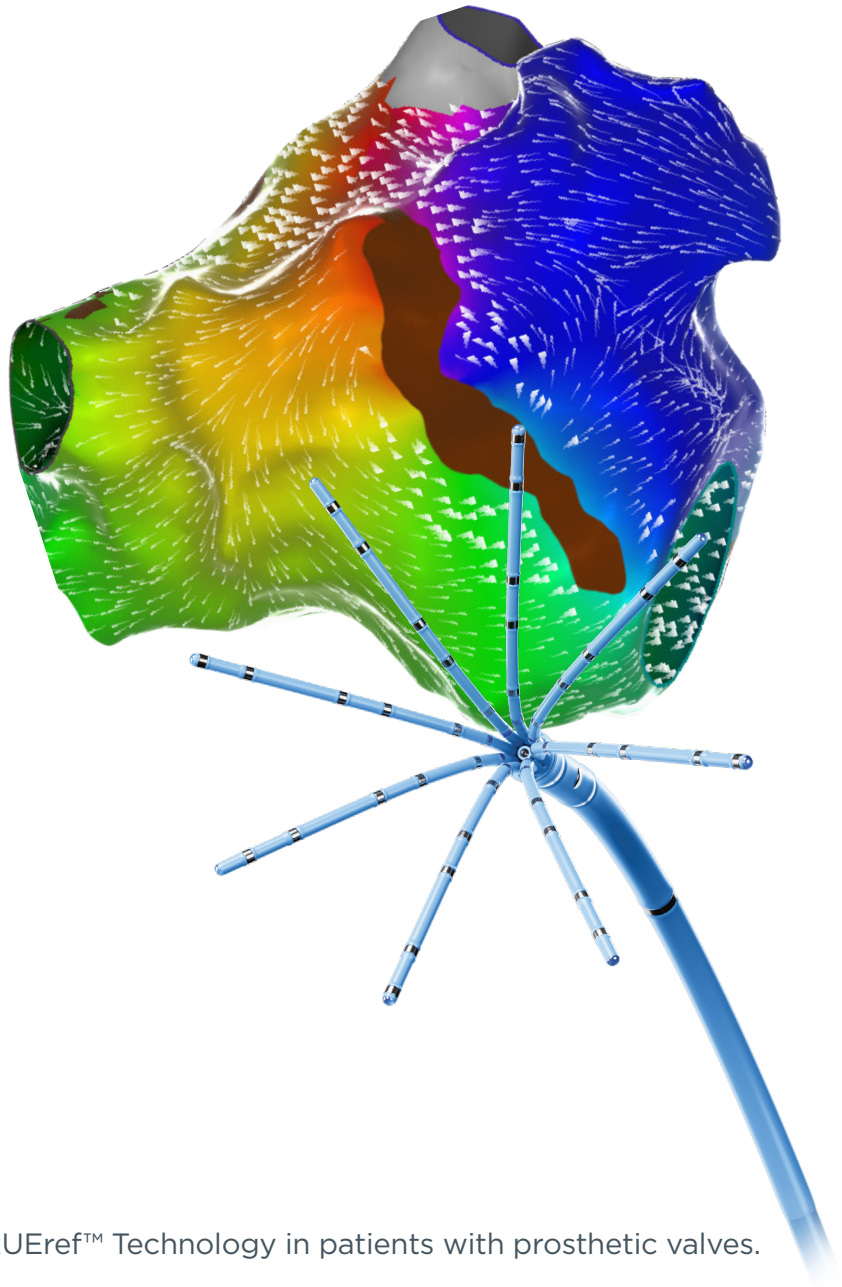
Biosense Webster
PART OF THE Johnson & Johnson FAMILY OF COMPANIES

OCTARAY™

Mapping Catheter with TRUEref™ Technology

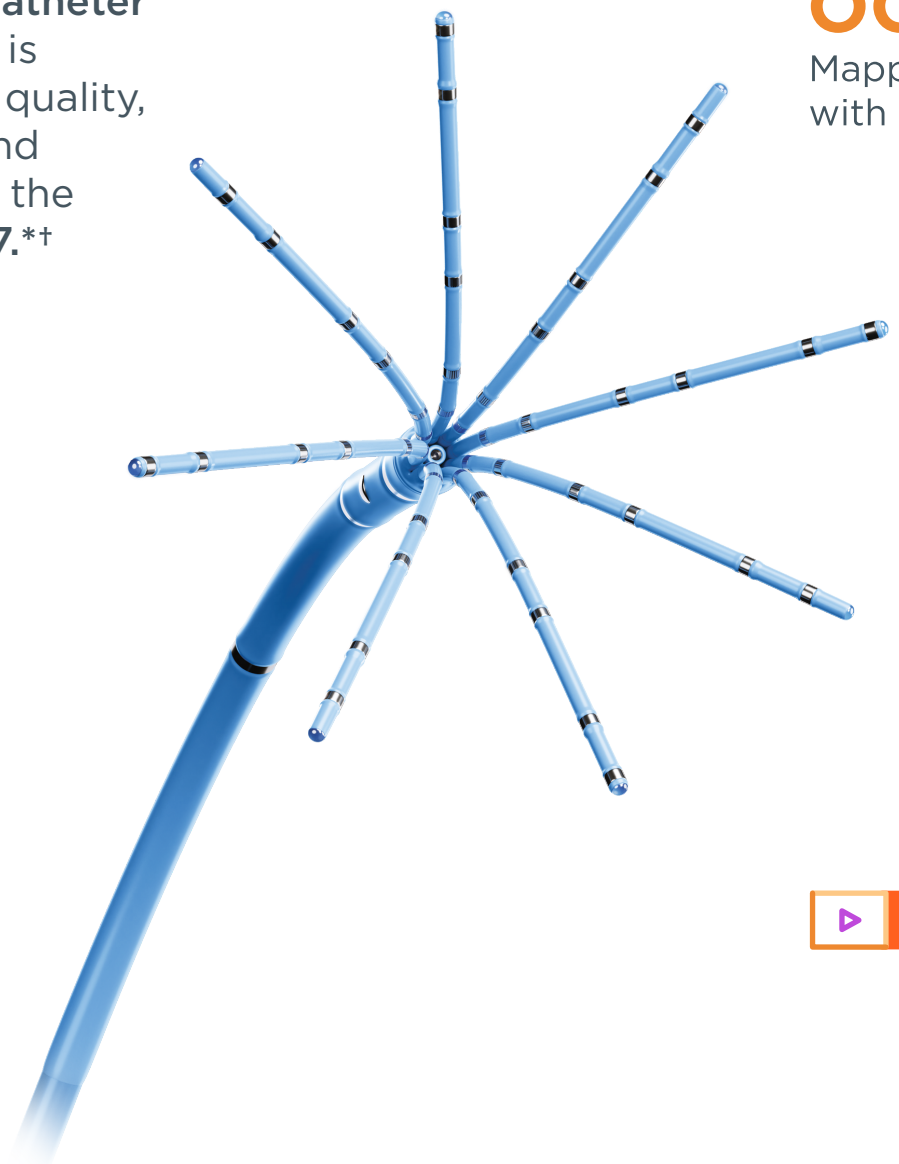


DO NOT use OCTARAY™ Mapping Catheter with TRUEref™ Technology in patients with prosthetic valves.

OCTARAY™

Mapping Catheter
with TRUEref™ Technology

The OCTARAY™ Mapping Catheter with TRUEref™ Technology is designed to improve signal quality, enhance mapping speed, and unleash the full potential of the **CARTO® 3 System Version 7.*†**



TRUE CLARITY

Map with greater precision and detail with improved signal quality.[1*]

TRUE SPEED

Map twice the point density in half the time.[1†]

TRUE INTEGRATION

Boost performance and unleash the full potential of CARTO® 3 System Version 7.[2]

OCTARAY™ Mapping Catheter Video

*Compared to the PENTARAY® NAV eco High Density Mapping Catheter. Based on a single-center, preclinical study (n=8) and benchtop study.
†Study was a comparison of OCTARAY™ Catheter 2-2-2 vs PENTARAY® Catheter 2-6-2. Based on bench testing.

OCTARAY™

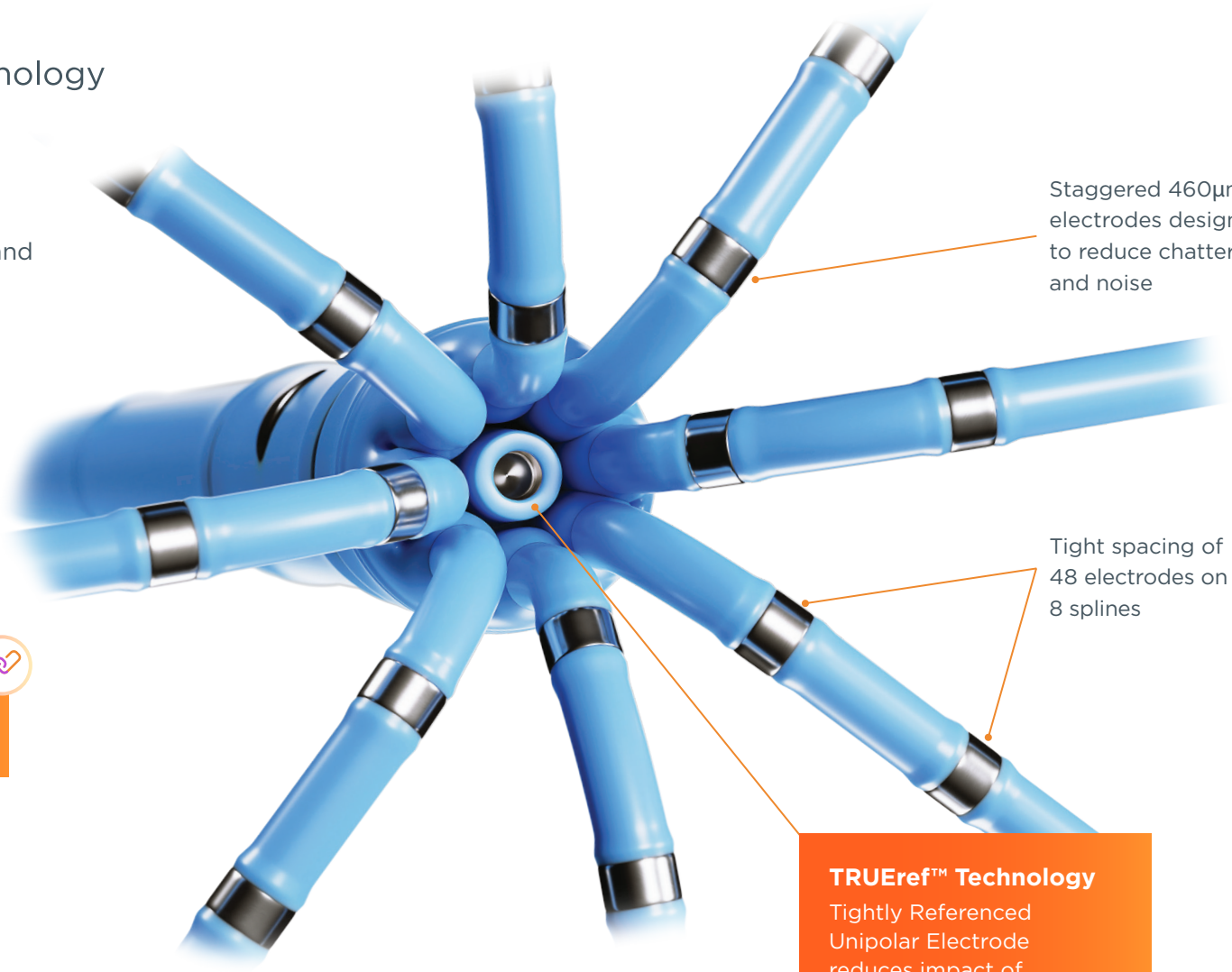
Mapping Catheter with TRUEref™ Technology

TRUE CLARITY

Map with greater precision and detail with improved signal quality.[1*]

- TRUEref™ Technology[1*]
- Small electrode size[1*]
- Tight spacing[1*]

Improves identification of lesion set gaps[1†]



* Compared to the PENTARAY® Catheter. Based on a single-center, preclinical study (n=8) and benchtop study.
† Based on a single-center, pre-clinical study (n=8), a comparison of OCTARAY™ Catheter 2-2-2-2-2 vs. PENTARAY® Catheter 2-6-2.
‡ Compared to Wilson's Central Terminal (WCT). Based on a benchtop study (n=3).

OCTARAY™

Mapping Catheter with TRUEref™ Technology

2x
EGMs per map[c]

>50%
Decrease in mapping time[4d]

>4x
Acquisition rate[c]

TRUE SPEED

Map twice the point density in half the time.[1*]

- Increased electrode count[1†]
- Elongated spline option
- Unique spline array[1*]

2-2-2-2-2

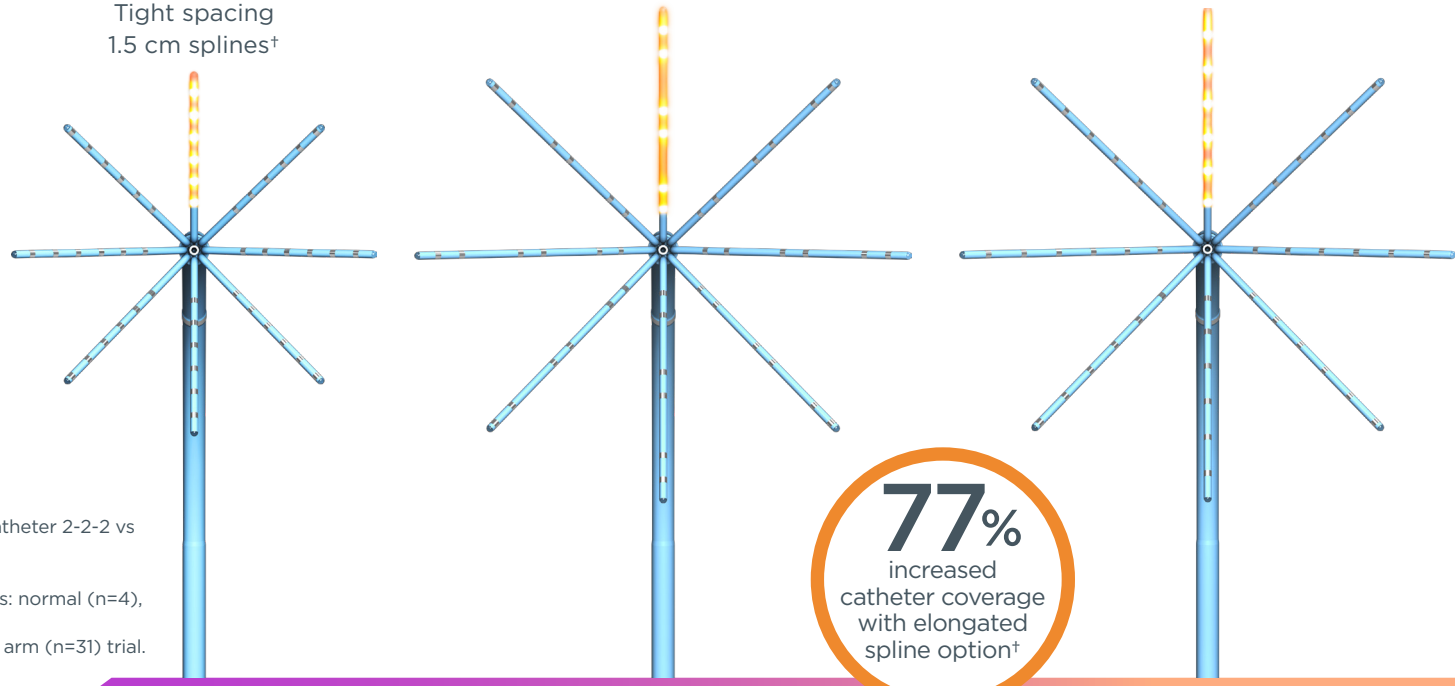
High bipole density
Tight spacing
1.5 cm splines†

2-5-2-5-2

Tight spacing
Extra coverage
2.0 cm splines†

3-3-3-3-3

High bipole density
Extra coverage
2.0 cm splines†



77%
increased catheter coverage with elongated spline option†

* Study was a comparison of OCTARAY™ Catheter 2-2-2 vs PENTARAY® Catheter 2-6-2.
† Compared to the PENTARAY® Catheter.
[c] Pre-clinical results with swine left ventricles: normal (n=4), with infarction (n=8).
[d] Based on OCTARAY™ results from a single arm (n=31) trial.

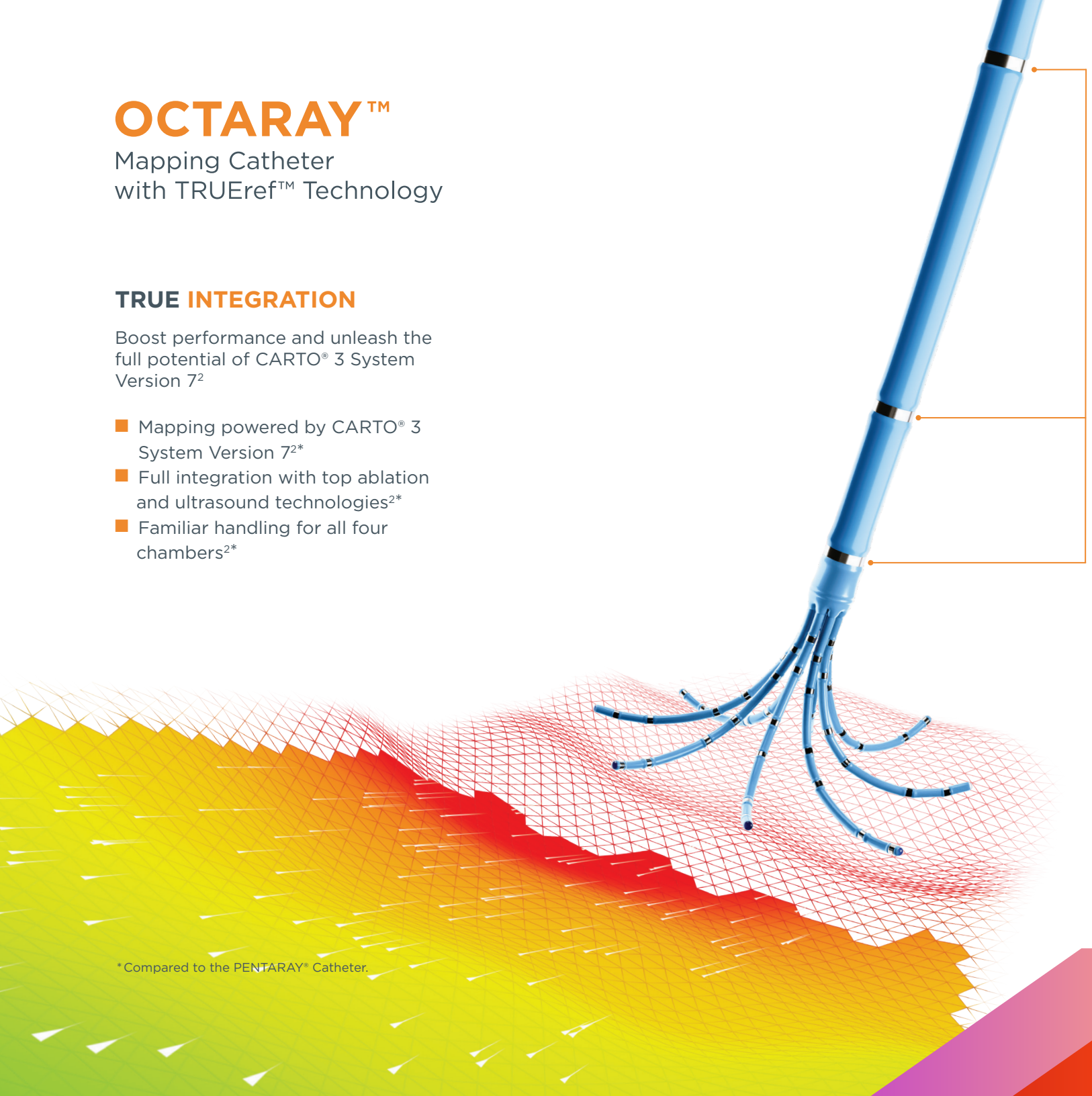
OCTARAY™

Mapping Catheter
with TRUEref™ Technology

TRUE INTEGRATION

Boost performance and unleash the full potential of CARTO® 3 System Version 7[2]

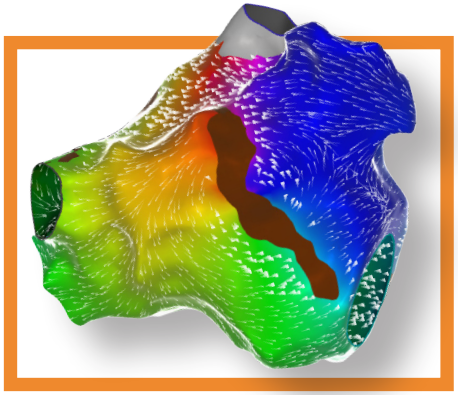
- Mapping powered by CARTO® 3 System Version 7[2]*
- Full integration with top ablation and ultrasound technologies[2]*
- Familiar handling for all four chambers[2]*



*Compared to the PENTARAY® Catheter.

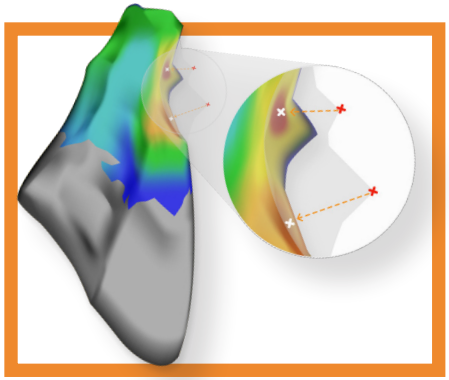
CARTO PRIME® Module offers a suite of tools designed to accelerate the physician's ability to diagnose complex arrhythmias.

CARTO PRIME®
Module



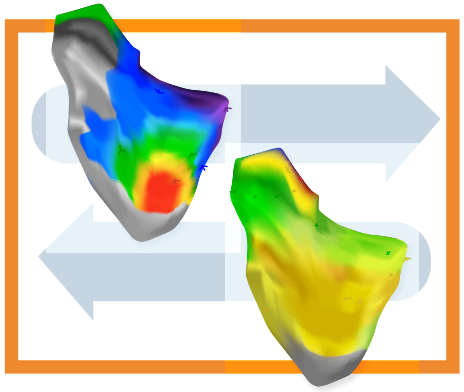
Coherent Mapping

May simplify the diagnosis of scar-related complex atrial arrhythmia.[5]



LAT Hybrid

Increases Premature Ventricular Contraction (PVC) mapping location accuracy.[6]



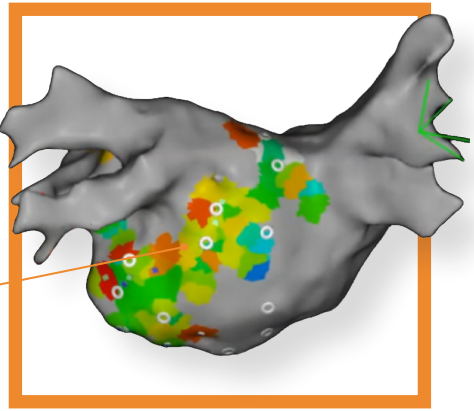
Parallel Mapping & Map Replay

Enhances mapping efficiency by enabling the ability to map multiple arrhythmias simultaneously[2]* (Parallel Mapping) or retrospectively (Map Replay) using the same catheter locations.

CARTOFINDER™ Module

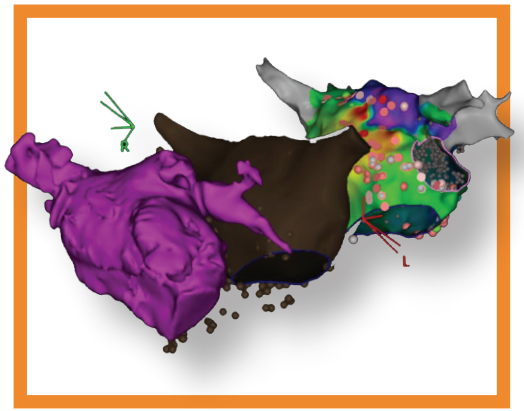
Identifies repetitive focal and rotational activation patterns in irregular atrial arrhythmias.[7]

CARTOFINDER™ Module **Cycle Length Map** displays the dominant cycle length that is calculated for each channel at each CARTOFINDER™ Module site.†



Map Merge

Ability to register previous study map to the current study using registration menu.†



* Efficiencies are based on inference and pre-clinical test data only.
† Included in CARTO® 3 System Version 7 Upgrade Kit.

CARTO® 3 System Version 7 expands base software capabilities with tools designed to improve user experience and enhance depth of information.

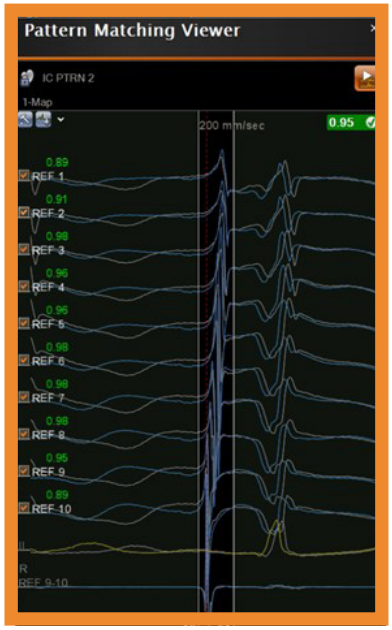
CARTO® 3
System

Advanced Reference Annotation

Advanced Reference Annotation (ARA) is a novel multi-channel algorithm that provides consistent, accurate and robust reference annotations for the detection of atrial and ventricular arrhythmias.*

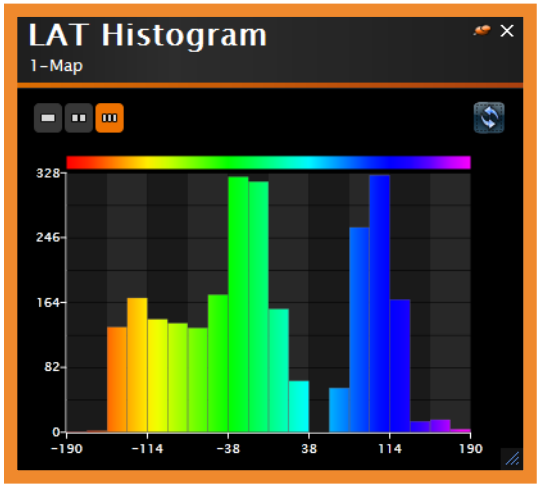
IC Pattern Matching

Automatically discriminates between different atrial activations based on their manifestation on the CS signals.†



LAT Histogram

LAT Histogram is a tool that provides a visual representation of the activation throughout the entire Cycle Length.



* 98% average stability rate consists of 94 test vectors with more than 69000 annotations, annotated by 8 experienced physicians. 96% average detection rate consists of 94 test vectors with more than 69000 annotations, annotated by 8 experienced physicians.

† Included in CARTO® 3 System Version Upgrade Kit. Based on bench testing.

CARTO®

Signal Processing Unit

- Increases CARTO® 3 System channel capacity to meet your high-density mapping needs
- Enables TRUEref™ Technology which reduces the impact of far-field unipolar signals[3]*

* Compared to Wilson's Central Terminal (WCT). Based on benchtop study (n=3).

OCTARAY™ Mapping Catheter with TRUEref™ Technology

Ordering Number	Spline length	Curve	Electrode spacing
D-1609-01	1.5 cm	D	2-2-2-2-2
D-1609-02	2.0 cm	D	2-5-2-5-2
D-1609-03	2.0 cm	D	3-3-3-3-3
D-1609-04	1.5 cm	F	2-2-2-2-2
D-1609-05	2.0 cm	F	2-5-2-5-2
D-1609-06	2.0 cm	F	3-3-3-3-3

CARTO® 3 System eco Interface Cable

Ordering Number	Length
D-1344-02	10 ft

CARTO® Signal Processing Unit

Ordering Number	Description
KT-5070-00	Signal Processing Unit Kit
Accesories Included	
EM-5070-00F (x1)	Signal Processing Unit
CW-8602-34F (x2)	20 Pole A/B Cable
CW-0303-30F (x1)	Power Supply Cable
CW-4178-03F (x1)	Fiber Optic Cable
KT-5070-01 (x1)	SPU Holder Kit

CARTO® 3 System Version 7

Ordering Number	Description
KT-5400-250US	CARTO® 3 System Version 7 Upgrade Kit - required to use OCTARAY™ Mapping Catheter with TRUEref™ Technology

To order, call your Biosense Webster sales representative.

DO NOT use OCTARAY™ Mapping Catheter with TRUEref™ Technology in patients with prosthetic valves.

1. Sroubek J, Rottman M, Barkagan M, et al. (2019) A novel octaray multielectrode catheter for high-resolution atrial mapping: electrogram characterization and utility for mapping ablation gaps. J Cardiovasc Electrophysiol.: 1-9.
2. Barkagan M, Sroubek J, Shapira-Daniels A, et al. (2020) A novel multi-electrode catheter for high-density ventricular mapping: electrogram characterization and utility for scar mapping. Europace (0): 1-10.
3. TR-0028829 Rev. A.
4. Sarkozy AV, Johan; De Potter, Tom; Schilling, Richard; Markides, Vias (2020) Higher Density Mapping Efficiencies and Ease of Maneuverability from the OCTARAY First in Man Study. European Heart Rhythm Association 2020. Vienna, Austria. March 29th-31st, 2020. Pending formal publication.
5. Anter E et al. Activation Mapping With Integration of Vector and Velocity Information Improves the Ability to Identify the Mechanism and Location of Complex Scar Related Atrial Tachycardias. Circ Arrhythm Electrophysial. 2018;11:e006536.
6. Steyers III CM et al. Ablation using 3D maps adjusted for spatial displacement of premature ventricular complexes relative to sinus beats: Improving precision by correcting for the shift. J Cardiovasc Electrophysial. 2019;1-7.
7. Bench testing performed by Biosense Webster, Inc. CARTO® 3 V7 CARTOFINDER Algorithm POD Report February 2019.

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Important information: Prior to use, refer to the instructions for use supplied with this device for indications, contraindications, side effects, warnings and precautions.
Caution: US law restricts this device to sale by or on the order of a physician.

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