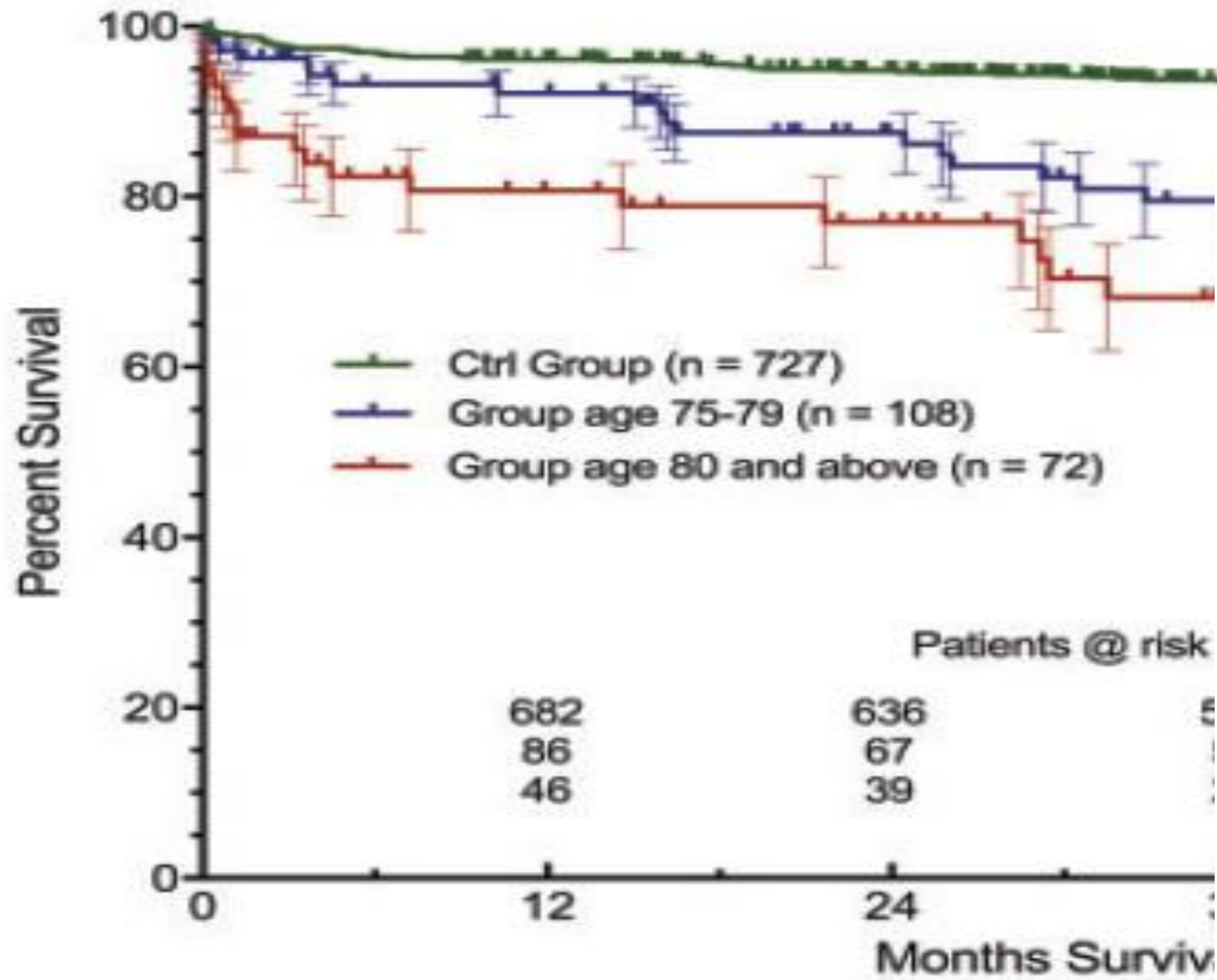
	<75 (727)	75-79(108)	>80 (72)	P Value
	%	%	%	
Operative Mortality	1.4	3.7	11.1	<0.001
Reop. for bleeding	3.9	5.6	10	0.059
Mech. Vent. > 48 h	2.9	8.4	21.4	<0.001
Low Cardiac Output	2.2	1.9	11.4	0.001
Perm. Pacemaker	3.6	7.5	7.1	0.062
Stroke	1.1	1.9	2.9	0.163
ARF-Hemodialysis	0.6	0.9	8.6	<0.001
Infection	3.5	6.5	10	0.017

Aortic Root Replacement in Octogenarians Offers Acceptable Perioperative and Late Outcomes

Sorabella Ann Thorac Surg 2016;101:967–73

Post op outcomes	< 80 (558)	Octog (34)	P Value
	%	%	
Inhospital deaths	2.3	5.9	0.21
Reop for bleeding	6.1	15.2	0.06
Stroke	3.6	3.9	0.13
Resp failure	5.7	9.1	0.44
ARF-Dialysis	2.5	6.1	0.22
Atrial Fibrillation	38.5	61	0.01

Survival



STS/EACTS Latin America Cardiovascular Surgery Conference

November 15-17, 2018

Hilton Cartagena | Cartagena, Colombia



The Society
of Thoracic
Surgeons



EACTS
European Association for Cardio-Thoracic Surgery

THANK YOU

