FACULTAD DE MEDICINA
PONTIFICIA UNIVERSIDAD
CATÓLICA DE CHILE

IFSO
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Robotics in MBS – Innovations, Techniques, and Future Directions

Hugo™ RAS Update

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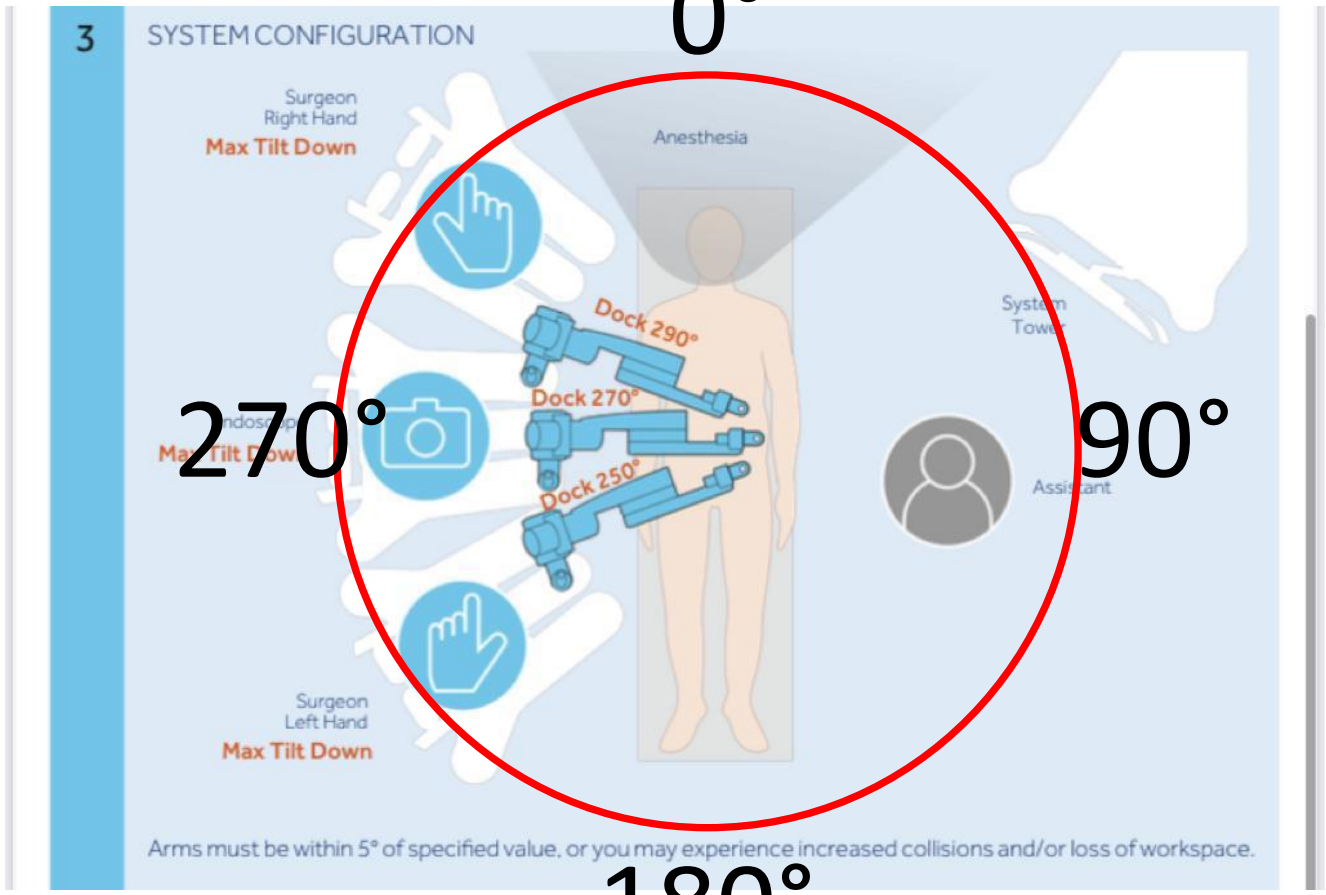
IFSO Chile, September 2025

Disclosures

- Medtronic – Advisor, speaker and proctor.

HUGO-RAS

Docking – Tilt and angle



Docking

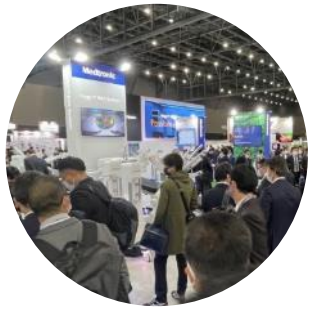
Console

Bringing robotic assisted surgery to more people in more places

Sweden

UK

Finland



Japan

Panama

Spain

Italy

India

Chile

The Netherlands

France

Australia

Note – not a complete list of countries or installs

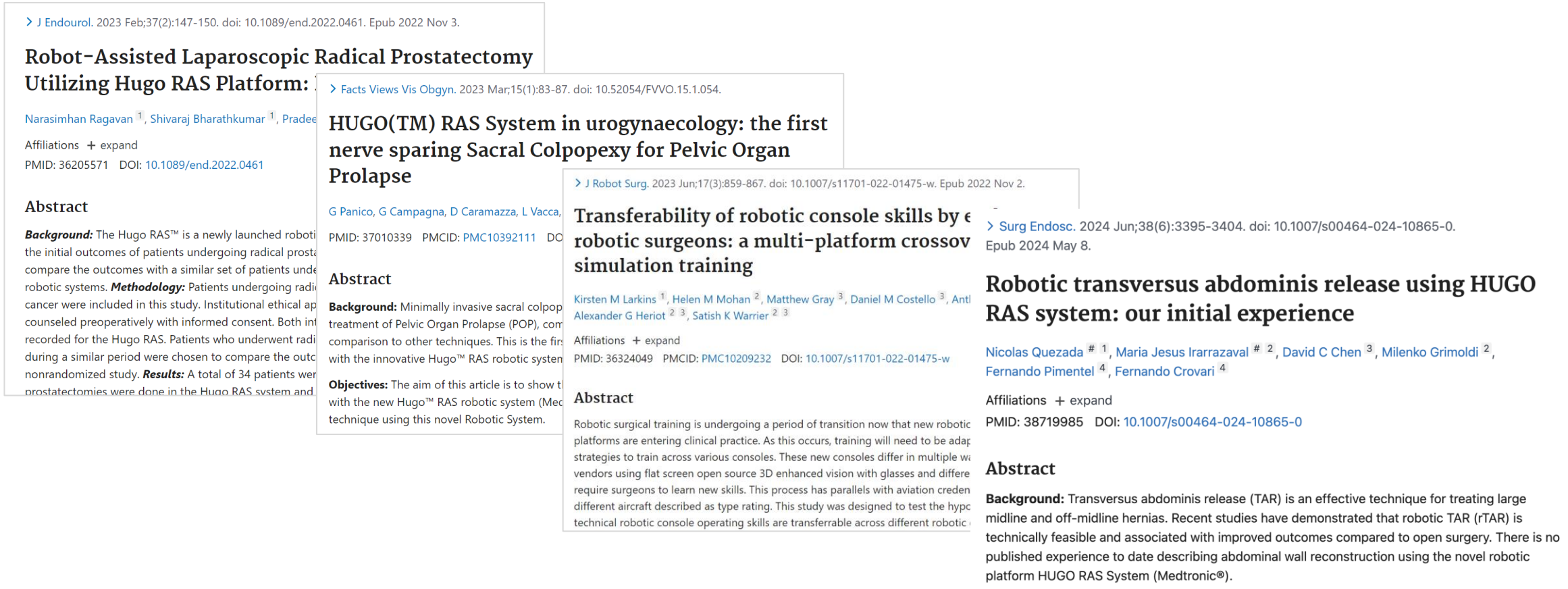
The Medtronic Hugo ™ RAS system is commercially available in certain geographies. Regulatory requirements of individual countries and regions will determine approval, clearance, or market availability. In the EU, the Hugo™ RAS system is CE marked. In the U.S., the Hugo ™ system is an investigational device not for sale.

08/2025 – EMEA-RP-2500141 (WF#18124974)

Medtronic

Clinical evidence of HUGO

- More than 200 peer-reviewed publications on HUGO-RAS system



> J Endourol. 2023 Feb;37(2):147-150. doi: 10.1089/end.2022.0461. Epub 2022 Nov 3.

Robot-Assisted Laparoscopic Radical Prostatectomy Utilizing Hugo RAS Platform:

Narasimhan Ragavan [1], Shivaraj Bharathkumar [1], Pradee

Affiliations + expand

PMID: 36205571 DOI: 10.1089/end.2022.0461

Abstract

Background: The Hugo RAS™ is a newly launched roboti
the initial outcomes of patients undergoing radical prosta
compare the outcomes with a similar set of patients unde
robotic systems. ***Methodology:*** Patients undergoing radi
cancer were included in this study. Institutional ethical ap
counseled preoperatively with informed consent. Both int
recorded for the Hugo RAS. Patients who underwent radi
during a similar period were chosen to compare the outc
nonrandomized study. ***Results:*** A total of 34 patients wer
prostatectomies were done in the Hugo RAS system and

> Facts Views Vis Obgyn. 2023 Mar;15(1):83-87. doi: 10.52054/FVVO.15.1.054.

HUGO(TM) RAS System in urogynaecology: the first nerve sparing Sacral Colpopexy for Pelvic Organ Prolapse

G Panico, G Campagna, D Caramazza, L Vacca,

PMID: 37010339 PMCID: PMC10392111 DO

Abstract

Background: Minimally invasive sacral colpop
treatment of Pelvic Organ Prolapse (POP), com
comparison to other techniques. This is the firs
with the innovative Hugo™ RAS robotic systen

Objectives: The aim of this article is to show t
with the new Hugo™ RAS robotic system (Mec
technique using this novel Robotic System.

> J Robot Surg. 2023 Jun;17(3):859-867. doi: 10.1007/s11701-022-01475-w. Epub 2022 Nov 2.

Transferability of robotic console skills by e robotic surgeons: a multi-platform crossov simulation training

Kirsten M Larkins [1], Helen M Mohan [2], Matthew Gray [3], Daniel M Costello [3], Antl
Alexander G Heriot [2 3], Satish K Warrier [2 3]

Affiliations + expand

PMID: 36324049 PMCID: PMC10209232 DOI: 10.1007/s11701-022-01475-w

Abstract

Robotic surgical training is undergoing a period of transition now that new robotic
platforms are entering clinical practice. As this occurs, training will need to be adap
strategies to train across various consoles. These new consoles differ in multiple wa
vendors using flat screen open source 3D enhanced vision with glasses and differe
require surgeons to learn new skills. This process has parallels with aviation creden
different aircraft described as type rating. This study was designed to test the hypo
technical robotic console operating skills are transferrable across different robotic

> Surg Endosc. 2024 Jun;38(6):3395-3404. doi: 10.1007/s00464-024-10865-0. Epub 2024 May 8.

Robotic transversus abdominis release using HUGO RAS system: our initial experience

Nicolas Quezada [# 1], Maria Jesus Irarrazaval [# 2], David C Chen [3], Milenko Grimoldi [2], Fernando Pimentel [4], Fernando Crovari [4]

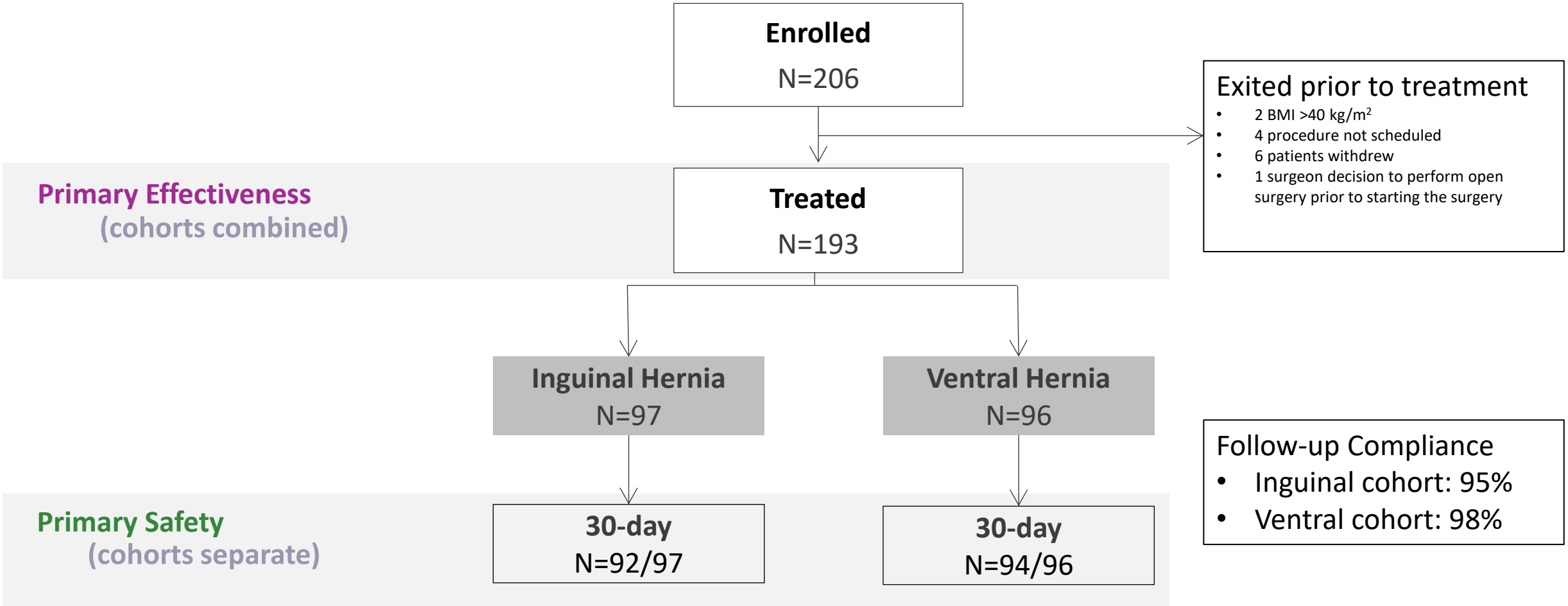
Affiliations + expand

PMID: 38719985 DOI: 10.1007/s00464-024-10865-0

Abstract

Background: Transversus abdominis release (TAR) is an effective technique for treating large midline and off-midline hernias. Recent studies have demonstrated that robotic TAR (rTAR) is technically feasible and associated with improved outcomes compared to open surgery. There is no published experience to date describing abdominal wall reconstruction using the novel robotic platform HUGO RAS System (Medtronic®).

HUGO US Trial – Enable Hernia Repair Study



Primary Effectiveness Endpoint: Surgical Success Rate

100% surgical success with no conversions in either cohort

Surgical success: Defined as the procedure not being converted from use of the Hugo™ RAS system to open surgery, laparoscopy, or another RAS system

Cohort	Surgical Success Rate % (n/N) 95%CI	P-value
All patients	**100.0%** (193/193) 98.1%, 100.0%	<0.0001[a]

[a] relative to an FDA-approved predetermined performance goal of 85%

- The Hugo RAS™ system was effective in performing inguinal and ventral hernia repairs
- No conversions to open or laparoscopic surgery or to the use of an alternate RAS devise were necessary throughout the study

Primary Safety Endpoint: Surgical Success Events

Primary safety goal was met

Rate of patients with one or more surgical-site events: composite endpoint of surgical-site occurrences and surgical-site infections

Cohort	Surgical-site Event Rate % (n/N) 95%CI	P-value
Inguinal Cohort	**0.0%** (0/92) 0.0%, 3.9%	<0.0001[a]
Ventral Cohort	**2.1%** (2/94) 0.3%, 7.5%	<0.0001[a]

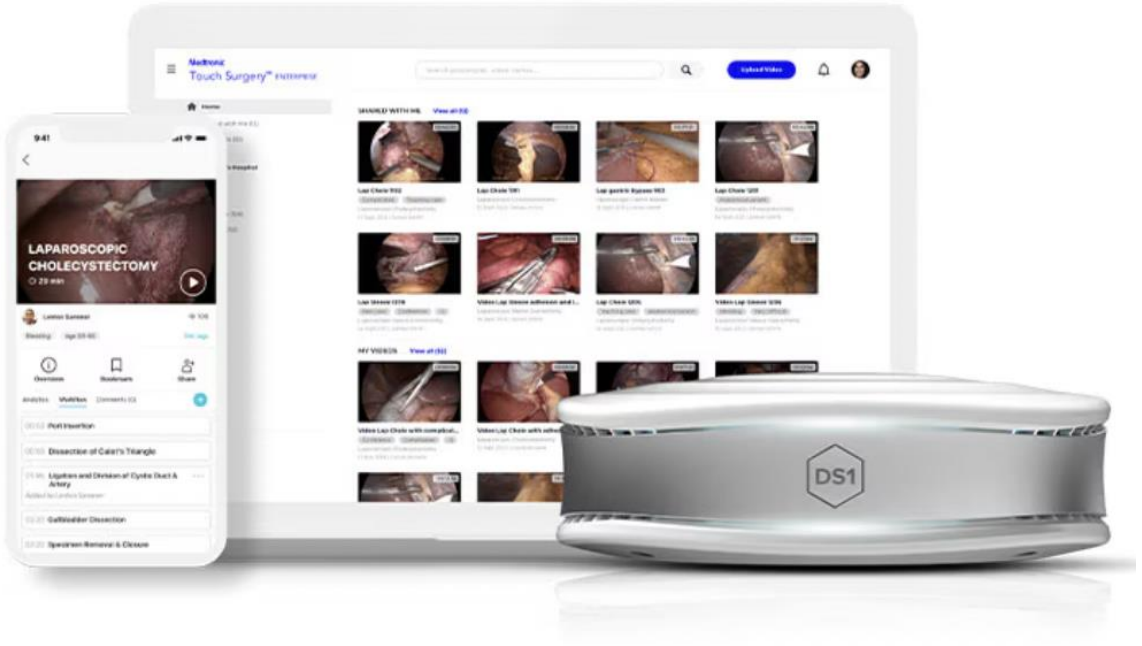
[a] relative to FDA-approved predetermined performance goals of 30%

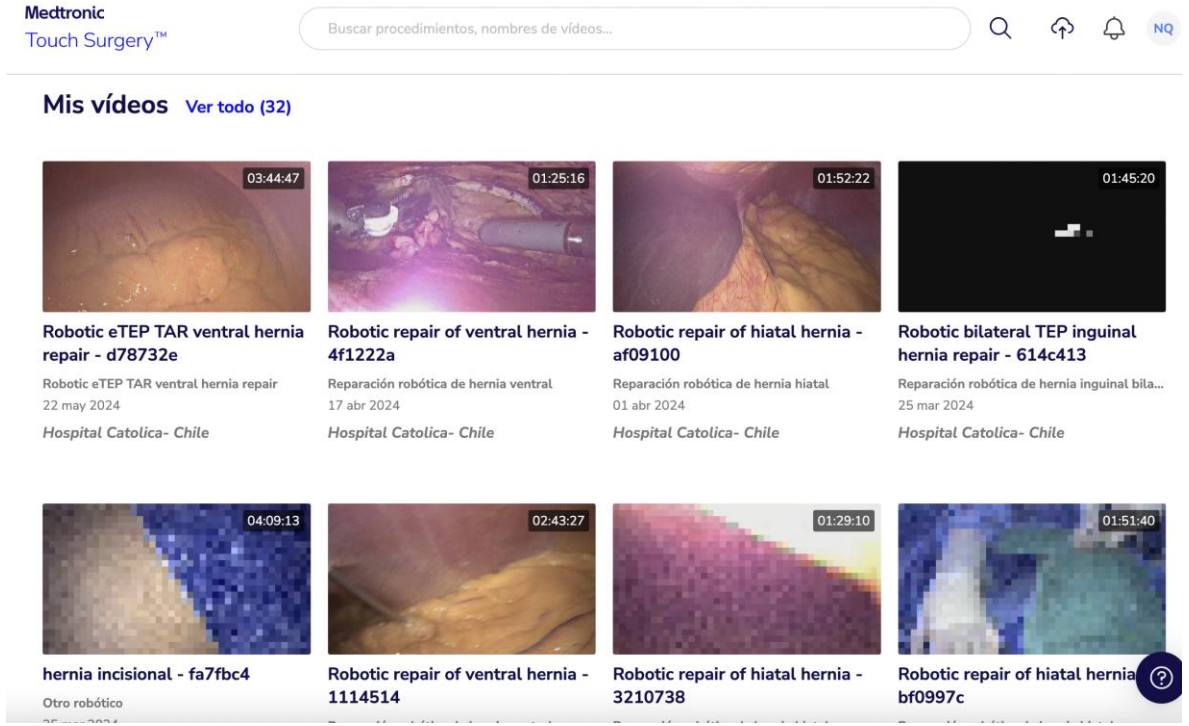
- 2 patients in the ventral cohort
  - 1 incision-site abscess noted 7 days after the procedure
  - 1 small intestine obstruction identified 22 days after the procedure
- Both were able to be resolved without further complications

Future Directions

- Publication of IDE Enable Hernia Repair Study (in preparation)
- Submission in review with FDA for urology indication
- Introduction of Hugo™ RAS system to the US market (pending)
- Expand the indications for Hugo™ RAS system to include hernia repair

DS1


Medtronic
Touch Surgery™
LAPAROSCOPIC
CHOLECYSTECTOMY
DS1


Medtronic
Touch Surgery™
Buscar procedimientos, nombres de vídeos...
NQ
Mis vídeos
Ver todo (32)
03:44:47
Robotic eTEP TAR ventral hernia repair - d78732e
Robotic eTEP TAR ventral hernia repair
22 may 2024
Hospital Catolica- Chile
01:25:16
Robotic repair of ventral hernia - 4f1222a
Reparación robótica de hernia ventral
17 abr 2024
Hospital Catolica- Chile
01:52:22
Robotic repair of hiatal hernia - af09100
Reparación robótica de hernia hiatal
01 abr 2024
Hospital Catolica- Chile
01:45:20
Robotic bilateral TEP inguinal hernia repair - 614c413
Reparación robótica de hernia inguinal bila...
25 mar 2024
Hospital Catolica- Chile
04:09:13
hernia incisional - fa7fbc4
Otro robótico
02:43:27
Robotic repair of ventral hernia - 1114514
01:29:10
Robotic repair of hiatal hernia - 3210738
01:51:40
Robotic repair of hiatal hernia bf0997c

Touch Surgery Live Stream

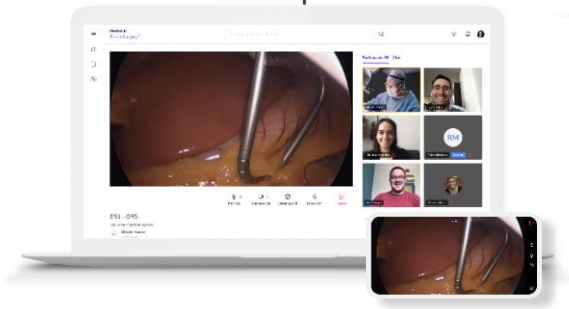
Touch Surgery™ Live Stream

1

Mobile touchscreen wirelessly connects procedure room and clinical team with remote attendees.

2

Participants can join the stream on their desktop or mobile, from anywhere, with one tap.

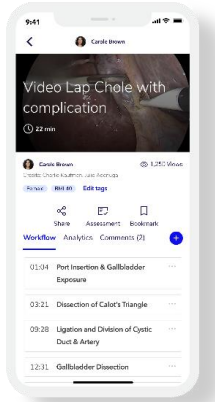


The Touch Surgery™ Ecosystem

3

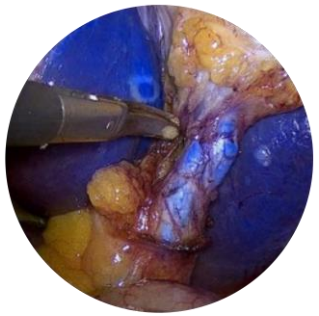
Endoscopic feed can be recorded…

4



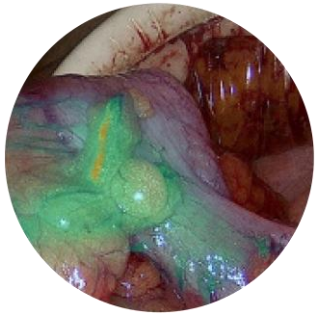
…and uploaded to the cloud for reviewing and sharing immediately after the case.

Karl-Storz – IMAGE1 S RUBINA™



Blue and green overlays

Maximize visibility across anatomies and in varying light settings by combining white-light endoscopic image with ICG/NIR image for real-time insights.[1]



Intensity mapping

Confidently visualize critical structures (e.g., the sentinel lymph node).[†,2]

Monochromatic mode

Spot leakage with next-level visual clarity.[1]

LigaSure™ RAS

Summary

- HUGO is increasing its adoption worldwide.
- Several clinical-validation peer-reviewed papers demonstrating feasibility, safety and comparable results to other platforms.
- HUGO is continuously incorporating technology for improving surgical performance and patient safety.

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