Laparoscopic Ventral Hernia Repair Positioning System

**Ventralight™ ST** Mesh with **Echo 2™** Positioning System

**Designed for Accurate Mesh Centering**

Right Procedure. Right Product. Right Outcome.
A Consistent, Reproducible Technique

The ECHO 2™ Positioning System is a deployment and positioning device that comes attached to VENTRALIGHT™ ST Mesh and facilitates mesh positioning and centering over the hernia defect, for a consistent, reproducible technique.

The ECHO 2™ Positioning System is intended to aid with:

• Accurate mesh placement, positioning, and overlap\textsuperscript{1,3}
• Decreasing operative time\textsuperscript{1,3}

Accurate mesh overlap and centering can improve results

Literature suggests:

• Accurately centered mesh with appropriate overlap has shown to reduce the risk of mesh shift and recurrence.\textsuperscript{1,2}
• Inaccurate mesh overlap in laparoscopic ventral hernia repair can result in postoperative mesh shift and recurrence.\textsuperscript{1,2}

**Ventralight™ ST Mesh**
Monofilament polypropylene mesh with absorbable hydrogel barrier based on Sepra® Technology with more than 10 publications and used clinically since 2007.¹

**Echo 2™ Positioning System**
Deployment and positioning device designed for accurate mesh centering and overlap.

**Patented Positioning Frame**
Includes "Remove" symbol indicating where to grasp frame for removal from body

**Center Hoisting Suture**
Used to hoist mesh against abdominal wall for centering and positioning

**Introducer Tool**
Facilitates rolling and insertion down trocar

**Long Axis Indicators**
Visual indicator for long-axis of mesh to aid in positioning

¹ References available upon request.
# Six Steps for Consistent, Reproducible Technique

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>1</strong></td>
<td><strong>Hydrate</strong></td>
</tr>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td>Hydrate mesh for 1-3 seconds.</td>
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<tr>
<td><strong>2</strong></td>
<td><strong>Roll &amp; Deploy</strong></td>
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<tr>
<td><img src="image2.png" alt="Image" /></td>
<td>Roll device with introducer tool and insert through trocar into the body.</td>
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<tr>
<td><strong>3</strong></td>
<td><strong>Hoist</strong></td>
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<tr>
<td><img src="image3.png" alt="Image" /></td>
<td>Once the device is deployed, retrieve the hoisting suture through the center of the hernia defect and hoist to abdominal wall.</td>
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<tr>
<td><strong>4</strong></td>
<td><strong>Position &amp; Center</strong></td>
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<tr>
<td><img src="image4.png" alt="Image" /></td>
<td>Once approximated to the defect, clamp the hoisting suture with hemostat and position mesh as necessary.</td>
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<tr>
<td><strong>5</strong></td>
<td><strong>Fixate</strong></td>
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<td><img src="image5.png" alt="Image" /></td>
<td>Fixate around the entire perimeter with fasteners placed 1-2cm apart.</td>
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<tr>
<td><strong>6</strong></td>
<td><strong>Remove Frame</strong></td>
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<tr>
<td><img src="image6.png" alt="Image" /></td>
<td>Remove hemostat, cut hoisting suture and pull frame off the mesh and remove through trocar. Place additional fixation as needed.</td>
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</table>
Literature supports the use of hernia mesh positioning systems

"There are now (positioning) devices available that greatly aid in the correct positioning of mesh against the abdominal wall. These devices not only aid in achievement of the correct overlap but, in my experience, also decrease the operative time."

"Use of the ECHO™ positioning system was associated with significantly less operation time (mean 14 vs 26 minutes; P < 0.001)."

"Fewer maneuvers reduce the risk of organ damage, especially in centers with less experience with larger hernias."

"A considerable amount of time savings was demonstrated during intracorporeal mesh placement and orientation within the abdomen."
Ventralight™ ST Mesh with Echo 2™ Positioning System

**Indications**

Ventralight™ ST Mesh is indicated for use in the reconstruction of soft tissue deficiencies, such as for the repair of hernias. The Echo 2™ Positioning System is intended to facilitate the delivery and positioning of the soft tissue prosthesis during laparoscopic hernia repair.

**Contraindications**

Do not use the device in infants, children or pregnant women, whereby future growth will be compromised by use of such material. Do not use for the reconstruction of cardiovascular defects. Literature reports there is a possibility for adhesion formation when the polypropylene is placed in direct contact with the bowel or viscera.

**Warnings**

The use of any synthetic mesh in a contaminated or infected wound can lead to fistula formation and/or extrusion of the mesh and is not recommended. If an infection develops, treat the infection aggressively. Consideration should be given regarding the need to remove the mesh. Unresolved infection may require removal of the mesh. Ventralight™ ST Mesh is the only permanent implant component of the device. The Echo 2™ Positioning System (which includes deployment frame, center hoisting suture and all connectors) must be removed from the patient and appropriately discarded. It is not part of the permanent implant. Do not apply sharp, pointed, cautery devices, or ultrasonic tools (such as scissors, needles, tackers, diathermic tools, etc.) to the Echo 2™ Positioning System frame. The device contains superelastic nitinol wire; do not cut and avoid direct contact/coupling with active surgical electrodes. The Echo 2™ Positioning System should not be used with any other hernia prosthesis aside from those with which it comes pre-attached/packaged.

**Precautions**

Do not trim the mesh. This will affect the interface between the mesh and the positioning system. Visualization must be maintained throughout the course of the entire surgical procedure. Additionally, laparoscopic removal of the Echo 2™ Positioning System frame must be performed under sufficient visualization of the entire device and surrounding anatomy, to ensure proper removal.

**Adverse Reactions**

Possible complications may include, but are not limited to, seroma, adhesion, hemotoma, pain, infection, inflammation, extrusion, erosion, migration, fistula formation, allergic reaction and recurrence of the hernia or soft tissue defect.

To learn more, contact your local Bard Representative or call 1.800.556.6275.

Please consult package insert for more detailed safety information and instructions for use.

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