

# ACURATE Prime XL Clinical Combined Cohort

Scientific

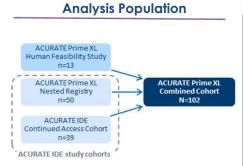
Design: Combined dataset from clinical studies enrolling subjects with symptomatic severe native aortic stenosis indicated for TAVR, who have a native annulus diameter between 26.5 mm and 29 mm (See Analysis Population graphic).

**30 Day Outcomes** 

**Objective:** Evaluate clinical outcomes of the ACURATE Prime XL (29mm).

## Positive, 30-Day results demonstrated:

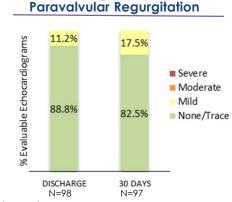
- No deaths and disabling stroke at 30 Days (low non-disabling stroke rate (2%) through 30 Days)
- Favorable hemodynamics: improved aortic valve area and single-digit gradients were sustained through 30 Days
- Zero patients had moderate or greater paravalvular regurgitation 30 Days



Safety Outcomes [N=102]	Discharge	30 Days
Death	0.0% (0)	0.0% (0)
Stroke	1.0% (1)	2.0% (2)
Disabling stroke	0.0% (0)	0.0% (0)
Rehospitalization <sup>†</sup>	0.0% (0)	1.0% (1)
Myocardial infarction	0.0% (0)	0.0% (0)
Bleeding (life-threatening/disabling)	0.0% (0)	0.0% (0)
Acute kidney injury (Stage 2/3)	0.0% (0)	0.0% (0)
Major vascular complication	0.0% (0)	0.0% (0)
Repeat procedure for valve-related dysfunction	0.0% (0)	0.0% (0)
New permanent pacemaker	5.9% (6)	12.7% (13)
Prosthetic valve malposition	0.0% (0)	0.0% (0)
Prosthetic valve thrombosis	0.0% (0)	0.0% (0)
Prosthetic valve endocarditis	0.0% (0)	0.0% (0)

†Hospitalization for valve-related issues or worsening CHF, per VARC-2 definition

#### **Valve Hemodynamics** $2.21 \pm 0.6$ $2.14 \pm 0.6$ (n=97)(n=97)2.5 Mean Gradient (mmHg) $41.3 \pm 10.1$ (n=101) $7.2 \pm 5.5$ $6.6 \pm 2.9$ (n=99) $0.79 \pm 0.2$ (n=98)0.5 (n=102)BASELINE DISCHARGE 30 DAYS



Presented by Rai Makkar, MD at PCRLV 2024

Baseline echo data are site-reported; discharge & 30d echo data are core laboratory-adjudicated CAUTION: The ACURATE Prime Aortic Valve System is CE Marked. In the USA, it is an investigational device. And is restricted under federal law to investigational use only.

Not available for sale. C€ 0344

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## **Clinical Experience with ACURATE Prime XL**

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<sup>1</sup>Methodist DeBakey Heart and Vascular Center, Houston, Texas, USA; <sup>2</sup>Advocate Christ Medical Center, Oak Lawn, Illinois, USA; Heart Care Centers of Illinois, Palos Park, Illinois, USA; <sup>3</sup>University of Virginia, Charlottesville, VA, USA; <sup>4</sup>Baylor Scott and White The Heart Hospital, Plano, TX, USA; <sup>5</sup>Victorian Heart Hospital Monash Health, Clayton, Victoria, Australia; <sup>6</sup>The Prince Charles Hospital, Brisbane, Queensland, Australia; <sup>7</sup>OhioHealth Riverside Methodist Hospital, Columbus, Ohio, USA; <sup>8</sup>Albany Medical College, Albany, NY, USA; <sup>9</sup>Boston Scientific Corporation, Marlborough, MA, USA; <sup>10</sup>Cedars-Sinai Medical Center, Los Angeles, California, USA

Combined dataset from studies enrolling subjects

### The ACURATE Prime XL Valve

Leverages ACURATE neo2 design, with adaptations for compatibility with a larger annulus diameter (26.5mm—29mm)



OPEN-CELL, SELF-EXPANDING NITINOL FRAME SUPRA-ANNULAR LEAFLET POSITIONING CONNECTED CELL

• Equalizes distribution of radial force



**INNER & OUTER SEALING SKIRTS** 

### **Analysis Population**

**ACURATE IDE study cohorts** 

with symptomatic severe native aortic stenosis indicated for TAVR and who have a native annulus **ACURATE Prime XL** diameter between 26.5mm and 29mm, and who Human Feasibility Study have been treated with the ACURATE Prime XL valve. n=13 ACURATE Prime XL ACURATE Prime XL **Nested Registry Combined Cohort** N=102 n=50 **ACURATE IDE** Continued Access Cohort n=39

#### **Baseline Characteristics**

ACURATE Prime XL Combined Cohort (N=102)			
Age (years)	79.6 ± 6.8		
Gender	Male: 94.1%	Female: 5.9%	
STS Score (%)	3.4 ± 3.1		
Operative Risk (per Case Review Committee)	High/Extreme: 40.2%		
	Intermediate: 42.2%		
	Low: 17.6%		
Mean AV gradient	41.3±10.1 mmHg		
Aortic valve area	0.79±0.2 cm <sup>2</sup>		

Baseline echocardiographic measures are site reported

#### Paravalvular Regurgitation **Valve Hemodynamics** 3.0 $2.21 \pm 0.6$ $2.14 \pm 0.6$ 11.2% **Evaluable Echocardiograms** 17.5% (n=97)(n=97)2.5 Mean Gradient (mmHg) 60 $41.3 \pm 10.1$ 2.0 ■ Severe (n=101)■ Moderate EOA (cm<sup>2</sup>) 1.5 40 Mild 88.8% 82.5% ■ None/Trace 1.0 $7.2 \pm 5.5$ $6.6 \pm 2.9$ 20 (n=99) $0.79 \pm 0.2$ (n=98)(n=102)0 **BASELINE** DISCHARGE 30 DAYS Baseline echocardiographic data are site-reported; discharge & 30d echocardiographic data are adjudicated by a single core laboration of the control of the

As Presented by Raj Makkar, MD at PCRLV 2024; CAUTION: The ACURATE Prime Aortic Valve is CE-Marked. In the USA, the ACURATE Prime Aortic Valve System is an investigational device and is restricted under federal law to investigational use only. Not available for sale

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Conclusions: Patients treated with the ACURATE Prime XL valve exhibited good early clinical outcomes at discharge and 30 days post procedure. Although the sample size is small, clinical results in this cohort were in line with those observed in other TAVR studies of patients with extra-large annuli and are encouraging for this new size iteration. SH-2040607 AA Slide 2 of 3





**CAUTION:** In Europe, the ACURATE neo2<sup>™</sup> Aortic Valve System and the ACURATE Prime<sup>™</sup> Aortic Valve System are CE-marked. In the USA, the ACURATE neo2 Aortic Valve System and the ACURATE Prime Aortic Valve System are investigational devices and are restricted under federal law to investigational use only. Not available for sale.

**CAUTION:** The law restricts these devices to sale by or on the order of a physician. Indications, contraindications, warnings, and instructions for use can be found in the product labelling supplied with each device or at www.IFU-BSCI.com. Products shown for INFORMATION purposes only and may not be approved or for sale in certain countries. This material not intended for use in France.

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