

# BOLD SOLUTIONS TO CHALLENGE AFIB

## ATRIAL FIBRILLATION: **A GROWING CRISIS**

# ABBOTT EP: BOLDLY REDEFINING THE TECHNOLOGY YOU RELY ON



Atrial fibrillation is the fastest growing crisis in EP, with worldwide patient population expected to explode

# FROM 37 MILLION TODAY, TO MORE THAN 60 MILLION BY 2050





EFFICIENCY



C ACCURACY

#### PATIENT OUTCOMES $(\tilde{\lambda})$

A health crisis scaling so dynamically demands boldness. Abbott partners with EPs to take the tools used to challenge AFib everyday, and redefine them to be more EFFICIENT without ever compromising ACCURACY - so physicians can deliver better PATIENT **OUTCOMES** and bring boldness to the fight against AFib

# **BOLD SOLUTIONS TO CHALLENGE AFIB**

ACCESS

IMAGING

**TRANSSEPTAL** 

**Abbott** 

Agilis™ NxT Steerable Introducer



ViewMate™ Ultrasound System



ViewFlex™ Xtra Intracardiac Echocardiography (ICE) Catheter



BRK<sup>™</sup> Transseptal Needles



MAPPING

Advisor™ HD Grid Mapping Catheter, Sensor Enabled™



EnSite™ X EP System

Only Abbott offers a holistic portfolio with solutions for every step in your procedure journey

ABLATION	LAAO
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Eh-d

Amplatzer<sup>™</sup> Amulet<sup>™</sup> LAA Occluder



FlexAbility™ Irrigated Ablation

Catheter, Sensor Enabled™

TactiCath<sup>™</sup> Contact Force Ablation Catheter, Sensor Enabled™

### ABBOTT - A BOLD PARTNER IN THE FIGHT AGAINST AFIB



### VASCULAR CLOSURE

### MONITORING



Perclose<sup>™</sup> Prostyle<sup>™</sup> Suture-Mediated Closure System



Jot Dx<sup>™</sup> Insertable Cardiac Monitor

## YOU RELY ON TECHNOLOGY THAT DRIVES EFFICIENCY

### GET IN AND OUT OF YOUR LAB IN LESS TIME

Unleash the bold power of the grid with Advisor™ HD Grid Mapping Catheter, Sensor Enabled™. Advisor™ HD Grid Mapping Catheter, SE redefines lab efficiency with SHORTER PROCEDURE TIMES than circular mapping catheters.



Within Abbott's EP portfolio of products, there are bold solutions that redefine what is possible in delivering care that **REDUCES REPEAT VISITS** 

**REDO AF PROCEDURES<sup>2</sup>** 

ADVISOR<sup>™</sup> HD **GRID MAPPING** CATHETER 6%

Reduce patient **HEALTHCARE UTILIZATION** when ablating with TactiCath<sup>™</sup> Contact Force Ablation Catheter, Sensor Enabled<sup>™</sup>



### **KNOW YOU'RE DOING IT RIGHT THE FIRST TIME**



# YOU RELY ON TECHNOLOGY BOLD ENOUGH NOT TO **COMPROMISE BETWEEN EFFICIENCY AND ACCURACY**

#### Abbott has worked with electrophysiology partners to ensure that our solutions challenge AFib with technology that redefines lab efficiency and SIGNAL ACCURACY

Boldness is **SEEING EVERY SIGNAL IN 360 DEGREES** with EnSite<sup>™</sup> Omnipolar Technology; capturing signals no other mapping technology can detect

EnSite<sup>™</sup> Omnipolar Technology helps electrophysiologists challenge AFib with INSTANT NEW PERSPECTIVE OF WAVEFRONT DIRECTION with activation direction arrows displayed beat-by-beat



# ACCURACY MATTERS **IN ABLATION THERAPIES**

Abbott's EP portfolio is bold enough to complement accuracy in signal quality with ACCURACY IN CONTACT FORCE during ablation





**UP TO 6X GREATER ACCURACY IN CONTACT FORCE SENSING** WITH THE TACTICATH™ CONTACT FORCE ABLATION CATHETER, SENSOR ENABLED<sup>™</sup> TIP IN LATERAL ORIENTATION <sup>4,5</sup>

# YOU RELY ON TECHNOLOGY THAT **DELIVERS BETTER PATIENT OUTCOMES**

We design for BOLD results that help physicians give their patients better outcomes that last

### **FREE YOUR PATIENTS** FROM ATRIAL ARRHYTMIAS

12-month freedom from atrial Arrhythmias with Advisor<sup>™</sup> HD Grid Mapping Catheter, Sensor Enabled<sup>™ 2</sup>

Catheter, SE 87%

Advisor HD Grid Mapping



Freedom of arrhythmia at 12 mo with Agilis™ NxT Steerable Sheath<sup>6</sup> Protocol Defined Treatment Success by Sheath Usage - All Subjects





# BETTER OUTCOMES FOR BOTH **PAROXYSMAL AND PERSISTENT AFIB**

Safe and effective AFib treatment with TactiCath<sup>™</sup> Ablation Catheter, Sensor Enabled

Improved quality of life for patients at least 12 months following ablation<sup>7</sup>

**PAROXYSMAL AFIB** 92.4%

Freedom from symptomatic recurrance of paroxysmal AFib<sup>8</sup> 82.2%

Freedom from symptomatic recurrance of persistent AFib at 15 months<sup>8</sup>

90%



Improved quality of life scores noted as AFEQT



#### References

- Day, J. D., Crandall, B., Cutler, M., Osborn, J., Miller, J., Mallender, C., & Lakkireddy, D. (2020). High Power Ultra Short Duration Ablation with HD Grid Improves Freedom from Atrial Fibrillation and Redo Procedures Compared to Circular Mapping Catheter. Journal of Atrial Fibrillation, 13(2). Persist-End Final Clinical Study Report (Abbott report CL1013884). Bourier, F., Gianni, C., Dare, M., Deisenhofer, I., Hessling, G., Reents, T., . . . Al-Ahmad, A. (2017). Fiberoptic contact-force sensing electrophysiological catheters: how precise is the technology? Journal of

- Cardiovascular Electrophysiology, 28(1), 109-114. Bourier F, Deisenhofer I, Hessling G, et al. Contact-force sensing electrophysiological catheters: How accurate is the technology? [Abstract PO03-170]. Presentation at HRS 2016, San Francisco, CA, May 4-7, 2016. Heart Rhythm. 2016;13(5 Suppl 1):8318-8319. Abbott. Data on File. Document 90569806.
- San Francisco, California.
- Lo MY, Sanders P, Sommer P, Kalman JM, Siddiqui UR, Sundaram S, Piorkowski C, Olson N, Madej SM and Gibson DN. Safety and Effectiveness of a Next-Generation Contact Force Catheter. JACC: Clinical

**CAUTION**: This product is intended for use by or under the direction of a physician. Prior to use, reference the Instructions for Use, inside the product carton (when available) or at manuals.sjm.com or eifu. abbottvascular.com for more detailed information on Indications, Contraindications, Warnings, Precautions and Adverse Events.

#### **United States: Required Safety Information**

Indications: The TactiCath<sup>TM</sup> Quartz Contact Force Ablation Catheter and TactiCath<sup>TM</sup> Ablation Catheter, Sensor Enabled<sup>TM</sup> are indicated for use in cardiac electrophysiological mapping and for the treatment of drug refractory recurrent symptomatic paroxysmal atrial fibrillation, when used in conjunction with a compatible RF generator and three-dimensional mapping system. **Contraindications**: Do not use for any of the following conditions: certain recent heart surgery; prosthetic valves; active systemic infection; use in coronary vasculature; myxoma or intracardiac thrombus, or an interatrial baffle or patch; retrograde trans-aortic approach in patients with aortic valve replacement. **Warnings**: It is important to carefully titrate RF power; too high RF power during ablation may lead to perforation caused by steam retrograde trans-aortic approach in patients with aortic valve replacement. **Warmings:** It is important to carefully titrate RF power; too high RF power during ablation may lead to pertoation caused by steam pop. Contact force in excess of 70 g may not improve the characteristics of lesion formation and may increase the risk for perforation during manipulation of the catheter. Patients with aortic valve replacement, **Warmings:** It is important to carefully titrate RF power; too high RF power during ablation may lead to pertoation caused by steam pop. Contact force in excess of 70 g may not improve the characteristics of lesion formation and may increase the risk for perforation during manipulation of the catheter. Patients with aortic valve replacement patients are reached by the sensor in this catheter have been properly cleared of air prior to inserting the catheter into the vasculature since entrapped air can cause potential injury or fatality. The temperature data transmitted by the sensor in this catheter is representative of the irrigated electrode only and does not provide tissue temperature data. **Precautions:** The long-term risks of protracted fluoroscopy and creation of RF induced lesions have not been established; careful consideration must be given for the use of the device in prepubescent children. When using the catheter with conventional EP lab system or with a 3-D navigational system, careful casheter with onvertice and the sing of retracter data damage, perforation, or tamponade. Always maintain a constant saline irrigation flow to prevent coagulation within the lumen of the catheter. Care should be taken when ablating near structures such as the sing-arrival and AV nodes. **Potential Adverse Events**: Potential adverse events include, but are not limited to, are discussed and the paralelecter data term period and the prevent paralelecter data the prevent coagulation is the specific adverse to be howed in the law period to a specific adverse events. Potential adverse events include, but are not l cardiovascular related complications, including groin hematoma, pericardial effusion and infection. More serious complications are rare, which can include damage to the heart or blood vessels; blood clots

Indications: The Advisor<sup>™</sup> HD Grid Mapping Catheter, Sensor Enabled<sup>™</sup>, is indicated for multiple electrode electrophysiological mapping of cardiac structures in the heart, i.e., recording or stimulation only. Indications: The Advisor<sup>16</sup> HD Grid Mapping Catheter, Sensor Enabled<sup>16</sup>, is indicated for multiple electrode electropysiological mapping of cardiac structures in the heart, i.e., recording or stimulation only. This catheter is intended to obtain electrograms in the atrial and ventricular regions of the heart. **Contraindications**: The catheter is incrntanidicated for patients with prostive valves and patients with left atrial thrombus or myxoma, or interatrial baffle or patch via transseptal approach. This device should not be used with patients with active systemic infections. The catheter is contraindicated in patients who cannot be anticoagulated or infused with heparinized saline. **Warnings**: Cardiac catheterization procedures present the potential for significant x-ray exposure, which can result in acute radiation injury as well as increased risk for somatic and genetic effects, to both patients and laboratory staff due to the x-ray beam intensity and duration of the fluoroscopic imaging. Careful consideration is an inherent risk of any electrode placement. Careful catheter entrapment within the heart or blood vessels is a possible complication of electrophysiology procedures. Vascular perforation or discussed preformed in order to avoid device component damage, thromboembolism, cerebrovascular accident, cardiac damage, perforation, pericardial effusion, or tamponade. Risks associated with electrical stimulation may include, but are not limited to, the induction of arrhythmias, such as atrial fibrillation (AF), ventricular tachycardia (VT) per cardia enusion, or caniponade. Asks associated with electrical stinulation may include, out are not numed to, the induction of arrivinmas, such as arrian normation (AF), ventricular factoreation (VF) requiring cardioversion, and ventricular fibrillation (VF). Catheter materials are not compatible with magnetic resonance imaging (MRI). **Precautions:** Maintain and value clotting time (ACT) of greater than 300 seconds at all times during use of the catheter. This includes when the catheter is used in the right side of the heart. To prevent entanglement with concomitant and y used catheters, use care when using the catheter in the proximity of the other catheters. Maintain constant irrigation to prevent coagulation on the distal paddle. Inspect irrigation tubing for obstructions, such as kinks and air bubbles. If irrigation is interrupted, remove the catheter from the patient and inspect the catheter. Ensure that the irrigation ports are patent and flush the catheter prior to re-insertion. Always straighten the catheter before insertion or withdrawal. Do not use if the catheter appears damaged, kinked, or if there is difficulty in deflecting the distal section to achieve the desired curve. Do not use if the catheter does not hold its curve and/or if more than the distal catheter prior to real constructions are precedent or the patient of and the of the transformed dors of the catheter trans below to the distal catheter prior is interrupted. Catheter appears damaged, kinked, or if there is defined to real catheter prior to real constructions are prior to real catheter does not hold its curve and/or if the prior to real constructions are patient and the prior to real constructions are prior to real catheter does not hold its curve and/or if the real catheter to real hold catheter to be not hold its curve and/or if the real catheter to real hold catheter to be not hold its curve and/or if the real catheter to real hold catheter to be not hold its curve and/or if the real holds and the catheter tore hold catheter t

Indications: The Agilis<sup>™</sup> NxT Steerable Introducer is indicated when introducing various cardiovascular catheters into the heart. Contraindications: The Agilis<sup>™</sup> NxT Steerable Introducer is contraindicated For known or suspected atrial myxoma, Myocardial Infarctions within the last two weeks. Unstable angina, Recent Cerebral Vascular Accident (CVA), Patients who do not tolerate anticoagulation therapy, Patients with an active infection and Presence of atrial thrombus. **Warnings**: Do not alter this device in any way. Only those physicians who are trained in transseptal procedures and SJM catheter delivery systems should use this device. Do Not reuse this device. Thorough cleaning of biological and foreign material is not possible. Adverse patient reactions may result from reuse of this device. Maintain continuous hemodynamic monitoring throughout procedure. Always observe acceptable hemodynamics prior to advancing the dilator or any other component. **Precautions**: US federal law restricts this device to sale by or on the order of a physician. Carefully read instructions before use of device to help reduce potential risks and complications associated with transseptal procedures, such as air emboli and/or perforation of the aorta and left atrium (LA). (Perforation of the aorta and LA not included for 82 cm device). Inspect all components before use. Do not use if package or items in kit appear to be damaged or defective. The French

size specified represents the inner diameter of the introducer sheath. Potential adverse events: Cardiac perforation, Embolus, Cerebrovascular accident, Death, Atrial fibrillation, Dissection and Heart block. **Indications:** The EnSite<sup>™</sup> X EP System is a suggested diagnostic tool in patients for whom electrophysiology studies have been indicated. The EnSite<sup>™</sup> X EP System provides information about the electrical activity of the heart and displays catheter location during conventional electrophysiological (EP) procedures. **Warnings:** For patient safety, any connections that directly connect the patient to the EnSite<sup>™</sup> X EP System must be routed through the appropriate modules: EnSite<sup>™</sup> X EP System Module, EnSite<sup>™</sup> X EP System Stein Cardiac defibrillator discharge and other leakage currents is dependent upon the use of appropriate modules: EnSite<sup>™</sup> X EP System full protection against the effects of cardiac defibrillator discharge and other leakage currents is dependent upon the use of appropriate modules: EnSite<sup>™</sup> X EP System and the matoma requiring surgical repair and/or blood transfusion. Non-SE catheters cannot collect location data and should not be used for navigation in VoXel Mode because they do not have a magnetic sensor. However, they can be visualized and display intracardiac signals. Only connect items that have been specified as part of the EnSite X EP System or compatible with the EnSite<sup>™</sup> X EP System to the multiple socket-outlets. The EnSite<sup>™</sup> X EP System model display should be used in conjunction with connection of other devices (e.g., stimulator, defibrillator, and other devices) may create a location shift. **Precautions:** Ensure that surface electrodes, Patient Reference Sensors, and associated connectors do not contact one another, electrical ground, or metallic objects. Ensite<sup>™</sup> X EP System Field Frame Cables. Ensite<sup>™</sup> X EP System Field Frame Cable used in another operating Field Frame. Connection do not place the EnSite<sup>™</sup> X EP System Field Frame Cables. The EnSite<sup>™</sup> X EP

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