

VENTRAL HERNIA REPAIR

Procedural set up guide for use with AXIUS 8mm Needle Driver

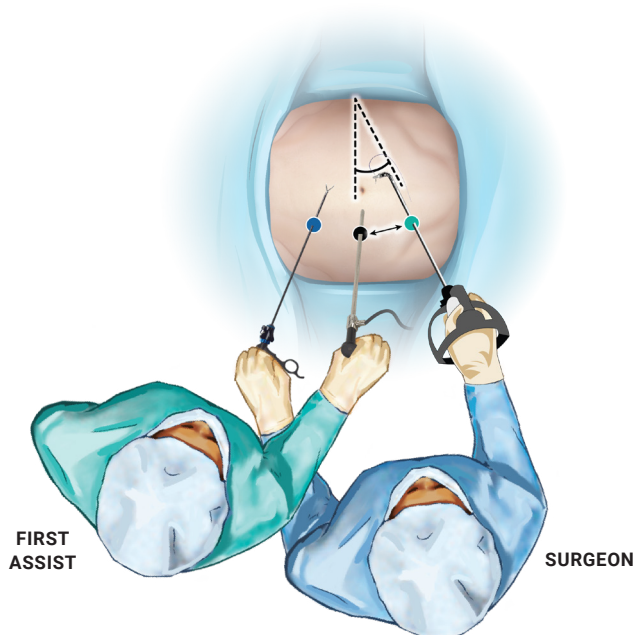
Recommended AXIUS shaft length: **MEDIUM**

CLINICAL & USER ADVANTAGES

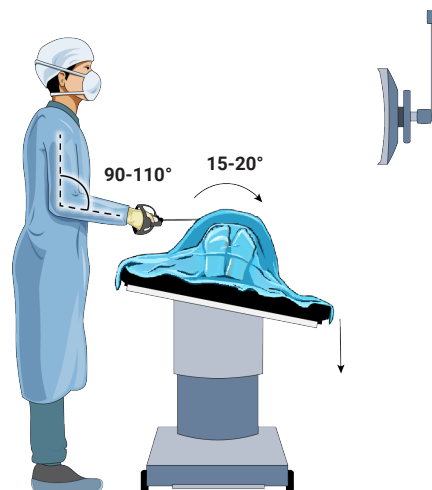
- ▶ **Allows fascial defect closure and mesh fixation on the anterior abdominal wall**
 - Challenging angles with traditional laparoscopic needle drivers
 - Allows suturing over tacking, to reduce potential patient pain/discomfort caused by tacks
- ▶ **Provides precision and dexterity required for delicate peritoneal closure** (retrorectus approach)
- ▶ **Improved quality of suturing and surgeon ergonomics compared to traditional laparoscopic needle drivers¹**

GENERAL PRINCIPLES FOR ALL AXIUS PROCEDURES

- ▶ **Surgeon to always use AXIUS in their dominant hand**
- ▶ **To avoid external collisions:**
 - Reduce cross-over of AXIUS shaft with camera:
 - If AXIUS used in surgeon's right hand, first assist stands on left of surgeon
 - If AXIUS used in surgeon's left hand, first assist stands on right of surgeon
 - Space trocars appropriately (approximately 8cm distance) to reduce collisions
- ▶ **Triangulation is required to maintain good vision of needle:**
 - Avoid placement of AXIUS trocar in same line of camera view
 - Always approach tissue from an angle



ERGONOMIC CONSIDERATIONS FOR PATIENT & TABLE SET-UP



- ▶ **Secure patient** toward the edge of the table with their arms tucked (see back page) to optimize space for AXIUS
- ▶ **Rotate table** away from the surgeon (the further the better) for a more horizontal AXIUS shaft approach
- ▶ **"Break the bed"** to increase the working space between the patient's ribs and hip
- ▶ **Adjust the operating table height** during AXIUS use to maintain an elbow bend of 90-110°
- ▶ **"Dance with the device"** - Continue to adjust feet and body position throughout procedure to keep forearm in line with AXIUS shaft and upper arm next to body

SCAN QR CODE TO VIEW
VENTRAL HERNIA PROCEDURE VIDEO

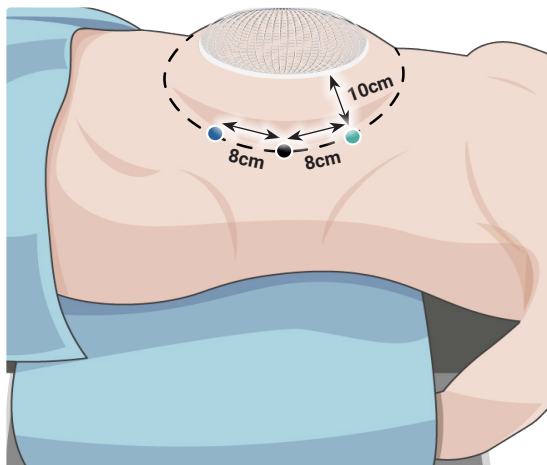


TROCAR PLACEMENT RULES

Recommendations shown are for hernia defects less than 5cm in size, located close to patient's midline, and not requiring component separation. For wider hernia defects or other hernia locations or approaches, adjustments in trocar placements may be required.

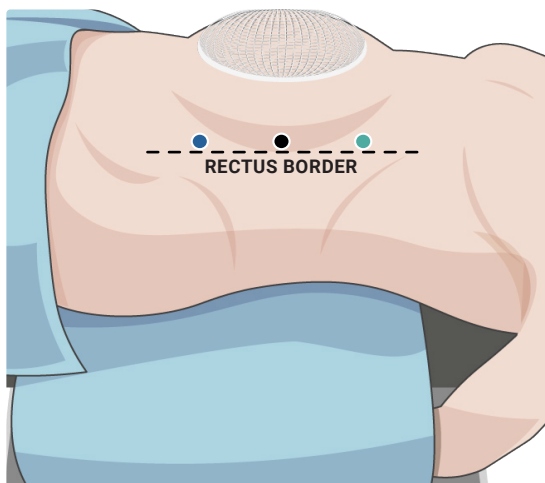
Below trocar placements show surgeon using AXIUS in right hand and operating from patient's left. Mirror placements when operating from patient's right or for left handed use of AXIUS.

IPOM APPROACH



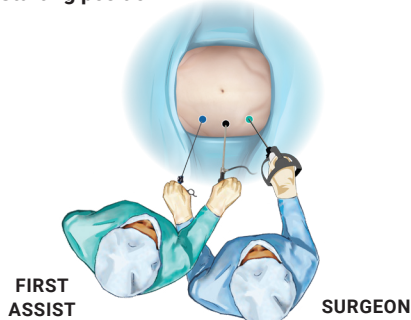
- ▶ **Trocars placed more lateral than standard placement** for optimal use of articulation and to avoid external collision of AXIUS frame with patient.
 - **Camera trocar (BLACK)**
 - Placed equidistant between patient's iliac crest and subcostal margin.
 - **AXIUS trocar (GREEN - 8mm+)**
 - Placed close to subcostal margin, at least 8cm superior to camera trocar and approximately 10cm lateral from expected mesh perimeter. This distance is important when closing the primary defect to ensure a good angle of approach.
 - **Secondary trocar (BLUE)**
 - Placed close to iliac crest, at least 8cm inferior to camera trocar.

RETRORECTUS APPROACH

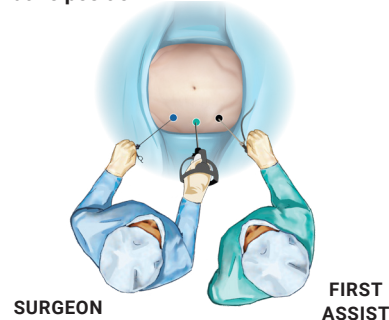


- ▶ **Trocars placed just medial of rectus border**, spaced approximately 8cm apart.
 - **Camera trocar (BLACK)**
 - Placed equidistant between patient's iliac crest and subcostal margin.
 - **Starting position:**
 - Suture the peritoneum from right to left, starting with AXIUS in most superior trocar (GREEN - 8mm+), with first assist standing on surgeon's left.
 - **When suturing furthest (most inferior) side of defect, mesh, or peritoneum:**
 - If unable to reach most inferior anatomy from starting position, AXIUS can be moved to the middle trocar (GREEN - 8mm+) for better reach, and the camera moved to the most superior trocar (BLACK), with first assist standing on surgeon's right.

Starting position



Alternative position



ADDITIONAL TIPS FOR ALL APPROACHES

- ▶ **Trocar sizes:** Use more than one 8mm trocar to allow AXIUS to move between trocars.
- ▶ **Camera trocar** and **secondary trocar** can be used interchangeably depending on surgeon preference. Using adjacent trocars reduces crossover with first assist and improves ergonomics, although reduced triangulation may reduce ease of access to surgical site.
- ▶ **Two handed technique:** Use your off hand to indent the abdominal wall while suturing to help obtain a better angle of attack.

CONSULT OPERATING INSTRUCTIONS

The information provided is to improve customer comfort while using the AXIUS 8mm Needle Driver. This is not intended to replace the Instructions for Use (IFU). The document is in no way intended to instruct on surgical techniques, nor does it relate to the safety and/or performance of the device. The instructions, indicated use, contraindications, warnings and precautions are provided in the IFU.

