YOU SPECIALIZE IN THORACIC SURGERY. SO DO WE.

Introducing a multifunctional bipolar vessel sealer designed specifically for thoracic procedures\textsuperscript{1-5}

LigaSure™ Maryland Jaw Thoracic Sealer/Divider

Medtronic Further, Together
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FEEL SECURE KNOWING YOUR DEVICE IS INDICATED FOR SEALING PULMONARY ARTERIES AND VEINS.\(^6\)

We’re working hard to transform lung health — from identifying patients earlier to optimizing treatment to accelerating recovery. It’s why we’re committed to offering a comprehensive suite of technologies tailored for thoracic surgery.

Introducing the first — and only — minimally-invasive LigaSure™ device specifically indicated for sealing pulmonary veins and arteries up to 7 millimeters.\(^7,†\)

**The LigaSure™ Maryland jaw thoracic device.**

It’s an exciting addition to our Valleylab™ energy family — and it’s part of our commitment to advancing care in the thoracic space.

\(^†\)As of March 23, 2018, based on indications for use for laparoscopic LigaSure™ devices.
ENHANCED BLUNT DISSECTION.
RELIABLE VESSEL SEALING.  
EFFICIENCY IN THE OR.  

One instrument. Four functions.

The LigaSure™ Maryland jaw thoracic device delivers all the clinical benefits of LigaSure™ technology — in a design made for thoracoscopic and VATS procedures.1–5

With the LigaSure™ thoracic device you get intuitive control9,10,† and the functionality of:

- A one-step vessel sealer6
- A Maryland dissector for enhanced blunt dissection9,10,‡
- An atraumatic grasper to securely grasp tissue9,10,§
- Cold scissors to leave the critical decision to cut in your hands6,9

Proven technology, proven reliability

While the LigaSure™ Maryland jaw thoracic device is a recent advancement, the technology that powers it has been tested in more than 19 million procedures.12,††

LigaSure™ vessel-sealing technology works by using the body's own collagen and elastin to create a permanent seal that can withstand three times normal pulmonary systolic blood pressure.13 With the LigaSure™ thoracic device you can seal:

- **Pulmonary vasculature** up to and including 7 mm1–5
- Lymphatics
- Tissue bundles

LigaSure™ technology also eliminates the guesswork — and minimizes thermal spread9,14,‡‡ — by automatically discontinuing energy delivery when the seal cycle is complete.15

100% of surgeons surveyed agreed:
The LigaSure™ Maryland device provides efficiency throughout the procedure.9,11,Ω

†31 of 33 surgeons surveyed after use agreed when compared to the surgeon’s primary device.
‡23 of 32 surveyed after use agreed when compared to surgeon’s primary device.
§33 of 32 surgeons surveyed after use agreed.
Ω32 of 32 surgeons surveyed after use agreed.
††Based on global data from FY01 through FY17.
‡‡Based on systemic vasculature. Compared to Olympus Thunderbeat™.
DESIGNED FOR THORACIC SURGERY

Introduce the benefits of LigaSure™ technology to your thoracic procedures

30 cm shaft designed specifically for access to the thoracic cavity

Maryland-style jaw with:
• Specifications optimized for sealing pulmonary vessels
• A proprietary nano-coating to reduce sticking, eschar buildup, and cleanings compared to devices without nano-coating
• A curved profile to improve access, visualization, and to allow for easy skeletonization of vessels

Handle design and activation button to allow for minimal steps when sealing and dividing

Confidence, control, and efficiency

The LigaSure™ Maryland jaw thoracic device is powered by the Valleylab™ FT10 energy platform, which:
• Makes LigaSure™ devices better — and faster — than ever
• Reads tissue 434,000 times per second — and automatically adjusts energy output to maintain the desired clinical effect

†Compared to legacy LigaSure™ device. Tissue sticking to device jaws instances measured over 110 seals per device (ForceTriad™ energy platform). LF1930T is only compatible with the Valleylab™ FT10 energy platform. §Eschar buildup assessed using optical imaging analysis after 60 seal and divide cycles. §§Cleaning effectiveness assessed after each of two cleaning cycles. §§§29 of 32 surgeons surveyed after use agreed. §§§29 of 32 surgeons surveyed after use agreed.

5
COOLER THAN THE COMPETITION. WITH FEWER CLEANINGS.

The LigaSure™ Maryland jaw thoracic device is the only minimally invasive advanced energy LigaSure™ device specifically indicated for sealing pulmonary veins and arteries. It outperforms other devices in key areas.

LESS THERMAL SPREAD

The LigaSure™ thoracic device produces significantly less thermal spread than the Olympus Thunderbeat™.

COOLER JAW TEMPERATURE

222°C
Harmonic™ HD 1000i after a single activation

64°C
LigaSure™ thoracic device after a single activation

FASTER COOLDOWN

0.3 SEC SECONDS
LigaSure™ Maryland thoracic device

39.6 SEC SECONDS
Harmonic™ HD 1000i

NANO-COATED ENABLES GREATER EFFICIENCY

The LigaSure™ thoracic device has our proprietary nano-coating on the jaws. That means less eschar buildup and fewer cleanings can enable greater procedural efficiency. Plus, the nano-coated LigaSure™ thoracic device:

- Reduces sticking by 97% compared to the Ethicon™ EnSeal G2 device
- Reduces sticking by 97% compared to the Voyant™ 5 mm Fusion device

†As of March 23, 2018, based on indications for use for laparoscopic LigaSure™ devices. †Seals performed on systemic vasculature. §Single activation. Harmonic™ HD 1000i was measured while using advanced hemostasis. All seals were performed on systemic vasculature. §Single activation. Harmonic™ HD 1000i was measured while using advanced hemostasis. All seals were performed on systemic vasculature. ††Eschar buildup assessed using optical imaging analysis after 60 seal and divide cycles. †††Rescoate relative to legacy, noncoated device. §§Cleaning effectiveness assessed after each of two cleaning cycles. ΩΩTissue sticking to device jaws instances measured over 110 seals per device (ForceTriad™ energy platform). LF1930T is only compatible with the Valleylab™ FT10 energy platform.
PROCEDURAL FOCUS: VATS LOBECTOMY

The LigaSure™ thoracic device is engineered to help you overcome challenges in video-assisted thoracoscopic surgeries (VATS).

THROUGHOUT THE PROCEDURE

<table>
<thead>
<tr>
<th>Procedural Step</th>
<th>LigaSure™ Thoracic Device Benefits</th>
<th>Clinical Literature</th>
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<tbody>
<tr>
<td>Mediastinal lymph node dissection</td>
<td>The jaw delivers improved access, tip visualization, and blunt dissection. These features address concerns about dissecting around recurrent laryngeal nerve and lymph nodes without causing damage.</td>
<td>“[Compared to an electrosurgical pencil,] the LigaSure™ device was associated to significant reduction of duration of both the mediastinal nodal dissection and the cumulative chest tube drainage.” –Martucci N, et al. 20</td>
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LUNG MOBILIZATION

<table>
<thead>
<tr>
<th>Procedural Step</th>
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<tr>
<td>Step 1 Lysis of adhesions and transection of</td>
<td>The multifunctionality of the device provides an efficient, versatile, hemostatic solution without opening an extra device.</td>
<td>“Although monopolar energy is widely used in thoracoscopic lung resections, bipolar energy has been shown to have better hemostatic potential with minimal thermal spread.” –Fikfak V, et al. 21</td>
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<td>the pulmonary ligament</td>
<td></td>
<td>“We believe that the short blunt curved tip facilitates hilar dissection of both simple and complex hilum and allowing for coagulation of tiny hilar vessels, which results in safe and efficient surgery.” –Fikfak V, et al. 21</td>
</tr>
<tr>
<td>Step 2 Dissection of the hilum to expose critical structures</td>
<td>The jaw shape of the LigaSure™ thoracic device delivers reliable vessel sealing with improved access, tip visualization, and blunt dissection.</td>
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DIVISION OF CRITICAL STRUCTURES

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</table>
| Step 3 Ligation and division of pulmonary arteries and veins | • Specifically designed for VATS procedures and pulmonary vasculature  
• Improved access and visibility  
• Reliable hemostasis  
• Effective blunt dissection  
• Multifunctionality may reduce instrument exchanges and procedure time | “During lung resection, pulmonary arteries and veins that are up to 5 and 7 mm in diameter, respectively, can be simply and safely sealed using energy vessel sealing system without reinforcement. Energy sealing has potential advantages to confer simpler vascular treatment, which could reduce intraoperative stress for surgeons.” –Okada M, et al. 22 |

†31 of 33 surgeons surveyed after use agreed. ‡Compared to surgeons’ primary device. §30 of 33 surgeons surveyed after use agreed when compared to surgeon’s primary device. Ω23 of 32 surgeons surveyed after use agreed. ††20 of 32 surgeons surveyed after use agreed. ††19 of 21 thoracic surgeons surveyed after use agreed when compared to their currently preferred method.
We offer comprehensive lung care solutions. Here is an example of how our technologies can make an impact on VATS lobectomies.

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<td>Mediastinal lymph node dissection</td>
<td>Step 1: Lysis of adhesions</td>
<td>Step 4: Divide bronchus</td>
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<td>Step 2: Dissect hilum</td>
<td>Step 5: Complete the fissure</td>
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<td>Step 3: Ligate and divide pulmonary vessels</td>
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**LigaSure™**
Maryland Jaw Thoracic Device

**Tri-Staple™**
2.0 Specialty Reloas
PRODUCT REQUEST FORM

I'm requesting the LigaSure™ Maryland jaw thoracic sealer/divider (LF1930T) for our facility so that I have consistent access to it for my thoracic cases.

The first — and only

The LigaSure™ Maryland jaw thoracic device is the only minimally invasive advanced energy LigaSure™ device specifically indicated for the sealing of pulmonary veins and arteries up to 7 mm.†

Multifunctional flexibility

The LigaSure™ Maryland jaw thoracic device delivers the reliable performance of LigaSure™ vessel-sealing technology. Plus, it:

▪ Is designed specifically for thoracoscopic/VATS/open procedures and pulmonary vasculature1–5
▪ Uses a proprietary nano-coating on the jaws to reduce sticking, eschar buildup, and cleanings6,11
▪ May reduce instrument exchanges6,7,5 and procedure time8,Ω
▪ Securely and atraumatically grasps tissue6,9,††
▪ Provides enhanced blunt dissection6,9,‡‡
▪ Allows for cutting independent of sealing6,10

I'm confident in using a technology that has been used in more than 19 million cases11 and is backed by a significant body of evidence-based research.

Thank you for reviewing this information. Please feel free to contact me if you have any questions.

Sincerely,

Additional comments:

†As of March 23, 2018, based on indications for use for laparoscopic LigaSure™ devices. †Compared to legacy, noncoated devices. §20 of 32 surgeons surveyed after use agreed. ††33 of 33 surgeons surveyed after use agreed. ‡‡23 of 32 surgeons surveyed after use agreed.

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TRANSFORM YOUR THORACIC PROCEDURES WITH ADVANCED ENERGY.

Contact your sales representative for more information about the first — and only — minimally invasive LigaSure™ device specifically indicated for pulmonary vessels.

Ordering information
LF1930T, six per case

†As of March 23, 2018, based on indications for use for laparoscopic LigaSure™ devices.

2. Based on internal test report #RE00125966, Jaw force and gap range burst pressure evaluation of EB4 thoracic Maryland device (LF1930T); conducted on bovine tissue. Nov. 20–21, 2017 and Nov. 27–30, 2017.
10. Based on internal test report #RE00125966, Jaw force and gap range burst pressure evaluation of EB4 thoracic Maryland device (LF1930T); conducted on bovine tissue. Nov. 20–21, 2017 and Nov. 27–30, 2017.
11. Based on internal test report #RE00125966, Jaw force and gap range burst pressure evaluation of EB4 thoracic Maryland device (LF1930T); conducted on bovine tissue. Nov. 20–21, 2017 and Nov. 27–30, 2017.
12. Based on internal test report #RE00125966, Jaw force and gap range burst pressure evaluation of EB4 thoracic Maryland device (LF1930T); conducted on bovine tissue. Nov. 20–21, 2017 and Nov. 27–30, 2017.
17. Based on internal test report #RE00071599, LF19XX MJC marketing claims testing conducted on porcine tissue. Feb. 7–22, 2017.