

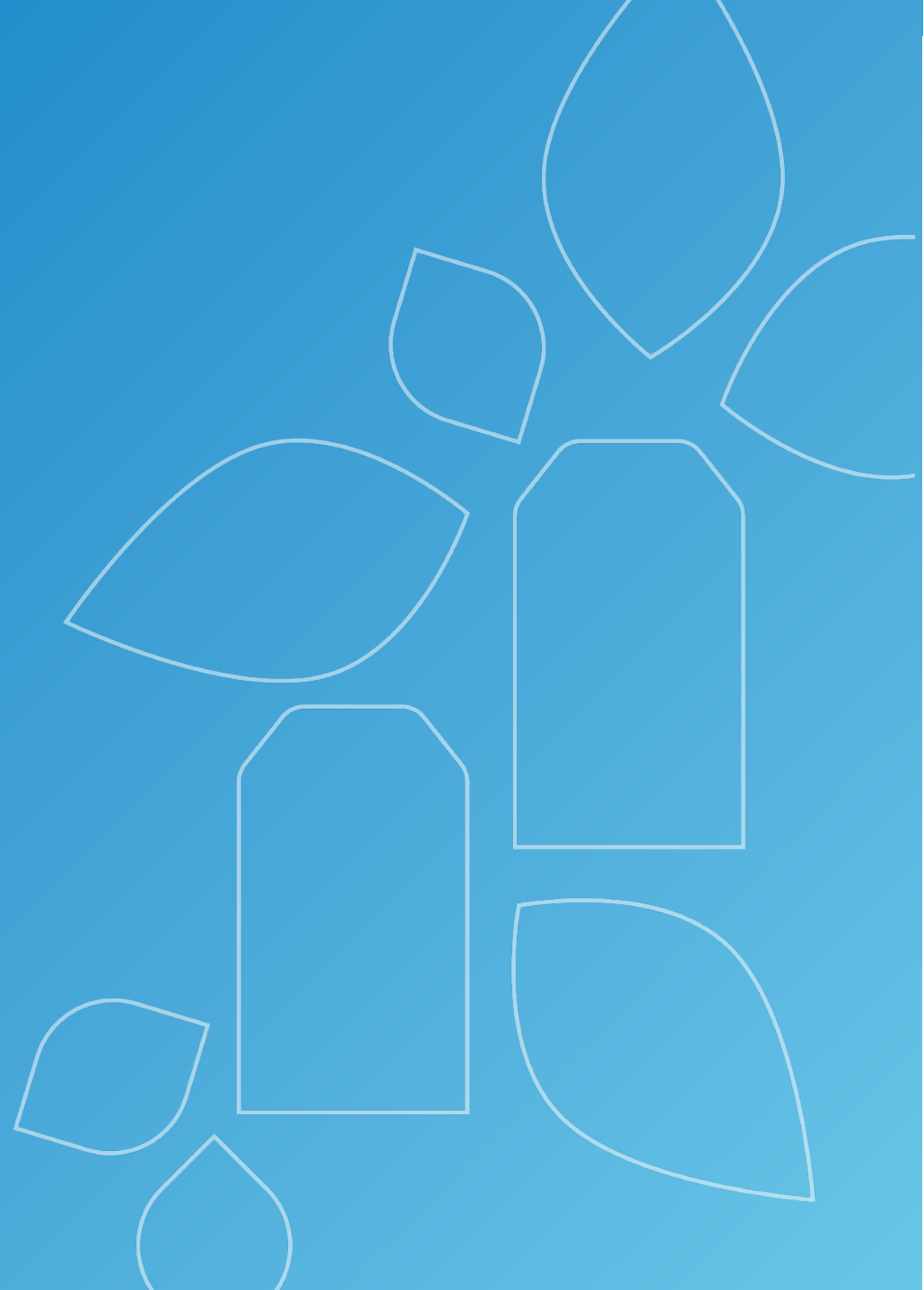


Southeastern Multidisciplinary Approaches to Cancer Symposium

Robotic Surgery Techniques in Colorectal Cancer

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City of Hope Atlanta



Disclosures

I do not have any relevant financial relationships.

This presentation and/or comments will provide a balanced, non-promotional, and evidence-based approach to all diagnostic, therapeutic and/or research related content.



Cultural Linguistic Competency (CLC) & Implicit Bias (IB)

STATE LAW:

The California legislature has passed Assembly Bill (AB) 1195, which states that as of July 1, 2006, all Category 1 CME activities that relate to patient care must include a cultural diversity/linguistics component. It has also passed AB 241, which states that as of January 1, 2022, all continuing education courses for a physician and surgeon **must** contain curriculum that includes specified instruction in the understanding of implicit bias in medical treatment.

The cultural and linguistic competency (CLC) and implicit bias (IB) definitions reiterate how patients' diverse backgrounds may impact their access to care.

EXEMPTION:

Business and Professions Code 2190.1 exempts activities which are dedicated solely to research or other issues that do not contain a direct patient care component.

The following CLC & IB components will be addressed in this presentation:

- *Gender and age*
- *Confirmation bias*



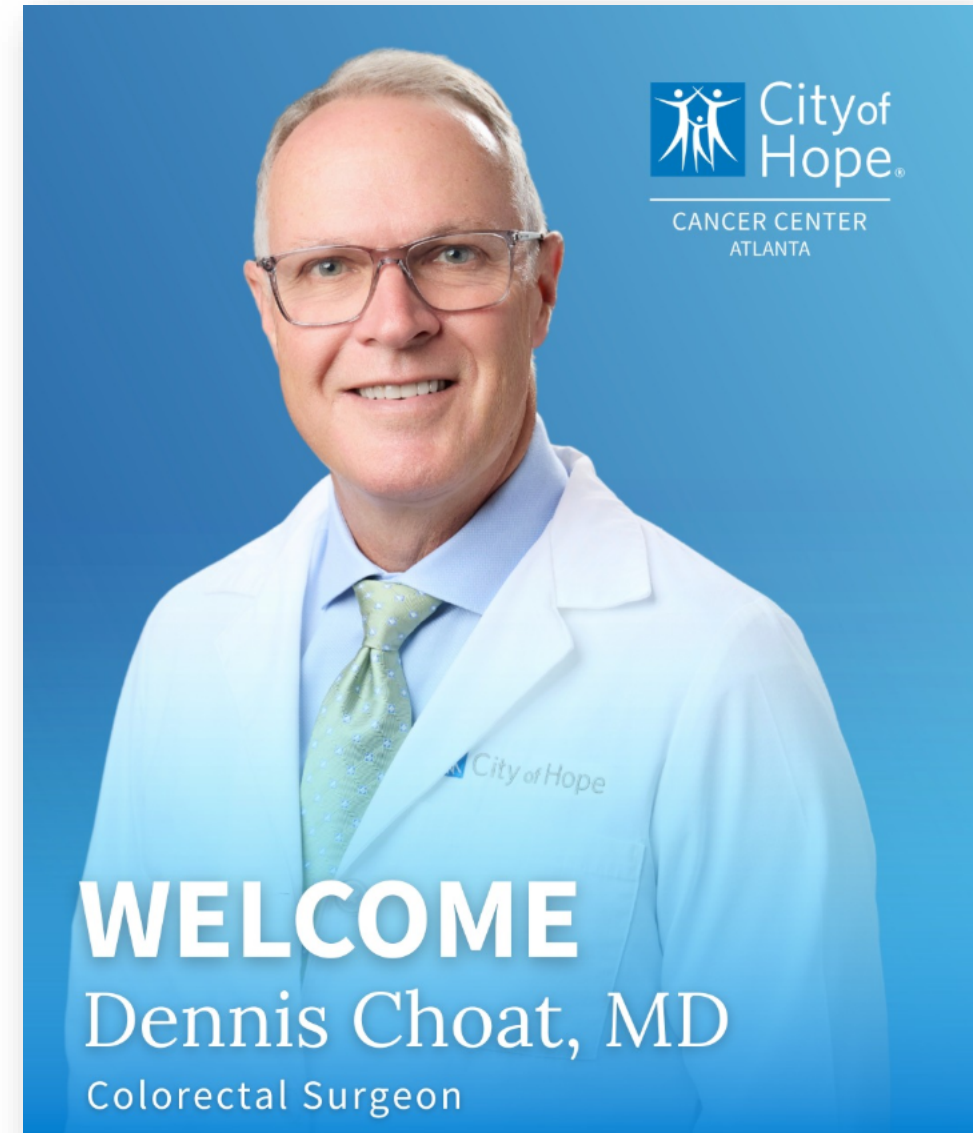
About me

Dennis Choat MD FACS FASCRS

Practicing surgery since 1998

Colorectal Surgeon

City of Hope Atlanta



Available Modalities

- Open Surgery
- Laparoscopic Surgery
- Laparoscopic Hand-Assist
- Robotic Surgery (Single to Multi-quadrant)
- Robotic NOS (Single site platform)-



Open Surgery

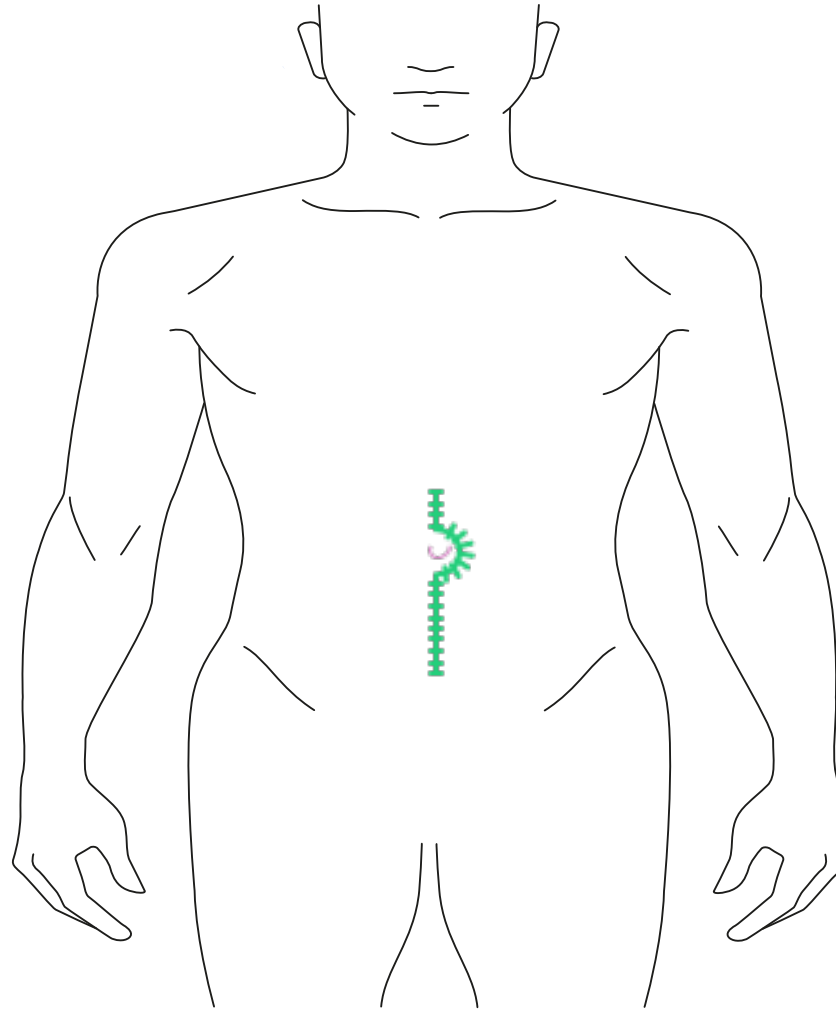
Large incisions

Physiologic stress

Painful

SSI, Pneumonia

Hernia Risk



Still plays a role

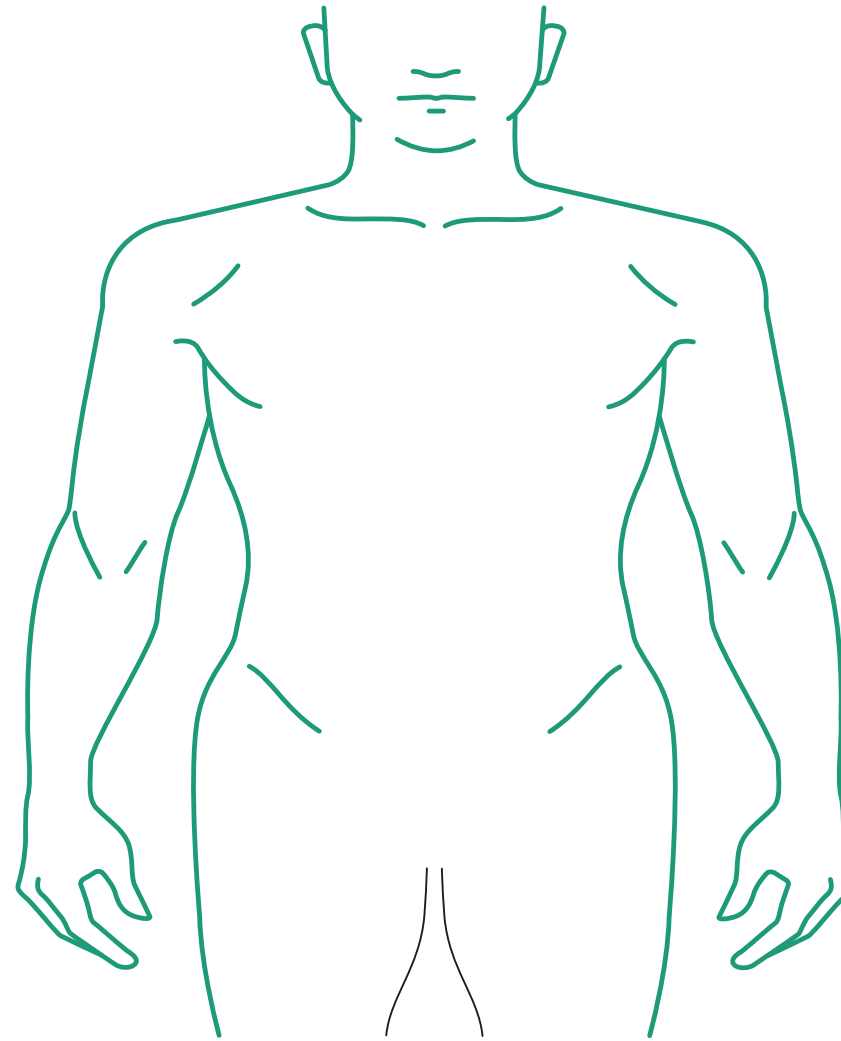
- **Still standard for advanced T4 disease**
- **Reliable for multi-visceral resection**
- **Higher morbidity may delay adjuvant therapy**

Tradeoff: Recovery vs. Completeness



Laparoscopic Surgery

- Lap-assisted
- Hand-assisted
- “Smaller” incisions
- Steep learning curve
- Extracorporeal anastomosis
- Established equivalence in colon cancer



Robotic Surgery

Console- Ergonomic, 3D HD

Tower- Energy, Insufflation

Robot- 4 Arms, Rotatable



Robotic Training

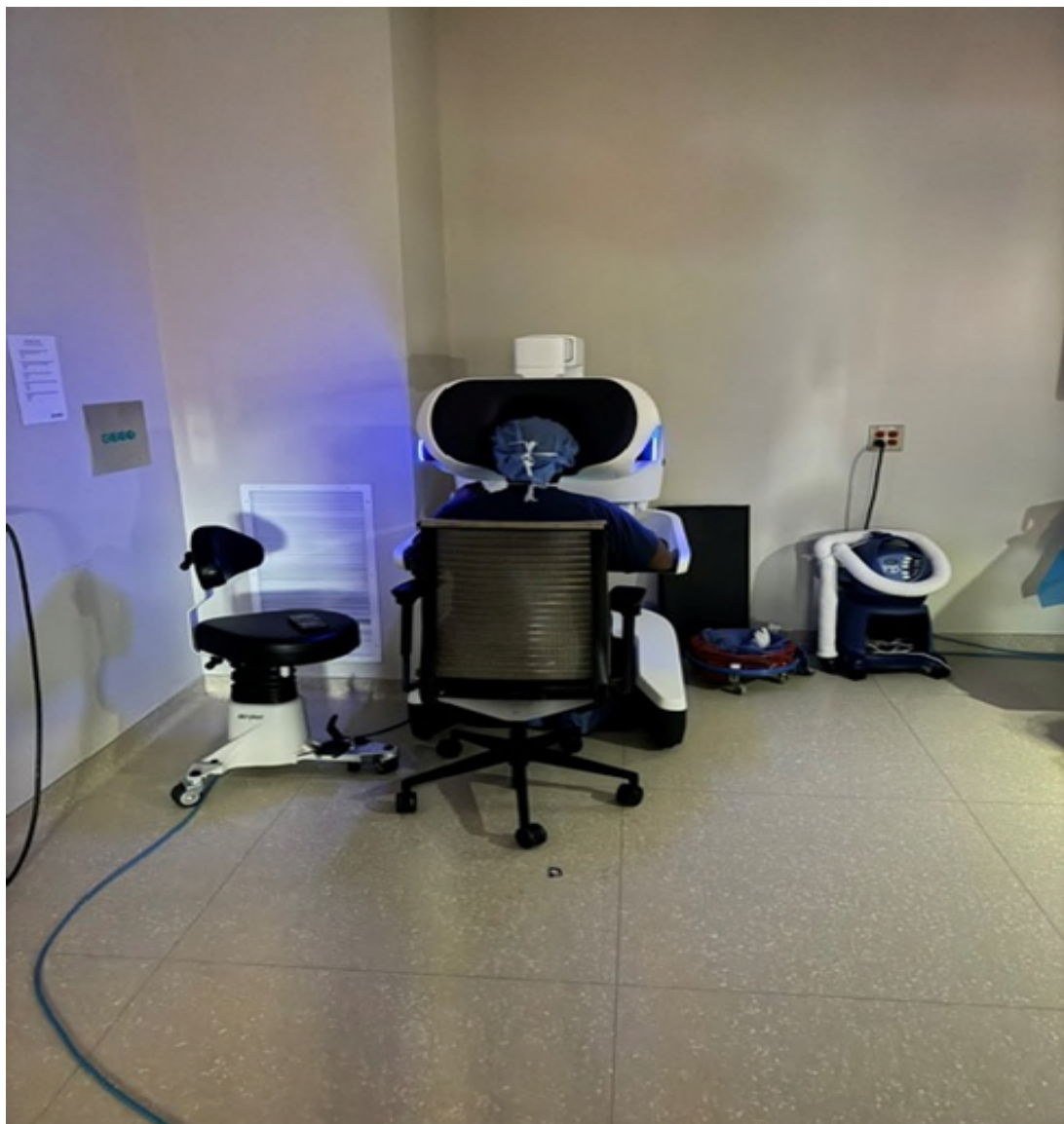
Leveling the learning curve:

- Watch videos
- Simulators
- Animal labs
- Immediate transition to live
- Proctoring



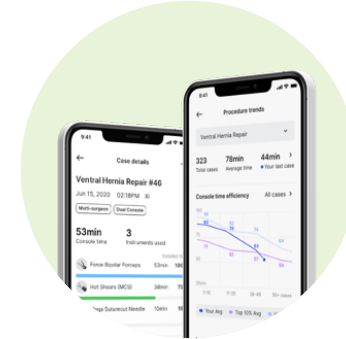
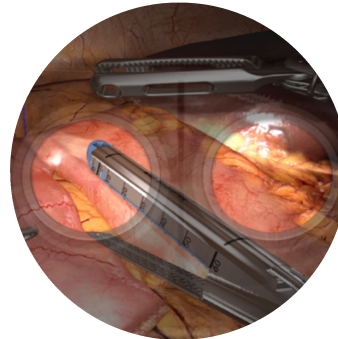
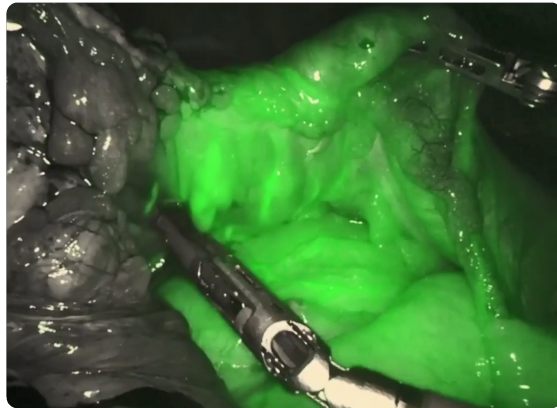
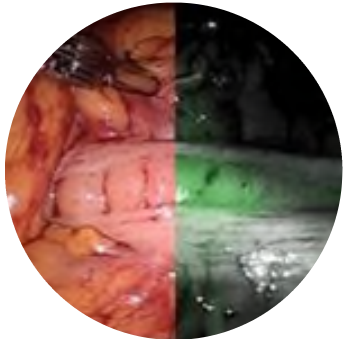
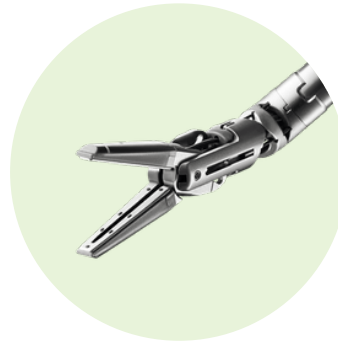
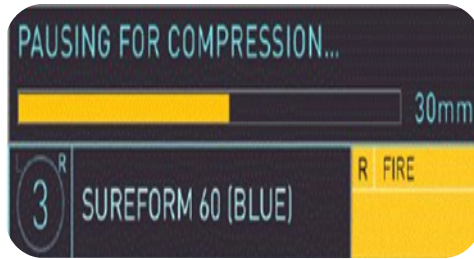
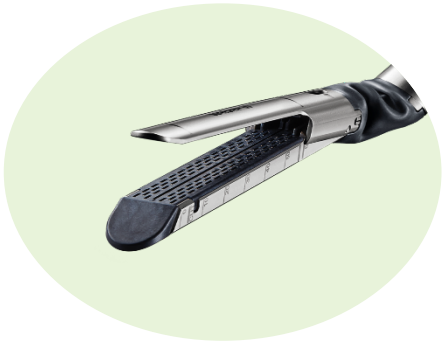






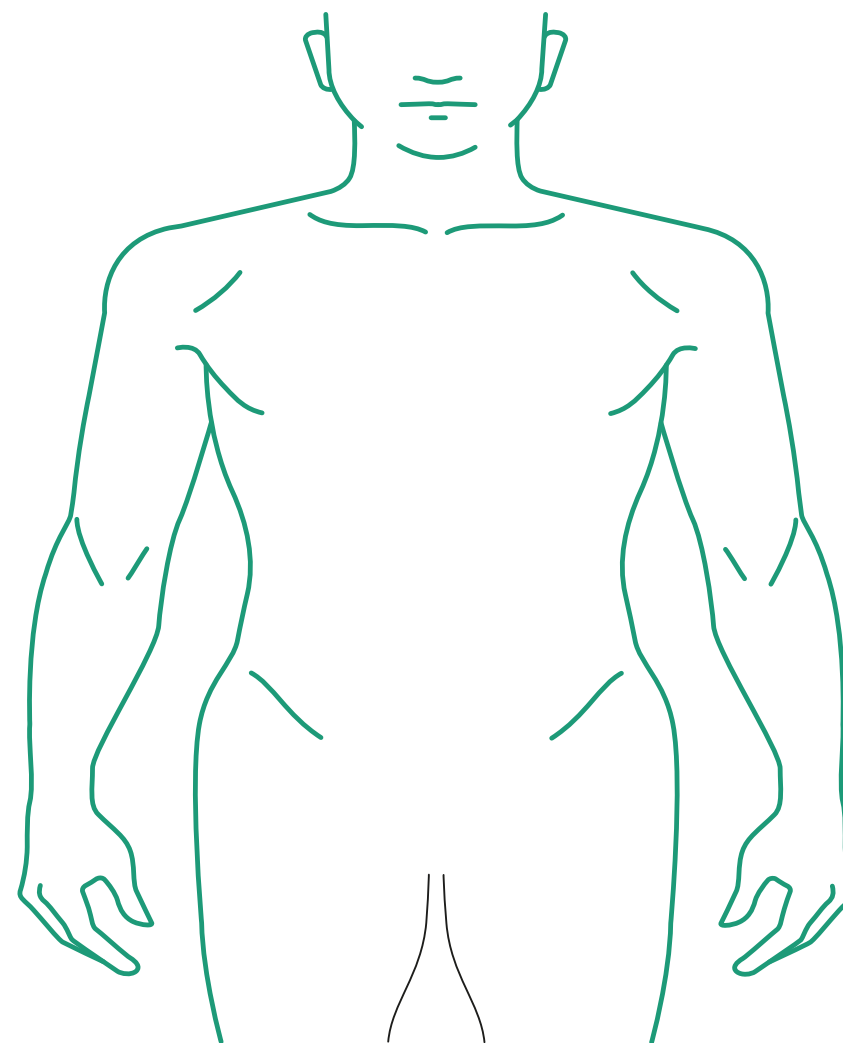
Advanced Technology

Instruments and Imaging



Goals of this Technology

- Intracorporeal anastomoses
- Small (<4 cm) incisions
- Less OR time
- Fewer infectious complications
- Less pain and therefore, less narcotic needs
- Decreased ileus
- Shorter LOS



ERAS Protocols

Preop:

Carbohydrate loading

Preoperative medications

Antibiotic and VTE prophylaxis

Intraop:

MIS

Normothermia

Euolemia

Avoid tubes and drains

Short-acting anesthetics

Post op:

Early feeding

Mobilization

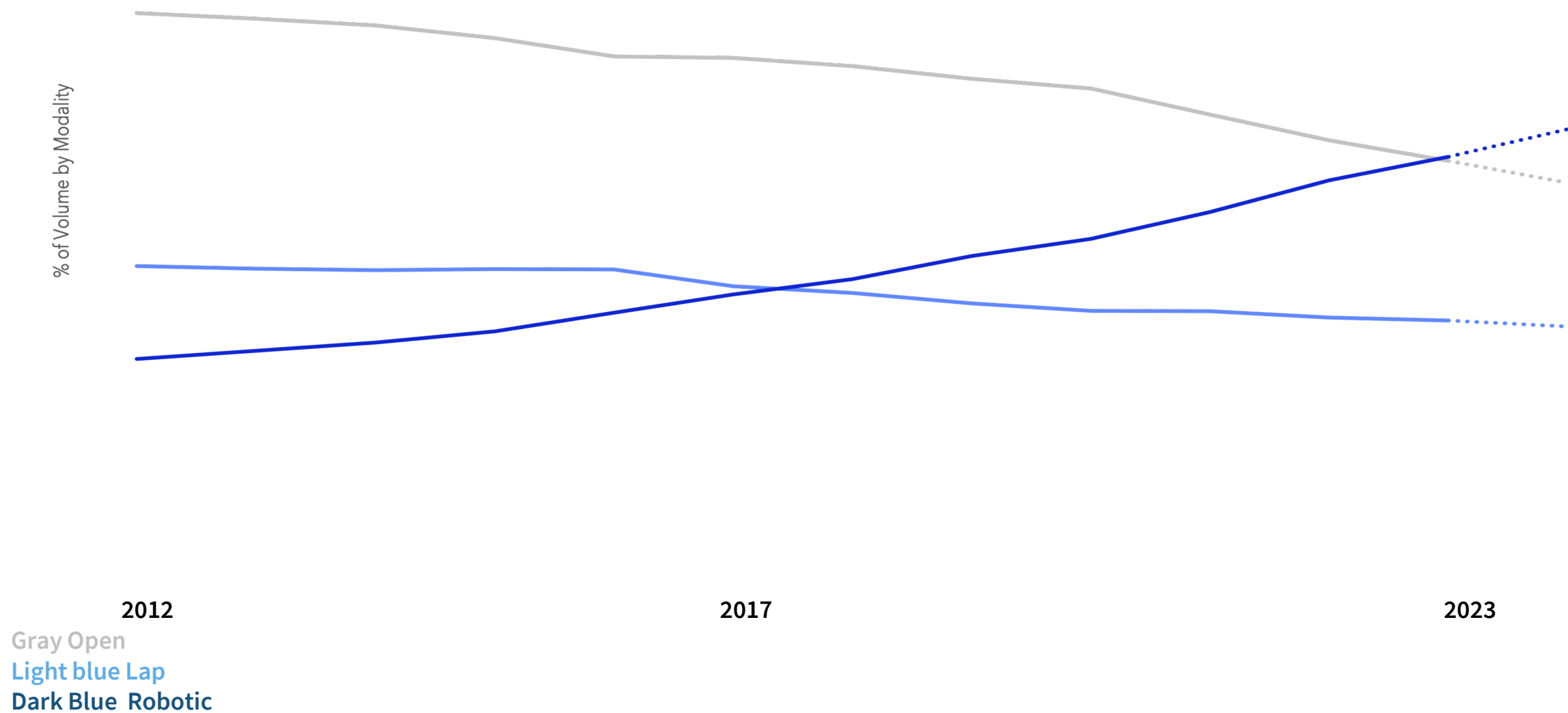
Opioid sparing

PONV prophylaxis

Gut stimulation



U.S. Case Modality - Colorectal



Robotic Pelvic Surgery

Enhanced dexterity in the pelvis

Better visualization for TME and nerve preservation

Maintain urinary and sexual function

Deeper accessibility



REAL Trial 2022-25

Largest RCT comparing Robotic vs. Lap for middle and low rectal cancers

Robotic offers:

- Lower CRM +; Higher R0 resections
- Lower Conversion Rates
- Fewer post op complications
- Lower 3-year locoregional recurrence

The Lancet Robotic vs. Lap surgery for middle and low rectal cancer (REAL): short-term outcomes of a multicenter RCT.. Gastroenterology & Hepatology **2022** Li, T
JAMA 2025



Results

P=0.03 LRR

JAMA[®]

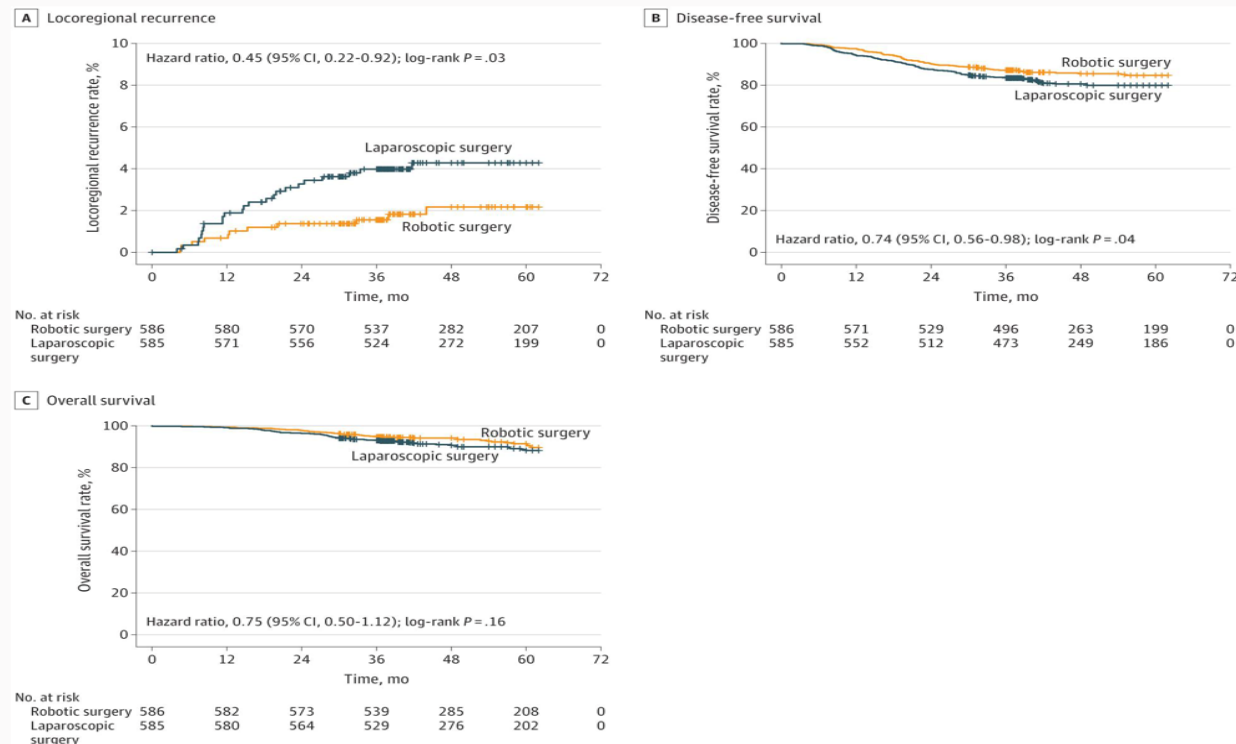
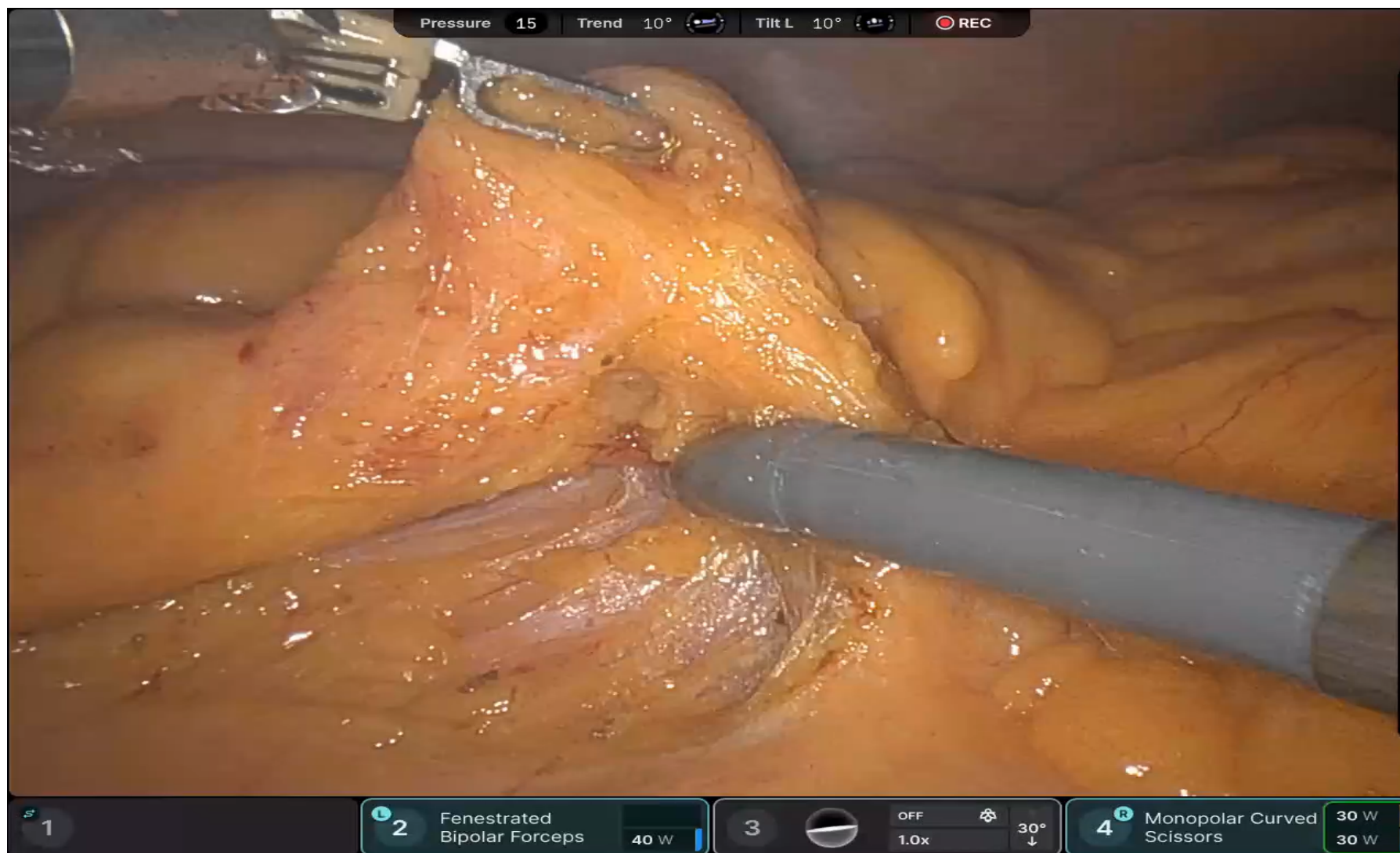
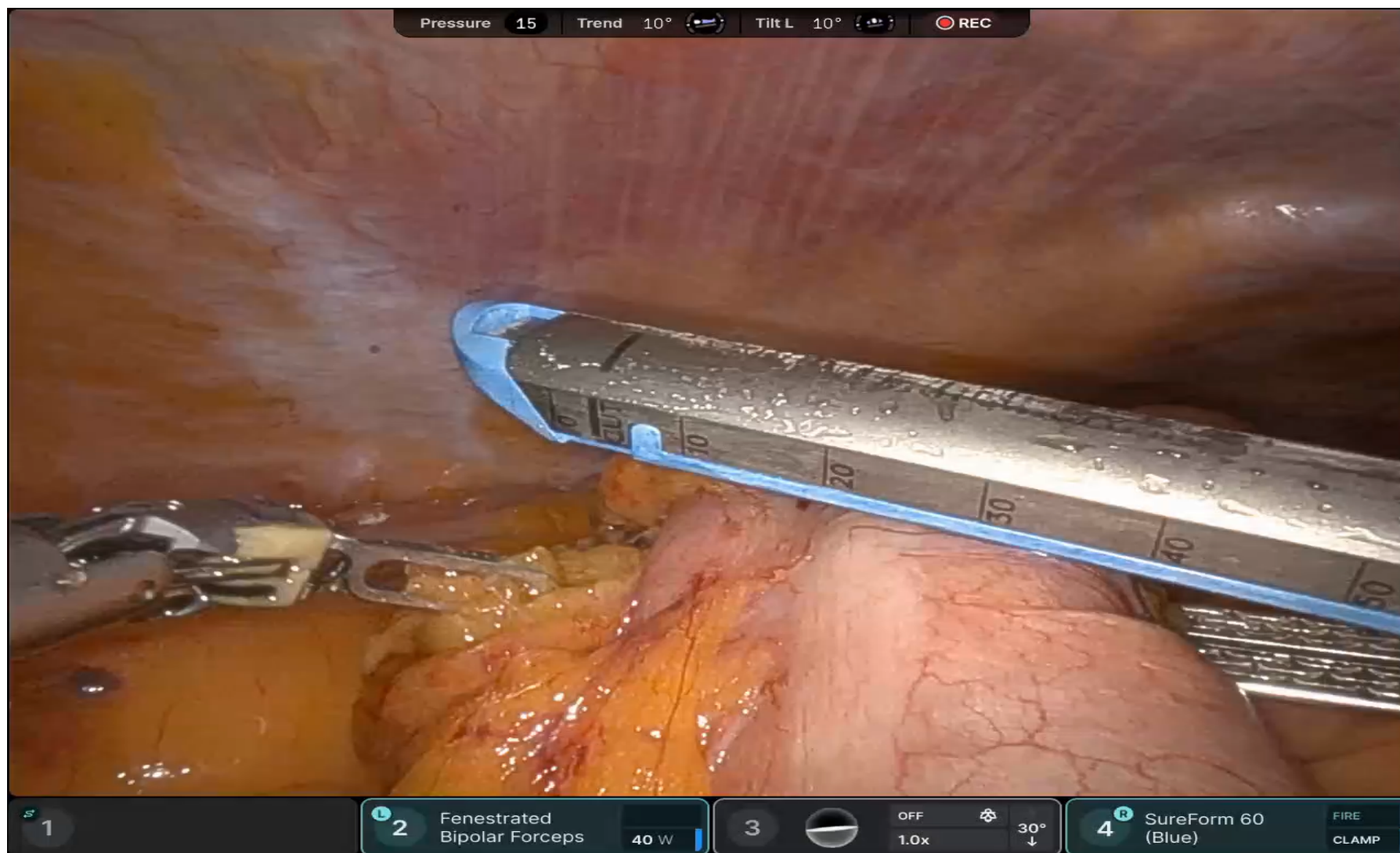


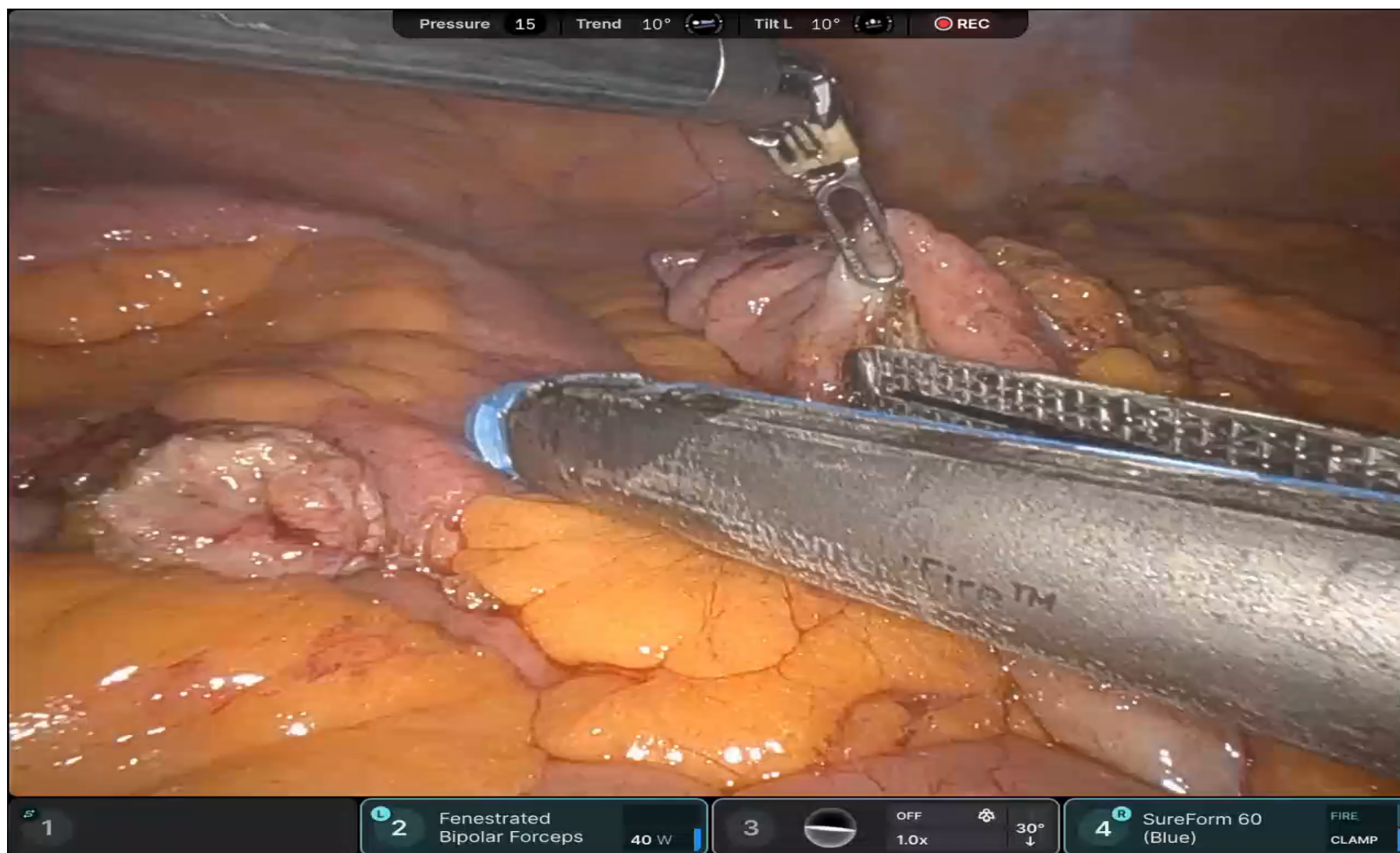
Figure 2. Oncological Outcomes at 3 Years

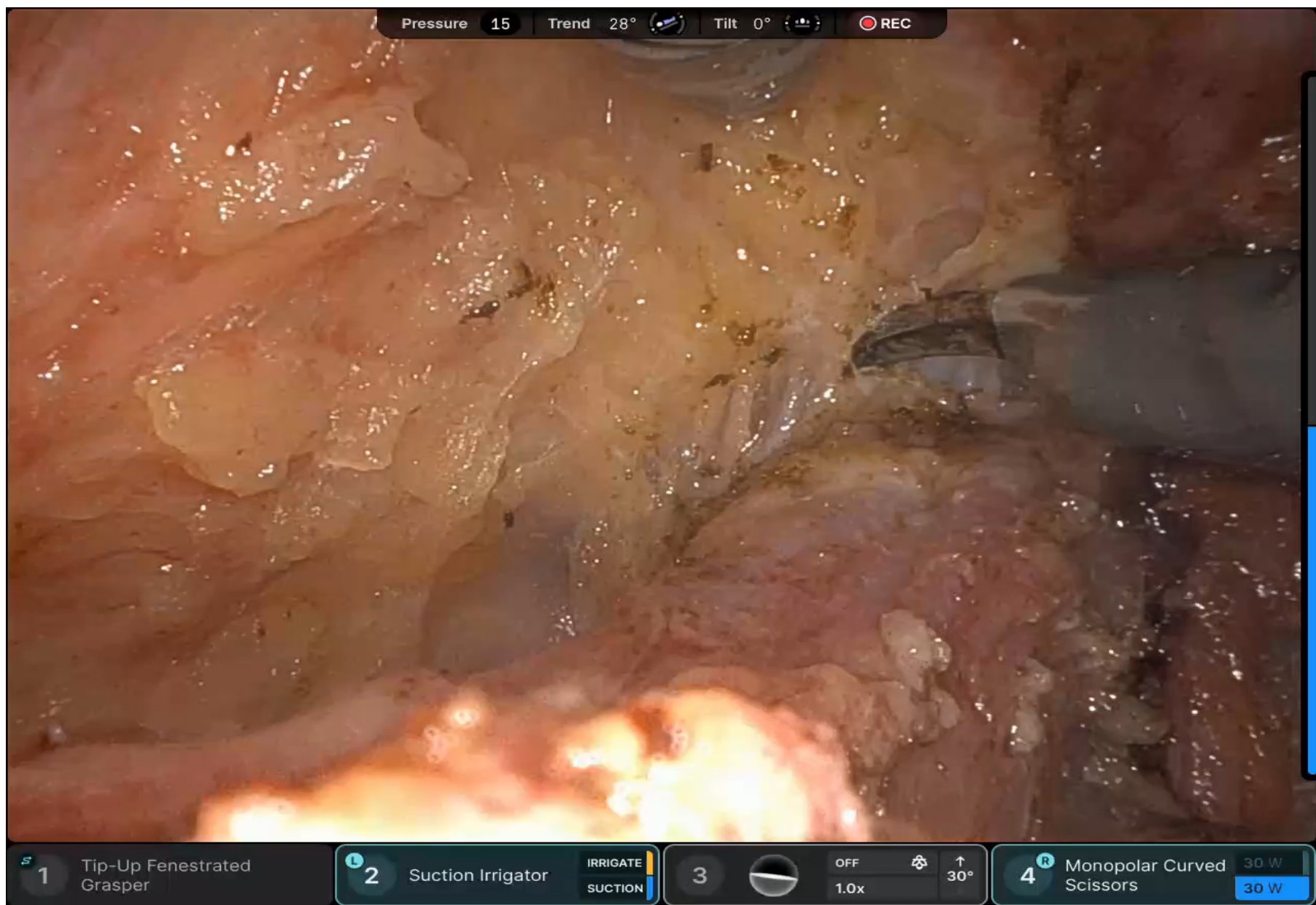
Robotic vs Laparoscopic Surgery for Middle and Low Rectal Cancer. JAMA. July 7, 2025.

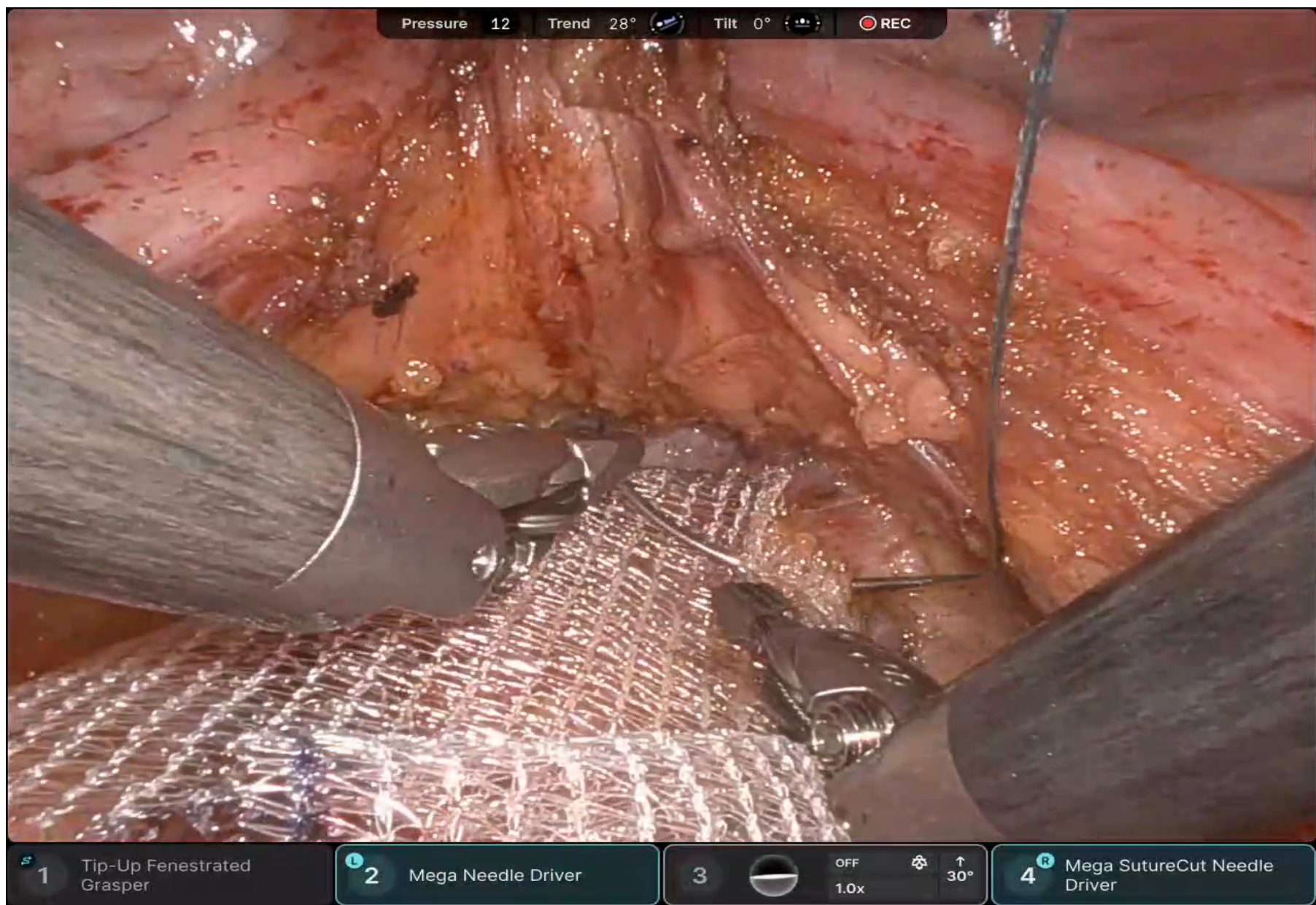


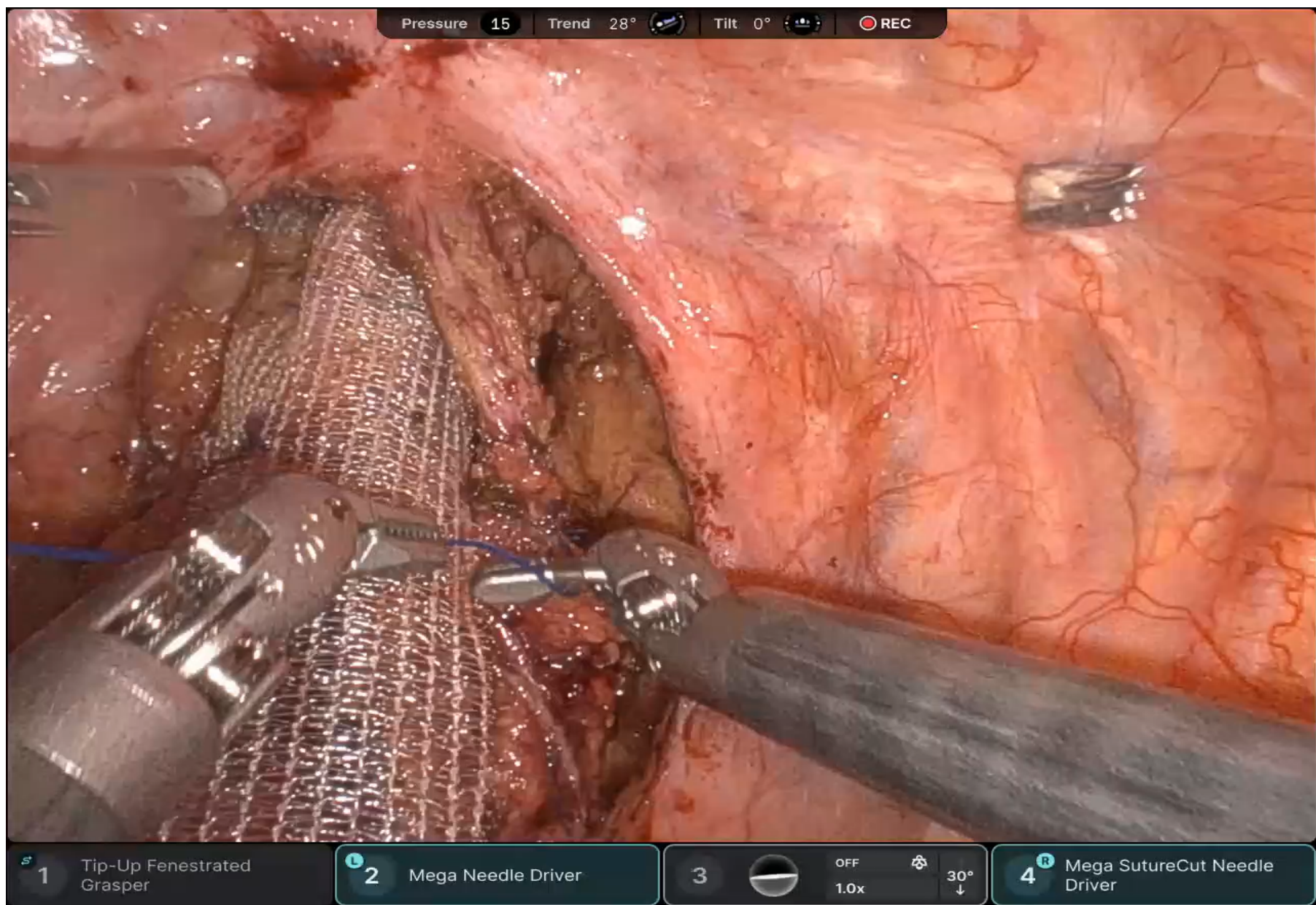












Single-site NOS



Thank You

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Questions Welcome

