



## ACIST | HDi<sup>®</sup> HD IVUS System

The system of choice for optimized imaging

# Why HDi®?

## Manage complications every step of the way

ACIST brings a new level of diagnostic capability to the interventional cardiology field by redefining intravascular ultrasound with high definition imaging that does a better job visualizing coronary complications that can increase MACE rates. By utilizing See it, Treat it and Prevent it techniques, physicians can identify edge dissection, lipid plaque, and thrombus to decrease their coronary complications.



## See it.

HDi® brings new imaging modes, LumenView™ and SilkView™, designed to detect complex complications helping physicians treat patients. Thrombus and edge dissections may lead to worse outcomes.<sup>1</sup>



- LumenView™ darkens the coronary lumen for better border detection.



- SilkView™ increases gray scale for finer blood speckle, tissue and plaque differentiation.



- ClassicView™ optimizes the balance of high resolution and depth of penetration and enables full vessel wall visualization.

## Treat it.

HDi enables enhanced imaging by providing sufficient penetration at 60 MHz to see the media layer, even in larger plaque volumes, so the physicians can maximize the stenting cross sectional area and may lead to better patient outcomes.<sup>4</sup>

## Prevent it.

HDi® has been designed to detect lipid pools and large plaque burdens. The data has shown that placing the stent edges in these types of plaques can result in an increase in complications.<sup>5</sup>

## Thrombus Detection

**Better**

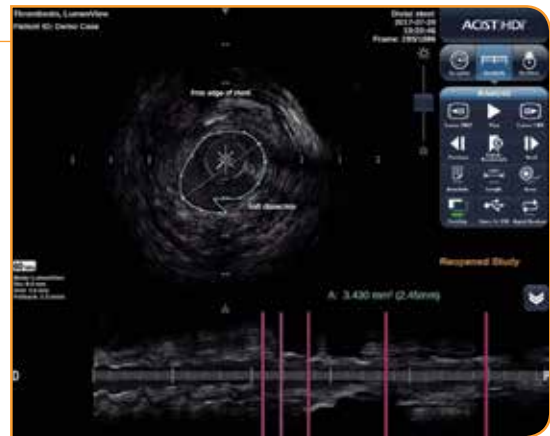
thrombus detection than 40 MHz<sup>2</sup>



## Edge Dissections

**50% more**

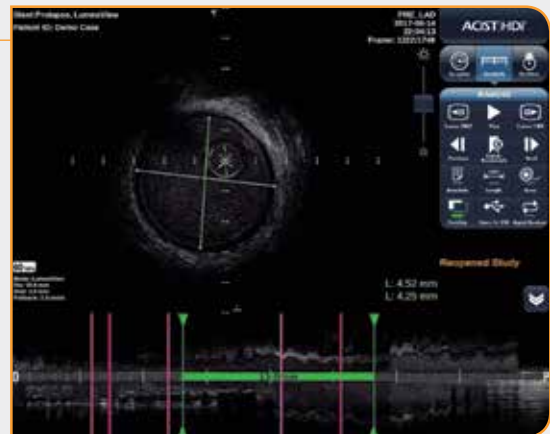
dissections detected than 40 MHz<sup>3</sup>



## Stent Size

**3x Better**

visualization of media than OCT for optimizing stent sizing<sup>2</sup>



## Stent Landing Zones

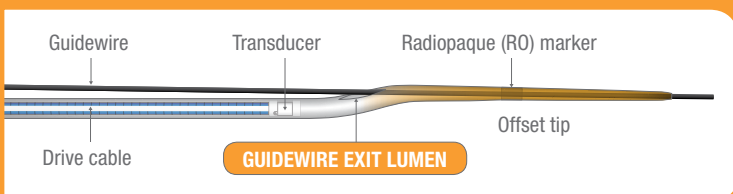
**8x more**

lipid pools than 40 MHz<sup>2</sup>

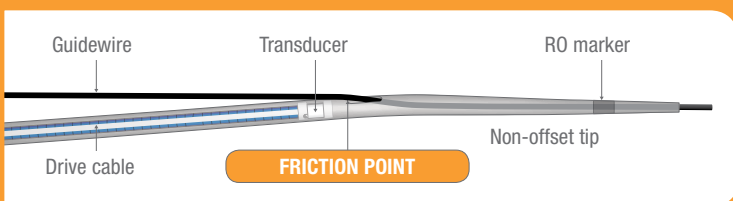


## Differentiated design, optimized imaging

- Novel, offset tip design
- VariFlex™ imaging window
- Lubricious hydrophilic coating



Novel offset tip design of Kodama.



Standard IVUS catheter tip design.

## High-speed pullback<sup>6</sup>

20x faster  
pullback

95% time  
reduction

Minimizing  
ischemic risk

### Pullback time for a 7-cm pullback

**HDI™ 7 sec 10 mm/sec**

Competitor IVUS systems **2 min 20 sec 0.5 mm/sec**

## Intuitive interface

Easy-to-use, interactive touchscreen facilitates rapid analysis and efficient workflow



## Streamlined system profile

Compact console configuration has small footprint that easily integrates into cath lab

### References

1. Predictors of subacute stent thrombosis: results of a systemic intravascular ultrasound study. *Circulation*. July 8, 2003;108:43-47.
2. Tanaka S, Sakamoto K, Kitahara H, et al. Assessments of lipid plaque and thrombus with a novel high-definition 60-MHz IVUS imaging system: comparison with conventional 40-MHz IVUS and optical coherence tomography. *J Am Coll Cardiol*. 2013;62(18\_S1):B201-B202.
3. Tanaka S, Sakamoto K, Yamada R, et al. Plaque assessment with a novel high-definition 60-MHz IVUS imaging system: comparison with conventional 40-MHz IVUS and optical coherence tomography. *J Am Coll Cardiol*. 2013;61(Suppl 10):A466.
4. Defining a new standard for IVUS optimized drug eluting stent implantation: the PRAVIO study. *Catheter Cardiovasc Interv*. August 1, 2009;74(2):348-356.
5. Impact of the distance from the stent edge to the residual plaque on edge restenosis following DES implantation. *PLoS One*. 2015;10(3):E0121079
6. Data on file at ACIST home office. Product marketing.

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