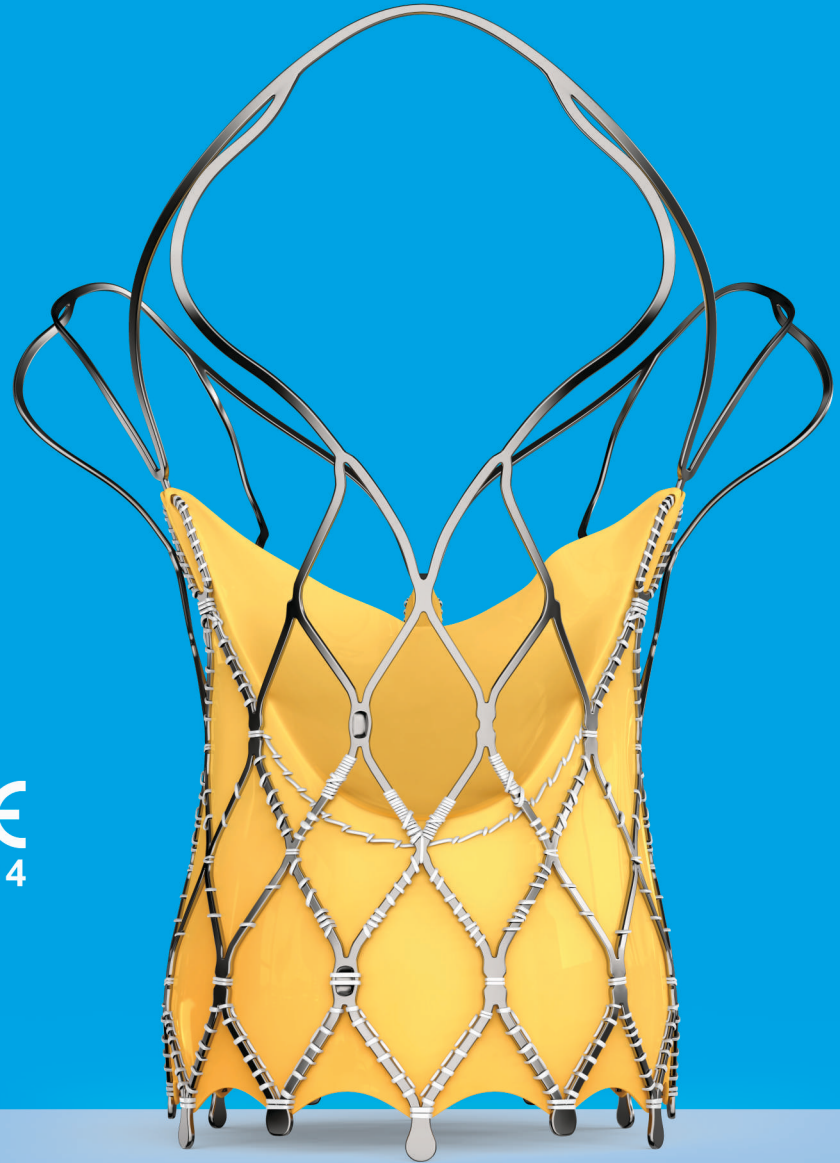


hydra

CE  
1434

Transcatheter Aortic Valve



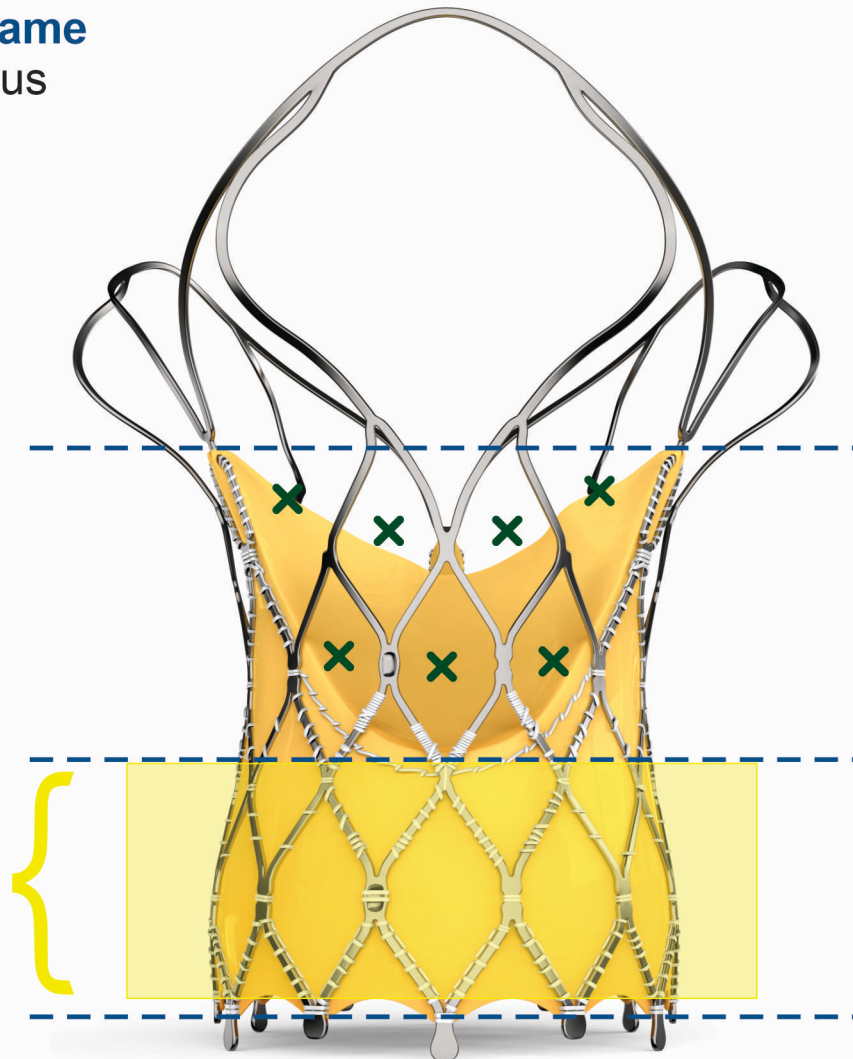
**Self-Expandable Nitinol Frame**  
Conformable to native annulus

**Three Tentacle Design**  
Less metal at outflow

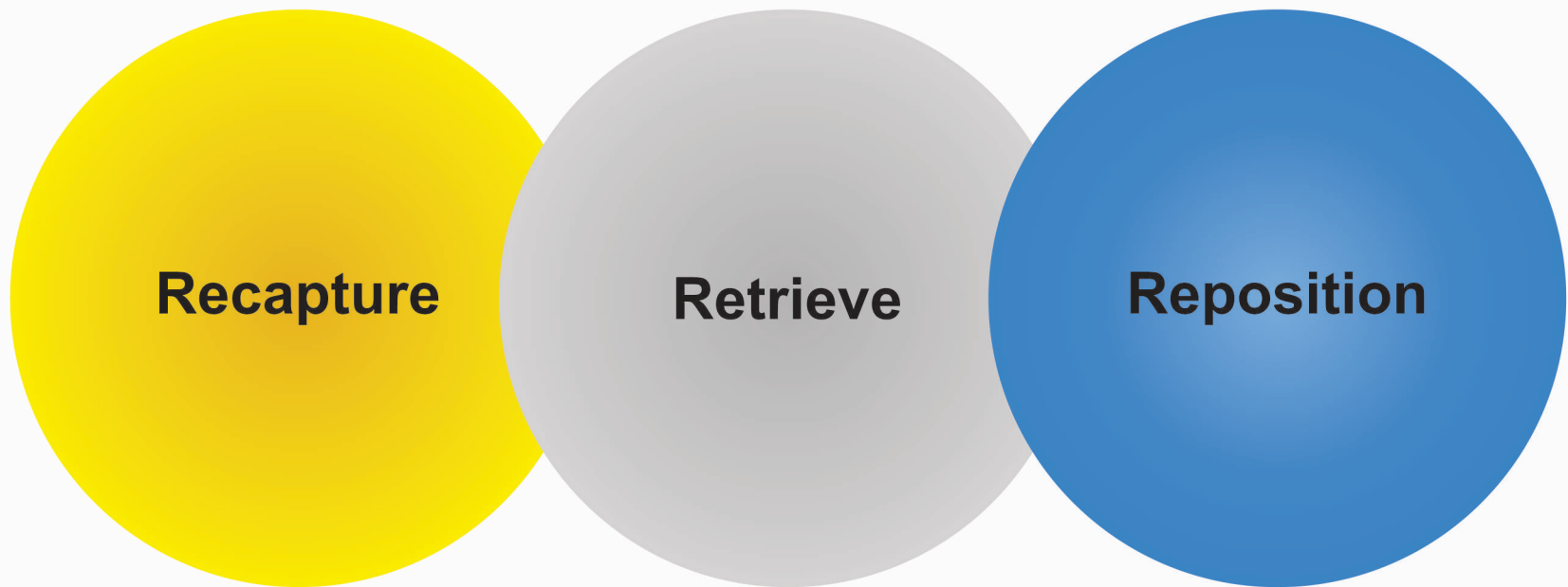
**Large Frame Cells ( $\geq 15F$ )**  
Facilitates easy access to the coronary arteries

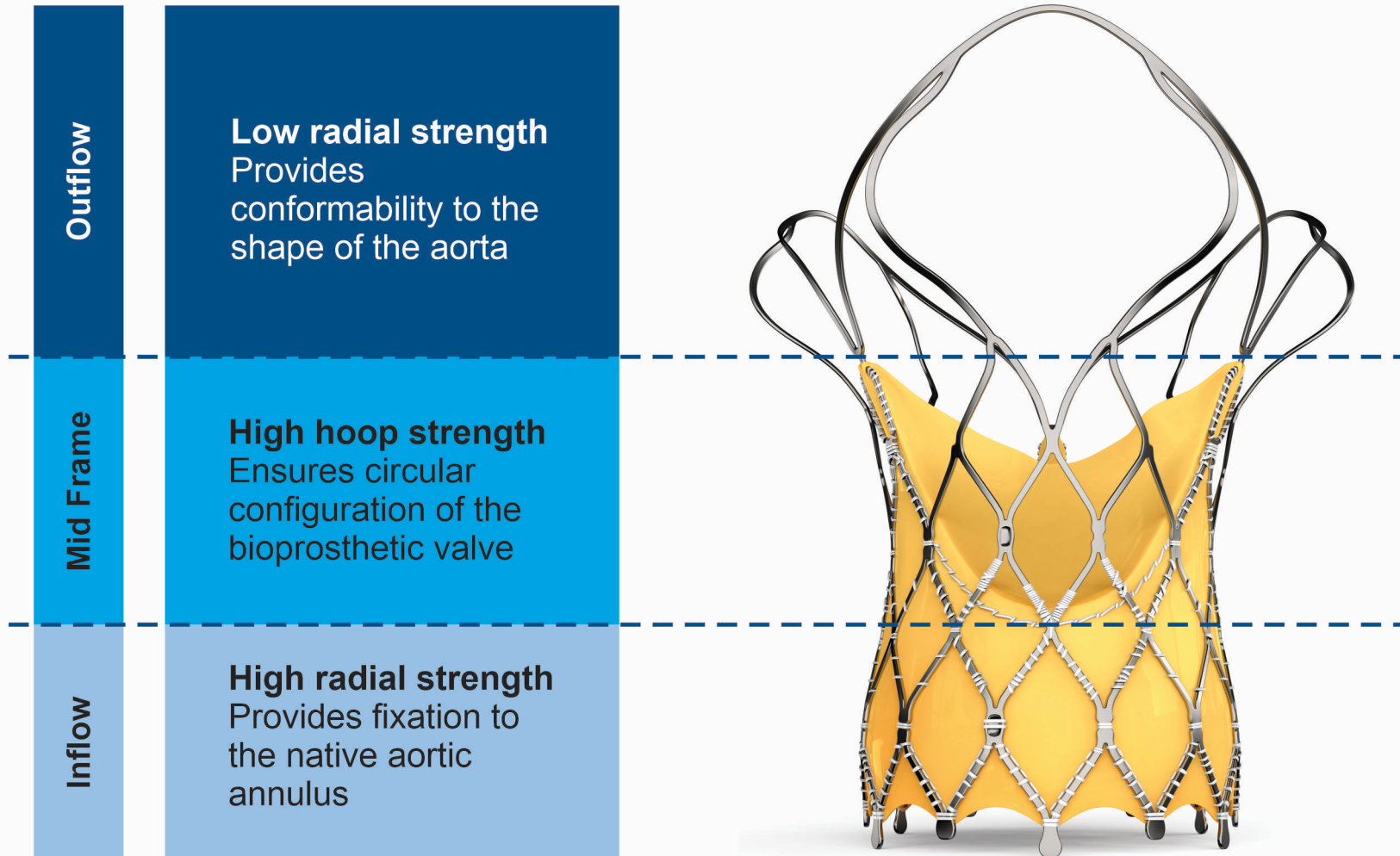
**Extended Sealing Skirt**  
Mitigates paravalvular leak

**Non-Flared Inflow Part**  
Reduces conduction abnormality



Each 'x' represents a single large cell

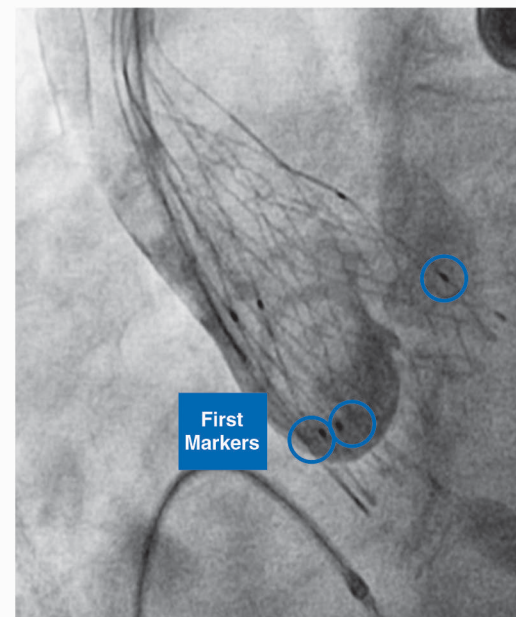
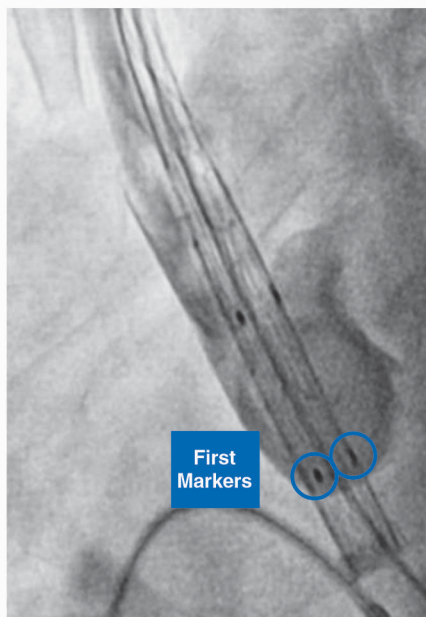
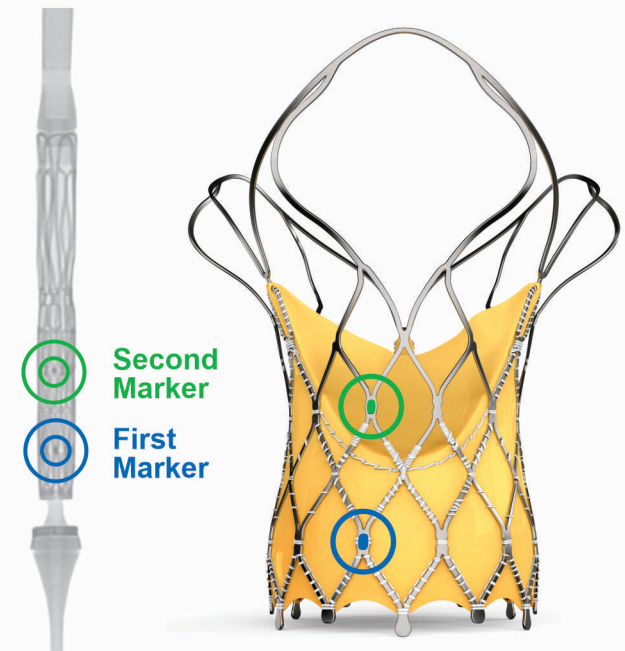




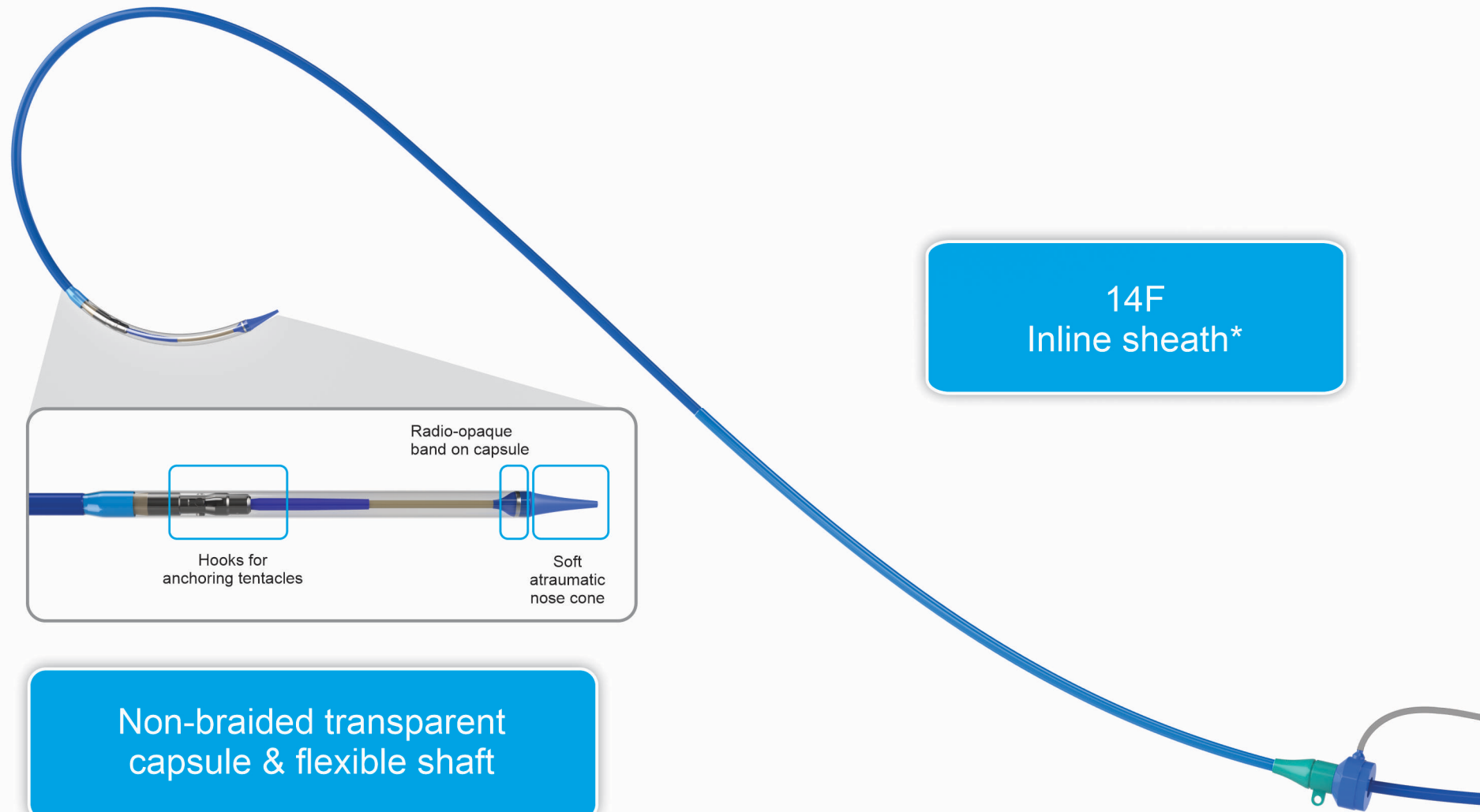


# Marker Location and Significance

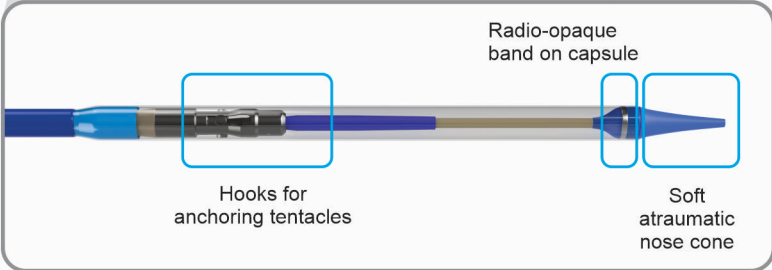
- First self-expanding TAVI device to have 2 rows of marker
  - **First markers** are located at **Node 1**
  - **Second markers** are located at **Node 3**
- **First markers** help
  - In precise implantation of the valve at the targeted implantation zone
  - To ascertain the depth of implant
- **Second markers** indicate
  - When the THV leaflets are going to get deployed



Case Example



14F  
Inline sheath\*



Non-braided transparent  
capsule & flexible shaft

**Ease of navigation through tortuous anatomy and coplanar implantation in horizontal aorta**

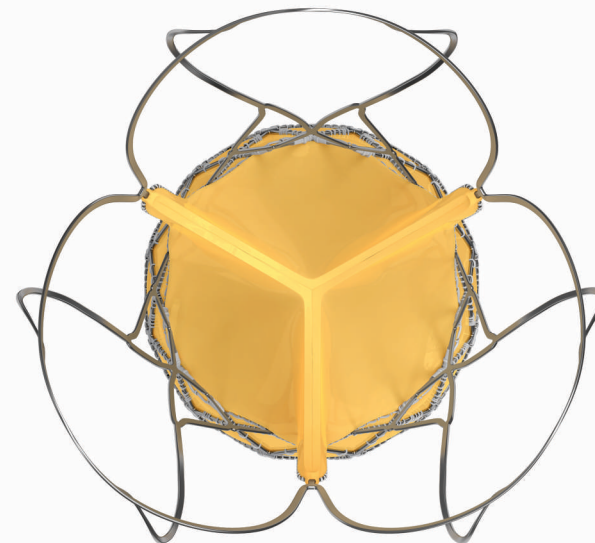
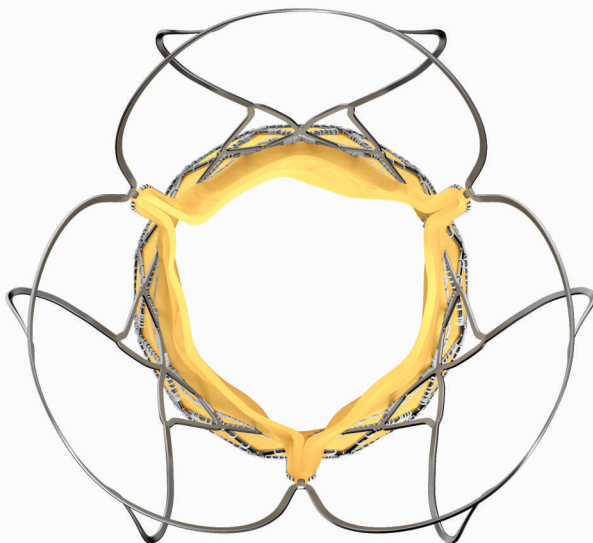
## Improved control handle along with Active Release

Provides overall stability and control during valve implantation to achieve the desired implant depth



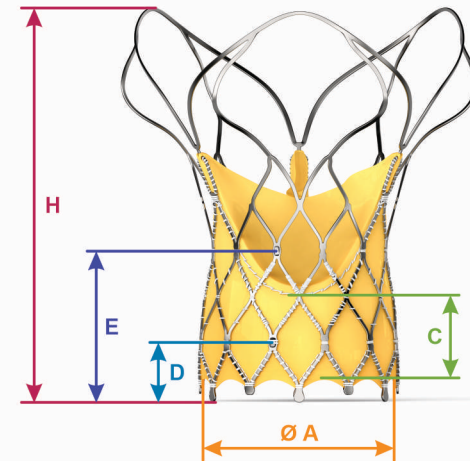
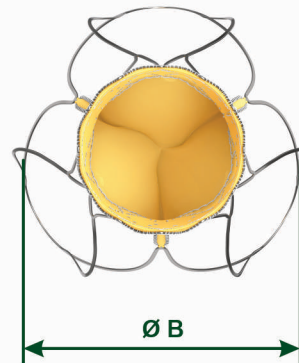
\* 14F equivalent integrated sheath diameter for patients requiring 22 mm or 26 mm Hydra valve.

- Made from **single bovine pericardium**
- Bioprosthetic valve leaflets are **supra-annular** in position, provide superior hemodynamics by providing larger effective orifice area and lower pressure gradient
- **Supra-annular** valve position helps to maintain circular shape of the bioprosthetic valve even if the native annulus shape is elliptical
- Proprietary **anti-calcification** treatment



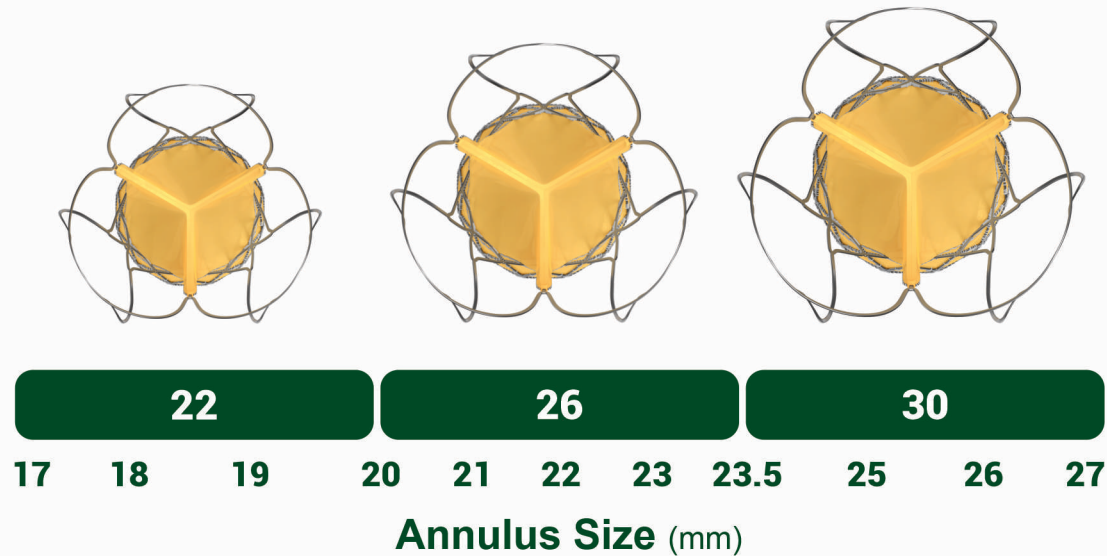
		Hydra 22	Hydra 26	Hydra 30
Diameter at Bottom	A	22	26	30
Diameter at Top	B	39	43	47
Sealing Skirt Height	C	12	13	14
First Marker Crimped	X	8	9	10
First Marker	D	5	6	7
Second Marker	E	15	18	21
Height	H	55	53	51

Sizes mentioned in "mm"



Crimped

## Intended Annular Treatment Range

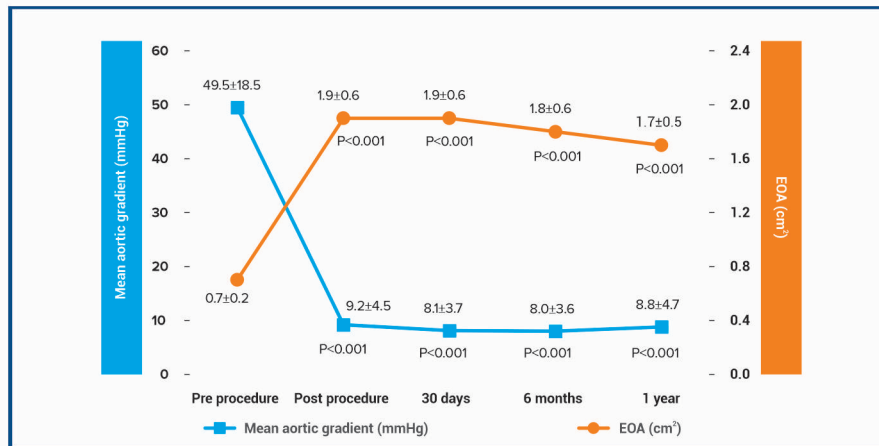


Transesophageal Echocardiogram (TEE) Derived Annular Treatment Range

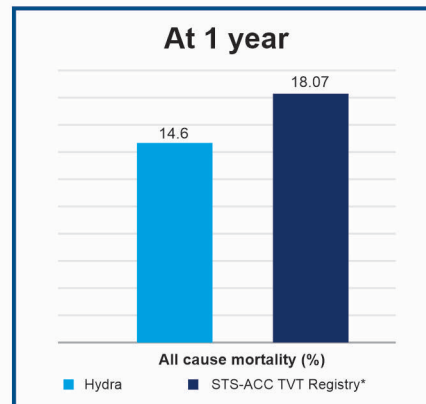
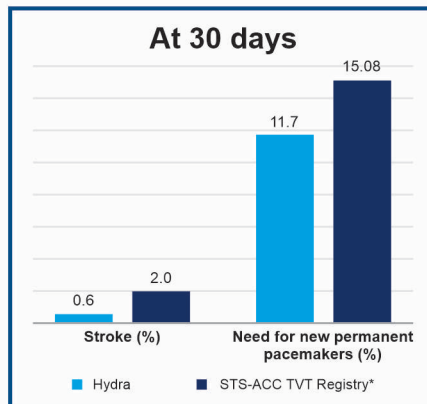


## Excellent Hemodynamics<sup>1</sup>

- Single digit valve gradient up to 1-year follow-up.
- Larger effective orifice area (EOA) up to 1-year follow-up.

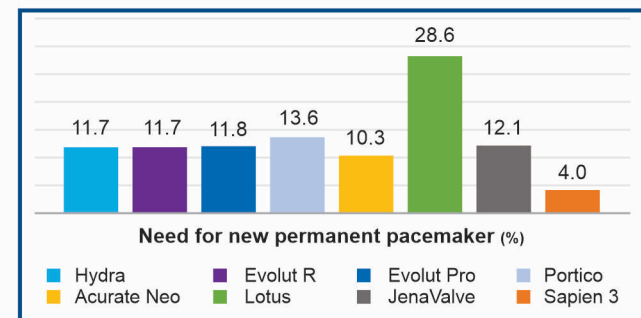
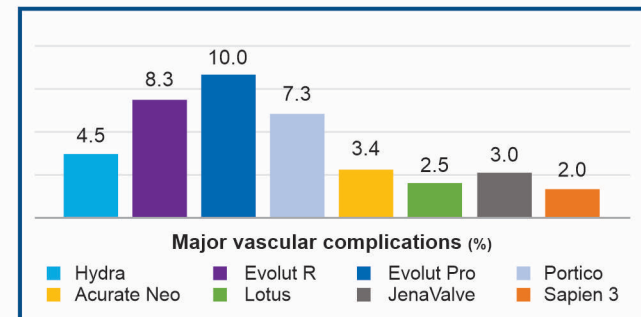
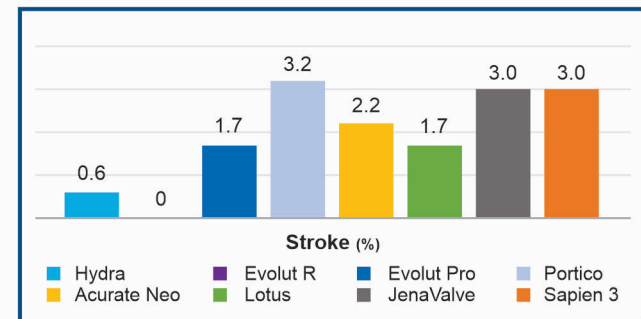


## Comparison of Hydra CE study with STS-ACC TVT Registry of TAVR<sup>1,2</sup>



\*2015 data

## Comparison of CE-mark studies for major TAVR devices<sup>1</sup> At 30 days



TAVR - Transcatheter Aortic Valve Replacement



Frame	Valve	Hydra AVDC	Safety features
<ul style="list-style-type: none"><li>➤ Varying radial force</li><li>➤ Two set of markers on the frame for precise positioning</li><li>➤ Highly flexible design and easy navigation due to less metal</li><li>➤ Extended sealing skirt</li><li>➤ Large open cells for future coronary access</li></ul>	<ul style="list-style-type: none"><li>➤ Supra-annular design</li><li>➤ Bovine pericardial tissue</li><li>➤ Anti-calcification treatment</li></ul>	<ul style="list-style-type: none"><li>➤ Flexible non-braided capsule</li><li>➤ Radio-opaque band on capsule</li><li>➤ 14F equivalent *</li><li>➤ Active release mechanism</li></ul>	<ul style="list-style-type: none"><li>➤ Recapturable</li><li>➤ Repositionable</li><li>➤ Retrievable</li></ul>

AVDC - Aortic Valve Delivery Catheter \* 14F equivalent integrated sheath diameter for patients requiring 22 mm or 26 mm Hydra valve.

# Ordering Information

Reference Number	Size
HYDRA22	22 mm
HYDRA26	26 mm
HYDRA30	30 mm

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### References:

1. Hydra CE study- DOI:10.1016/j.jcin.2021.09.004 2. STS/ACC TVT registry - DOI:10.1016/j.jacc.2020.09.595

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