



INSTITUT
CARDIOVASCULAIRE
PARIS
SUD

21st CARDIOVASCULAR SUMMIT
TCTAP 2016

Endless debate for perfect valve: Sapien 3

Thierry Lefèvre and the ICPS Team

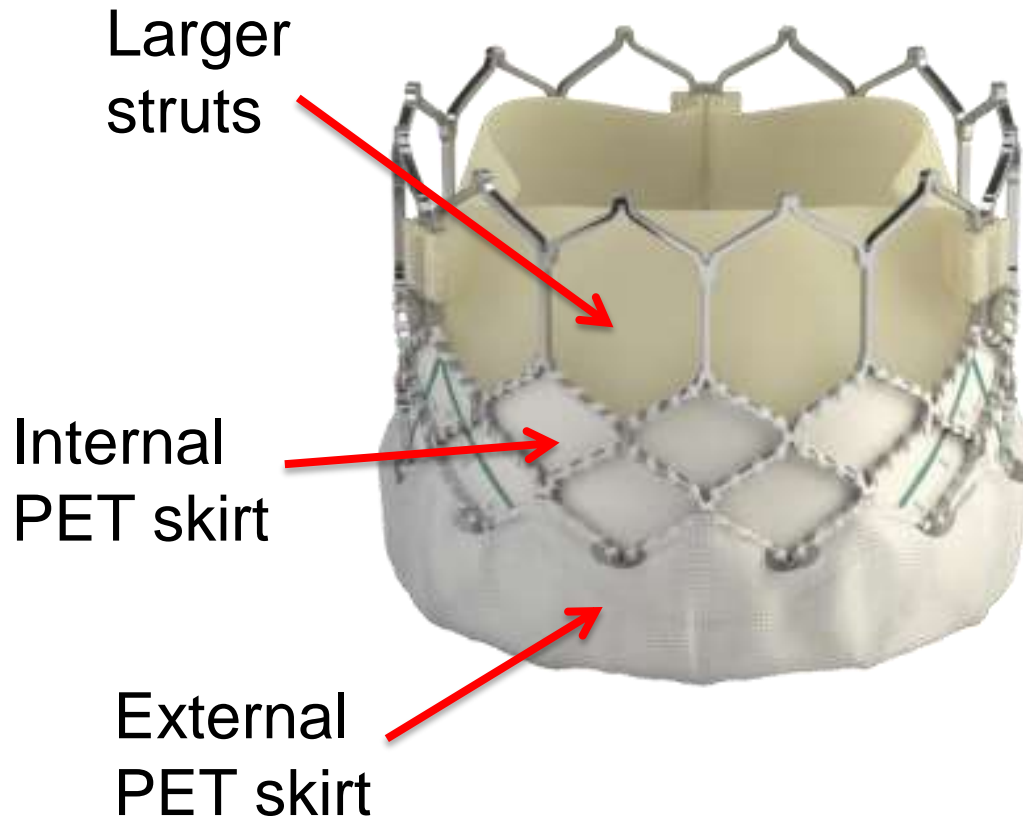
Conflict of interest

- ✓ Proctoring for Edwards

Perfect THV ?

- ✓ Good profile
- ✓ Low risk of PVL
- ✓ Low risk of AV-Block
- ✓ Low risk of annulus rupture
- ✓ Low risk of coronary occlusion
- ✓ Low risk of stroke
- ✓ Easy sizing
- ✓ Easy to prepare and easy to deliver
- ✓ Good hemodynamics and Durability

The Sapien 3 THV



Cobalt-chrome
Bovine pericardium
Thermafix preparation
High radial strenght

The Sapien 3 THV



20 mm



23 mm



26 mm



29 mm

Sheath size (TF)

14F

14F

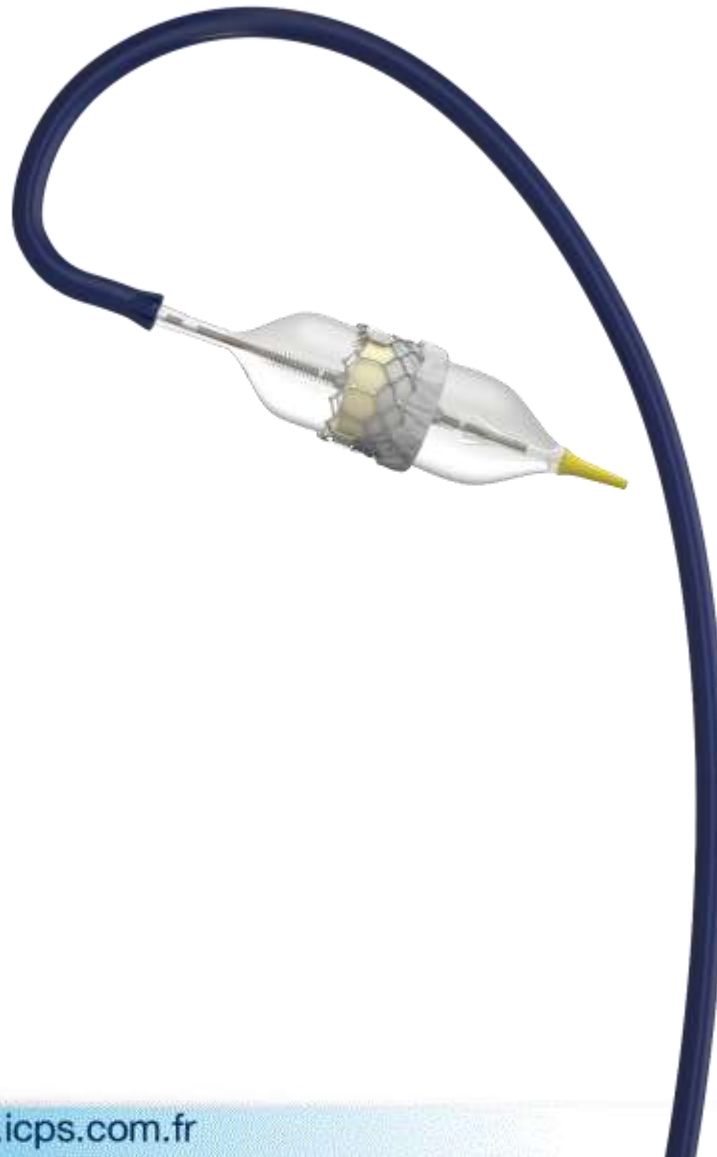
14F

16F

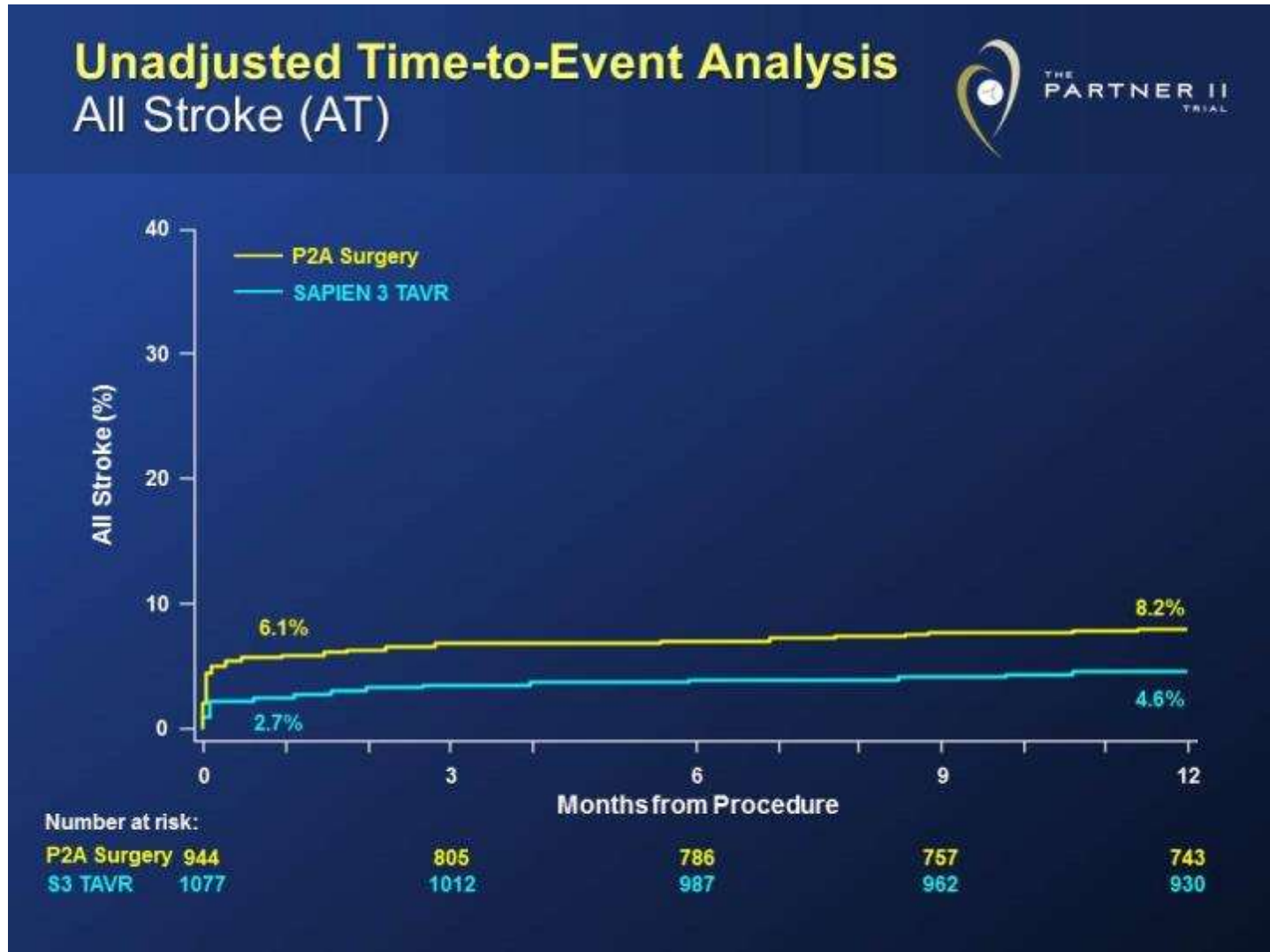
Minimal femoral size

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

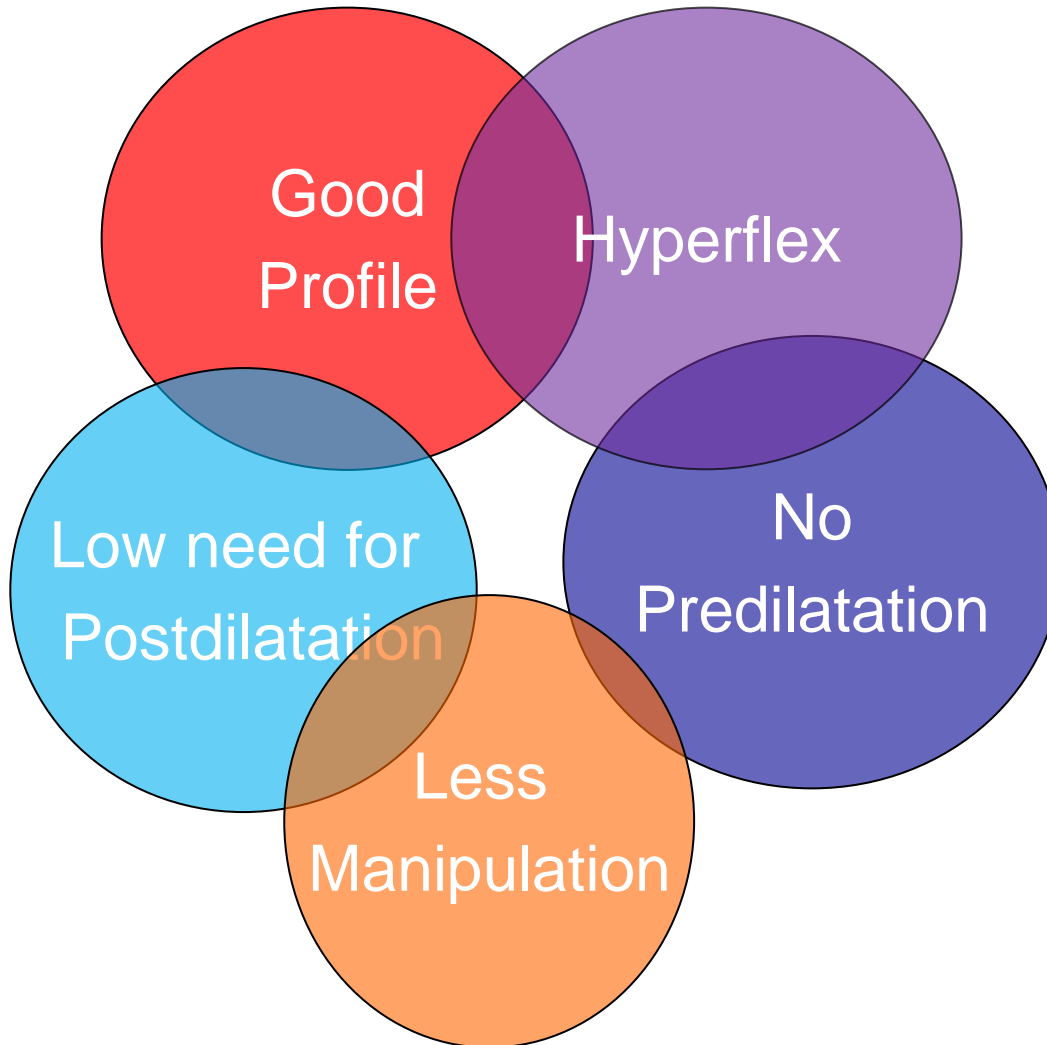
Easy to deliver



Low risk of strokes at 30 days (TF)

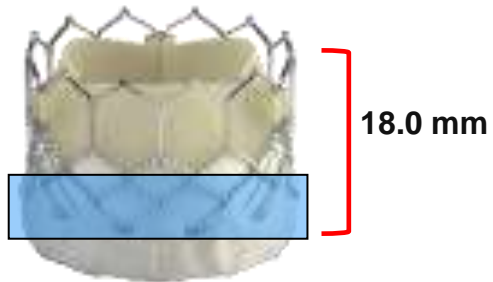


Low risk of strokes at 30 days (TF)

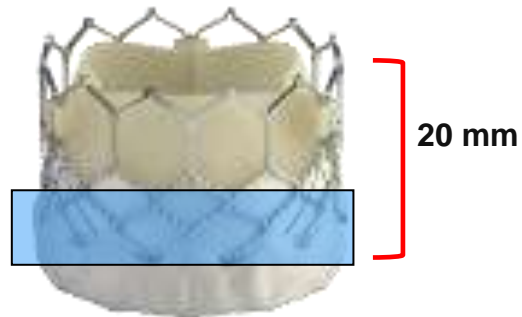


Easy positioning

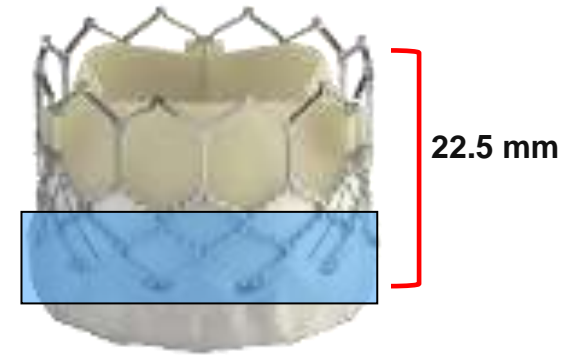
23 mm



26 mm

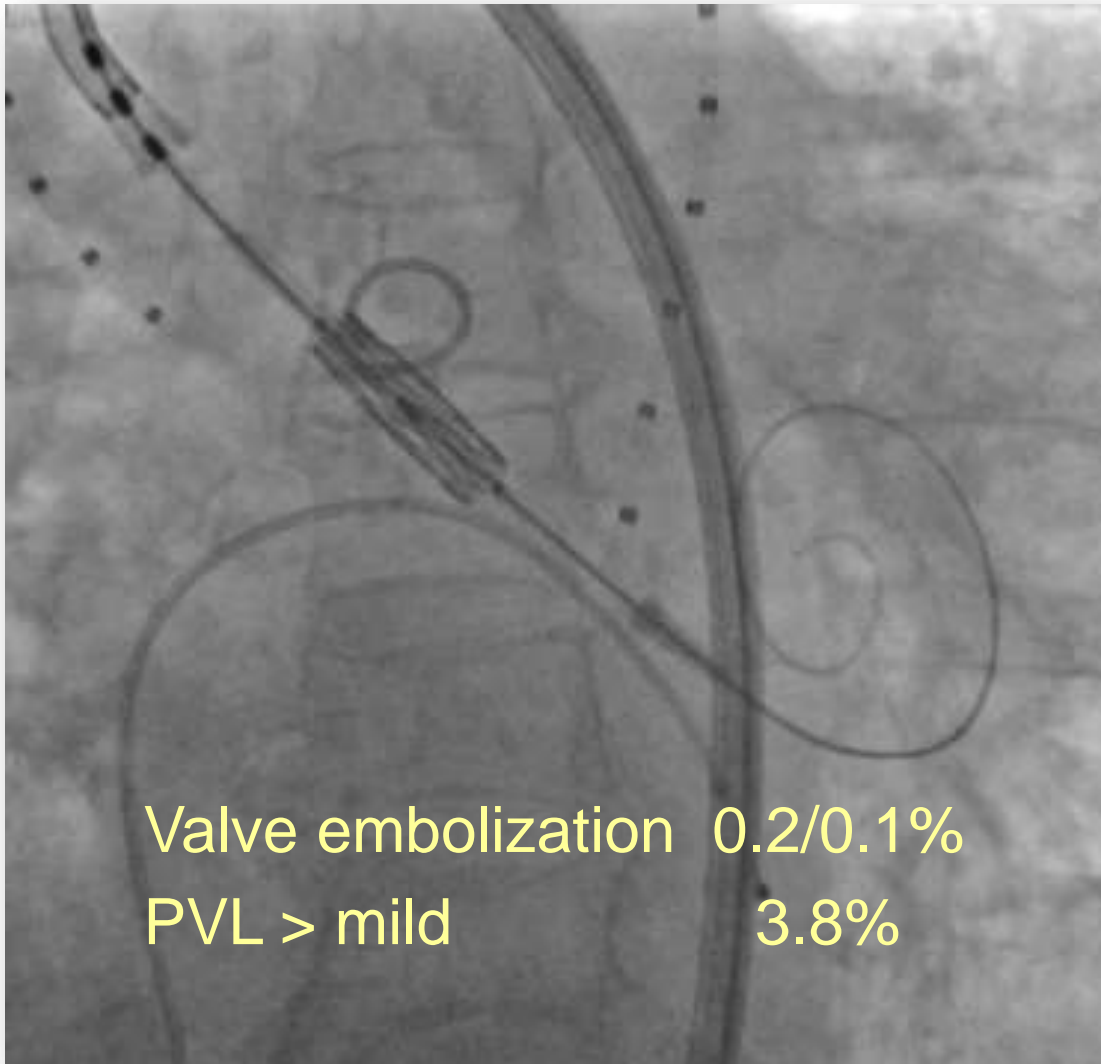


29 mm

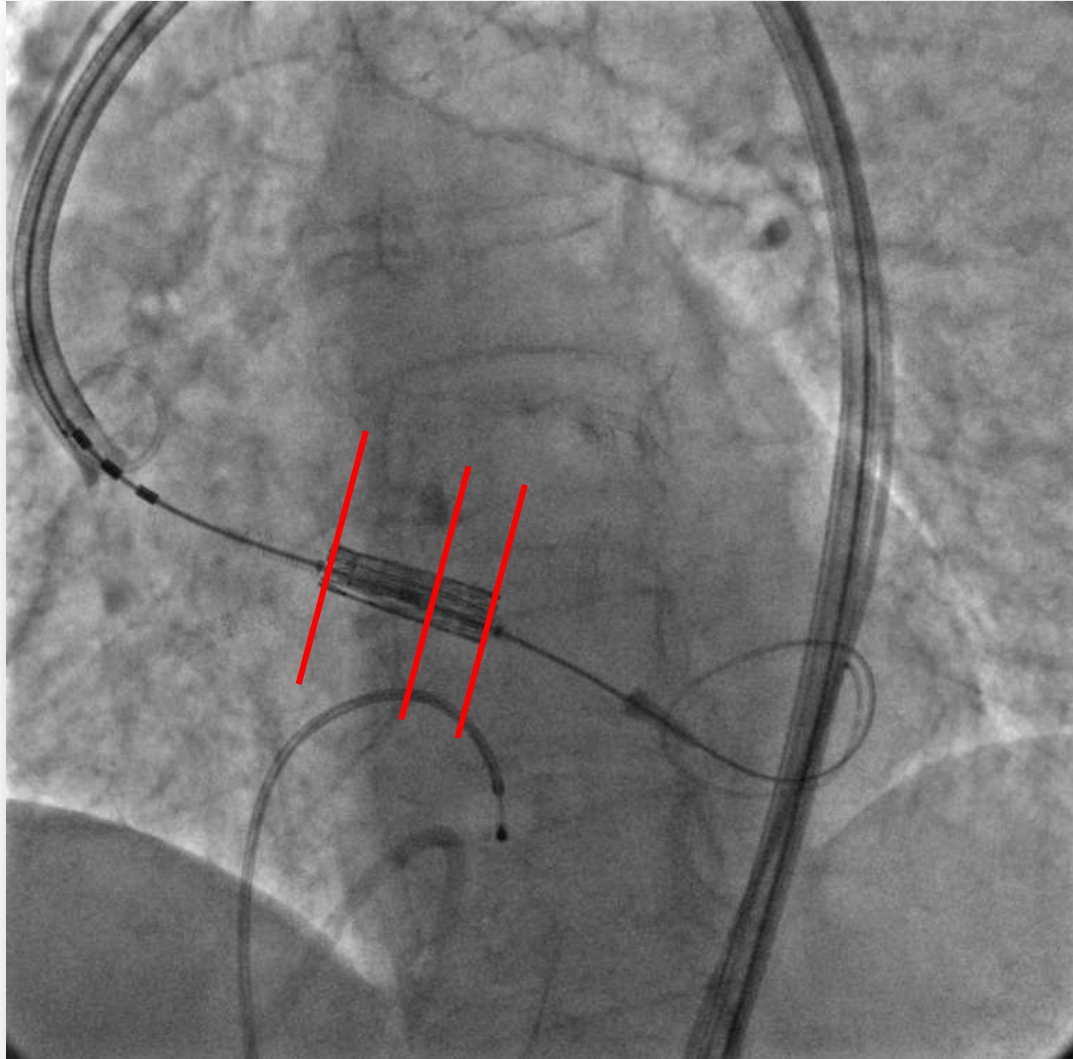


 Optimal Landing Zone

Easy positioning

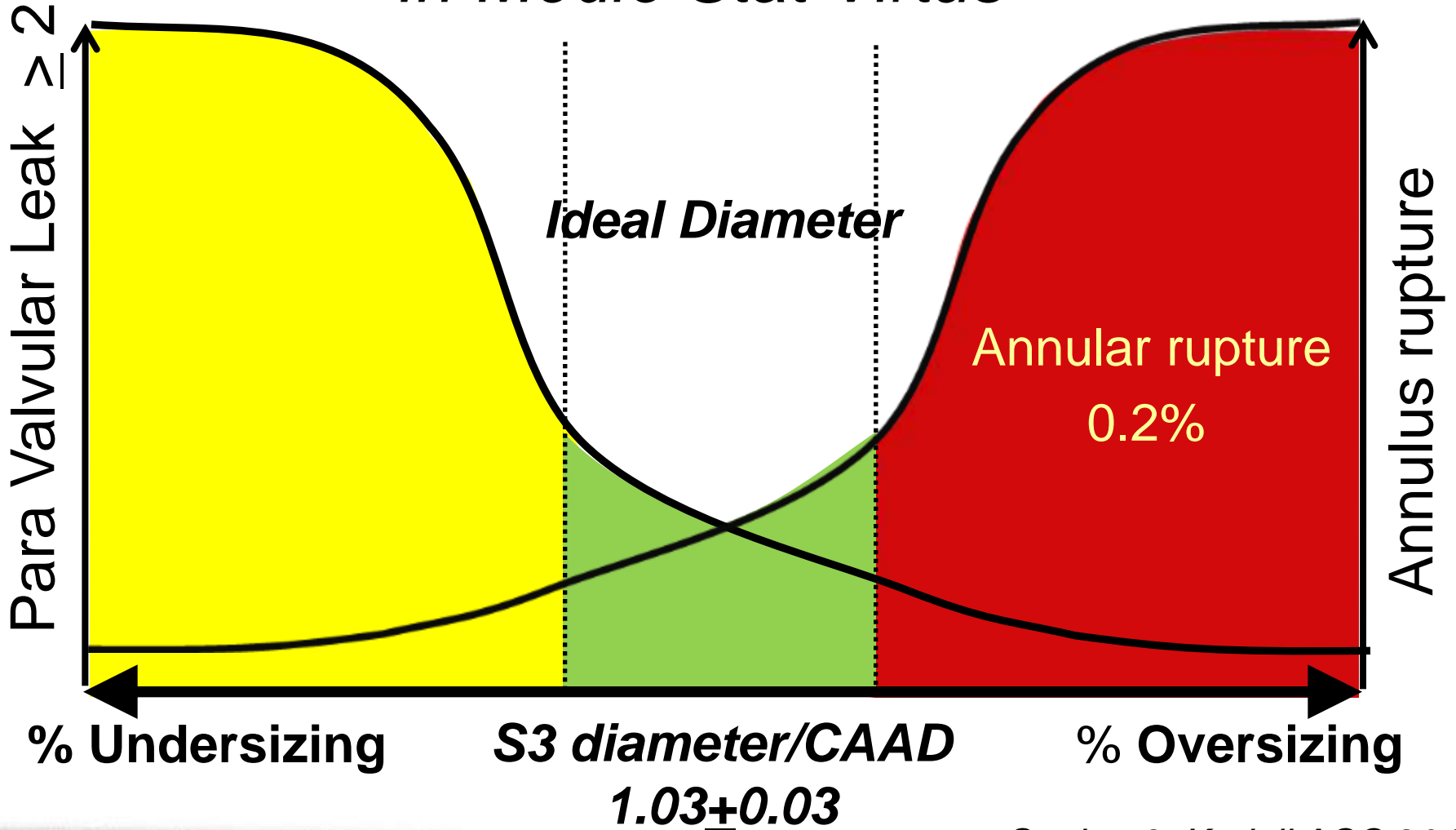


Simple deployment

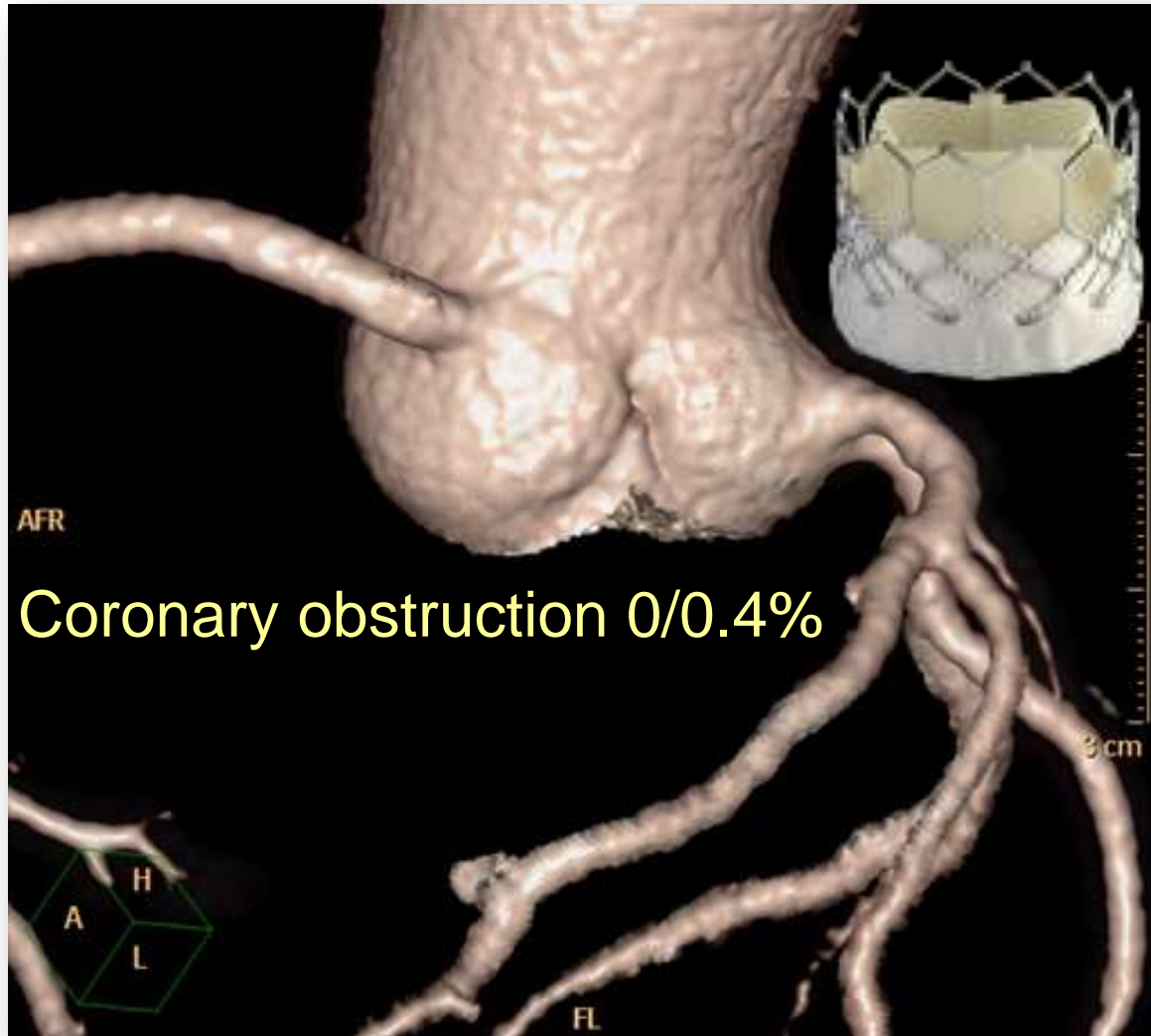


Easy sizing

"In Medio Stat Virtus"



Low risk of coronary occlusion

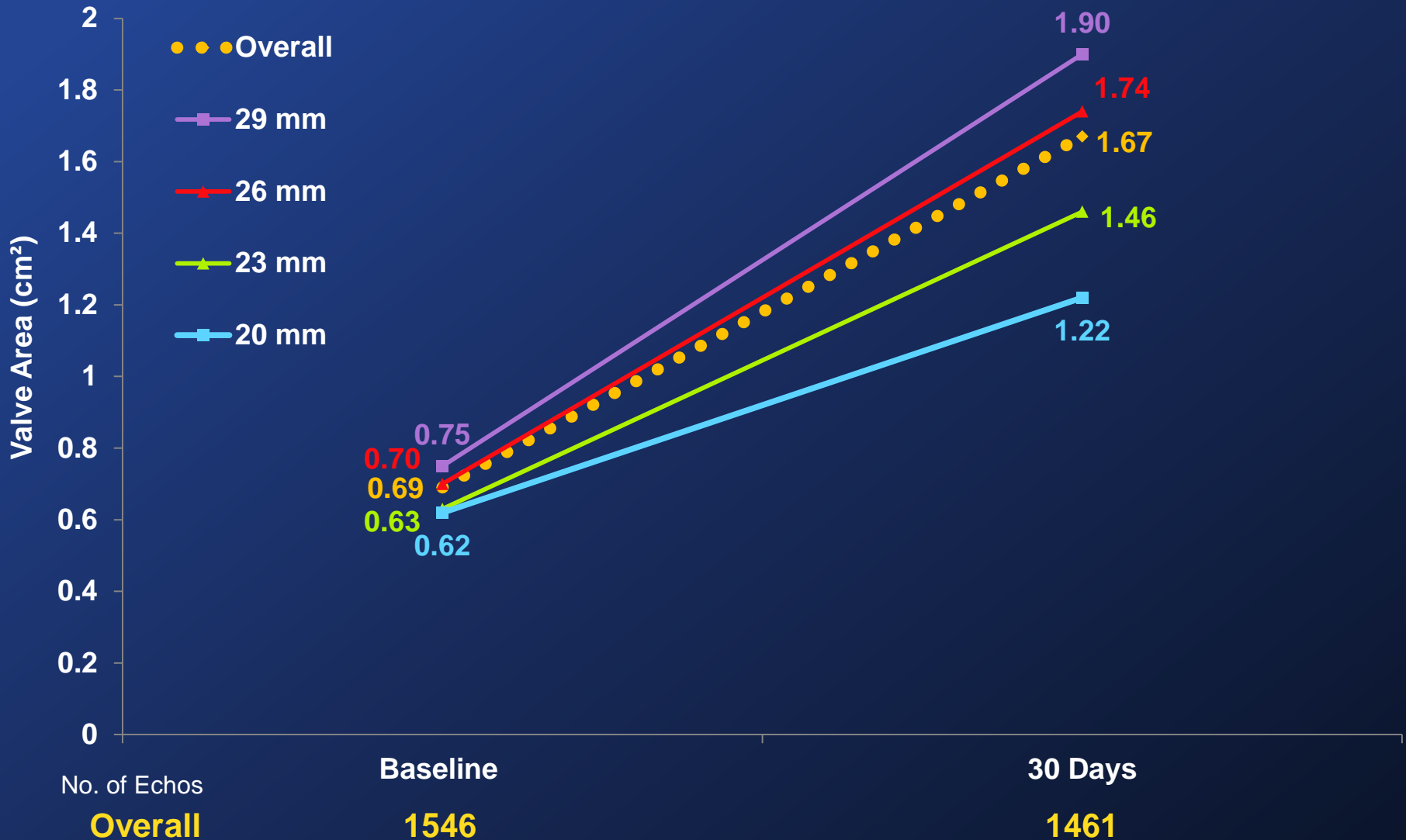


Echo Findings: S3HR & S3i

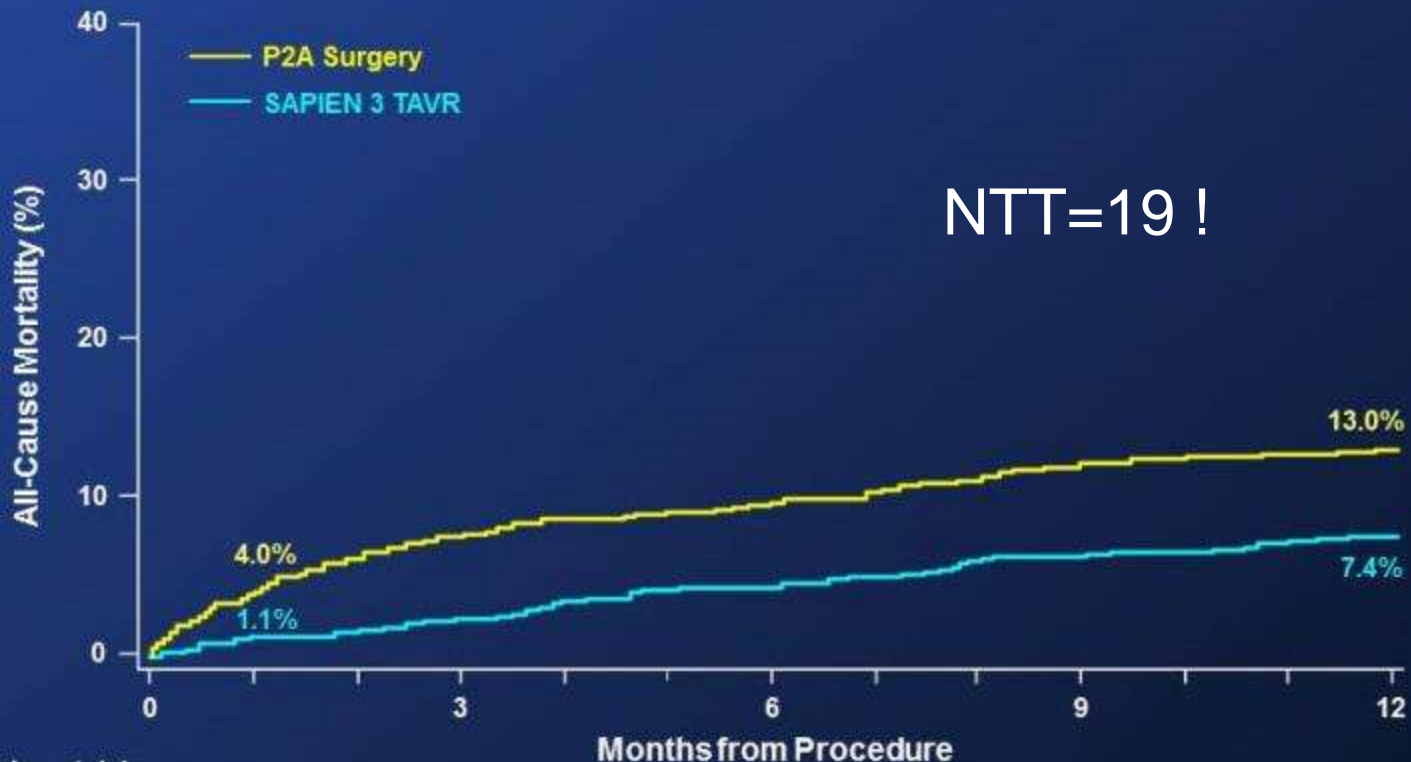
Aortic Valve Area (Valve Implant Patients)



THE
PARTNER II
TRIAL



Unadjusted Time-to-Event Analysis All-Cause Mortality (AT)



Number at risk:

P2A Surgery 944

S3 TAVR 1077

859

1043

836

1017

808

991

795

963

What are the remaining problems ?

- ✓ Sizing more demanding (MSCT is crucial)

 - Bicuspid valves

 - Short sino-tubular junction

 - LVOT calcifications

 - Flat sinus of valsalva

 - Intermediate annulus size

- ✓ In which case should we predilate ?

- ✓ In which case should we post dilate ?

Conclusion

- ✓ The Sapien 3 is not only an evolution of the Sapien XT. It is a revolution.
- ✓ Because of a great design it is easier, faster and safer, even in challenging anatomies.
- ✓ The data from the European S3 study and from the PARTNER II S3 study are very strong.

Conclusion

- ✓ The next steps will be a downsizing of the sheath and delivery system with a precrimped valve.
- ✓ The durability is also very promising and if confirmed, it will pave the way for TAVR in lower risk patients.