

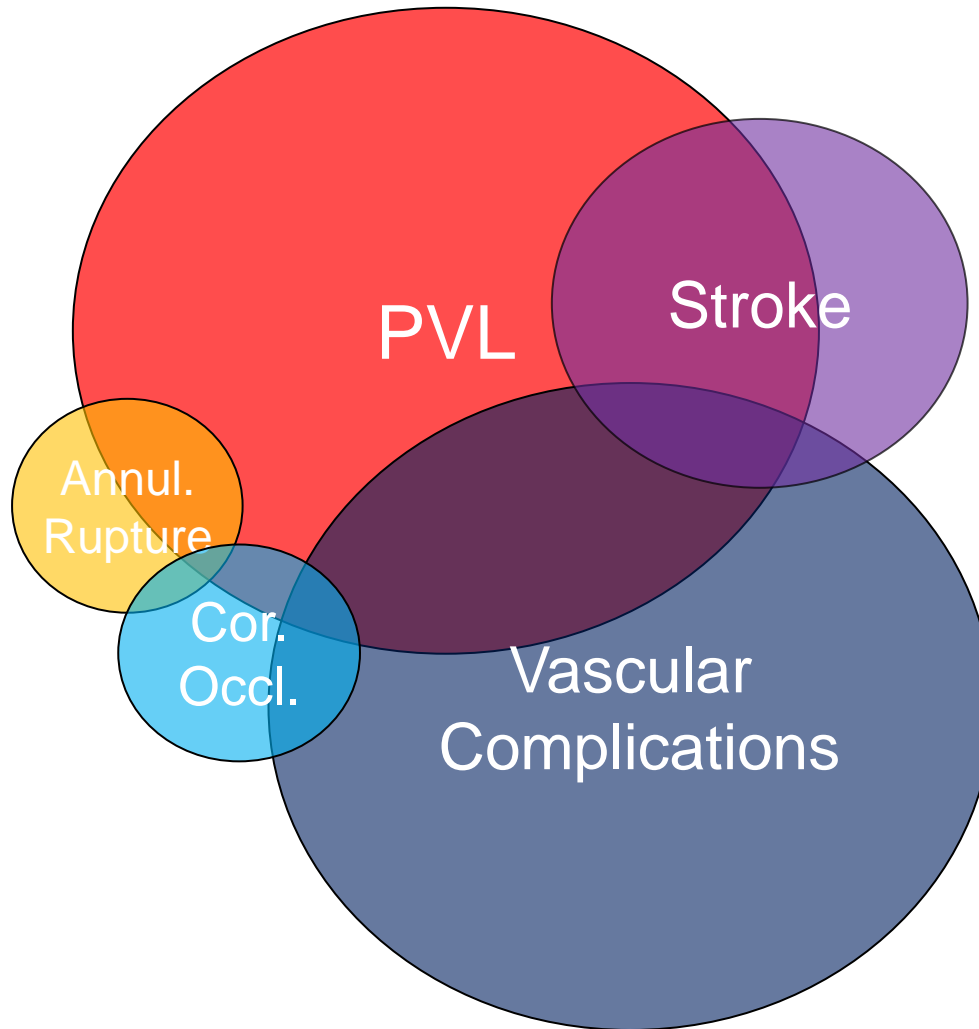


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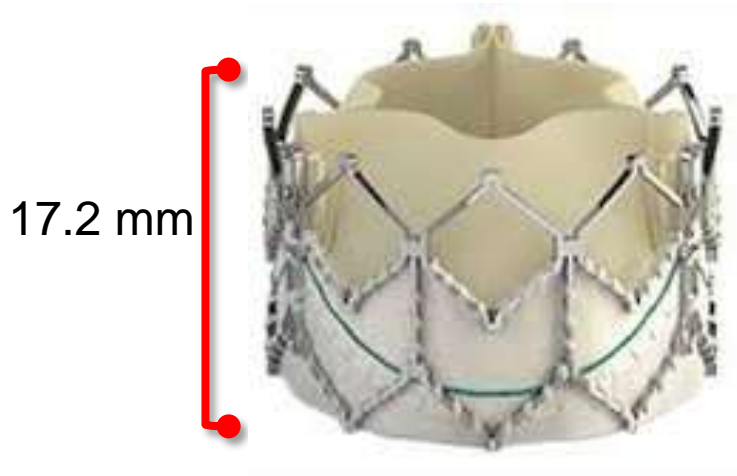
S3 in Challenging anatomy, implication in the clinical outcome

Thierry Lefèvre and the ICPS Team

Remaining limitations of TAVR in 2014

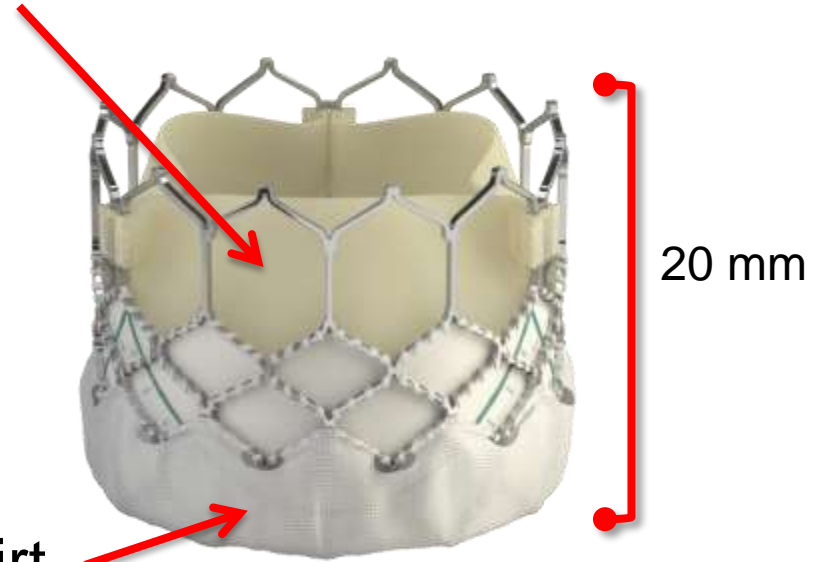


What is different with the S3 THV ?



XT 26

Larger
struts



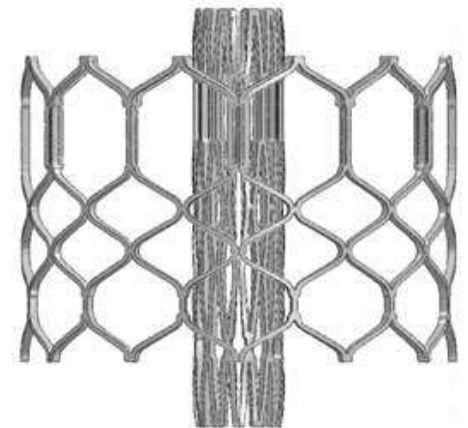
PET skirt

S3 26

Cobalt-chrome
Bovine pericardium
Thermafix preparation
Better radial strenght

What is different with the S3 THV ?

Size S3	Crimped	Deployed	Sapien XT
23 mm	24,5	18,0	14,3
26 mm	27,0	20,0	17,2
29 mm	31,0	22,5	19,1



What is different with the S3 THV ?



20 mm

23 mm

26 mm

29 mm

Sheath size (TF)

14F

14F

14F

16F

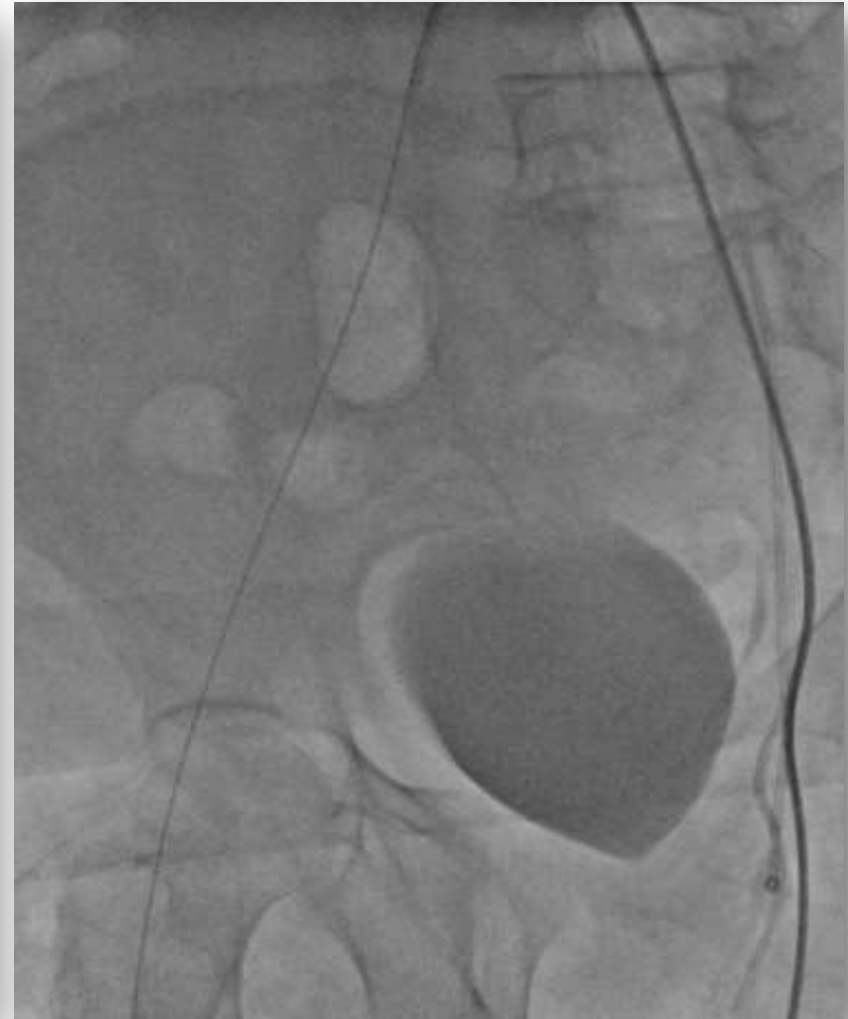
Minimal femoral size

Calcium score	0	> 0
SFAR	1.1	1.0
Min. size for 24 French	8.4	9.2
Min. size for 22 French	7.6	8.4
Min. size for 19 French	6.8	7.5
Min. size for 18 French	6.5	7.2
Min. size for 16 French	5.8	6.4
Min. size for 14 French	5.1	5.6

Minimal femoral size

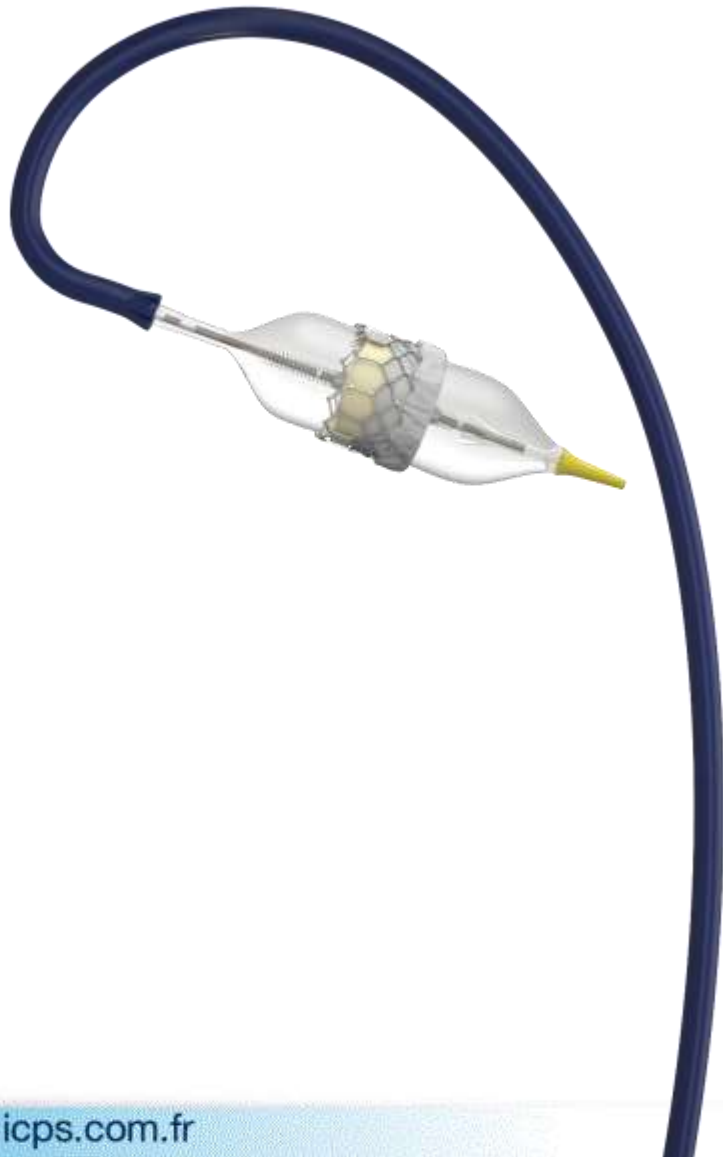


5.3 mm

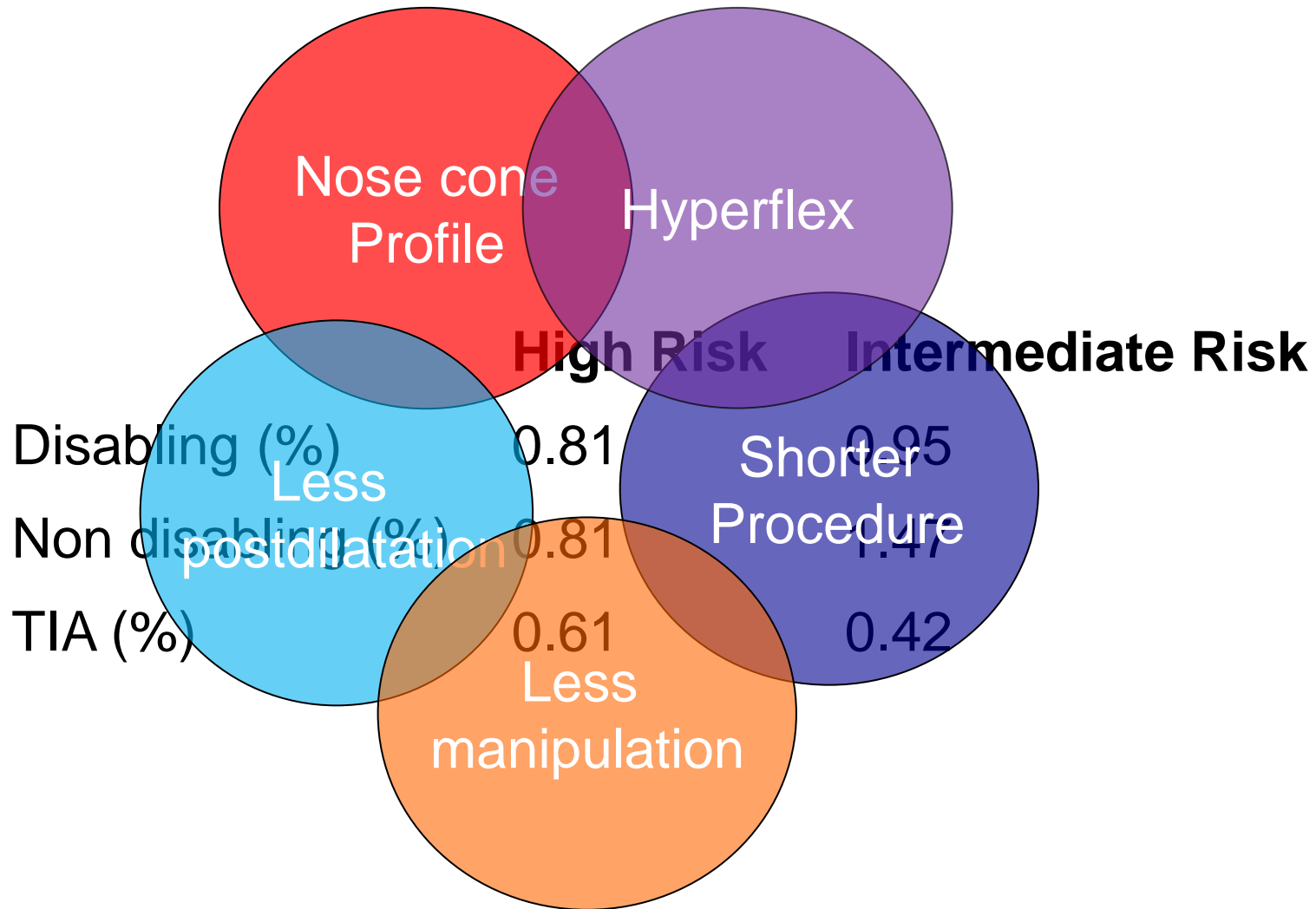


Sapien 3, Kodali ACC 2015

What is different with the S3 THV ?

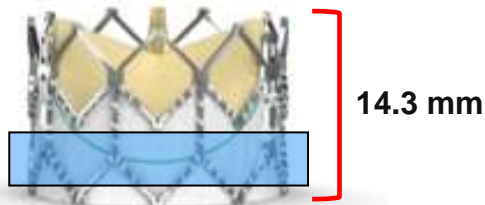


Low risk of strokes at 30 days (TF)



What is different with the S3 THV ?

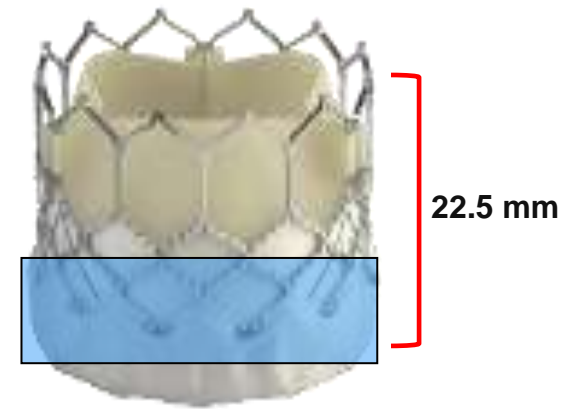
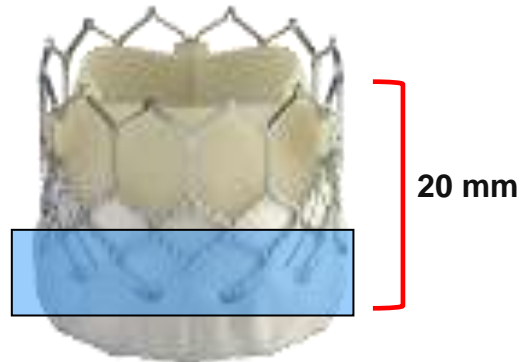
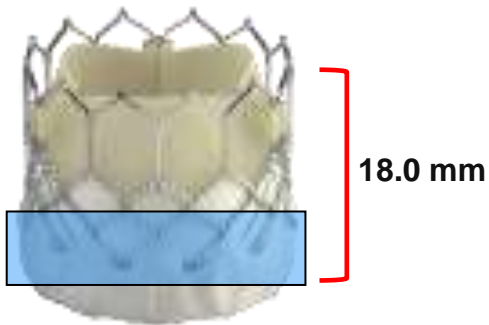
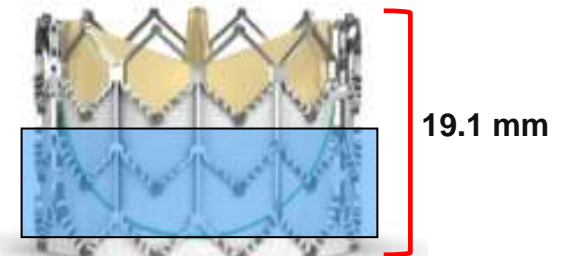
23 mm



26 mm

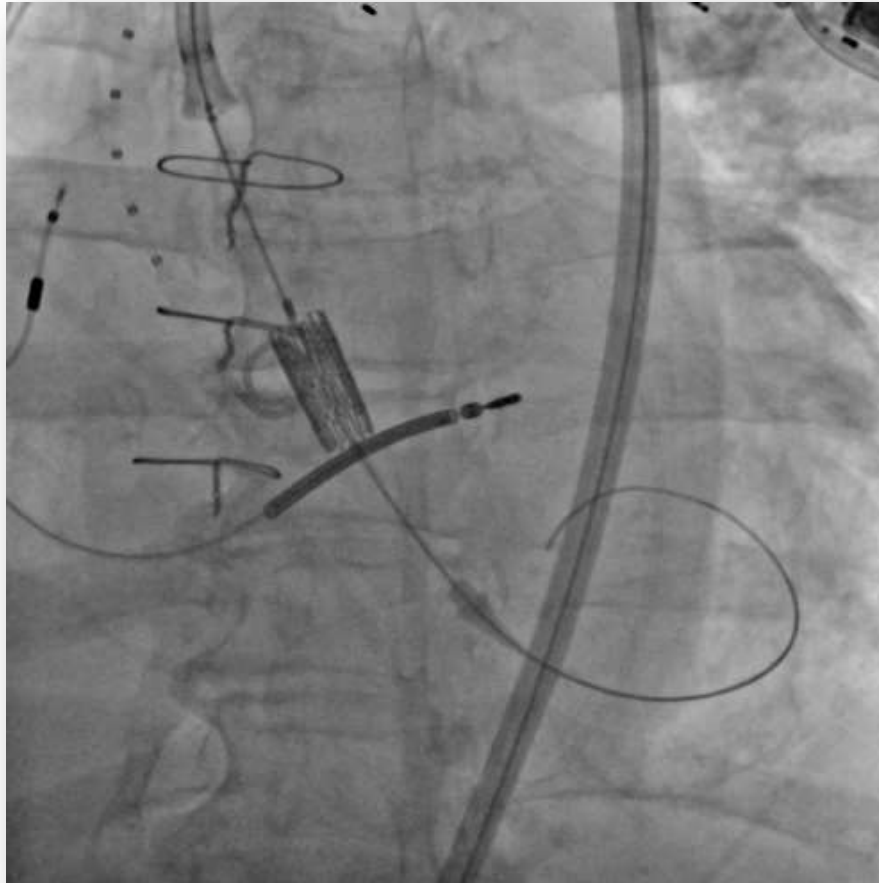


29 mm

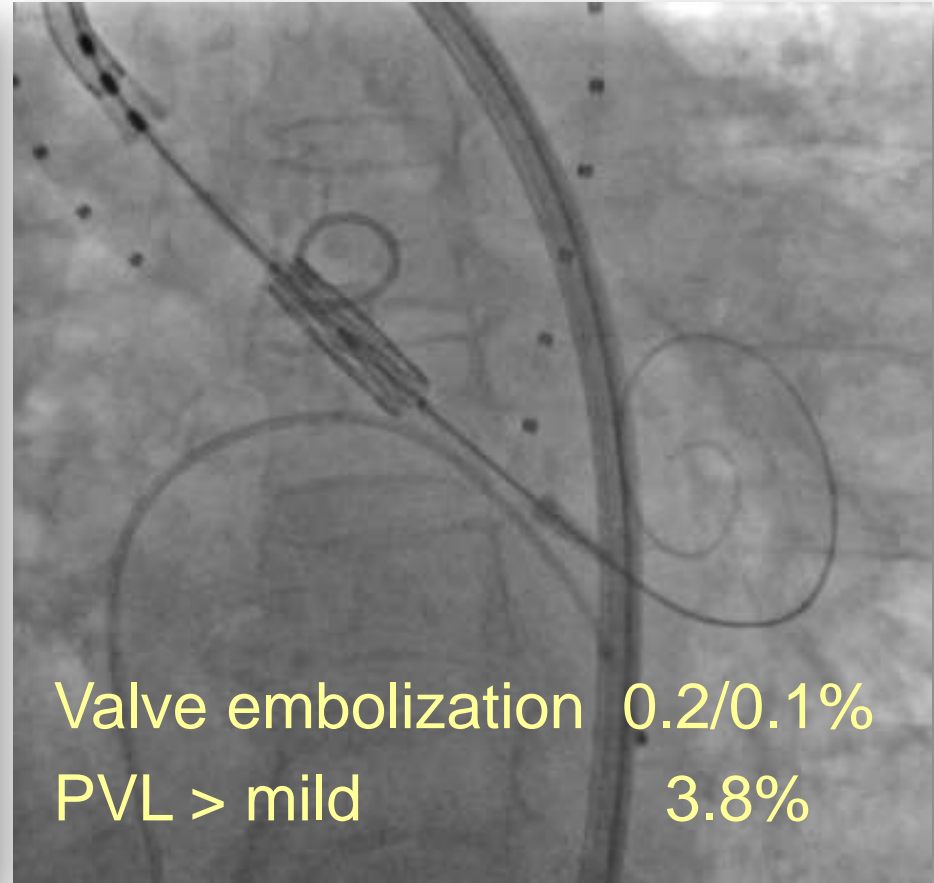


 Optimal Landing Zone

What is different with the S3 THV ?

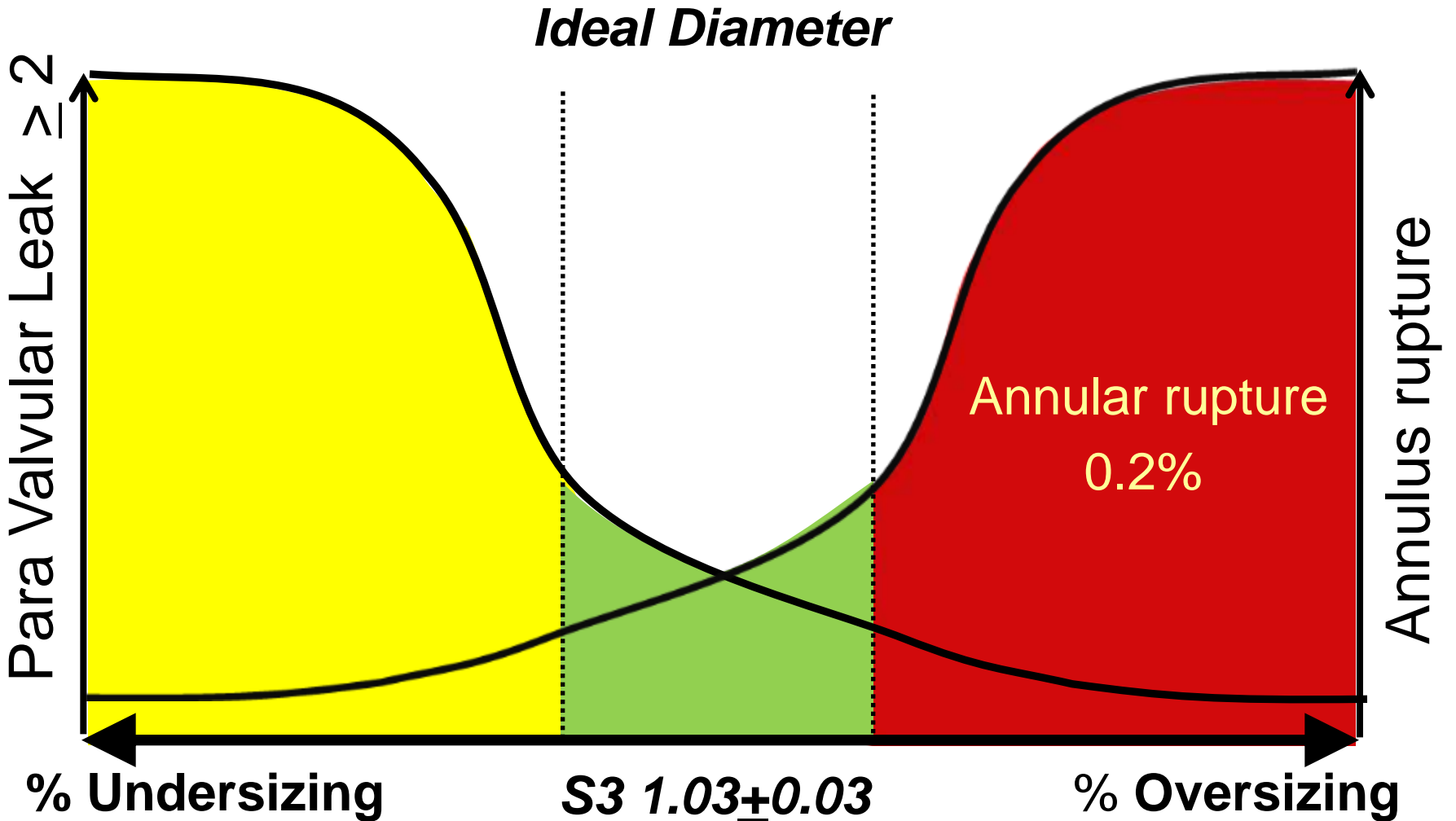


XT



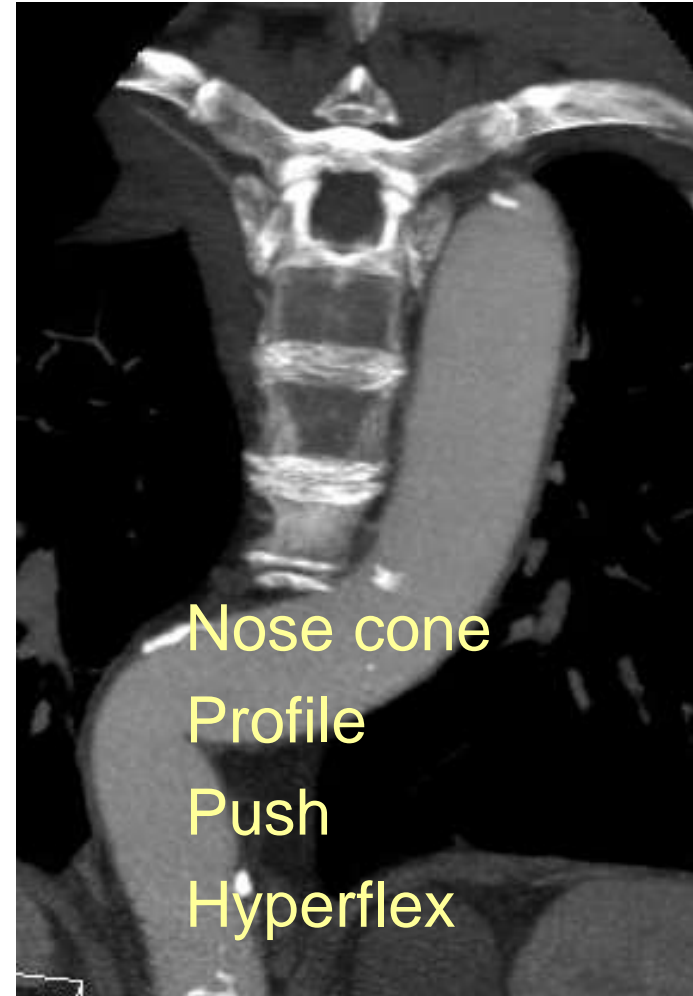
S3

“In Medio Stat Virtus”



Challenging anatomy

Aortic tortuosity



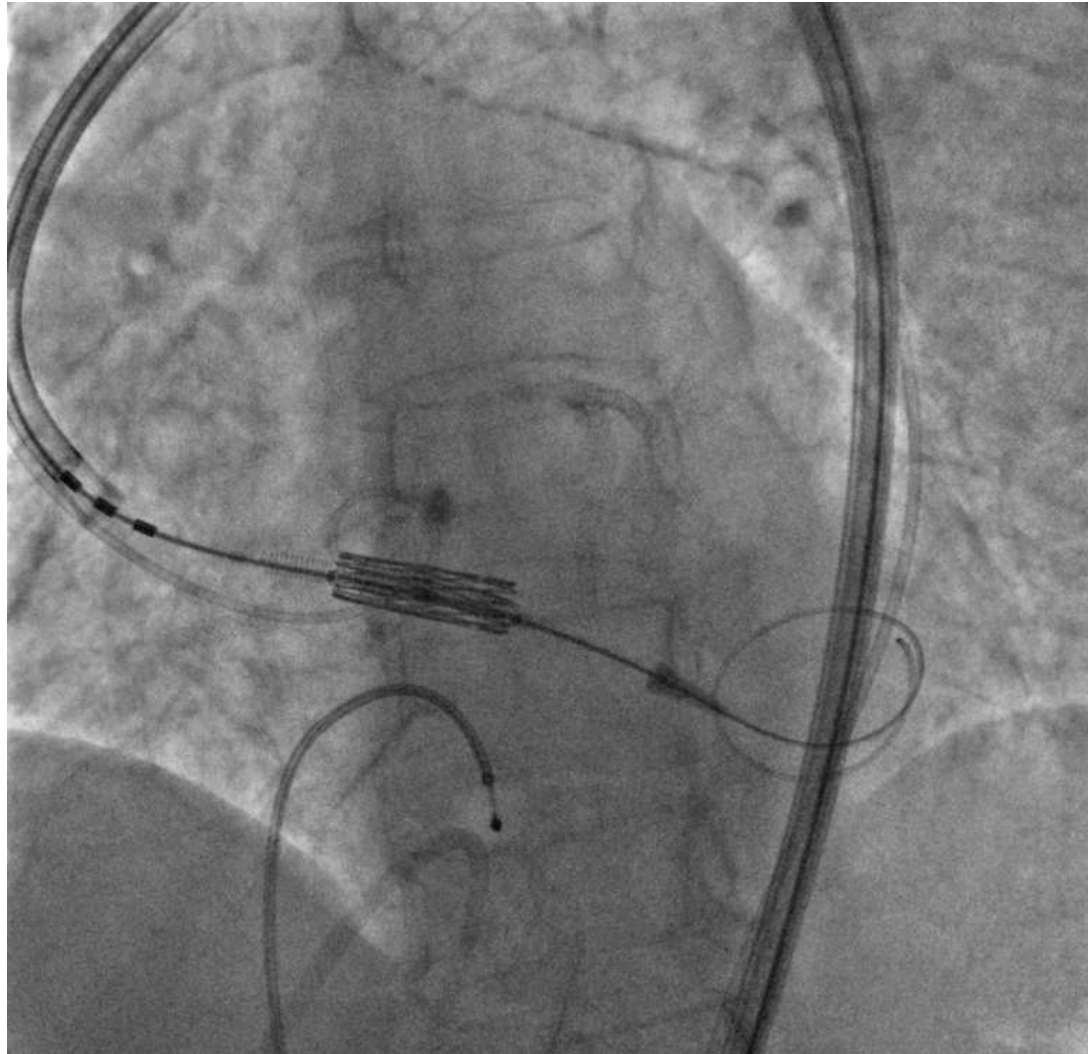
Short aortic annulus-LM distance



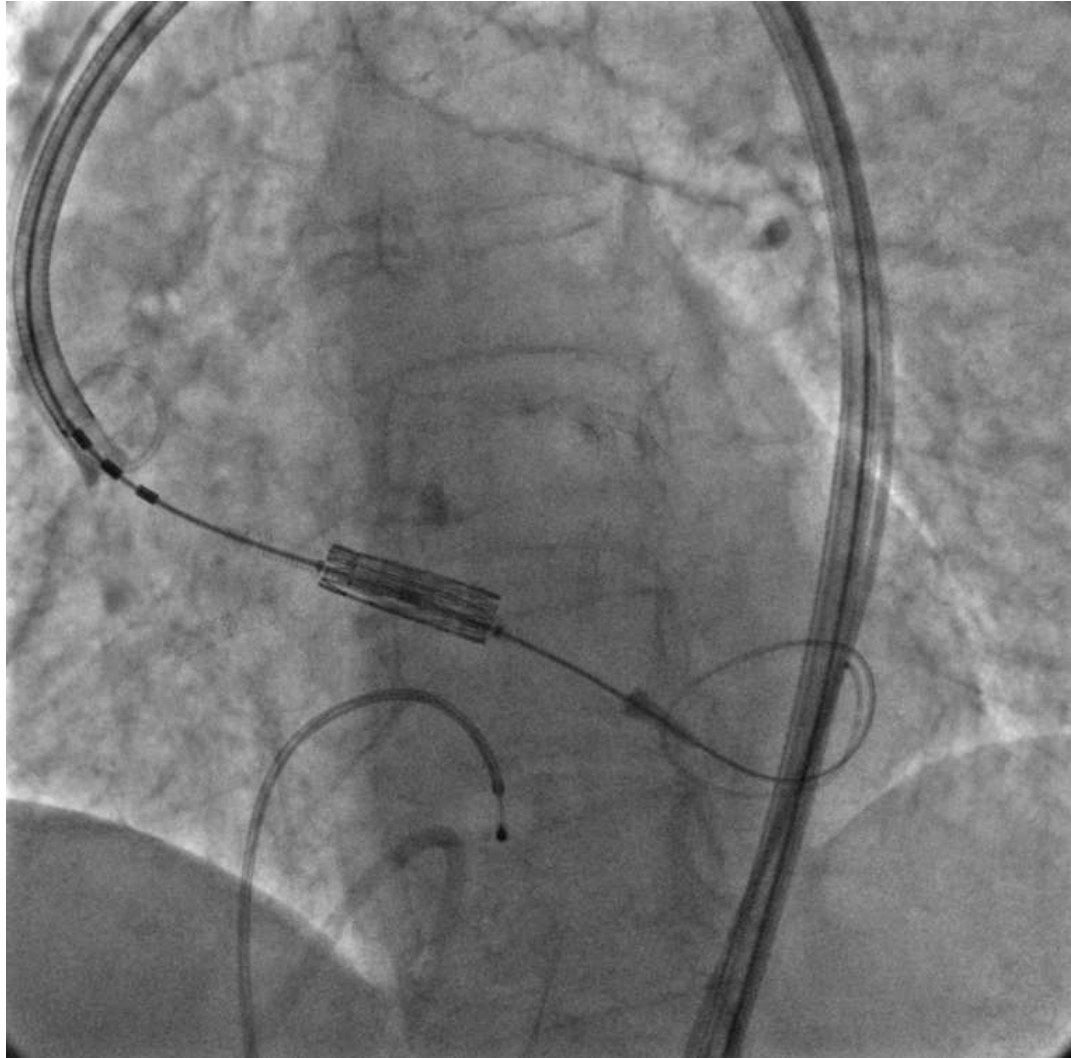
Horizontal aorta



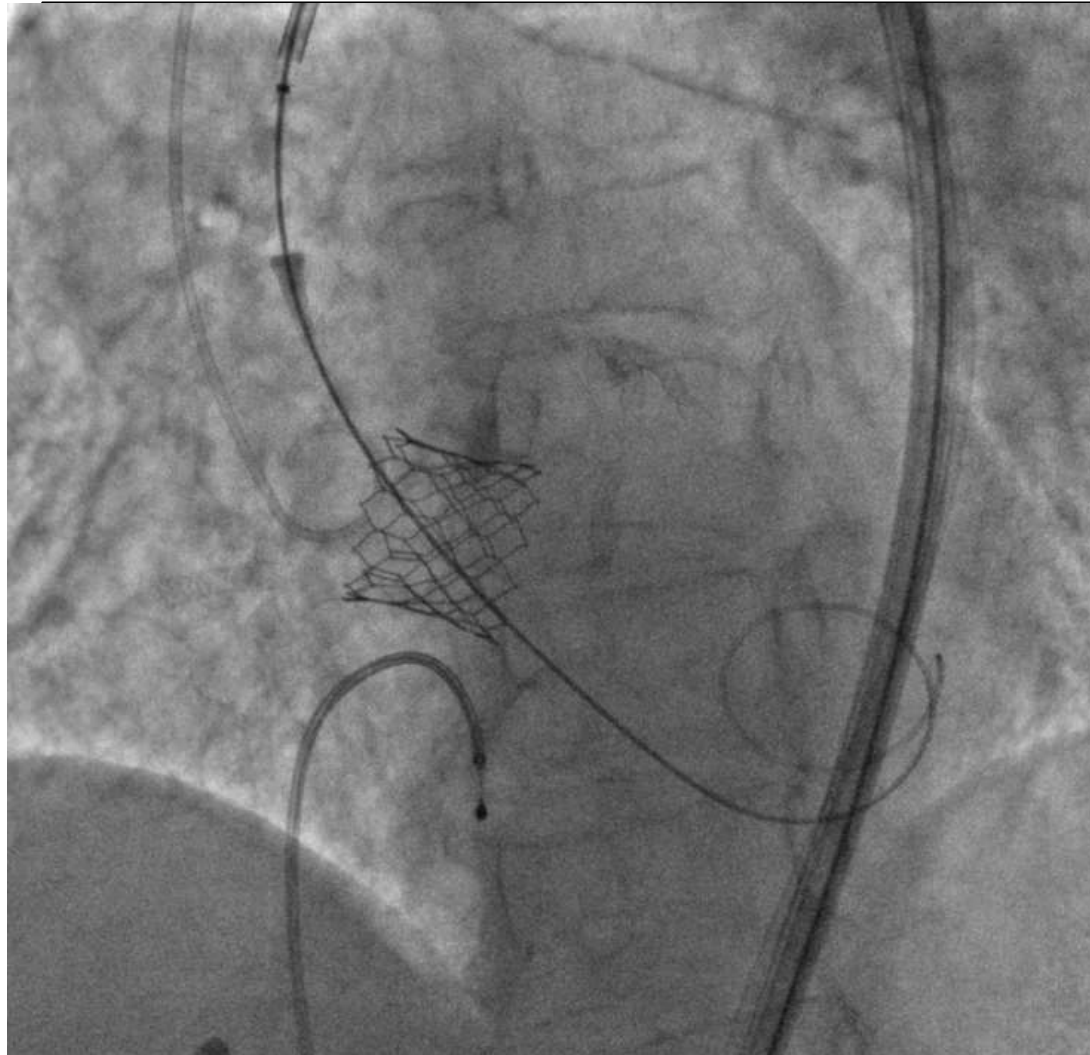
Horizontal aorta



Horizontal aorta



Horizontal aorta



Bicuspid valve

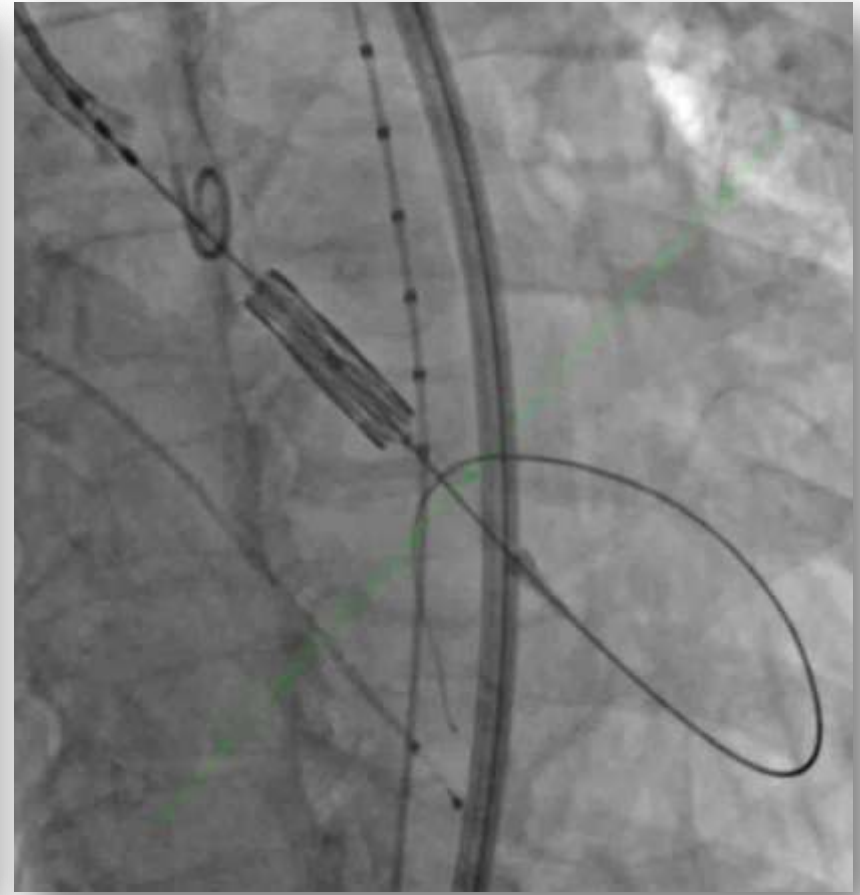
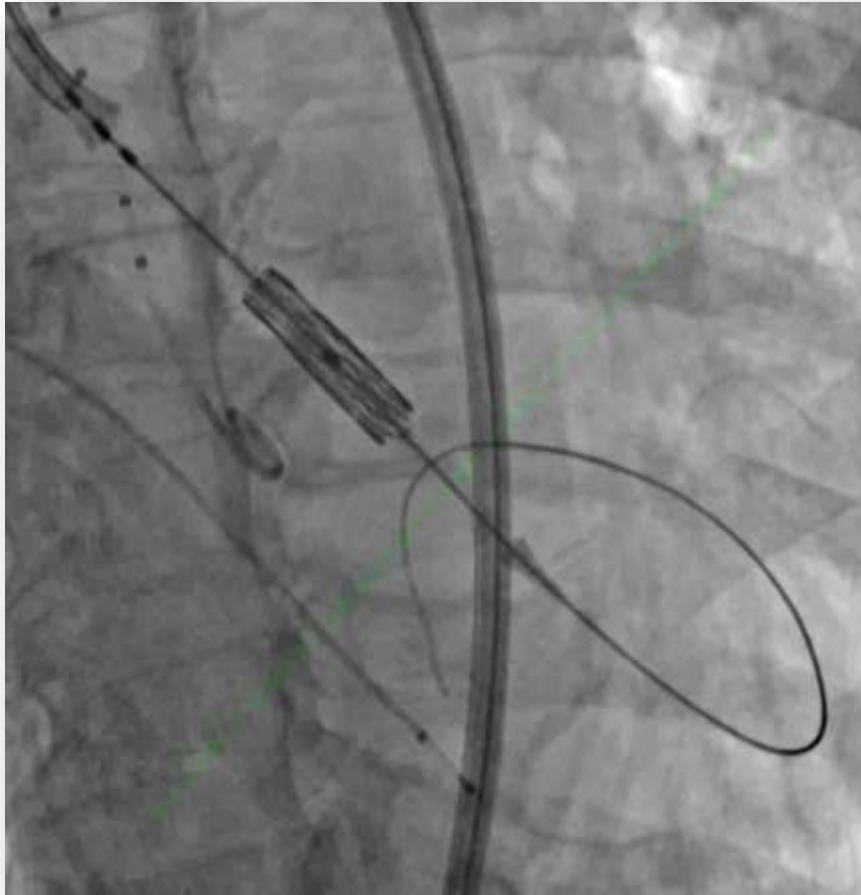


Bicuspid type2 (L-R &R-N raphe)



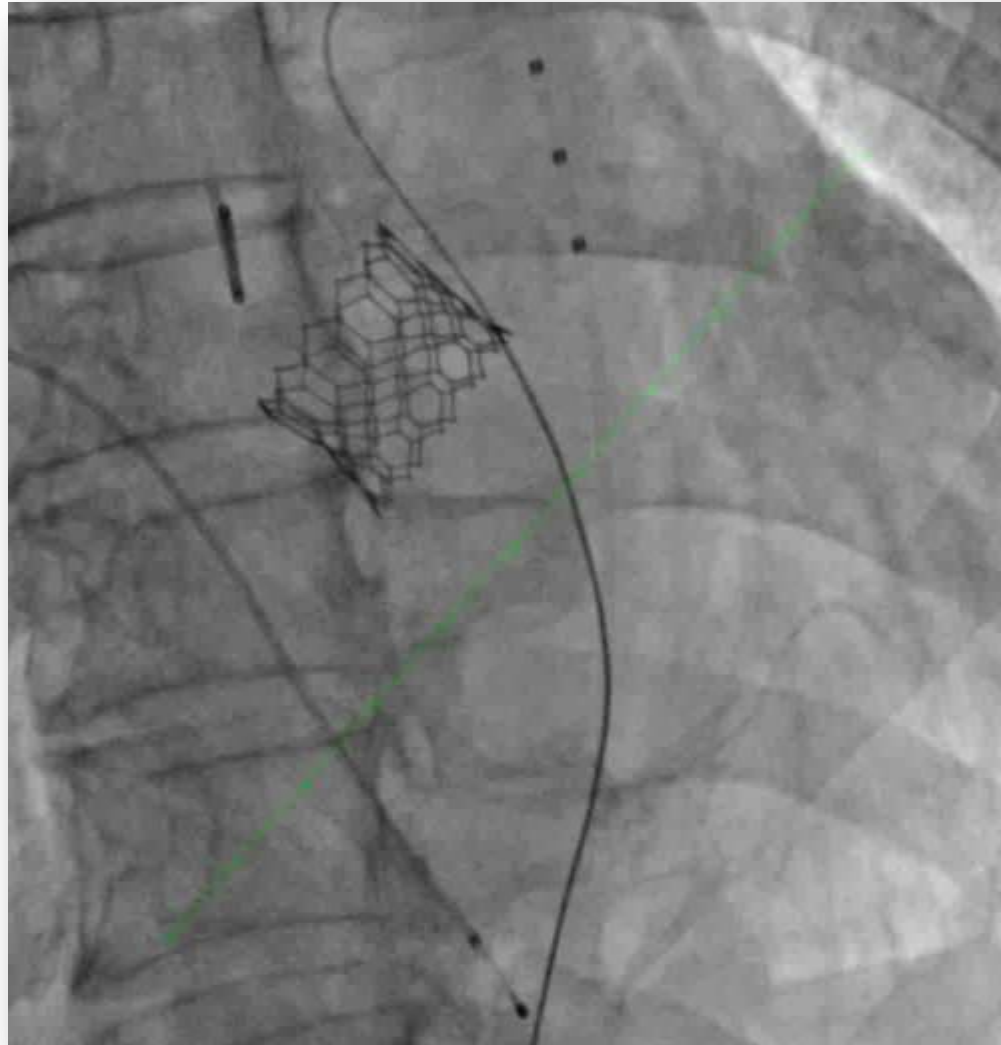
Short annulus diameter	26.5mm
Long annulus diameter	34.8mm
Mean annulus diameter	30.7mm

Bicuspid valve

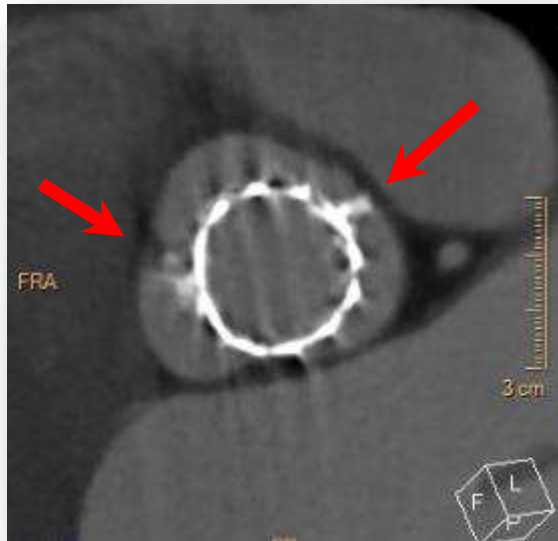


29 mm SAPIEN 3

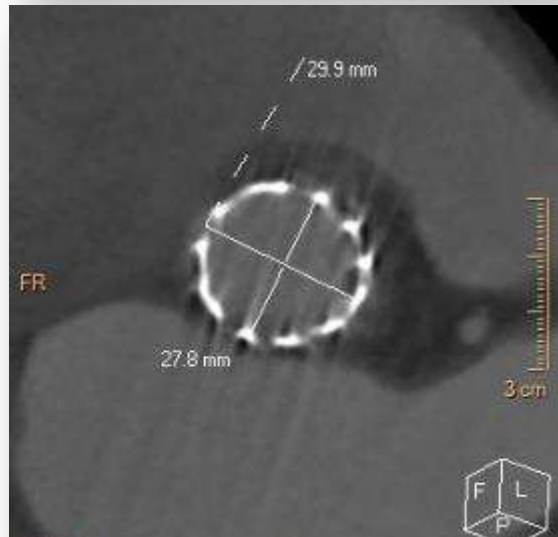
Bicuspid valve



Bicuspid valves

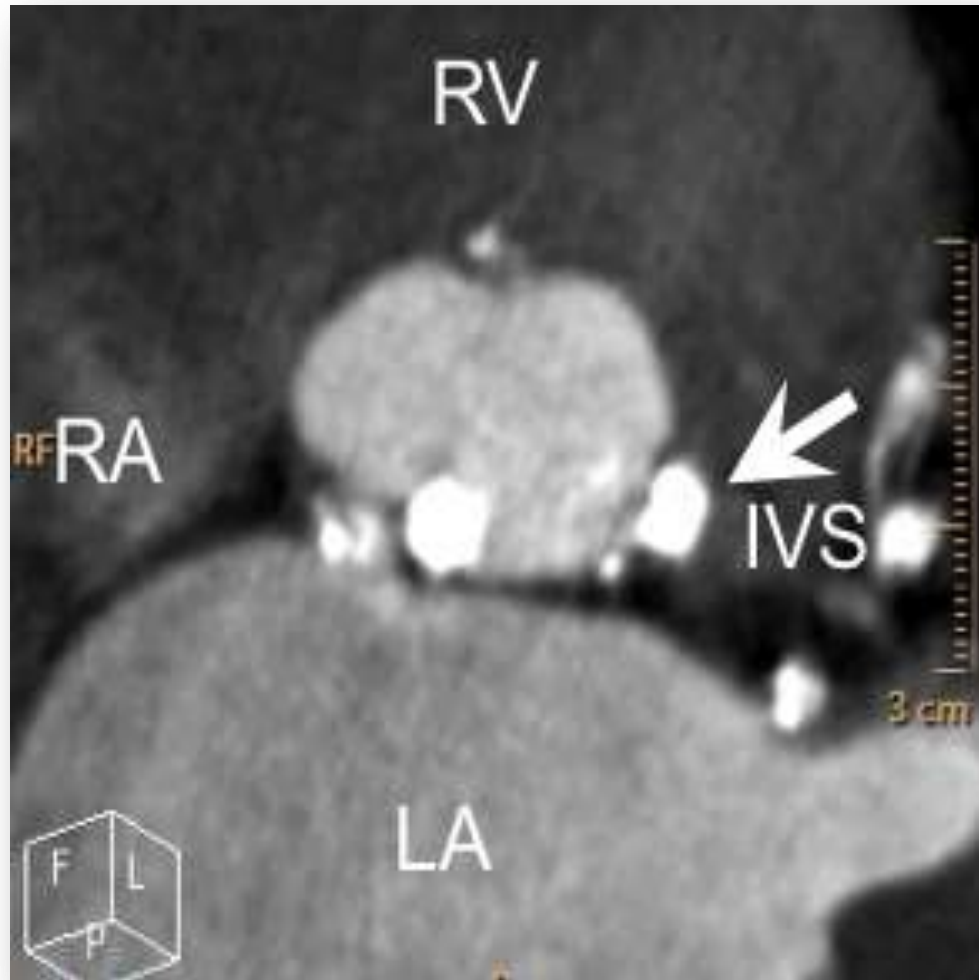


Both L-R and R-N raphe filled the gaps → no PVL despite undersizing



Short diameter of annulus 27.8mm
Long diameter of annulus 29.9mm

« Killer nodule »



Conclusion

- ✓ The rapid evolution of balloon-expandable TAVR, both procedural developments and technical enhancements, represented in the S3 clinical and echo results, indicates at least parity with the best surgical outcomes in comparable patients.

Conclusion

- ✓ The procedure with the S3 is now easier, faster and safer even in challenging anatomies.
- ✓ This paves the way for TAVR in lower risk patients with aortic stenosis.