The Ultra ICE™ Catheter is compatible with Clearview™, Galaxy™, Galaxy2™ and iLab™ Systems.

The filling device enables filling of the Ultra ICE™ Catheter tip without damage to the ultrasound sensor during catheter preparation.

The use of Convoy™ Sheaths is recommended to deploy the Ultra ICE™ Catheter.
ICE for Transseptal Puncture

Know where you are. See what you want to avoid.

Fluoroscopy alone provides limited visualization of intracardiac anatomy. Puncture of the aorta and left atrial free wall (LAFW) are serious complications that have occurred with fluoro-only guided transseptal puncture procedures.

Transseptal Puncture

Know where you are.
The Boston Scientific Ultra ICE™ Ultrasound Imaging Catheter is designed to provide precise, real-time visualization of both intracardiac anatomy and devices positioned within the heart. Not only can you identify anatomical structures, you can also visualize where your devices are relative to those structures*.

The image to the right shows an Ultra ICE™ Catheter positioned in the right atrium, parallel to the fossa ovalis, visualizing the structures critical to successful transseptal puncture: the septum, aorta, needle position, tenting, and the LAFW*.

See what you want to avoid.
Performing a successful transseptal puncture involves not only making sure the needle passes through the fossa, but also making sure the needle AVOIDS structures such as the aorta and the left atrial free wall. Being able to visualize those structures can provide an added measure of confidence.

Note the patient’s reduced left atrium, the tenting of the septum and its relationship to the LAFW. The corresponding fluoroscopic image may suggest that puncture has already occurred. However, the ICE image shows that this is not the case and guides the physician to redirect the needle in a puncture angle, away from the LAFW.

Advanced Applications: Crossing to the left side

ICE provides the combination of real-time imaging and soft tissue visualization that cannot be duplicated by fluoroscopy, pre-operative imaging (CT or MR), or electroanatomic mapping. Thus, ICE can bring uniquely valuable clinical information, either when used by itself or in conjunction with these other imaging modalities.

An emerging application for the Ultra ICE™ Catheter involves crossing the septum and then monitoring and helping to guide left-sided procedures. In this setting, ICE allows the user to:

- Visualize left atrial anatomy
- Confirm catheter location relative to the anatomy
- Verify tip-to-tissue contact
- Identify location of the esophagus relative to the ablation catheter
- Characterize acute lesion morphology: swelling, dimpling, and crater formation
- Monitor for any early signs of thrombus formation, stenosis, or pericardial effusion.

* Images are of one case. Individual clinical results may vary.
The Ultra ICE™ Ultrasound Imaging Catheter

Easy to position. Easy to interpret. Excellent near-field detail.

**UNIQUE VISION:**

**360° VIEW OF THE WORLD**

The radiopaque tip of the Ultra ICE™ Catheter allows easy placement and serves as a fluoroscopic marker during the procedure. The area of interest is then the central point in the ultrasound image, providing a clear panorama of what you want to visualize and all the surrounding structures.

**Ultra ICE™ Catheter**

Unique 360° View

**Phased Array Catheter**

Pie-Shaped Wedge View

---

**Easy to position**

The radiopaque tip of the Ultra ICE Catheter can be easily positioned directly adjacent to the area of interest (in this case the fossa) under fluoroscopic guidance.

A phased array catheter must be positioned at a distance from the area of interest, then steered to bring the area into view. This requires coordination of: a) catheter advancement within the atrium, b) distance from the septum, c) array rotation around the catheter’s axis, and d) angle of the array relative to the septum.

**Detailed near-field resolution; Wide field of view**

The Ultra ICE Catheter generates a panoramic 360° image perpendicular to the catheter, with the tip as a central reference point. This allows the user to visualize structures (such as the fossa) directly adjacent to the catheter tip and still see a detailed cross-section of the entire septum.

Near-field detail is dependant on the position of the catheter head relative to the area of interest and the orientation of the imaging plane. The far-field image is constrained to a narrow, pie-shaped wedge view.

**Easy to interpret**

The close proximity between the catheter tip and area of interest (such as the fossa) is designed to allow intuitive interpretation of the ICE image. The tip also serves as a fluoroscopic marker to guide the placement of the transseptal dilator tip at the fossa.

The distance required between the tip and the area of interest may affect the correlation between the catheter tip and anatomic structures. It may also prohibit the tip from serving as a marker for placement of other catheters.
The iLab™ Ultrasound Imaging System

The first intracardiac echocardiography system that can be integrated into the EP Lab. Streamline your EP Lab to free up space for other vital equipment while, never having to look for the cart again.

Total Lab integration. Always there, always available.

The Boston Scientific iLab™ System is the first intracardiac ultrasound system that allows you the operation to fully integrate the hardware into your EP Lab. Not only does this free up valuable floorspace, it also eliminates the need to first find the cart-based system and then transport it to where it is needed. The integrated system is always there, and always available.

- New, intuitive user interface
- Large high definition monitor
- Convenient touchpad interface
- Automatic enhancement of ICE images
- Modular hardware design easy to upgrade

Or, if a portable version is a better fit for your hospital, the iLab System is also available in a cart-based configuration.

Whichever configuration you prefer, the iLab System suits your needs.

- Quickly and easily learn basic imaging techniques
- Compatible with all Boston Scientific ultrasound catheter platforms; Intracardiac (ICE), Intravascular (IVUS), and Peripheral.