Echelon Flex[™]

Powered Vascular Stapler

with Advanced Placement Tip Thin. Nimble. And incredibly precise.





By aligning our devices to the surgical treatment pathway, we can ensure you have the right solutions for the right procedure.



Ligating the pulmonary artery and vein is the most challenging step in a thoracic procedure. The pulmonary vessels are not only thin and fragile structures, but they are also challenging to access using existing stapling devices. Surgeons take special precautions to avoid complications such as inadvertent tissue damage, as this can result in major bleeding in locations where repair is difficult to perform. The ECHELON FLEX[™] Powered Vascular Stapler with Advanced Placement Tip has been designed specifically for thoracic surgeons and delivers unprecedented precision during every step of a vessel ligation: access, placement and transection. Now surgeons can navigate into the tightest spaces within the thoracic cavity.



Key surgical concerns

- Facilitate access to the targeted vascular structures in constraint spaces such as the thoracic cavity
- Minimise the risk of damaging critical anatomical structures adjacent to the surgical site

Main device benefits

- A 26% narrower anvil with a blunt curved tip provides greater manoeuvrability² around fragile vessels as well as improved visibility³
- A 26% thinner shaft offers greater flexibility in the intercostal space and a better reach inside the thoracic cavity⁴. This may help spare the intercostal nerve bundle when torqueing is needed⁵
- Virtually effortless, powered firing reduces inadvertent movement at the tip of the stapler by 83% during the transection of vascular tissue, potentially resulting in less trauma⁶





1 Narrow, curved-tip anvil

The 7mm-wide anvil with a blunt curved tip is designed for blunt dissection and precise placement⁶ on the targeted vessel



2 Thin shaft

The 9mm shaft enhances the angle of reach when used without a trocar in the intercostal space



Active articulation

The 50° manual articulation enables flexible placement of the stapler on the targeted vessel



4 Vascular cartridge

The vascular cartridge provides reliable staple formation across a broader range of tissue thicknesses.⁷

5 Device stability

The disposable battery pack enables effortless, powered firing, thus reducing inadvertent movement at the tip of the stapler

6 Dual safety system (1)

The knife reverse switch provides the ability to return the knife before the end of the firing process

7 Dual safety system (2)

The manual override ensures full surgeon control in the event of a power loss⁸







Greater manoeuvrability in constraint spaces and flexibility during placement

The narrow anvil with a blunt, curved tip allows for blunt dissection and may reduce the amount of dissection required around the vessel to place the stapler⁹, potentially resulting in less trauma to surrounding tissue.¹⁰



The blunt, curved anvil tip also improves visibility³ and, in combination with the greater angle of articulation¹¹, enables precise placement of the stapler on the targeted vessel.

More Flexibility During Placement Provides 11% greater manual articulation in each direction*



*The ECHELON FLEX[™] Powered Vascular Stapler with Advanced Placement Tip is designed to provide an additional 10° of total articulation, providing a span of 100° (50° in each direction), compared to the Endo GIA[™] Curved Tip Relead with Tri-Staple[™] Technology that provides 45° of articulation in each direction. Based on articulation data from IFUs of each device.

The thin shaft increases the angle of access by about 44° and provides greater freedom of movement for navigation into tight spaces in the thoracic cavity.⁴



Code Description Quantity per Sales Unit PVE35A 30mm Standard Articulating Endoscopic Linear Cutter, 320mm² 3

ENDOPATH ECHELON[™] Vascular White Reload:



| Code | Color | Description | Open Staple Height | Staple Rows | Closed Staple Height | Quantity per Sales Unit |
|----------|-------|---|--------------------------|----------------|----------------------------|-------------------------------|
| VASECR35 | White | White reload intended for use in vascular/thin tissue | 2.5mm | 4 | 1.0mm | 12 |

¹ also indicated for gynaecologic, urologic, and paediatric surgery

- ² 022305-141001. When compared to the Endo GIA™ Curved Tip Reload with Tri-Staple™ Technology
- ³ 022308-141001. Compared to straight tip design.
- ⁴ 022307:141001. When compared to the Endo GIA™ Curved Tip Reload with Tri-Staple™ Technology. Approach angles assessed in a virtual CAD environment in the 5th intercostal space.
- ⁵ 026200-141210. The ECHELON FLEX™ Powered Vascular Stapler with Advanced Placement Tip (PVE35A) will,in a
- simulated model with its narrower 9mm shaft, reduce the pressure on the ribs in the area of the intercostal nerve bundle during instrument torqueing and angulation by up to 165% vs. a 12.1mm shaft. Range of reduction 44-165%, depending upon angle of shaft.
- ⁶ 022308-141001. The ECHELON FLEX^{IIII} Powered Vascular Stapler with its narrow blunt curved tip and reload jaw allows for enhanced visualization and confirmation of positioning the anvil precisely behind the vessel. Compared to straight tip design.
- ⁷ COOOOOO1573. Benchtop testing on porcine carotid arteries. Surgeons (n=24) fired each instrument / reload once: PSE45A/ECR45W and EGIAUSTND/EGIA45AVM. Distal tip motion measurement during the firing cycle showed a median reduction of 83% and a range of reduction of 53% to 96% in tip movement of PSE45A/ECR45W vs. EGIAUSTND/EGIA45AVM.
- ⁸ Using the manual override will disable the device. It cannot be used for any subsequent firings.
- ⁹ The ETHICON ECHELON FLEXTM Powered Vascular Stapler has the potential to reduce the amount of dissection required (otomy) around the vessel to place the stapler, compared to the EndoGia Curved Tip and the ECHELON FLEXTM Powered ENDOPATH[®] 45mm Stapler [as evaluated by surgeons in questionnaire following usage in animate porcine labs] (p<0.05 for both devices).
- ¹⁰ Reducing the amount of dissection required (otomy) around a structure to place the stapler potentially reduces the risk of trauma that may occur during dissection
- ^{II} Compared to the Endo GIA[™] Curved Tip Reload with Tri-Staple[™] technology. Based on articulation data from IFUs of each devicedoes not contain a reload

Please always refer to the Instructions for Use / Package Insert that come with the device for the most current and complete instructions.

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