Symptomatic High-Risk AI
Is TAVI a Viable Alternative?

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Disclosure Statement of Financial Interest

Consultant

- Edwards Lifesciences

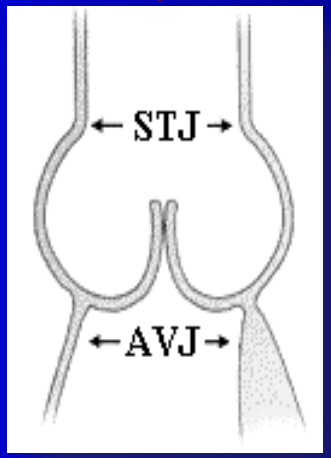
- JC Medical Inc.

Etiology of AI and Optimal Device for AI

Etiologies

- Degenerative 29%
- Idiopathic root dilatation 19%
- Congenital abnormalities 18%
- Rheumatic 14%
- Other/ Unknown 12%
- Aortitis/Inflammatory/ Endocarditis 9%

Majority of patients have expanding aortic annulus ± root

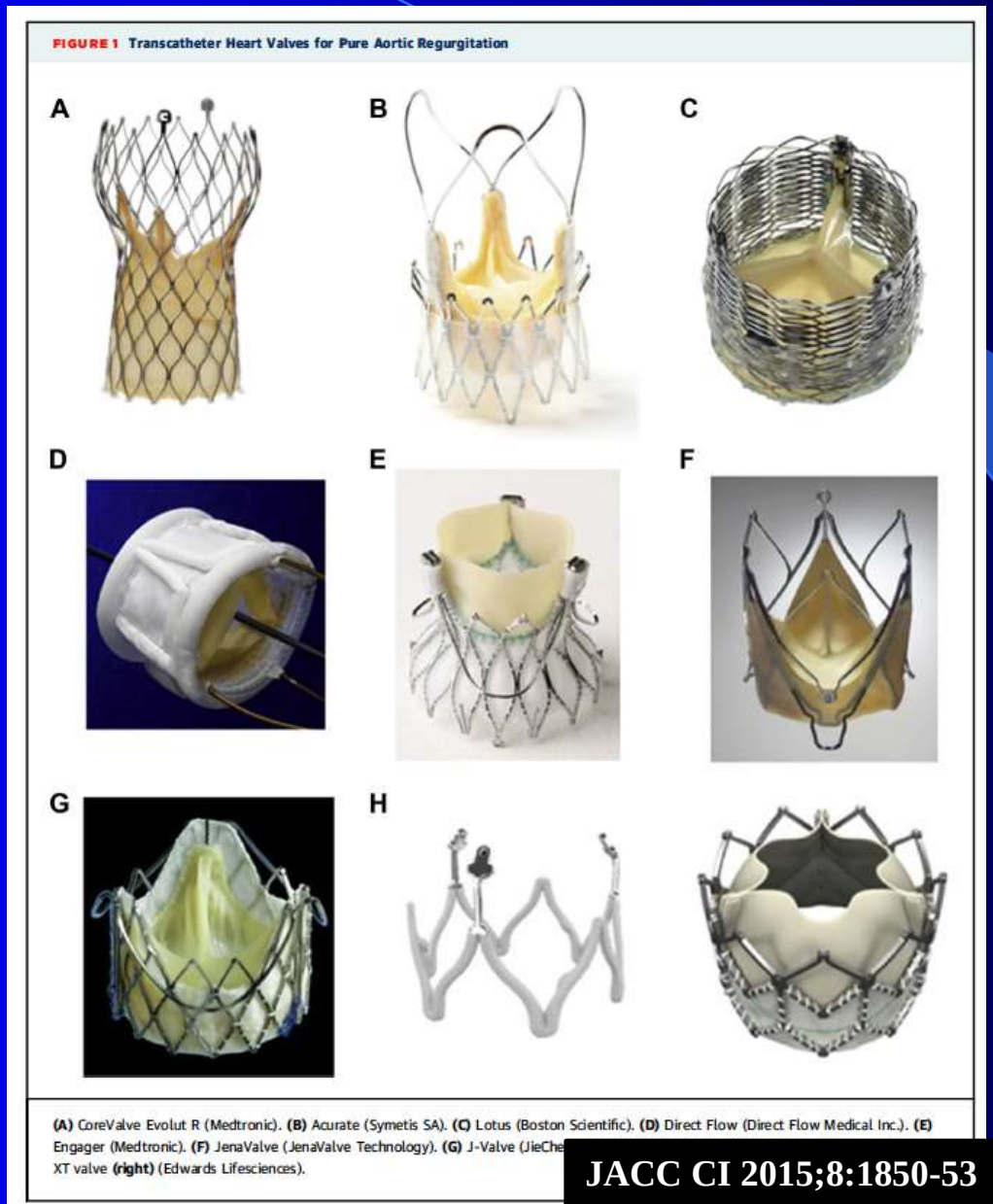


Optimal device for AI

- Stabilization of dilating structure
- Hemodynamic improvement
- Treatment of multiple etiologies
- Ease of use

Can you use the same devices for AI and AS?

Valves used for AI

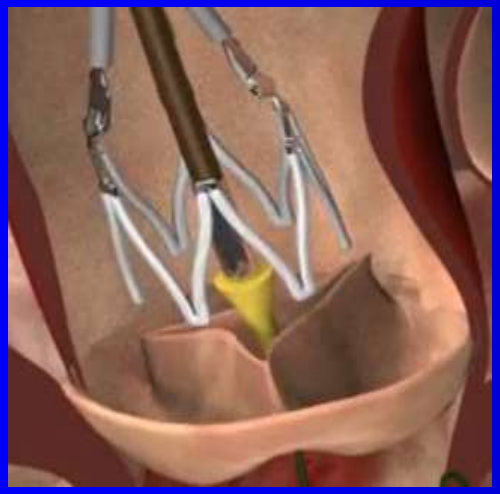


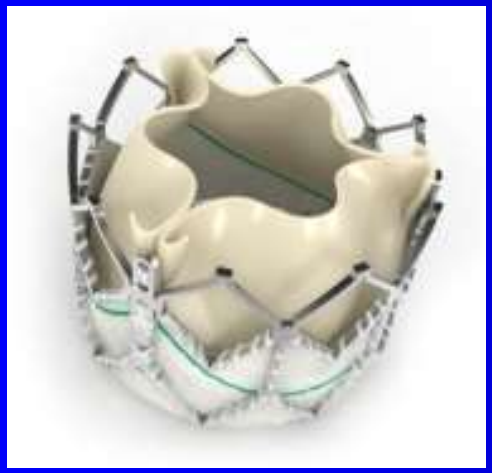
JACC CI 2015;8:1850-53

Literature Reports

Author	n	Valve	Access	Post dilation	2nd valve	Conversion to SAVR	Device success
Guo et al.	33	J-Valve	TA	-	0	1	32(97%)
Wei et al	6	J-Valve	TA	0	0	0	-
Wendt et al	8	Acurate	TA	2	0	0	8(100%)
Schofer et al	11	Direct Flow	TF	-	0	1	10(91%)
Koschyk et al.	10	JenaValve	TA	-	1	0	-
Schingoff et al	10	JenaValve	TA	-	0	0	-
Seiffert et al.	31	JenaValve	TA	2	1	0	30(97%)
Frelrker et al	22	CoreValve	-	-	-	-	18(77%)
Munoz-Garcia et al	10	CoreValve	TF	4	1	-	-
Rissi et al	16	CoreValve	-	-	1	2	-
Testa et al	26	CoreValve	TF,SC, TAo	3	5	0	20(77%)
Roy et al	43	CoreValve	TF, SC,TAo	4	8	1	32(74%)

Edwards SAPIEN Valve with Helio Transcatheter Aortic Dock



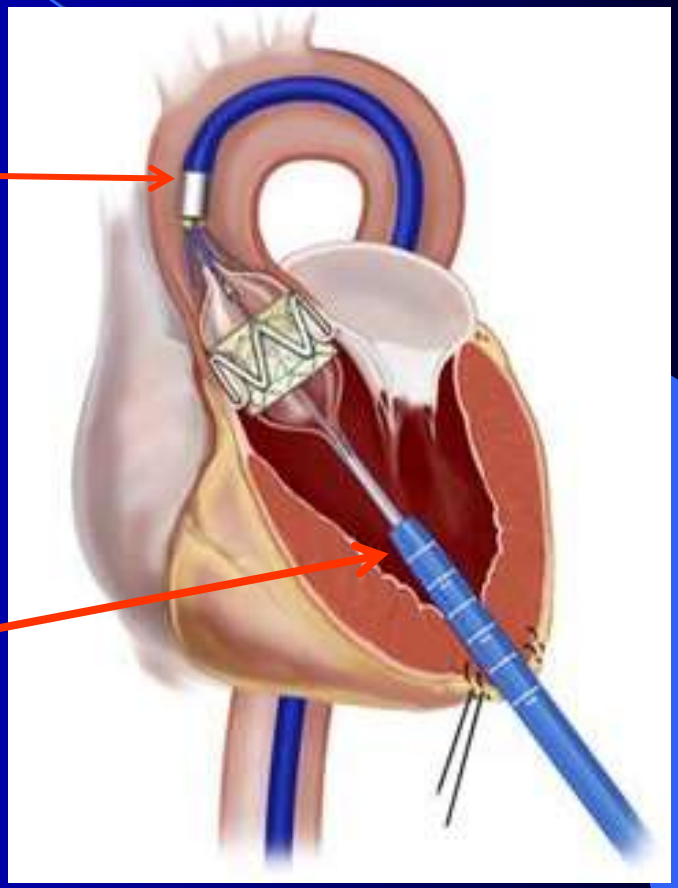


Utilizing the Edwards SAPIEN XT Transcatheter Heart Valve

TF

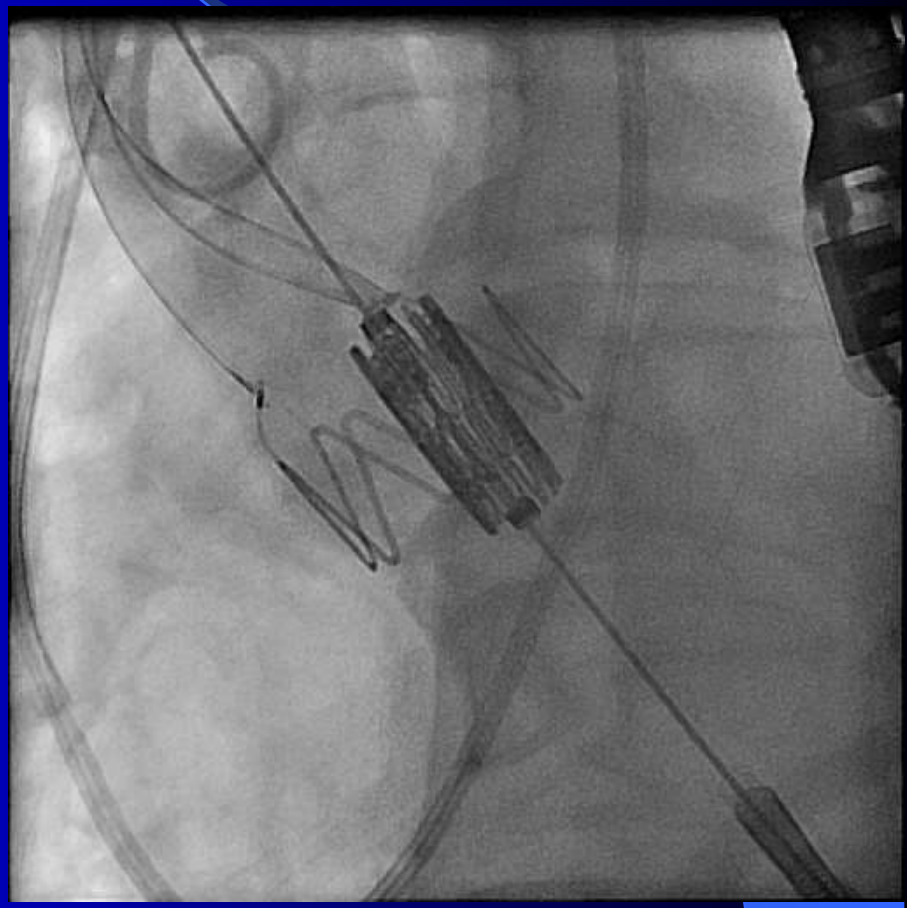
TA

TF

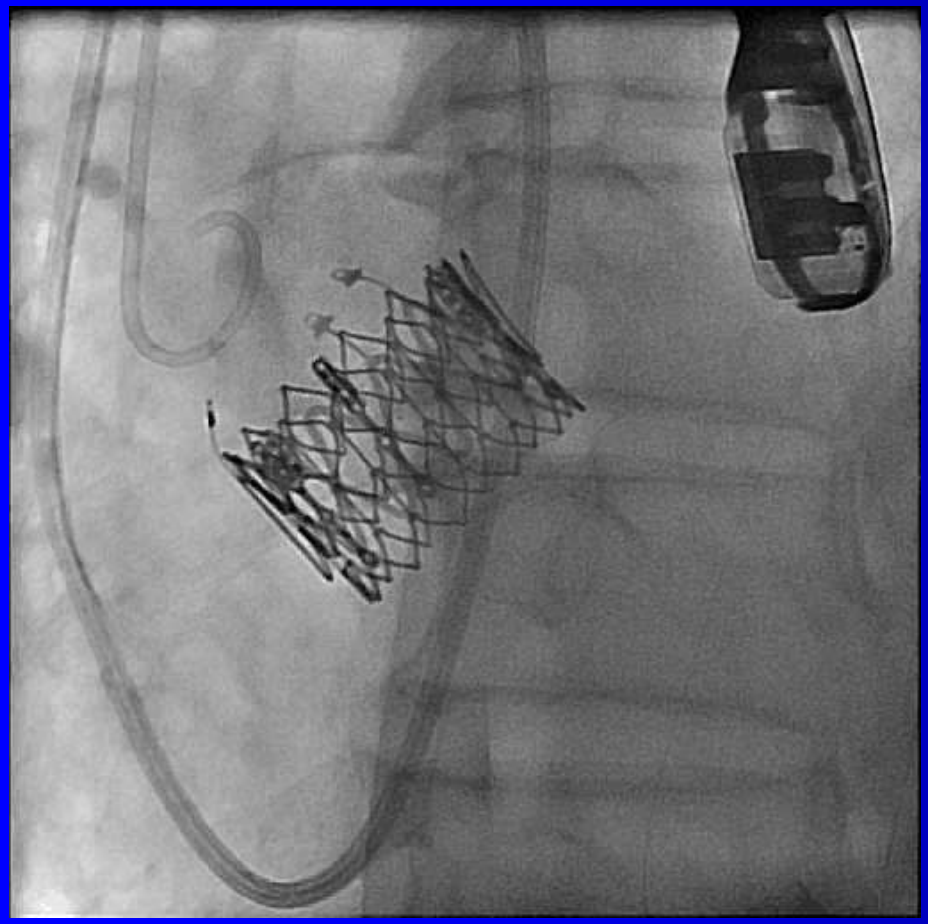


Edwards AI Project
TA/TF First-in-Man Procedure

SAPIEN XT valve with the Dock



Final Assessment



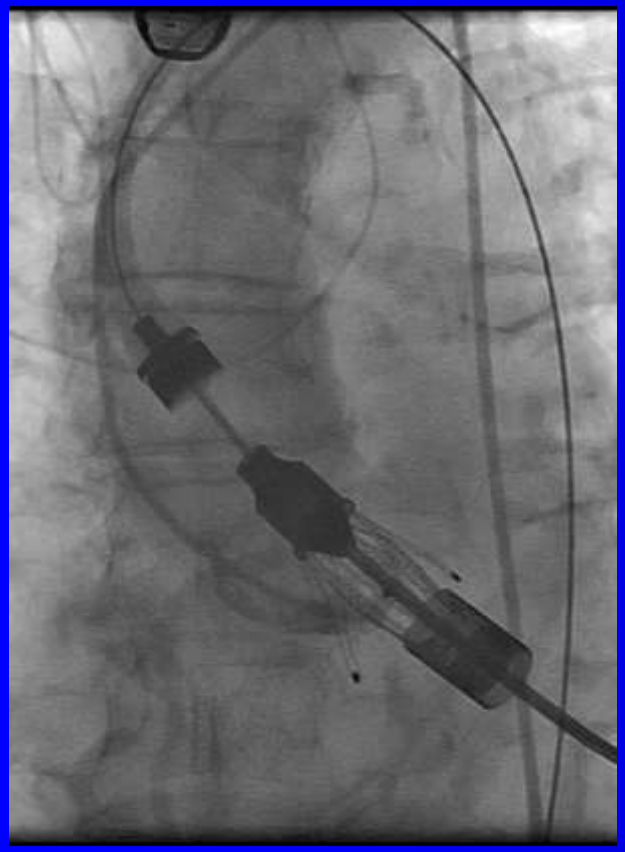
JenaValve

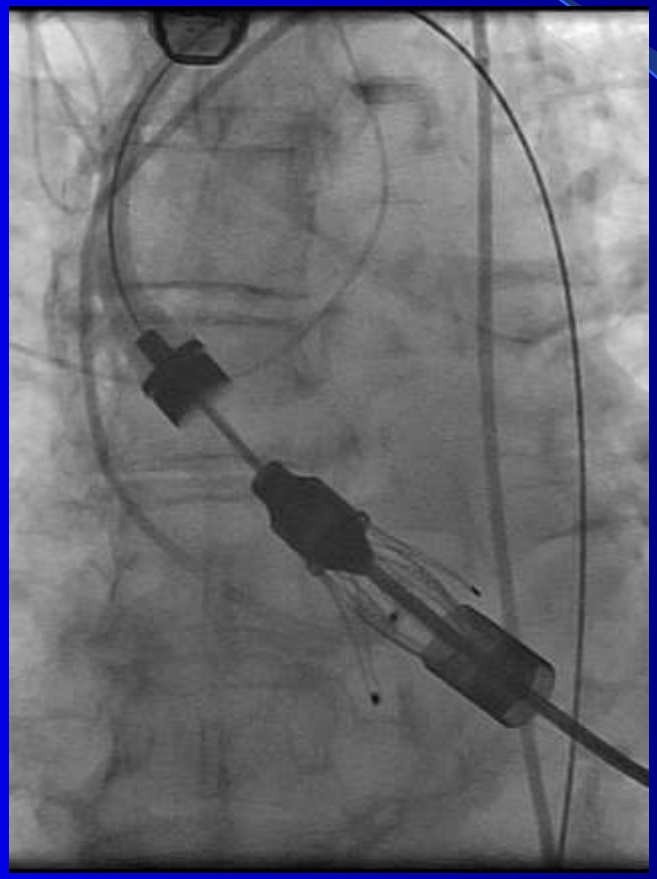
- **JenaValve's unique "3-feeler element"** allows the clinician to accurately position the prosthesis in the anatomically correct position during implantation thus ensuring a precise sub-coronary alignment within the patient's native valve.

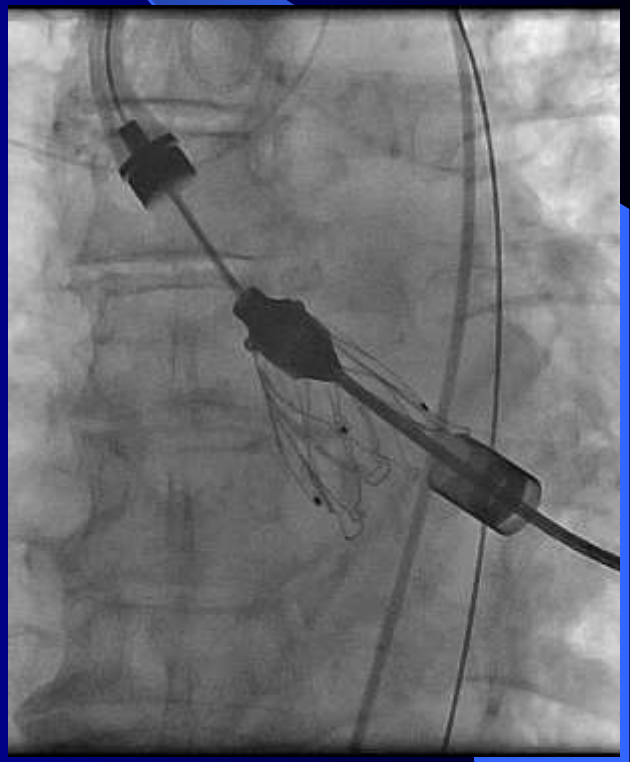
- **JenaClip™ anchoring and clipping mechanism** allows the patient's native valve leaflets to be clipped onto the valve enabling the JenaValve to be firmly anchored in the correct anatomical position and provide active fixation and resistance to migration.

CE Mark approval for high risk AI patients

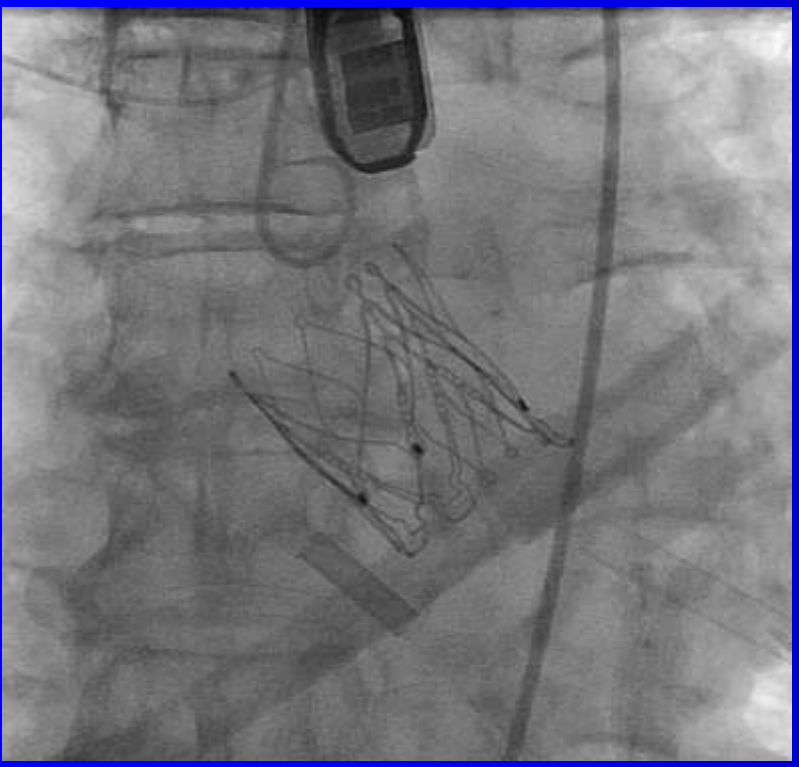
Implantation

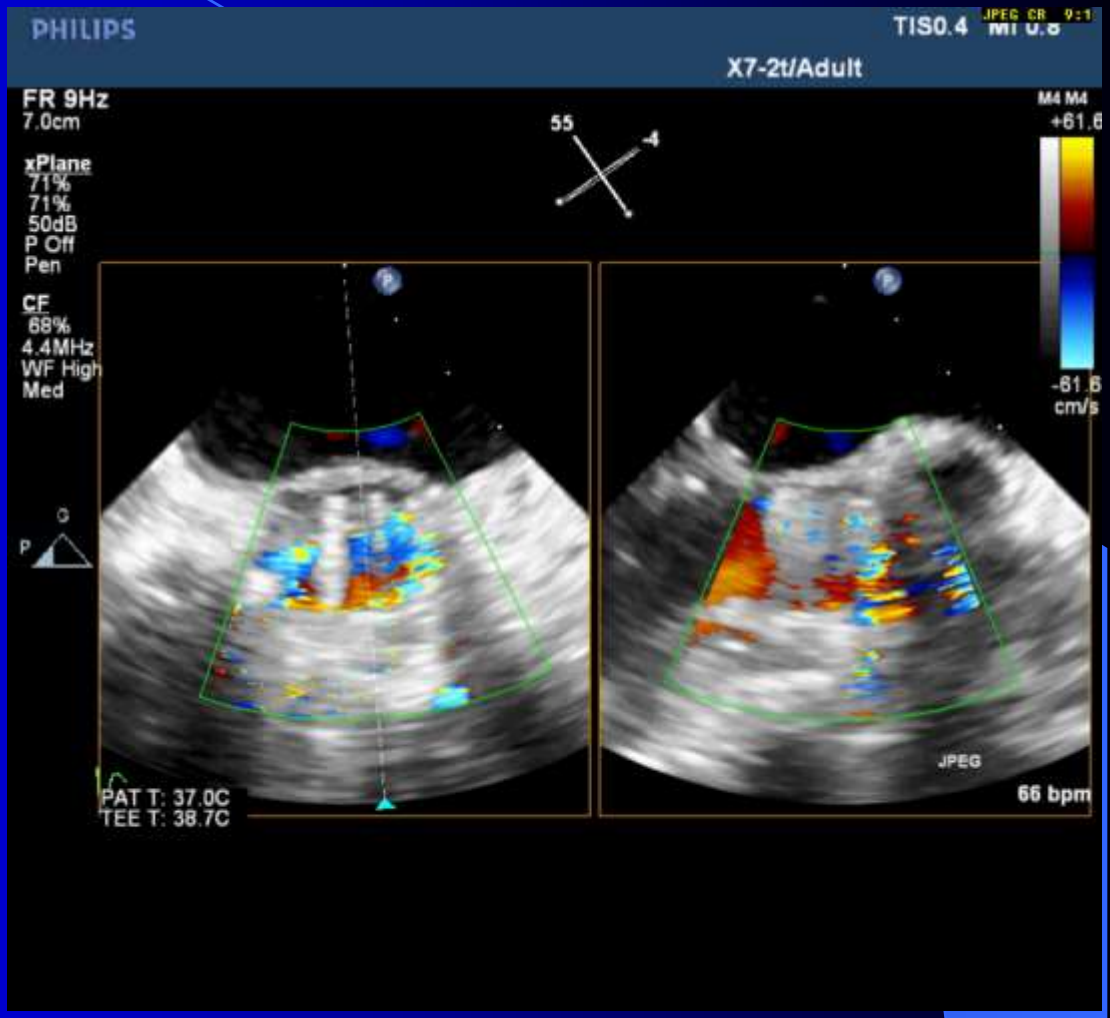






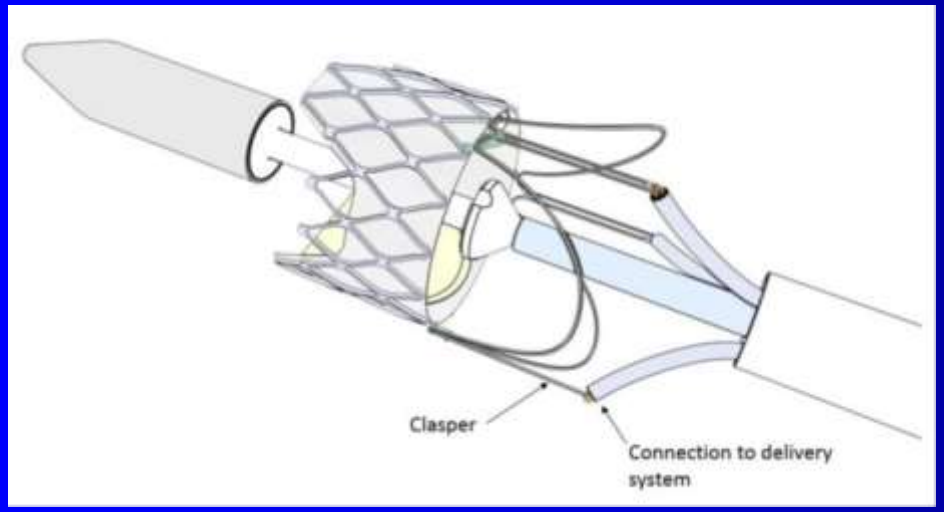
Aortogram and Echo

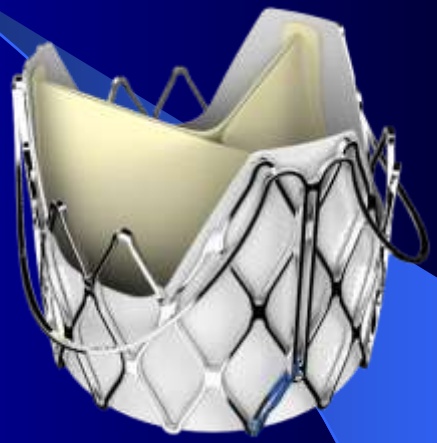


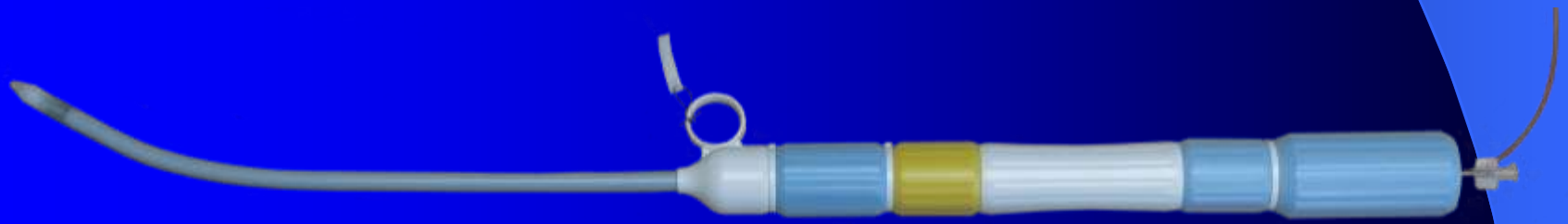


J-Valve™ Ausper System

Jie-Cheng Medical Technology







Designed for both AS and AI

Implantation

Clinical Trial Results (J-Valve)

PVL	30 day	6 months
None or Trivial	64.1%	71.8%
Mild	35.9%	28.2%
Moderate	0%	0%

39 Patients with AI

My experience: Easier implantation of J-Valve in AI patients relative to JenaValve

Symptomatic High-Risk AI
Is TAVI a Viable Alternative?

Yes!

- **TAVI is a viable alternative for the treatment of AI in selected high-risk patients**
- **Transcatheter valves with leaflet pinning or stabilization mechanisms, such as J-Valve and JenaValve, have been showing great promise.**


THANKS!