

VeGa™

MRI Active Pacing Leads

FEATURING INNOVATIVE SILGLIDE® TECHNOLOGY

Streamline  
the implant procedure

# VeGa™

A unique combination  
of flexibility,  
*slide* and control<sup>1,2</sup>



## Silicone + Silglide®

Silicone lead body for flexibility  
Innovative Silglide® coating for  
enhanced slide.<sup>1</sup>

6F lead body 

More Length Choice 

→ 45 cm → 52 cm → 58 cm

Precision Tip 

High X-ray visibility allows for fast  
and precise lead placement.<sup>3</sup>

Proven Safety 

Vega builds on the reliability and experience  
of the Beflex lead generation with a 99.9%  
implant survival rate after 6 years.<sup>4</sup>

MRI Conditional 

Allowing patients to safely undergo MRI scans  
and benefit from AutoMRI mode.<sup>5,6</sup>

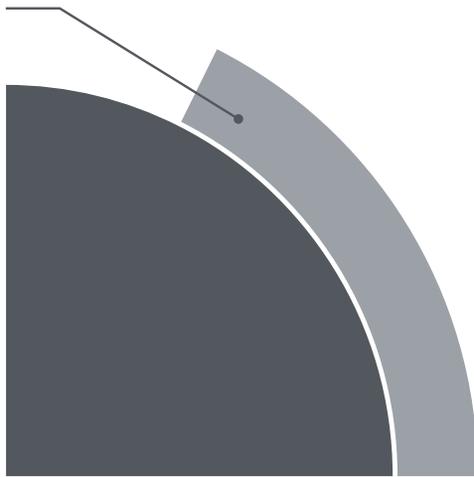
# *Silglide*® + Silicone

The combination of the Silicone body with *Silglide*® coating offers natural flexibility with enhanced gliding for smoother implants<sup>1</sup>

*Silglide*® is a surface enhancement that treats the silicone tubing of the lead using a vacuum plasma polymerization deposition process.

CONVENTIONAL COATING

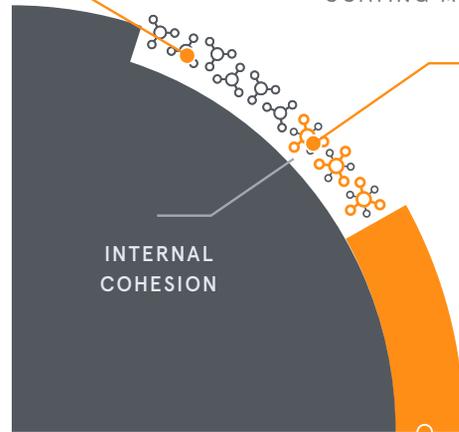
SUBSTRATE WITH CONVENTIONAL COATING



PLASMA POLYMERIZATION COATING PROCESS

→ ACTIVATION ←  
OF SUBSTRATE  
MOLECULES

1



→ GROWTH AND BONDING ←  
BETWEEN SUBSTRATE AND  
COATING MOLECULES

2

3

→ HOMOGENEOUS ←  
COATING PROVIDING  
MAXIMUM SLIDE

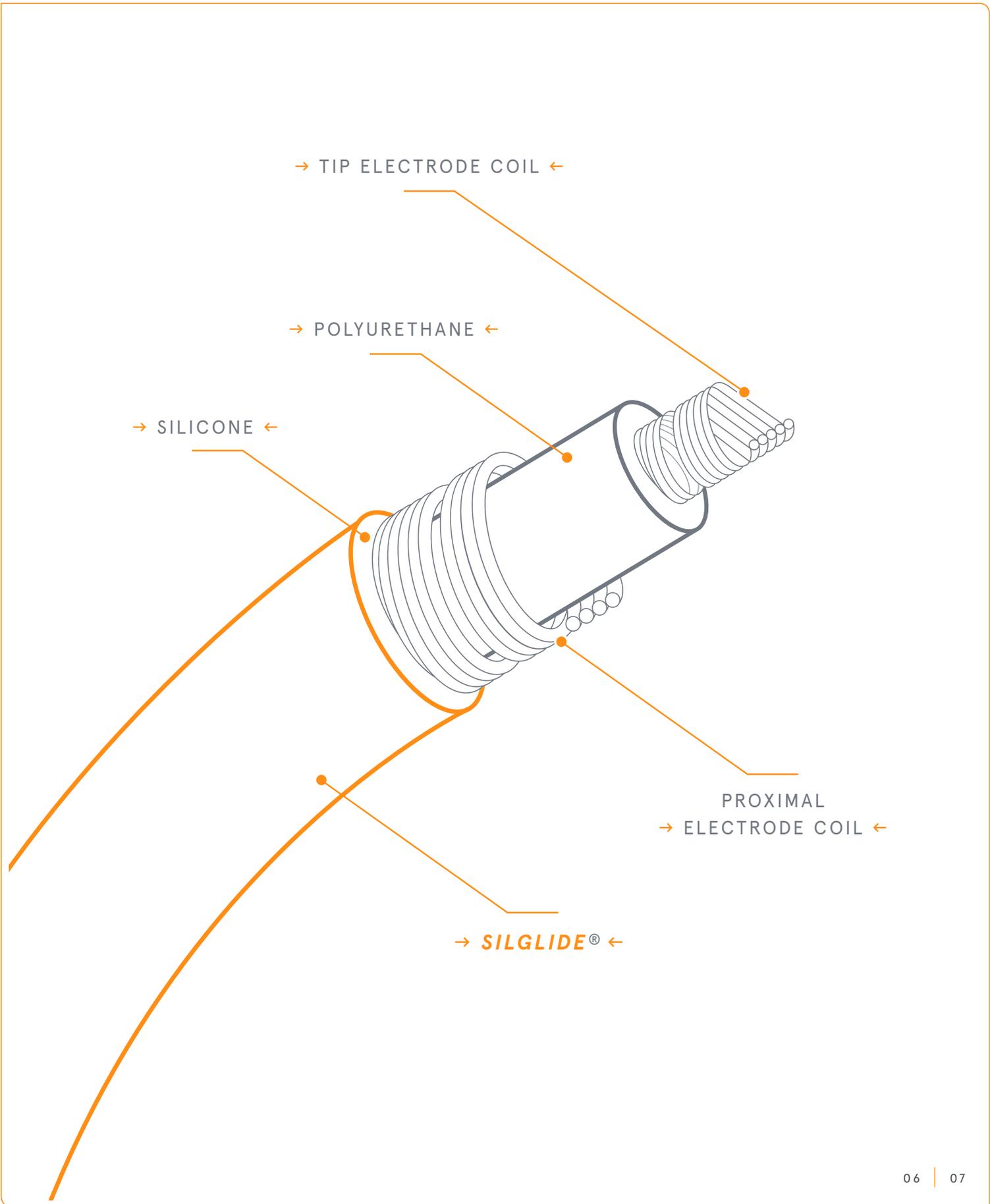
LUBRICIOUS QUALITIES  
OF *SILGLIDE*®

- Facilitates insertion
- Enables swift advancement through the veins
- Reduces surface friction
- Facilitates placement of multiple leads

## BODY TECHNOLOGY

# *Bipolar* coaxial Internal conductor structure

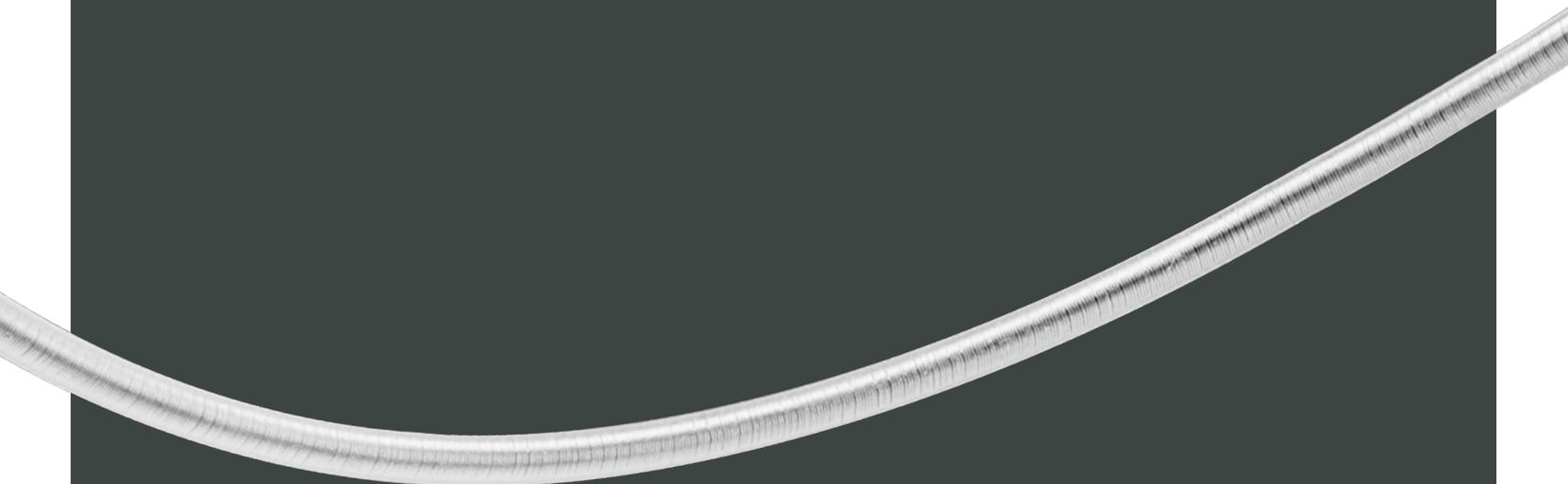
- High X-ray visibility<sup>3</sup>
- Maximum torque response<sup>2</sup>
- Polyurethane internal insulator
  - *Smooth helix extension and retraction*<sup>7</sup>
  - *Internal coil friction reduction*



TIP TECHNOLOGY

*Reduced 4 mm<sup>2</sup>*  
pacing surface

- Increases pacing efficiency<sup>8</sup>
- Improves sensing detection<sup>8</sup>
- Reduces polarization<sup>8</sup>





→ STEROID COLLAR ←

310 µg DSP\*  
REDUCES TISSUE INFLAMMATION  
LOWERS ACUTE/CHRONIC THRESHOLDS

→ 1.5 mm ACTIVE HELIX ←

REDUCES PERFORATION RISK<sup>8</sup>  
4mm<sup>2</sup> Pt-Ir TiN COATED ELECTRODE

SHORT TIP-TO-RING SPACING

10mm REDUCES  
OVERSENSING

→ PEEK\*\* HOUSING ←

SAFE HELIX PROTECTION ENSURES  
SMOOTH EXTENSION/RETRACTION<sup>6</sup>

→ PROXIMAL ELECTRODE ←

44mm<sup>2</sup> Pt-Ir ELECTRODE

\* Dexamethasone Sodium Phosphate  
\*\* Polyether ether ketone

PRECISION TIP

ENGINEERED FOR  
EXCELLENT X-RAY VISIBILITY<sup>3</sup>

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VERY FAST LEAD TIP POSITIONING  
CONFIRMED BY THE EVALUATION  
OF MORE THAN 200 IMPLANTS<sup>10</sup>

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VERY GOOD MANEUVERABILITY  
IN THE CHAMBER<sup>2</sup>

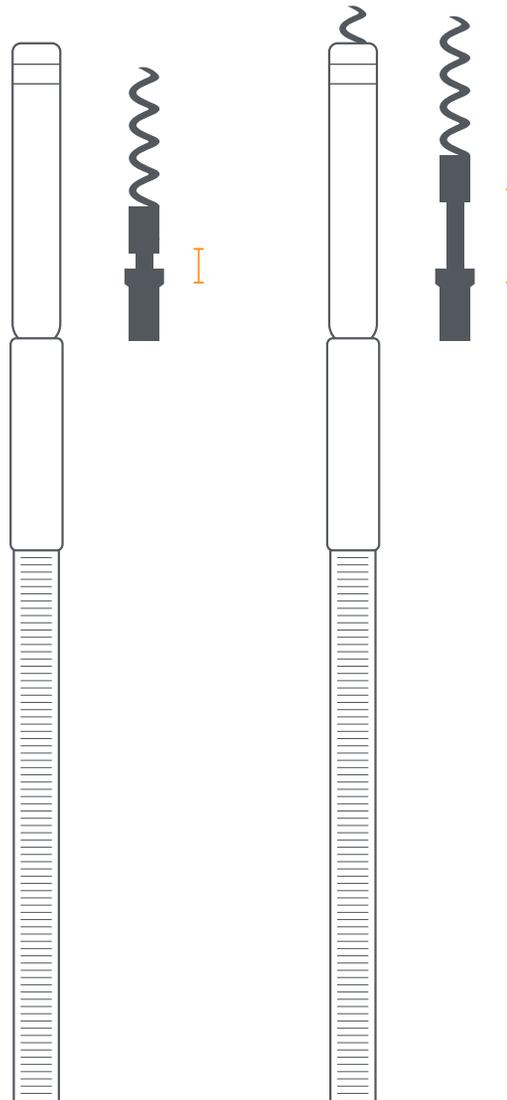
*Pleasure-S Clinical Study*



X-RAY VISIBILITY



PIN-DRIVEN SCREW  
WITH X-RAY MARKER  
FOR CLEAR VISIBILITY  
OF HELIX EXTENSION<sup>3</sup>



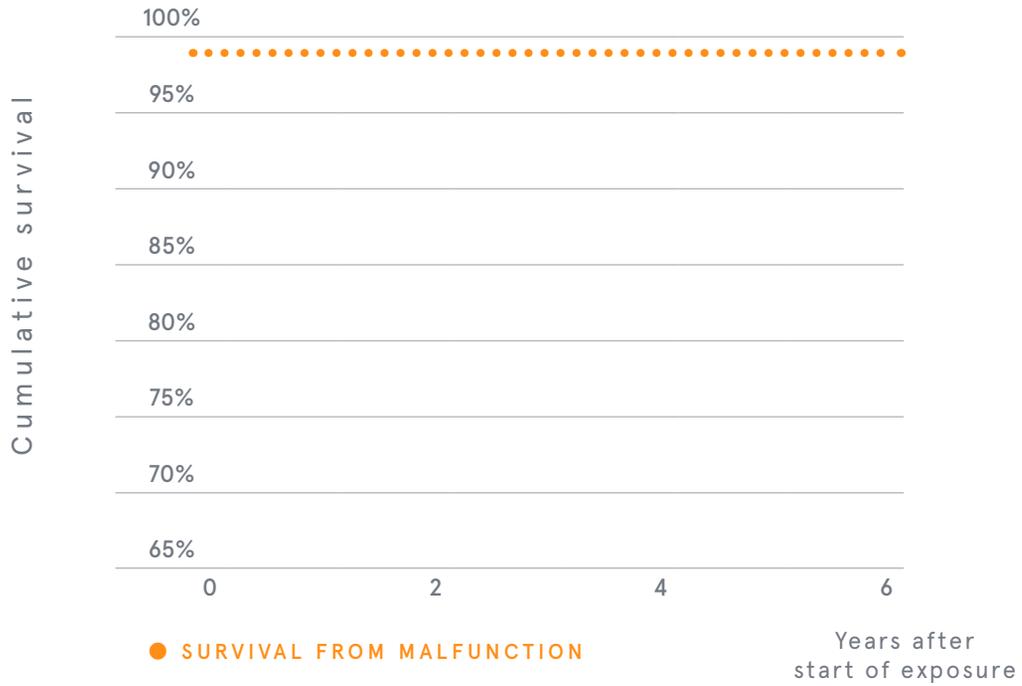
SAFETY & SECURITY

Building on the reliability  
and experience of the Beflex  
lead generation with a

99.9%

IMPLANT SURVIVAL RATE  
AFTER 6 YEARS.<sup>4</sup>

PRODUCT PERFORMANCE - BEFLEX RF45D/RF46D \*



CUMULATIVE SURVIVAL FROM MALFUNCTION WITH 95% CONFIDENCE INTERVAL AS A FUNCTION OF YEARS AFTER IMPLANT

	01	02	03	04	05	06
<b>Implant survival rate (%)</b>	<b>99.97</b>	<b>99.94</b>	<b>99.91</b>	<b>99.91</b>	<b>99.86</b>	<b>99.86</b>
Upper confidence interval (+)	0.01%	0.02%	0.03%	0.03%	0.05%	0.05%
Lower confidence interval (-)	0.02%	0.03%	0.04%	0.04%	0.07%	0.07%

\* Cut-off date 31/12/15

# Technical Specifications

CHARACTERISTICS		VEGA R45	VEGA R52	VEGA R58	
LENGTH		45 cm	52 cm	58 cm	
MRI CONDITIONAL <sup>5</sup>		✓	✓	✓	
CONNECTOR	IS-1 BI (3.2 mm)	✓	✓	✓	
	Serial number identification	45DRG	52DRG	58DRG	
FIXATION	Pin driven Retractable Screw	✓	✓	✓	
	Screw length	1.5 mm	1.5 mm	1.5 mm	
	X-ray markers	✓	✓	✓	
	Max number of turns to fully Extend / retract the screw	Straight Stylet	8	9	10
		J-Stylet	14	15	16
INTRODUCER	1 lead		7 F		
	1 lead + guidewire		9.5 F		
DISTAL ELECTRODE	Shape		Active screw		
	Material		Pt / Ir + TiN coating		
	Pacing surface		4 mm <sup>2</sup>		
	Steroid		310 µg of DSP*		
PROXIMAL ELECTRODE	Material		Pt / Ir		
	Surface		44 mm <sup>2</sup>		
	Inter-electrode distance		10 mm		
LEAD BODY	Diameter		6 F (2 mm)		
	Insulation		Silicone tubing with Silglide® surface treatment		
	Conductors		MP35N®		
	Internal coil		4 wires (max resistance 50 Ohm)		
	External coil		4 wires (max resistance 100 Ohm)		
ORDER CODES	Lead	TLD040C	TLD041C	TLD042C	
	Stylet kit	RLK40C	RLK41C	RLK42C	

\* Dexamethasone Sodium Phosphate

## REFERENCES

1. Applied membrane technology AMT brochure "USP Class 6 Medical implantable Grade coating" available at [www.appliedmembrantech.com](http://www.appliedmembrantech.com).
2. During Pleasure-S Clinical Study, "97% of clinical evaluation investigators concluded that BEFLEX leads had either "equal", "better" or "the best" maneuverability in the ventricle when compared to other similar models used; 94% of clinical evaluation investigators concluded that BEFLEX leads had either "equal", "better" or "the best" maneuverability in the atrium when compared to other similar models used". SORIN data on file.
3. During Pleasure-S Clinical Study, "95% of clinical evaluation investigators concluded that BEFLEX leads had either "equal", "better" or "the best" X-ray Markers visibility in the atrium when compared to other similar models used; 94% of clinical evaluation investigators concluded that BEFLEX leads had either "equal", "better" or "the best" X-ray Markers visibility in the ventricle when compared to other similar models used". SORIN data on file.
4. Product performance report, P46, May 2016, available at [www.crm.microport.com](http://www.crm.microport.com)
5. When implanted with KORA 100 and KORA 250 (DR & SR) pacemakers under their intended conditions of use. More details can be found in the MRI solutions manual (KORA 100: ref U201, KORA 250: ref U641).
6. Savouré A, Mechulan A, Burban M, Olivier A, and Lazarus A. The Kora Pacemaker is Safe and Effective for Magnetic Resonance Imaging. *Clin Med Insights Cardiol*. 2015; 9: 85–90.
7. During Pleasure-S Clinical Study, "94% of investigators concluded that BEFLEX leads had either "equal", "better" or "the best" ease of extension/retraction of helix in the ventricle". Sorin data on file.
8. Kenneth A. Ellenbogen, Bruce L. Wilkoff, G. Neal Kay, Chu Pak Lau, Angelo Auricchio. *Clinical Cardiac Pacing, Defibrillation and Resynchronization Therapy*. Elsevier Health Sciences; 5th Edition; March 2016.
9. Product performance report 2016 shows that in more than 60,000 leads implanted worldwide only 1 perforation and 1 lead dislodgment occurred as chronic lead complications.
10. During Pleasure-S Clinical Study, "94% of investigators concluded that BEFLEX leads had either "equal", "better" or "the best" lead placement time in both the atrium and the ventricle". Sorin data on file.

Refer to VEGA implant manual (ref. U921) furnished with the lead for complete instructions for intended use and relevant warnings, precautions, side effects, and contraindications.

