CREO MEDICAL

Capital Markets Day

19th November 2025

Agenda

Title		Time	Owner
Welcome		3:00 - 3:05	Kevin Crofton, Chair
Corporate Update		3:05 - 3:15	Craig Gulliford, CEO
Powering the Next Era of Endoscopy: Why Advanced Bipolar RF and Microwave Energy Are Redefining the Field	Dr. Roser Vega	3:15 – 3:25	Dave Woods, CCO
	Dr. Carlos Robles-Medranda	3:25 – 3:35	
	Dr. Benjamin Tharian	3:35 – 3:45	
Panel – Gastroenterology		3:45 – 4:05	
Coffee break		4:05 – 4:15	
Transforming Lung Cancer Care: Novel Ablation Technologies in the Era of Lung Screening		4:15 - 4:35	Professor Pallav Shah (UK)
Q&A - Bronchoscopic ablation		4:35 – 4:50	Moderated by Charlie Campion, CPO
From Specialist Innovation to Broad Adoption: Unlocking the Full Potential of Kamaptive Technology		4:50 – 4:55	Charlie Campion, CPO
Financial Outlook -Turning Creo's technology into commercial delivery & Q3 trading update		4:55 – 5:10	Richard Rees, CFO
Wrap up		5:10 - 5:20	Craig Gulliford, CEO
Drinks reception and product demonstrations		5:20 - 6:30	All

Welcome

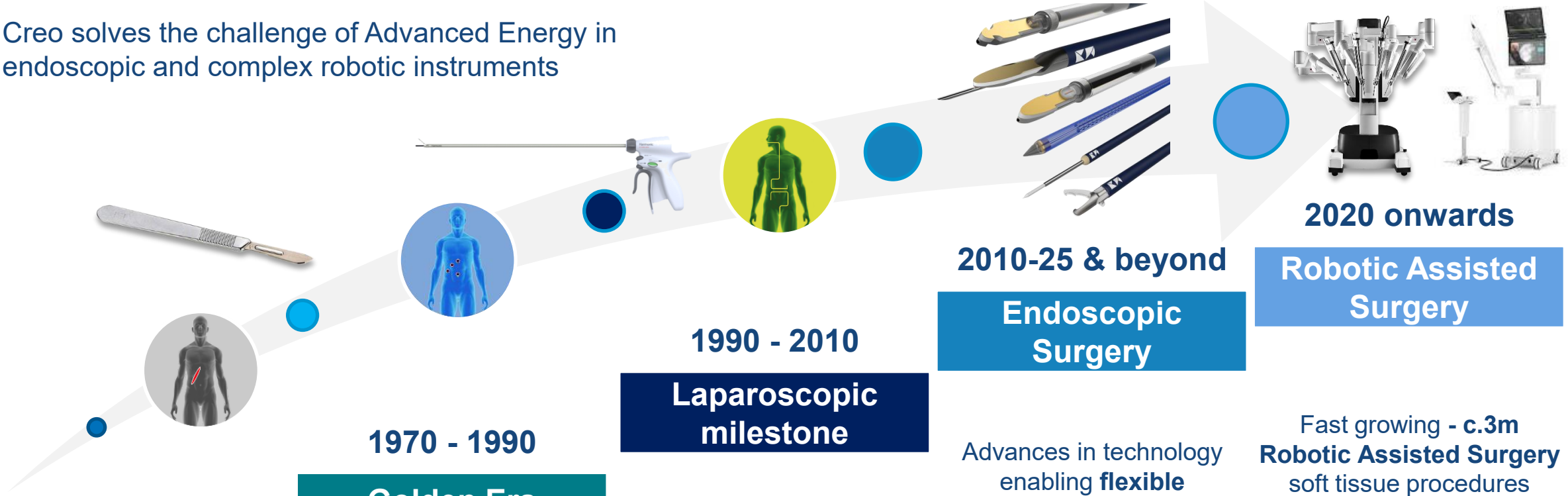
Kevin Crofton - Chairman

Corporate Update

Craig Gulliford - CEO

The Evolution of Advanced Energy

Creo solves the challenge of Advanced Energy in endoscopic and complex robotic instruments



1800 - 1970

Open Surgery

1970 - 1990

Golden Era

Open surgery remains as standard of care with rapid advent of Diathermy basic energy tools

1990 - 2010

Laparoscopic milestone

Laparoscopic surgery overtakes open surgery
c.75% of all procedures
$10bn+ market.
JnJ, Medtronic, Olympus and others lead

2010-25 & beyond

Endoscopic Surgery

Advances in technology enabling **flexible endoluminal endoscopy**
$3-4bn market, limited competition, clear differentiation

2020 onwards

Robotic Assisted Surgery

Fast growing **- c.3m Robotic Assisted Surgery** soft tissue procedures annually

Creo focus

The Evolution of Endotherapy

Creo solves the challenge of Advanced Energy in endoscopic and complex robotic instruments

1960 – 1980

Technology Breakthroughs Surgery

First use of Fibre Optics
And digital imaging

1980s

Initial Introduction

Introduction of video imaging

1990s - 2015

Widespread adoption

Start of minimally invasive procedures
HD imaging, EUS scopes and expansion
Development of basic tissue resection using Diethermy
More advanced procedures pioneered in Japan

2015 to present

Endoscopic Surgery Initialised

Adoption of advanced energy tools in GI
Integration of imaging & navigation
More advanced therapeutic techniques continue to develop

2025 and beyond

Explosion of use for therapy

Endoscopy transforms from diagnostic to a therapeuttic practice.
Demand for Greater surgical precision & contrel
AI for real time imaging
Micro Robotic Surgery
Growth of therapeutic endoscopy

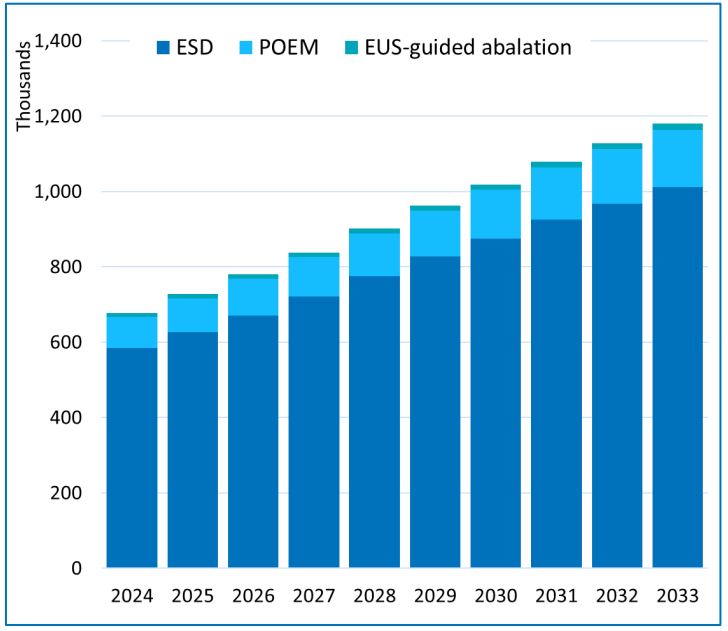
Creo focus

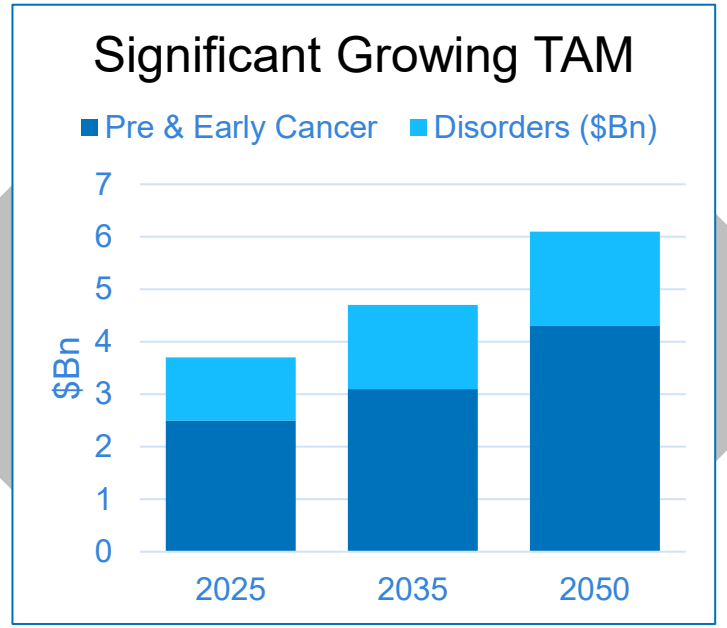
Everything Everywhere in Endoscopy

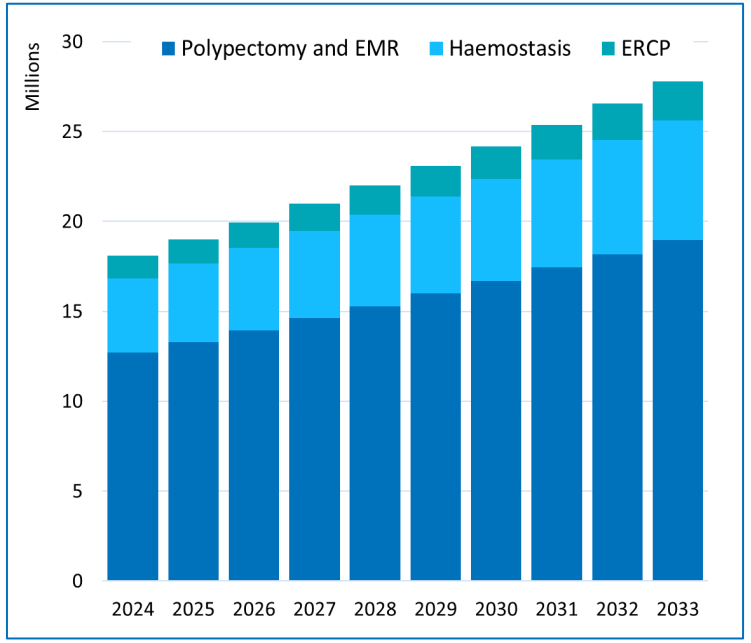
Advanced Bipolar RF

Super High Frequency Microwave

Advanced Bipolar RF







CREO MEDICAL

Anything is Possible with the Right Approach

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Powering the Next Era of Endoscopy

Why Bipolar RF and Microwave Energy are Redefining the Field

David Woods - CCO

Why Bipolar RF & Microwave will Redefine GI Endoscopy

- Rising GI disease burden and early cancer detection driving procedure growth
- Hospitals and clinicians want safe more predictable energy delivery
- Creo is the **only platform unifying bipolar RF + microwave**, providing a new class of energy to endoscopy
- Our advanced energy unlocks new endoscopic options that were previously out of reach.

What Are The Strategic Market Drivers

- Clinical need for minimally invasive alternatives. Third space procedures address conditions previously requiring invasive surgical interventions.
- Growing patient awareness and preference for non-surgical care
- Demonstrated outcomes and evidence expansion.
- Procedure volume migration to outpatient settings
- Economic pressure and value based care
- Physician skill expansion and training infrastructure
- Technology innovation
- Expanding indications (EFTR, obesity)

Economic and Workflow Value of Advanced Energy

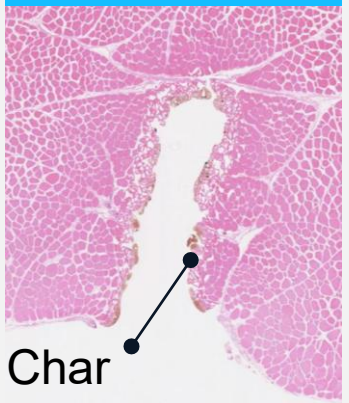
- Reduced thermal injury – fewer adverse events, lower total cost of care
- **More efficient dissection & coagulation = shorter procedure times**
- Reduced need for additional hemostasis tools, reduced inventory via multi-functional device.
- Improved safety for advanced endoscopists working in confined space
- **Consistent, reproducible energy deliver faster adoption and standardization**
- Shorter length of stay from fewer complications
- Supports expansion of advanced endoscopy service lines

Scalpel-like division

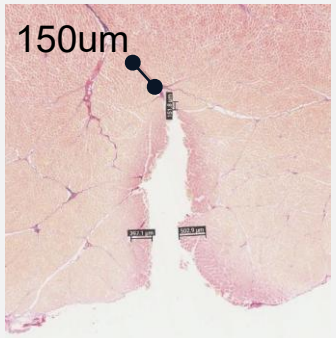
Creo

Scalpel-like cutting using **Speedboat**

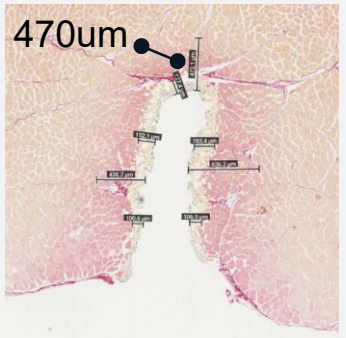
Competitor



Charred cut using **Dualknife**



Thermal margins are narrow and controlled.



Broader Thermal margins with clear layer of necrotic tissue.

Clinical Validation for Better Economic Outcomes and Adoption

- Alexopoulos (284 pts):
  - **No perforations**
  - **2× faster ESD** in giant polyps
- Jawaid RCT: Single-device POEM vs multi-tool monopolar:
  - Showed Speedboat:
    - Maintained an **excellent safety profile** in the esophageal tract
    - Was **more effective at bleeding control** than the monopolar alternative
- Asian Multicenter:
  - 97.5% resection
  - **0 perforations**
  - **Rapid novice learning, safer**

Dr Roser Vega

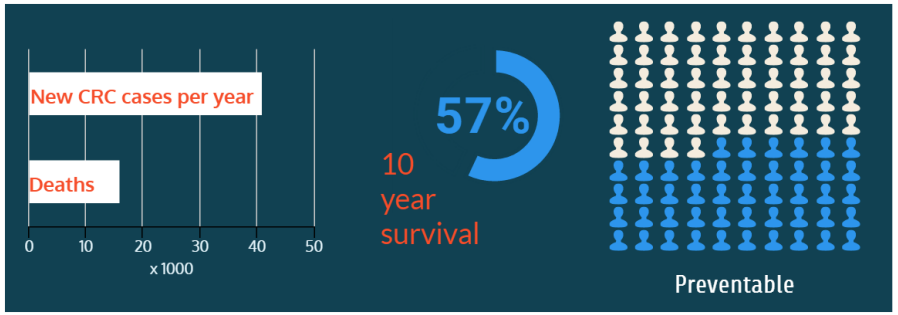
University College London Hospitals

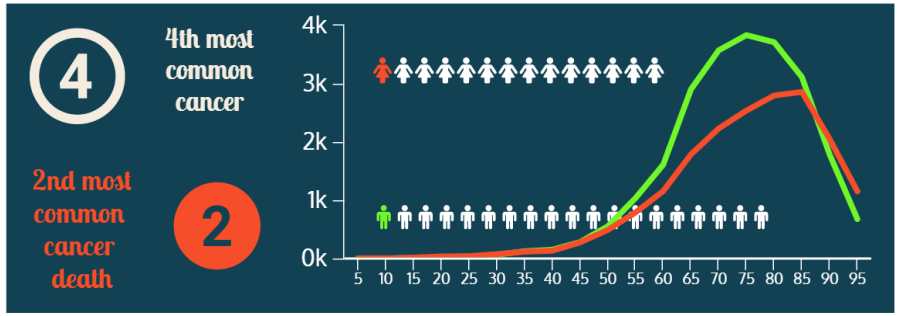
Speedboat assisted endoscopic submucosal dissection (S-ESD) of complex bowel polyps and early stage cancers at University College Hospital : 2019-2025 experience

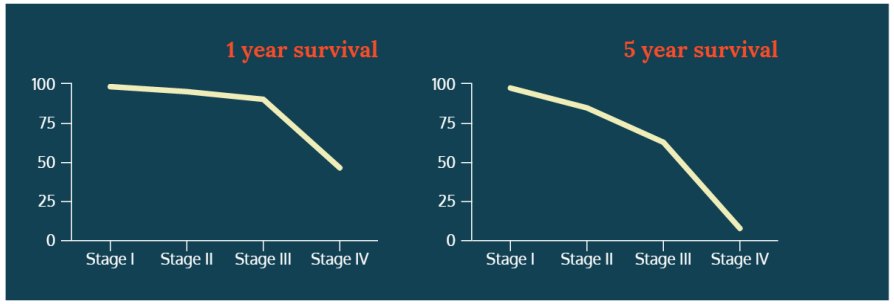
Dr. Roser Vega
Consultant Gastroenterologist
University College Hospital
Therapeutic Interventional Lead
Deputy director of Bowel Cancer Screening for North Central London
University College Hospital

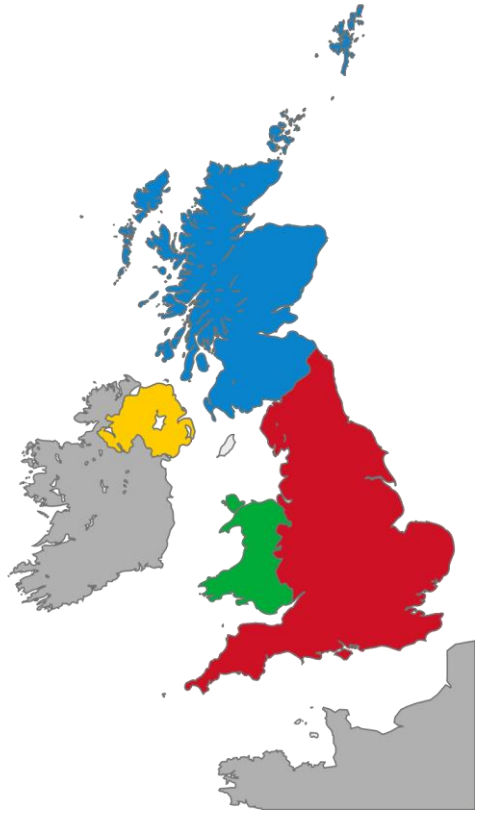
University College London Hospitals NHS
NHS Foundation Trust

COLORECTAL CANCER

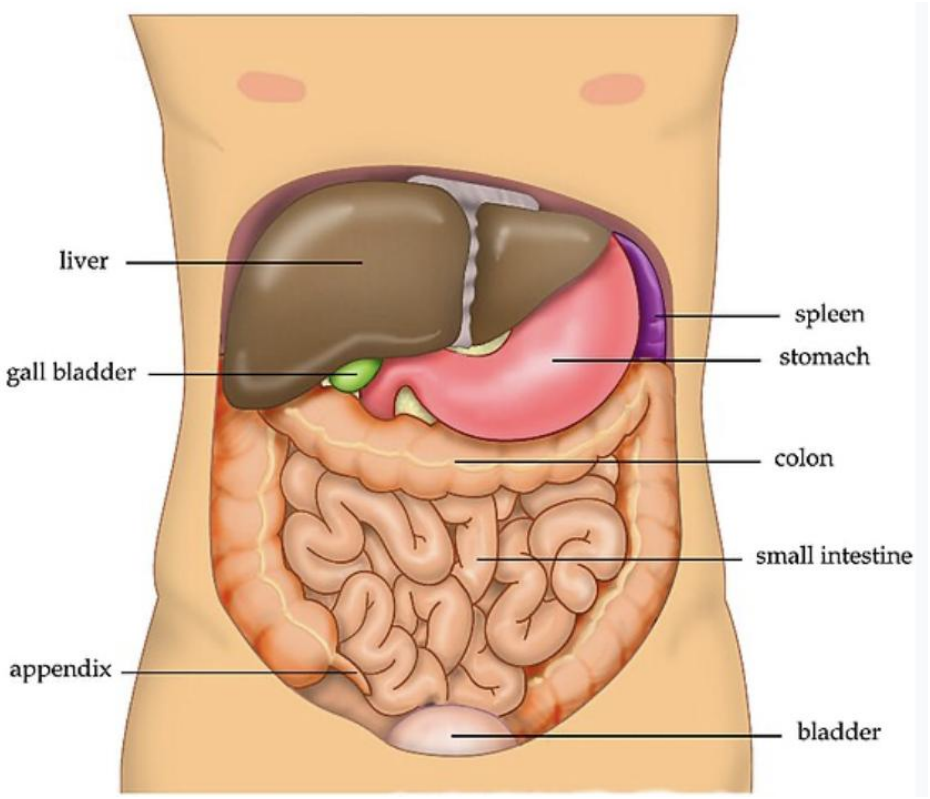




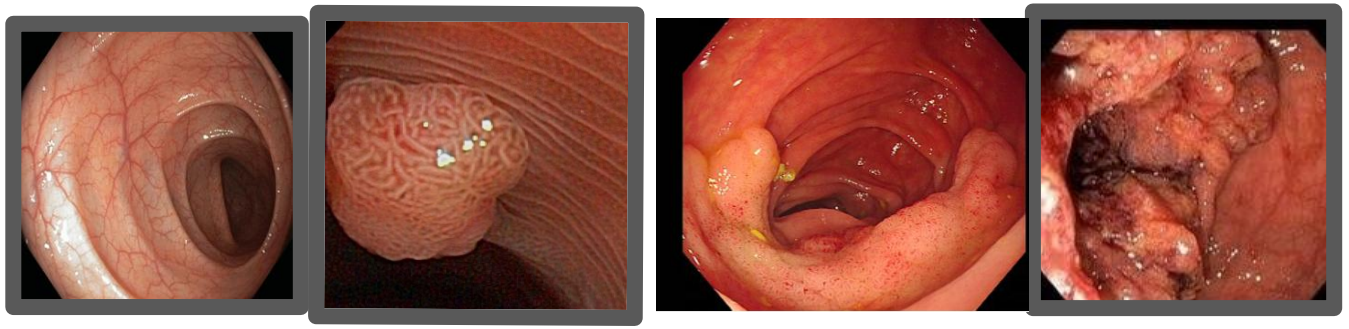


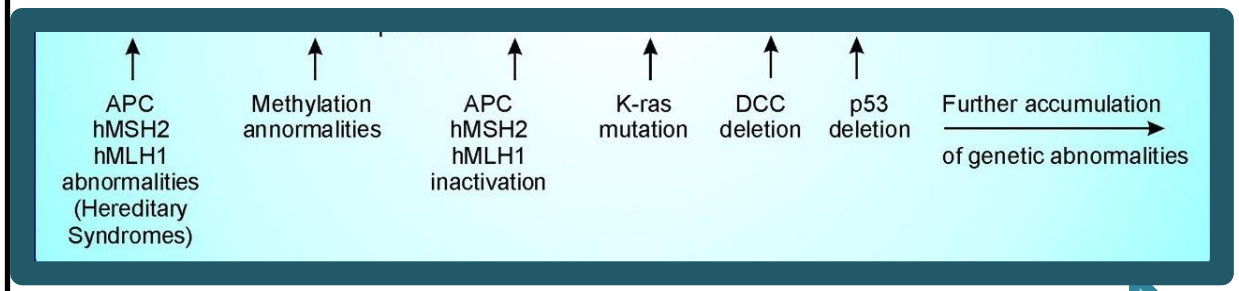


Population in UK (2024): 69.23 million

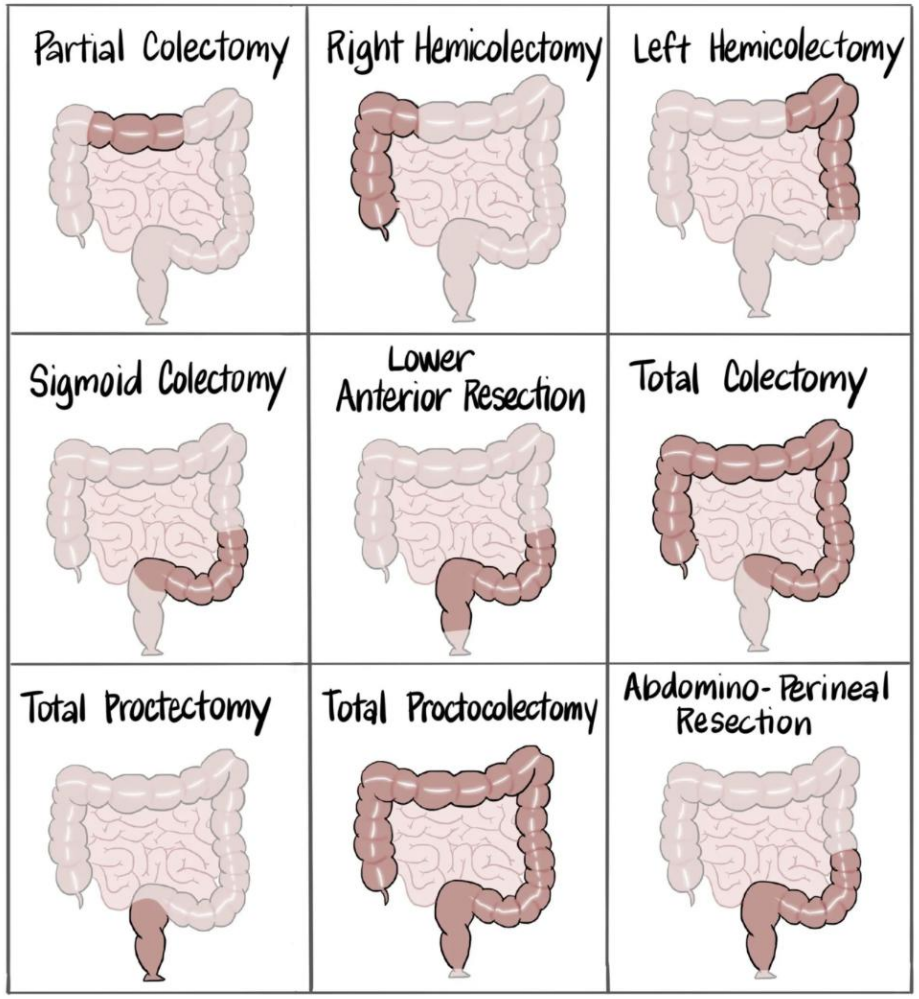


Benign polyp – cancer sequence





10 – 15 years

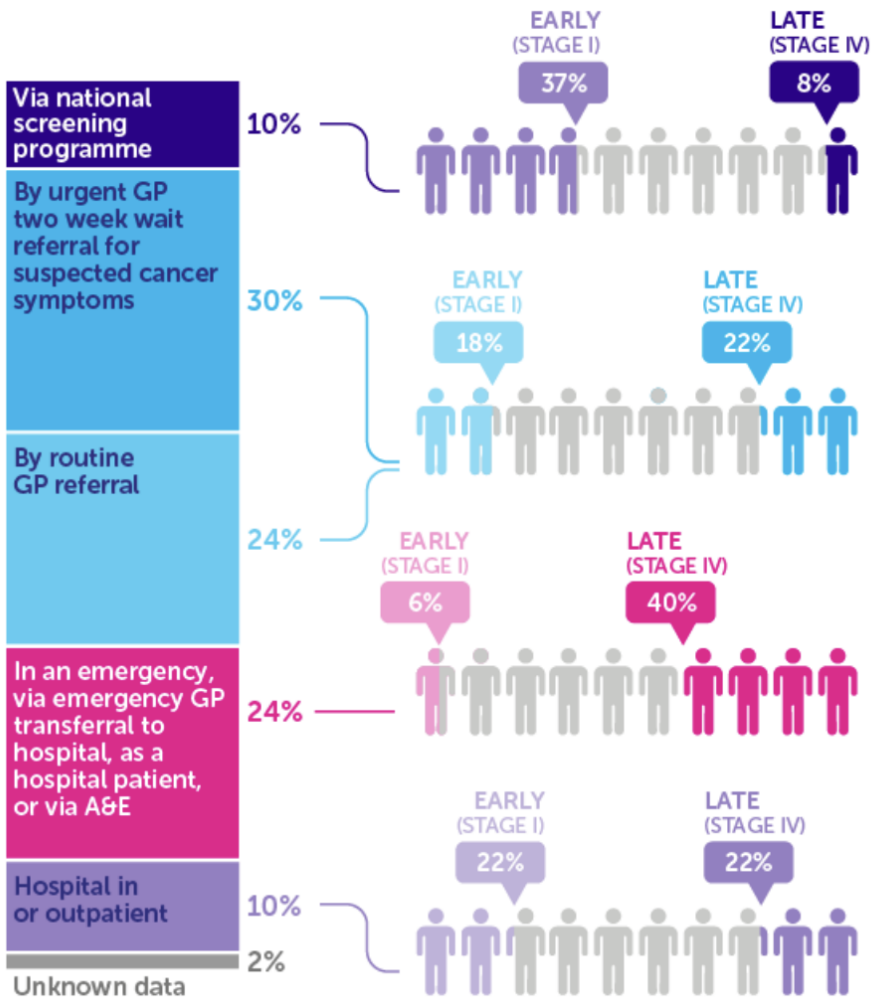


UCH published surgical outcomes in 2020:

- Nearly 400 operations for colon cancer
- Mortality rate 1.7%
- Length of stay >5 days: 78%
- 30 days readmission rate: 8.4%

The Association of Coloproctology of Great Britain & Ireland

HOW AND WHEN BOWEL CANCER PATIENTS ARE DIAGNOSED



Source: National Cancer Intelligence Network, data for England 2012-2013

LET'S BEAT CANCER SOONER
cruk.org

CANCER RESEARCH UK

BOWEL CANCER SURVIVAL BY STAGE AT DIAGNOSIS

BOWEL

= People surviving their bowel cancer for five or more years

DIAGNOSED AT STAGE 1
EARLIEST STAGE

MORE THAN 9 IN 10

DIAGNOSED AT STAGE 4
LATEST STAGE

LESS THAN 1 IN 10

Data for patients diagnosed in the East of England 2006-2010
Calculated by Public Health England

LET'S BEAT CANCER SOONER
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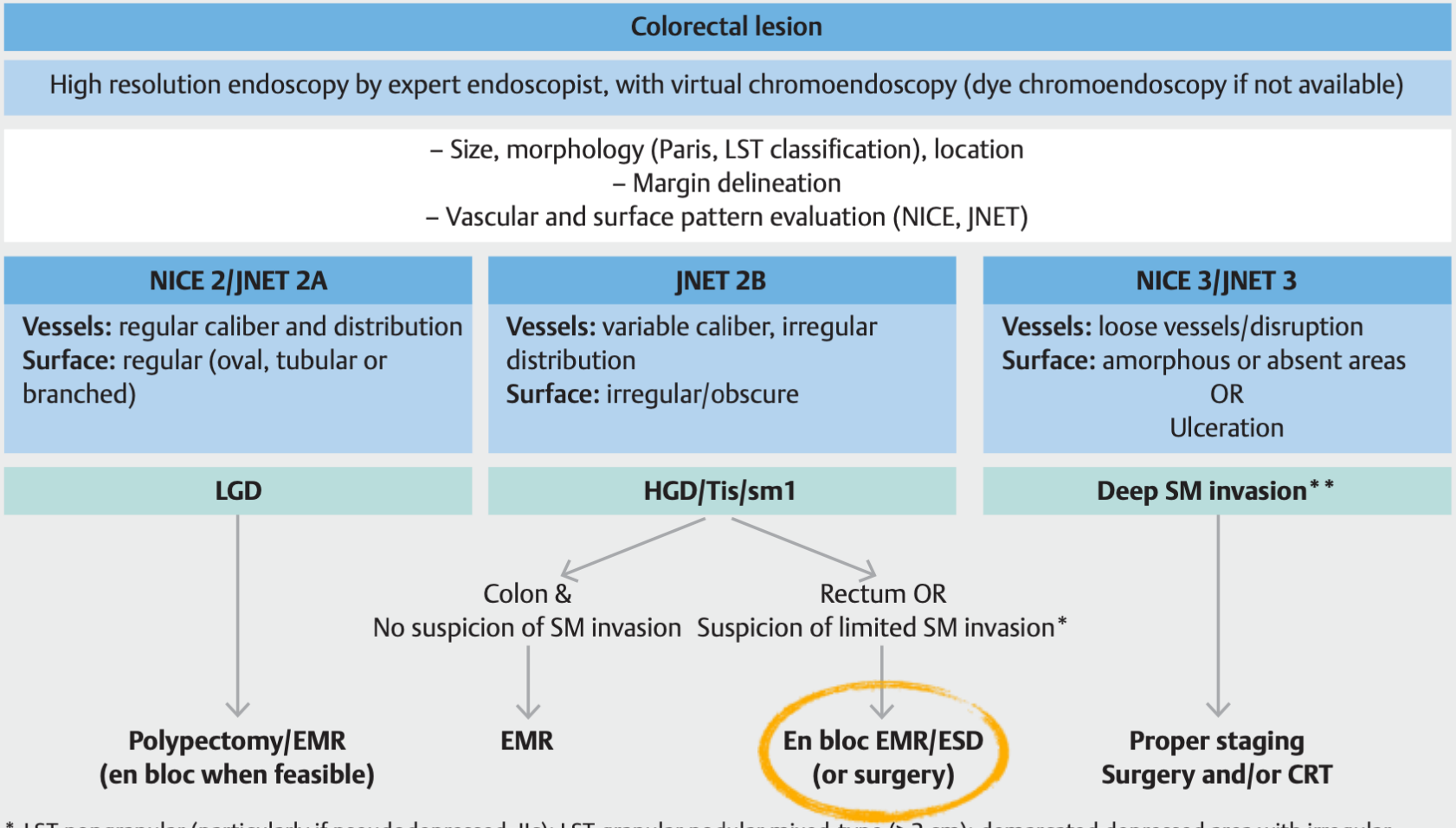
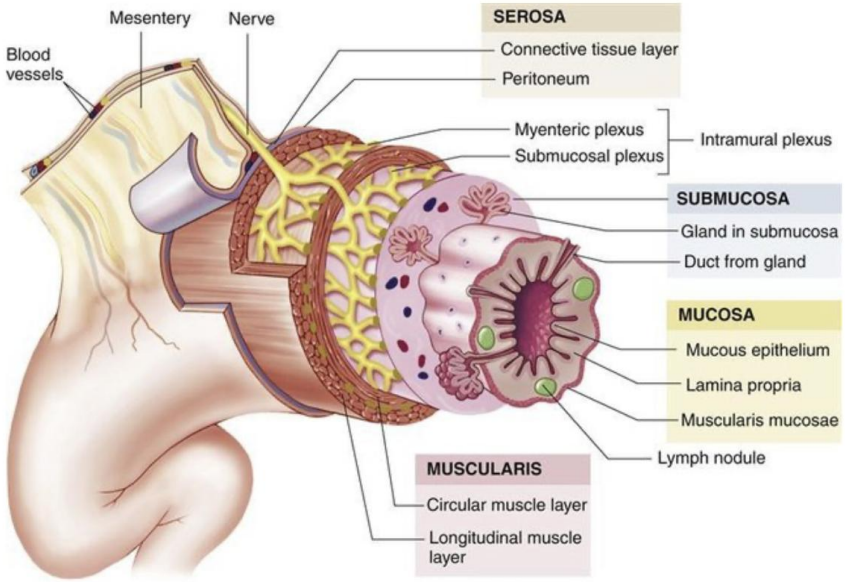
CANCER RESEARCH UK

University College London Hospitals NHS
NHS Foundation Trust

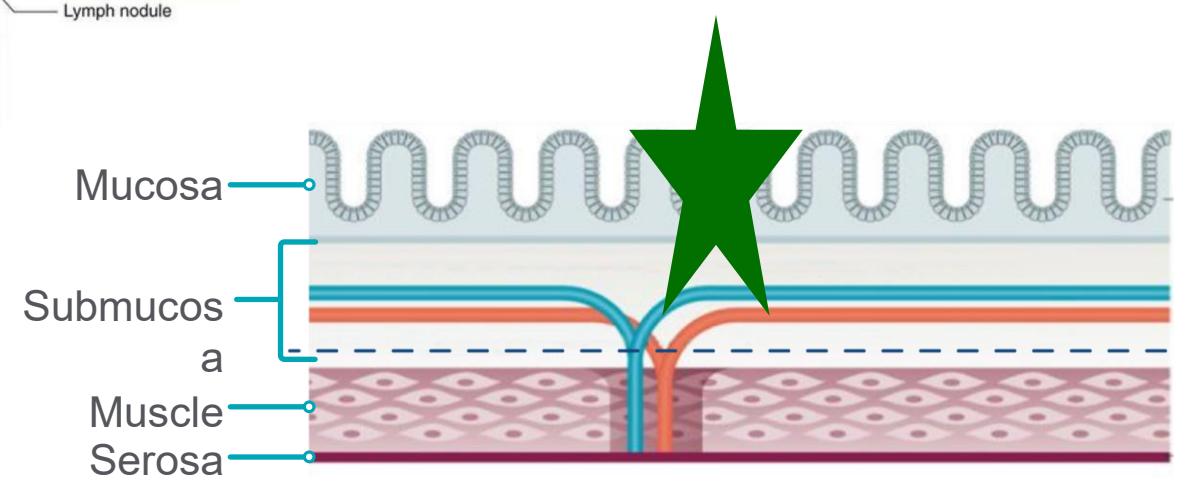
ESD Pathway

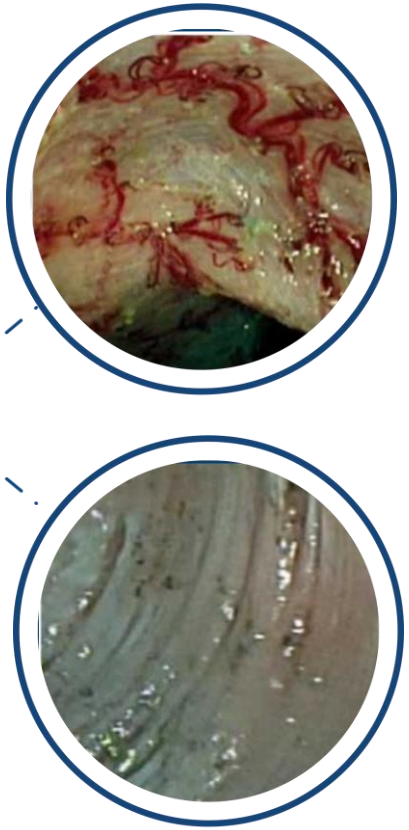


▶ **Fig. 4** Endoscopic submucosal dissection (ESD) for superficial colorectal lesions: a decision algorithm. CRT, chemoradiotherapy; EMR, endoscopic mucosal resection; EUS, endoscopic ultrasonography; HGD, high grade dysplasia; JNET, Japan NBI Expert Team; LGD, low grade dysplasia; LST, laterally spreading tumor; MRI, magnetic resonance imaging; NICE, NBI International Colorectal Endoscopic.



What is an S-ESD?





Saunders BP, Tsiamoulos ZP. Endoscopic mucosal resection and endoscopic submucosal dissection of large colonic polyps. Nat Rev Gastroenterol Hepatol 2016 Aug; 13(8):486-96

CHALLENGES IN ESD ADOPTION IN WESTERN COUNTRIES IN THE WEST

Review

Thieme

Colorectal endoscopic submucosal dissection in the West: A systematic review and meta-analysis

OPEN ACCESS

▶ **Table 2** Clinical outcomes.

Clinical outcomes (no. of studies)	No. of outcomes (%)*	95% confidence interval	Q-value (*P* value)	I^2 statistics
R0 resection (29)	3,067 (75.6%)	74.1%–77.0%	361 (<.01)	92.25
En bloc resection (31)	3,549 (84.6%)	83.3%–85.9%	244.6 (<.01)	87.74
Curative resection (21)	2,443 (81.9%)	78.6%–84.9%	74.17 (<.01)	73.03
Surgery for invasive Cancer† (23)	260 (4.8%)	2.4%–9.4%	419.5 (<.01)	94.75
Adverse events				
Perforation (25)	182 (5.5%)	4.2%–7.0%	33.14 (.27)	12.50
Bleeding (26)	111 (4.1%)	3.0%–5.5%	45.08 (<.01)	48.98
Delayed bleeding (26)	66 (3.4%)	2.5%–4.7%	35.89 (.07)	30.34
Surgery for complication (30)	42 (1.8%)	1.3%–2.4%	53.11 (<.01)	54.81

*After ESD.
†Pooled estimate using random effects model.
ESD, endoscopic submucosal dissection.

My timeline

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- SSD trainer: ex-vivo and in-vivo animal models since September 2020
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- Ongoing remote mentoring sessions to discuss outcomes and progress with my mentor
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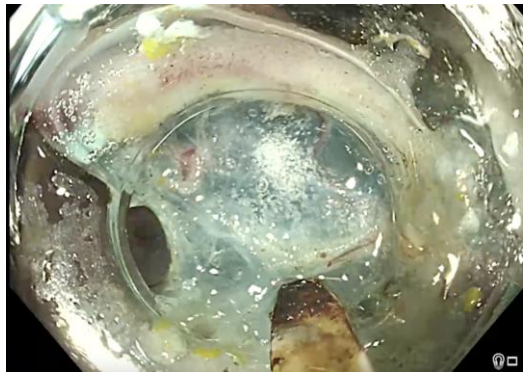
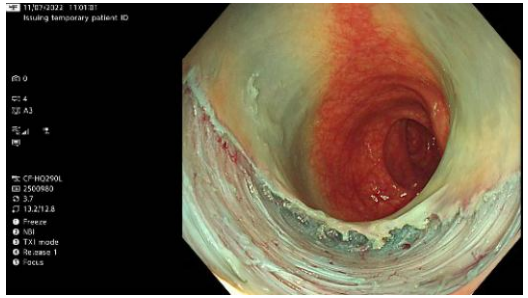
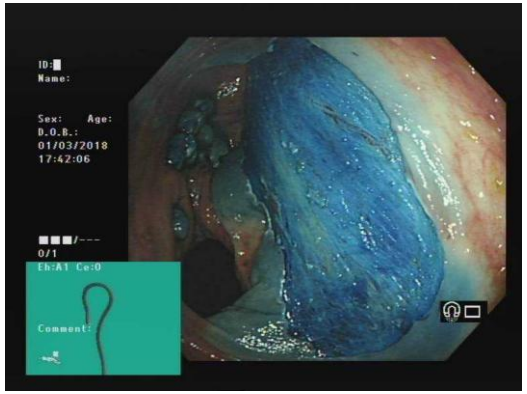
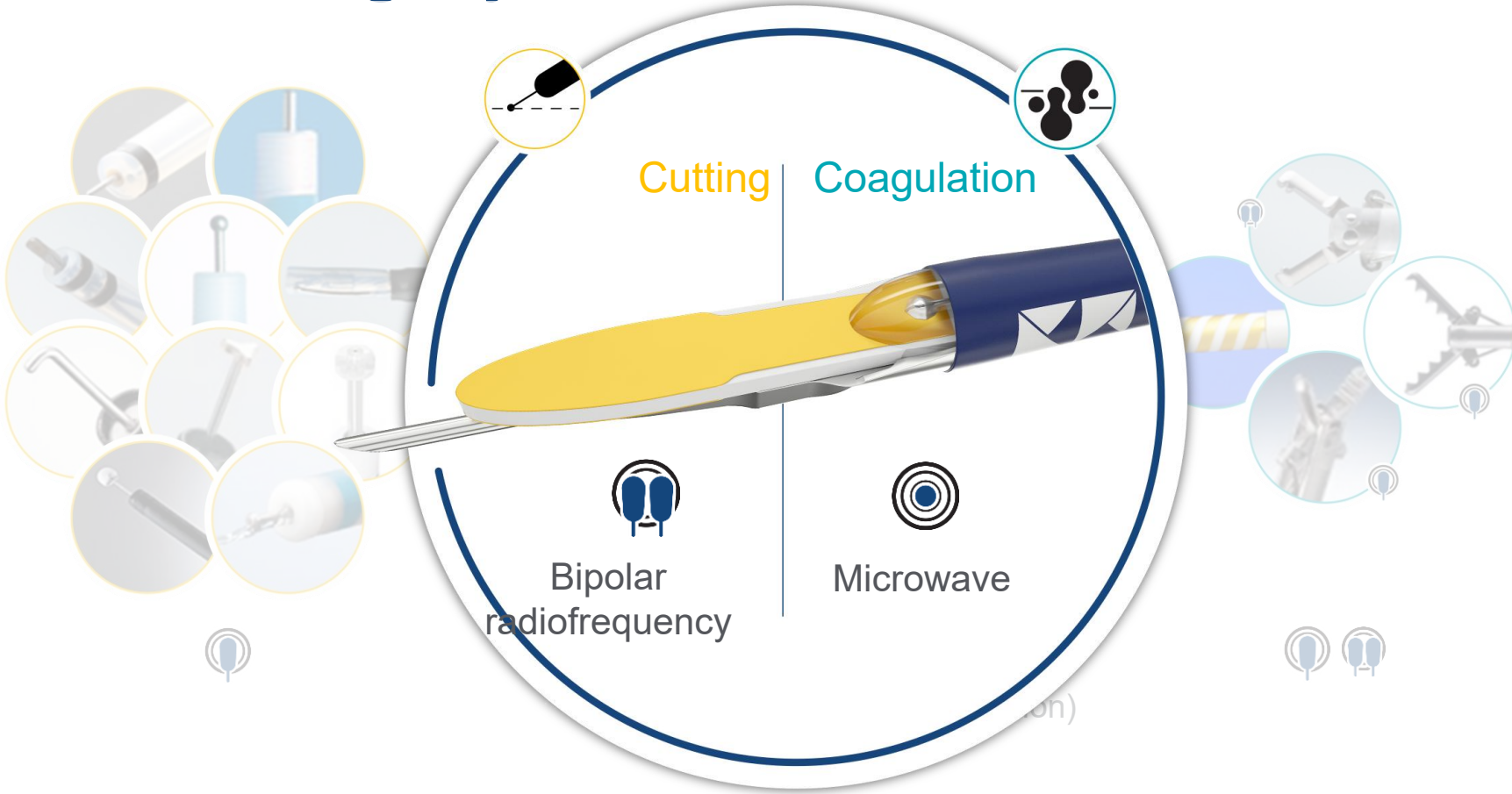






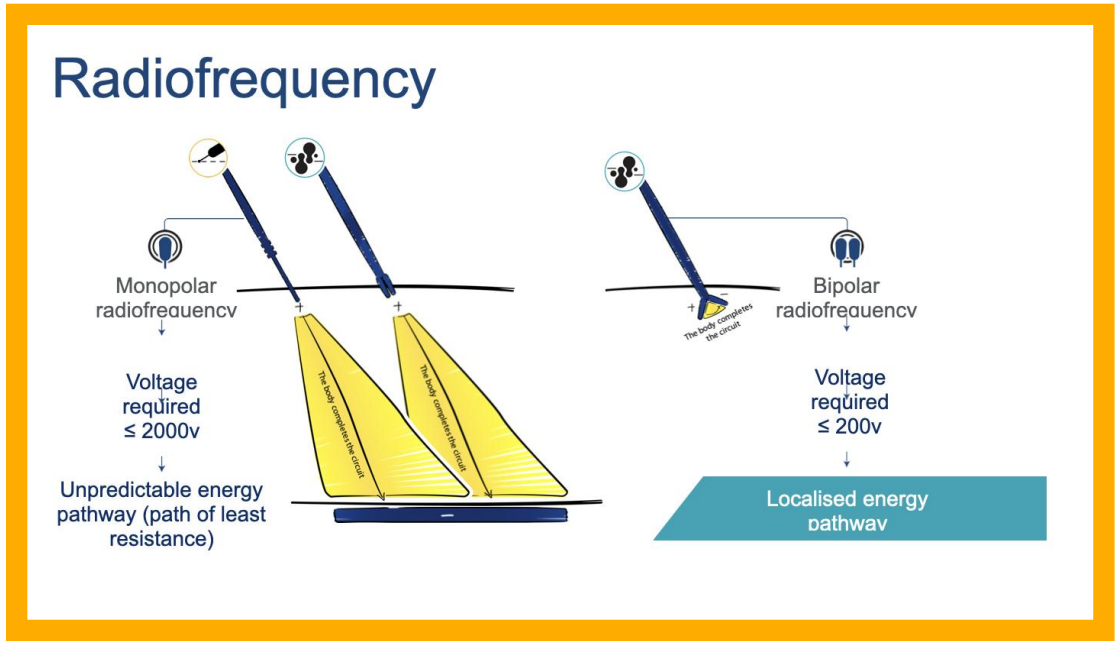
Electrosurgery Modalities



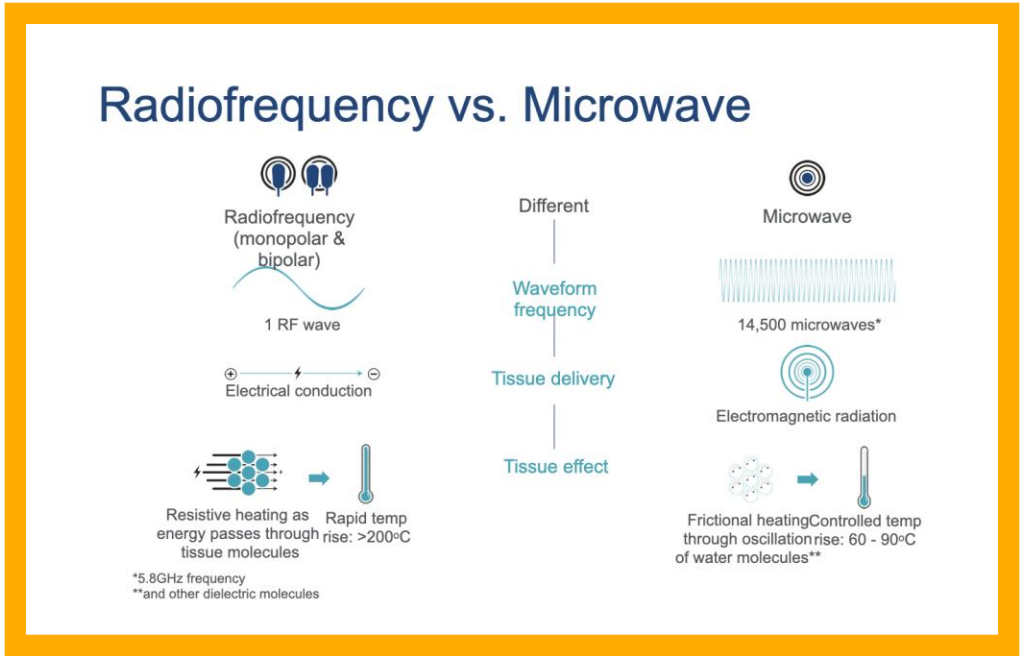
CREO-MEDICAL- SPEEDBOAT

Complications:

- The amount of energy delivered to the tissue plays and important role in **acute, delayed perforations** and **bleeding**.



CUT



COAGULATION

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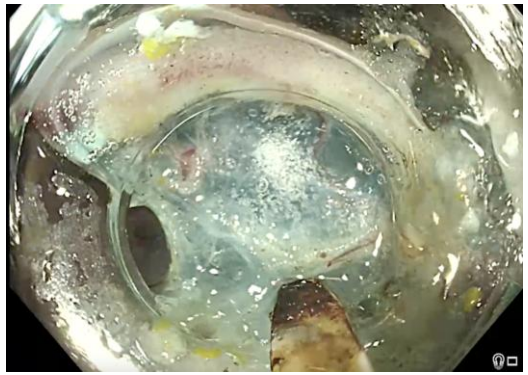

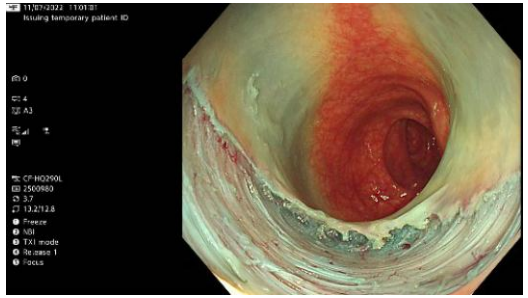

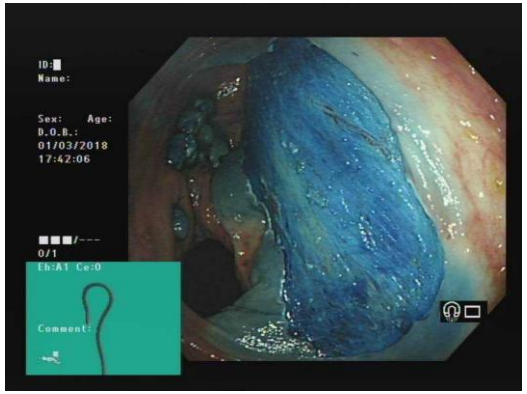

Patient testimony:

I am pleased to say that my recent checks for bowel cancer recurrence were both negative and I have effectively been discharged from your care, subject now only to annual blood tests. I am writing to offer my heartfelt thanks for the fantastic advice, treatment and support I have had from you and all your team over the last three years.

At a time when the NHS is under pressure like never before I can only say that my whole experience has been one of kindness, helpfulness and support throughout the period of my diagnosis and treatment. I am deeply impressed by what you are doing day after day, not to say hugely thankful for your surgical skill and your judgment in my case that you should not intervene further after my operation, but continue to monitor closely. I am glad to report that after three years I am fit and healthy and entirely symptomless. Thank you so much, and please pass this on to your team.

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- SSD trainer: ex-vivo and in-vivo animal models since September 2020
- Annual live endoscopy demonstration of SSD since London Live Endoscopy 2020
- Ongoing remote mentoring sessions to discuss outcomes and progress with my mentorA
- A total of **275** cases performed.
- First case at UCH: 10/09/2019
- Mentoring: 4 cases F2F mentoring
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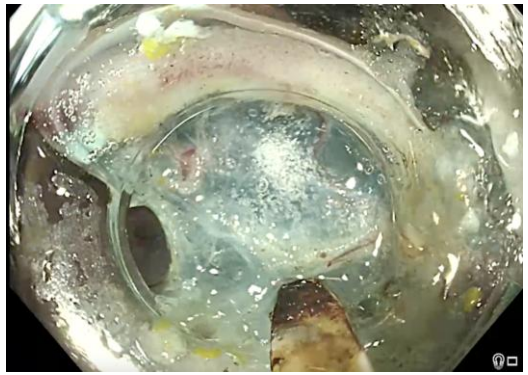
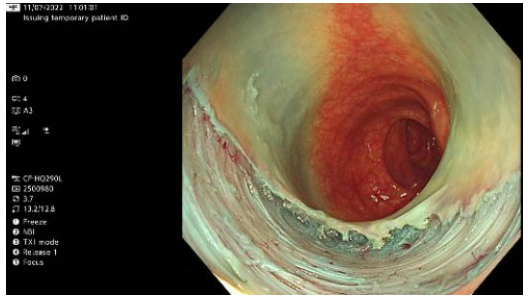
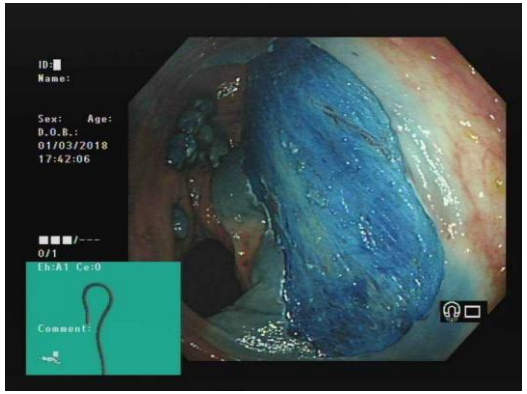






Advanced bipolar and microwave energy- a safer alternative compared to monopolar electrosurgical devices in Western colorectal endoscopic submucosal dissection (ESD) practice?

SJ Looi, R Kader, B Tan, E Seward, O Ahmad, R Vega.
Gastroenterology department, University College London Hospitals NHS Foundation Trust.

Aims

ESD is recommended by ESGE for en-bloc resection of colorectal lesions ≥20mm[1]. Most published data involves ESD using monopolar electrosurgical devices.

We present data of performing ESD without in-house mentoring with a novel electrosurgical device that utilises bipolar radiofrequency and microwave energy at a tertiary centre in the United Kingdom.

Methods

A retrospective observational study of patients undergoing ESD from September 2019 to October 2024 at our institution was performed.

Results

A total of 163 procedures were performed. There were 98 males and 65 females. 88% were aged >50 years. The mean lesion size was 5cm.

There were no cases of immediate bleeding, and only 5 cases (3%) of delayed bleeding. 3 patients (2%) had delayed perforation but only 1 needed surgery. 1 patient (0.6%) had post-polypectomy syndrome.

The overall rate of technical success (en-bloc resection) was 83% and the recurrence rate was 1%. Within the first hundred cases, resection speed doubled from 4 cm²/hour in the initial 25 cases, to 8 cm²/hour in the final 25 cases. This resection speed was maintained in the remaining cases despite taking on more lesions proximal to the rectum.

Year	ESD n (%)	Hybrid n (%)	Standard n (%)	En-bloc resection n (%)	Rectal n (%)	Non-rectal n (%)	R0 n (%)	Mean size (cm)	Mean duration (mins)
2019	6 (3.7)	4 (66.7)	2 (33.3)	2 (33.3)	6 (100.0)	0	0	4.4	291
2020	9 (5.5)	2 (22.2)	7 (77.8)	7 (77.8)	7 (77.8)	2 (22.2)	6 (66.7)	5.8	286
2021	28 (17.2)	10 (35.7)	18 (64.3)	22 (78.6)	17 (60.7)	11 (39.3)	12 (42.9)	4.7	179
2022	45 (27.6)	7 (15.6)	38 (84.4)	39 (86.7)	19 (42.2)	26 (57.8)	28 (62.2)	4.8	153
2023	34 (20.9)	8 (23.5)	26 (76.5)	28 (82.4)	6 (17.6)	28 (82.4)	23 (69.7)	4.9	143
2024	41 (25.1)	5 (12.2)	36 (87.8)	38 (92.7)	18 (43.9)	23 (56.1)	31 (75.6)	5.2	164
Total n (%)	163 (100)	37 (22.7)	126 (77.3)	136 (83.4)	73 (44.8)	90 (55.2)	100 (61.3)	5	203

Figure 1. Outcomes and results of ESD by year [1].

	Standard (n=127)	Hybrid (n=36)	Overall
Complications, n (%)	11 (6.7)	1 (0.6)	12 (7.4)
Perforation, n (%)	3 (1.8)	0	3 (1.8)
Conservative	2 (1.2)	0	2 (1.2)
Surgery	1 (0.6)	0	1 (0.6)
Immediate bleeding, n (%)	0	0	0
Delayed bleeding, n (%)	4 (2.5)	1 (0.6)	5 (3.1)
Post-polypectomy syndrome, n (%)	1 (0.6)	0	1 (0.6)
Recurrence, n (%)			2 (1.2)

Figure 2. ESD safety profile [2].

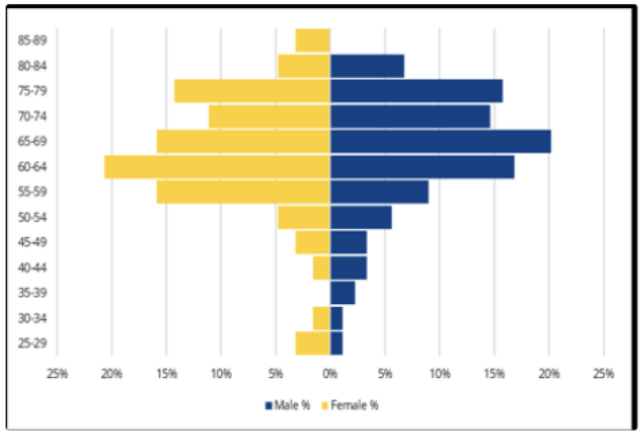


Figure 3. population pyramid of ESD patients [3].

Conclusion

Our findings demonstrate that ESD performed with a novel electrosurgical device combining advanced bipolar radiofrequency for dissection and high frequency microwave energy for coagulation, has an excellent safety and efficacy profile in an institution without in-house mentoring when compared to published European data.

References

1. Pimentel-Nunes P, Libânio D, Bastiaansen BAJ, Bhandari P, Bisschops R, Bourke MJ, Esposito G, Lemmers A, Maselli R, Messmann H, Pech O, Pioche M, Vieth M, Weusten BLAM, van Hooft JE, Deprez PH, Dinis-Ribeiro M. Endoscopic submucosal dissection for superficial gastrointestinal lesions: European Society of Gastrointestinal Endoscopy (ESGE) Guideline - Update 2022. Endoscopy. 2022 Jun;54(6):591-622. doi: 10.1055/a-1811-7025. Epub 2022 May 6. PMID: 35523224.

Published March 2025 – Visit Link >>

Outcomes of pT1 colorectal cancer (CRC) managed by Speedboat™-assisted endoscopic submucosal dissection (ESD)

SJ Looi, O Ahmad, E Seward, R Vega.
Gastroenterology department
University College London Hospitals NHS Foundation Trust

Aims

The introduction of bowel cancer screening programs has led to increased diagnosis of pT1 CRC. Several guidelines exist[1], but the optimal management of these lesions is still disputed. We review the outcomes of pT1 CRC managed by Speedboat-assisted ESD at our tertiary referral centre in the UK, to identify potential trends in guiding management post ESD.

Methods

A retrospective observational study of patients undergoing ESD from September 2019 to October 2024 at our institution was performed.

Results

There were 24 cases (19 rectal & 5 non-rectal). All lesions were adenocarcinomas with a nodular component, apart from one entirely flat lesion which was anal intraepithelial neoplasia. En-bloc resection rate was 87.5%.
Cases were risk stratified according to ESGE guidelines. There were 7 low risk, 5 local-risk and 11 high-risk patients. All high-risk patients were offered surgery: 7 accepted, 2 had chemoradiotherapy, 2 had surveillance. There was no residual tumour on any surgical specimen and only 1 had positive lymph nodes. 1 patient suffered anastomotic dehiscence and sepsis, 4 patients had low anterior resection syndrome (LARS). Those who declined surgery remain in remission after a mean 28-month follow-up period.

Risk	Definition
Very low	R0, enbloc, TiS, no high-risk features.
Low	R0, enbloc, T1-SM1, no high-risk features.
Undefined	R0, enbloc, T1>SM1, no high-risk features.
Local	Complete endoscopic resection (enbloc or piecemeal), positive horizontal margins, no high-risk features.
High	Lymphovascular invasion, deep margin involvement, undifferentiated tumour, grade 2 or 3 budding.

Figure 1. Risk stratification based on ESGE guidelines [1]

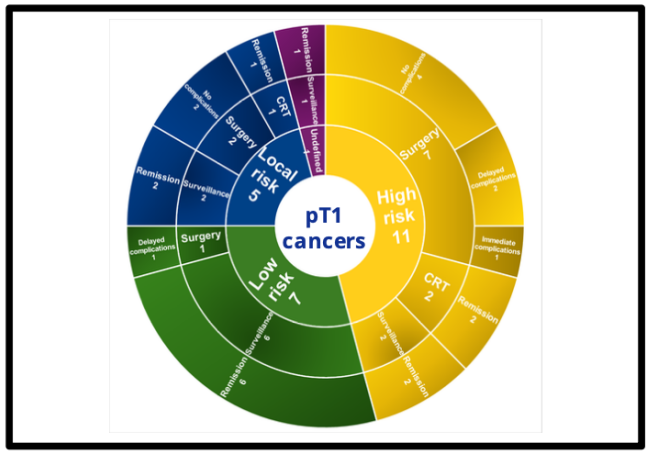


Figure 2. Outcomes [2].

Distribution, n (%)	
Rectum	18 (75)
Rectosigmoid	1 (4.2)
Sigmoid colon	2 (8.3)
Splenic flexure	1 (4.2)
Transverse	2 (8.3)
Morphology, n (%)	
LST-G mixed nodular	12 (50)
LST-NG	11 (45.8)
Unspecified	1 (4.2)
Paris classification, n (%)	
1s	15 (62.5)
2a	1 (4.2)
2a+1s	8 (33.3)
Histology, n (%)	
Adenocarcinoma	23 (95.8)
AIN	1 (4.2)

Figure 3. Lesion characteristics [3].

Conclusion

Nodular morphology and distal lesions are predictive of submucosal invasive cancer. Risk stratification of pT1 CRC based on existing guidelines does not predict true need for surgery. None of the high-risk patients managed surgically had any residual tumour, and 5 patients suffered surgical complications. High-risk patients who declined surgery also remain in remission to date.
Our results demonstrate that ESD should be considered as an alternative to surgery for patients with pT1 CRC. Deep resection margins <1mm alone, may not predict the true need for surgery and further research is needed to define characteristics that do.

References

1. Pimentel-Nunes P, Libânio D, Bastiaansen BAJ, Bhandari P, Bisschops R, Bourke MJ, Esposito G, Lemmers A, Maselli R, Messmann H, Pech O, Pioche M, Vieth M, Weusten BLAM, van Hooft JE, Deprez PH, Dinis-Ribeiro M. Endoscopic submucosal dissection for superficial gastrointestinal lesions: European Society of Gastrointestinal Endoscopy (ESGE) Guideline - Update 2022. Endoscopy. 2022 Jun;54(6):591-622. doi: 10.1055/a-1811-7025. Epub 2022 May 6. PMID: 35523224.

Thieme

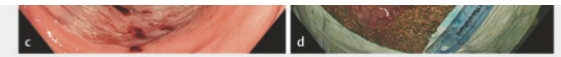
Organ-preserving endoscopic resection of a large colorectal lesion causing McKittrick–Wheelock syndrome

OPEN ACCESS

Video 1 Speedboat-assisted endoscopic submucosal dissection (S-ESD) of a large colorectal lesion causing McKittrick–Wheelock syndrome.

McKittrick–Wheelock syndrome is a rare but life-threatening condition characterised by severe diarrhoea, electrolyte disturbances, and kidney injury caused by colorectal tumours [1]. The majority of reported cases have been managed by surgical resection [2]. We demonstrate a case of McKittrick–Wheelock syndrome managed endoscopically by speedboat-assisted endoscopic submucosal dissection (S-ESD). S-ESD involves the use of a novel endoscopic electrosurgical device combining advanced bipolar radiofrequency for dissection and microwave energy for coagulation (▶ **Video 1**). This technique was selected to enable en-bloc resection with the potential for organ preservation, while minimising the risks associated with surgery below the peritoneal reflection, particularly in an elderly patient with multiple co-morbidities.

The lesion was removed en-bloc completely by S-ESD (▶ **Fig. 1**). Our patient had an uneventful recovery without any immediate or delayed complications. Histology confirmed R0 resection of a tubulovillous adenoma with low-grade dysplasia and focal high-grade dysplasia. S-ESD using Speedboat is a safe alternative to surgery for the management of McKittrick–Wheelock syndrome especially with lesions below the peritoneal reflection to minimise complications associated with surgery.



▶ **Fig. 1** Endoscopic resection of a large colorectal lesion causing McKittrick–Wheelock syndrome. **a, b**, Laterally spreading tumour extending from the rectum beyond the rectosigmoid junction. **c** Resection bed following Speedboat-assisted endoscopic submucosal dissection. **d** Final specimen measuring over 17 cm.

Endoscopy_UCTN_Code_TTT_1AQ_2AD_3AD

Acknowledgement

We would like to thank the endoscopy team at University College Hospital for setting up the video recording of the procedure, without which our submission would not be possible.

Conflict of Interest

The authors declare that they have no conflict of interest.

The authors

Shi Jie Looi[1], Omer Ahmad[1], Edward Seward[1], Roser Vega[1]

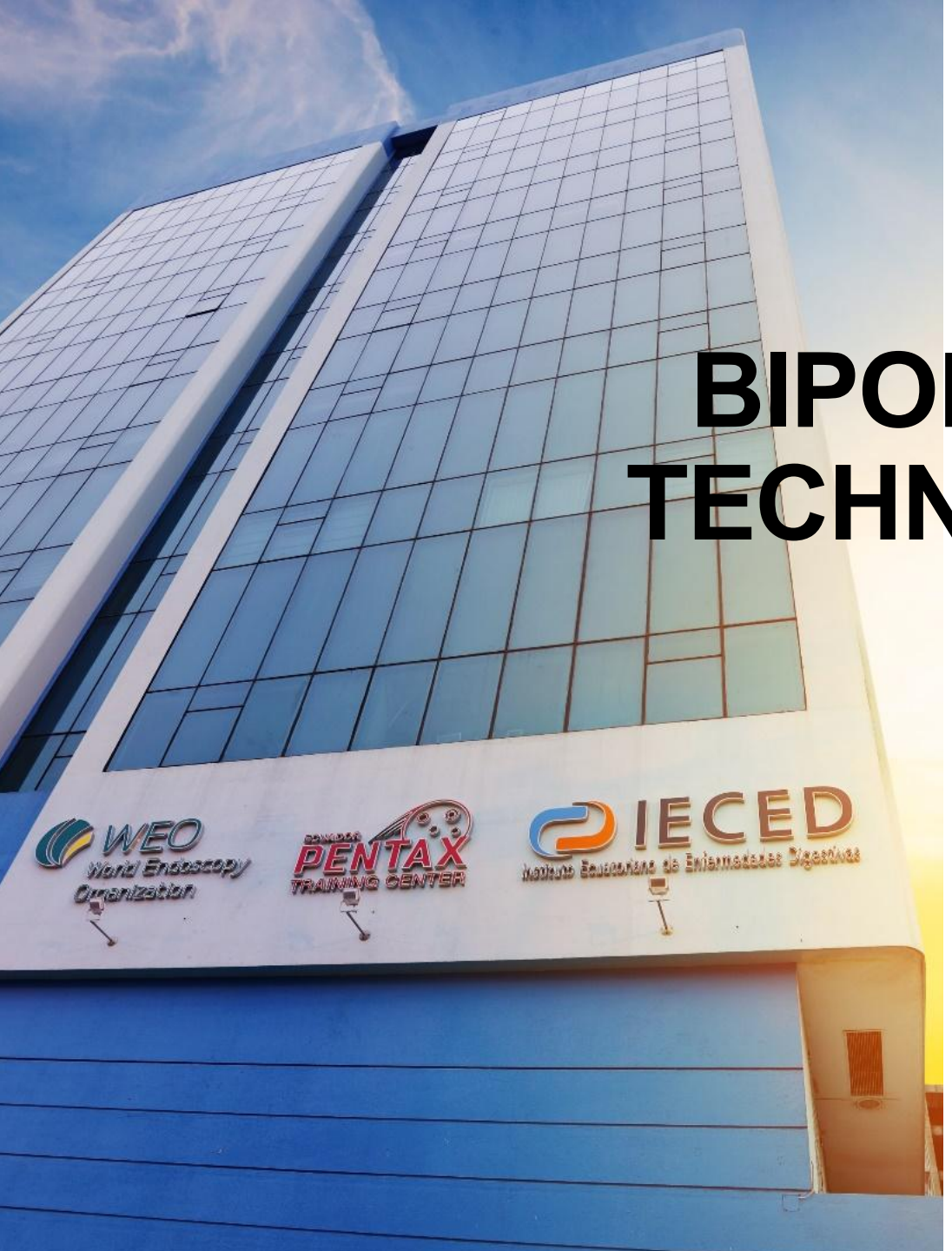
1 Gastroenterology Department, University College London Hospitals NHS Foundation Trust, London, England, United Kingdom

MY COLLABORATION WITH CREO MEDICAL TRAINING/INNOVATION:

- Member of Creo Medical Innovation Council:
  - New devices: Spydrblade Flex, Bipolar Snares, Speedboat Notch
- Member of Creo Medical Strategy Advisory Board
- Pioneer Programme Trainer and Mentor:
  - Pioneer Programme Trainer
  - Ongoing mentor for new adopters in the UK/Europe


THANK YOU

Dr Carlos Robles-Medranda



BIPOLAR & MICROWAVE TECHNOLOGY: PRESENT & FUTURE

Carlos Robles-Medranda, M.D., FASGE, AGAF

croblesm@ieced.ec

IECED
Instituto Ecuatoriano de Enfermedades Digestivas

DISCLOSURE

- Dr. Carlos Robles-Medranda is a key opinion leader and consultant for:
  - PENTAX MEDICAL
  - Micro-Tech
  - Motus
  - Limaca Medical
  - Endosound
  - CREO Medical
  - Gastritech Medical Supply
  - MDCONSGROUP
  - Steris

BACKGROUND

BIPOLAR TECHNOLOGY

- Bipolar energy systems are increasingly used in surgery and endoscopy because they offer **greater precision**, **less collateral tissue damage**, and **improved safety** compared to monopolar energy.

- Bipolar electrosurgery uses **two electrodes located on the same instrument**, allowing current to travel between them instead of passing through the patient's entire body.

- This provides: Highly localized heating Reduced thermal spread Less risk of stray energy injuries Better control in confined spaces (GI tract, ENT, laparoscopic surgery)

MICROWAVE TECHNOLOGY

- Microwave applications in medicine are relatively a new field of growing interest, with a significant trend in healthcare research and development.
- The first application of microwaves in medicine dates to the 1980s in the treatment of cancer via ablation therapy; since then, their applications have been expanded.
- As microwave energy is a form of non-ionizing radiation, it does not alter the molecular structure of biological tissue and has significant biomedical applications

Advanced Energy & Endoscopic Instruments

ADVANCED ENERGY PLATFORM

CROMA Advanced Bipolar RF and SHF microwave energy generator powering Creo's range of devices

ADVANCED ENERGY INSTRUMENTS

+ Suite of matched, single-use endoscopic electro-surgical devices for minimally invasive procedures

ENDOSCOPIC INSTRUMENTS

Full range of single use consumable endoscopy devices & accessories for diagnostic and therapeutic procedures

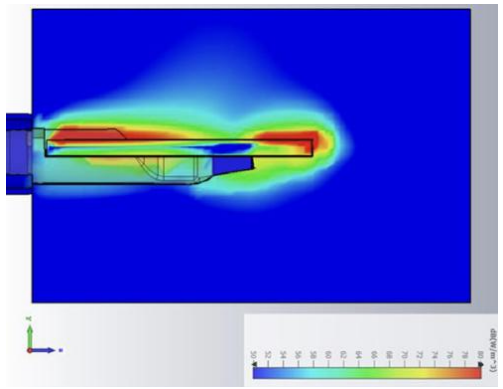
Lower and Upper GI

(Esophagus, Stomach, Bowel)

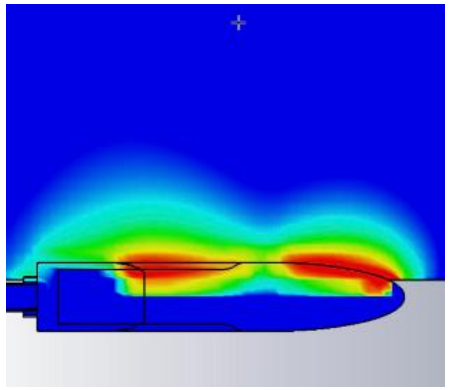
SPEED BOAT: THE EVOLUTION

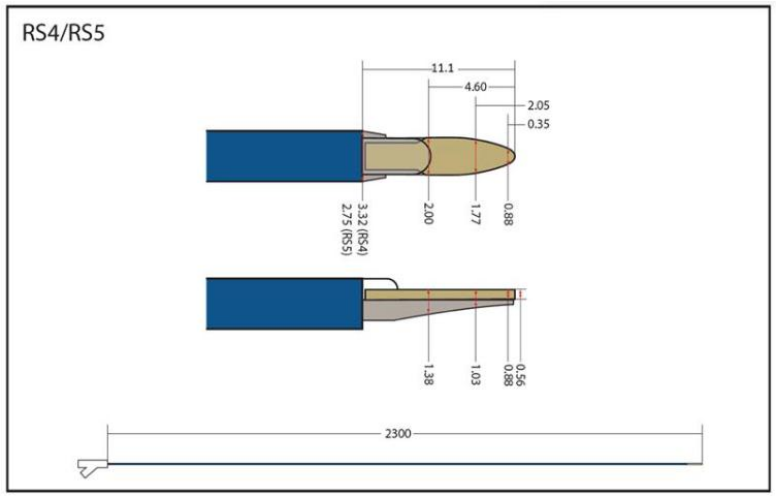
Speedboat UltraSlim Energy Distribution

Top Profile



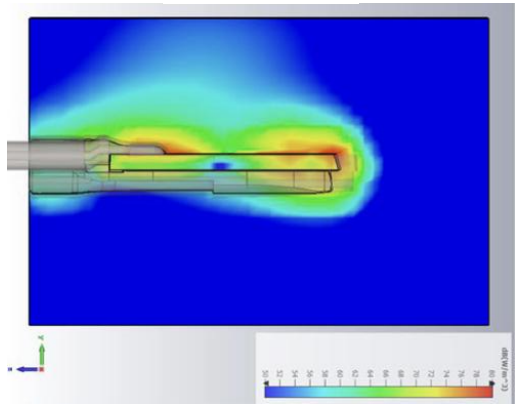
Side Profile



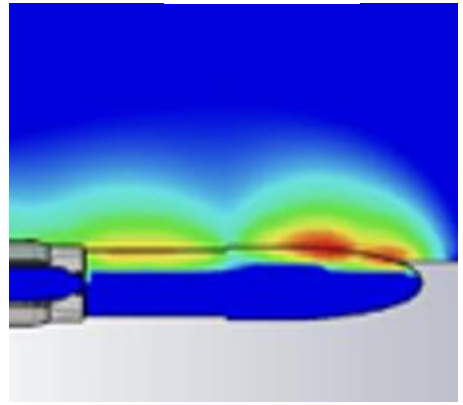


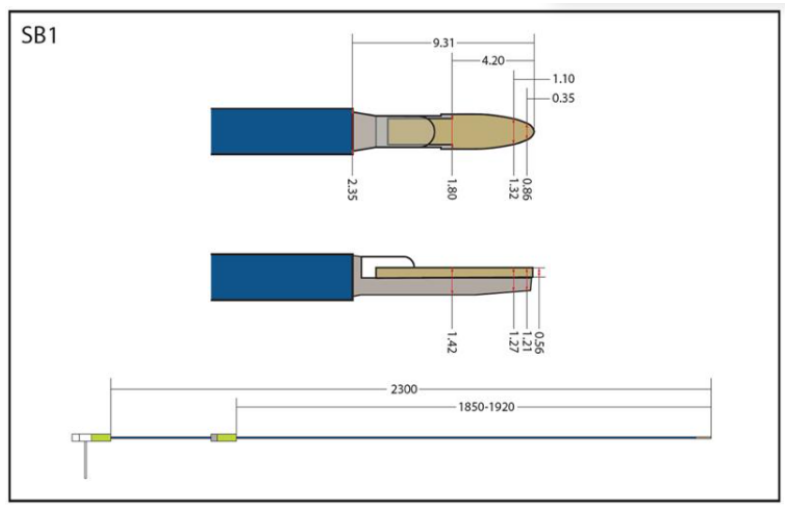
Speedboat Inject 3.2mm

Top Profile



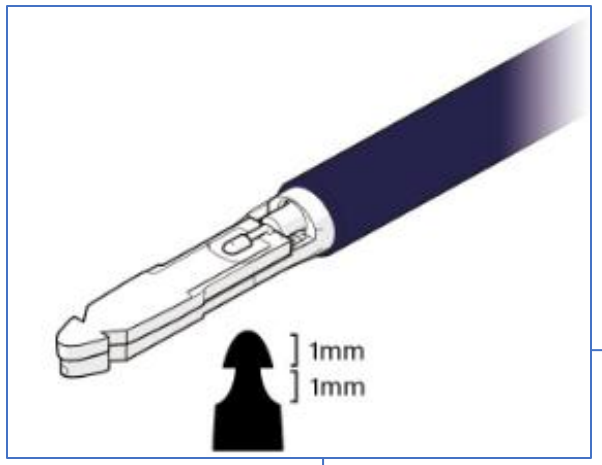
Side Profile

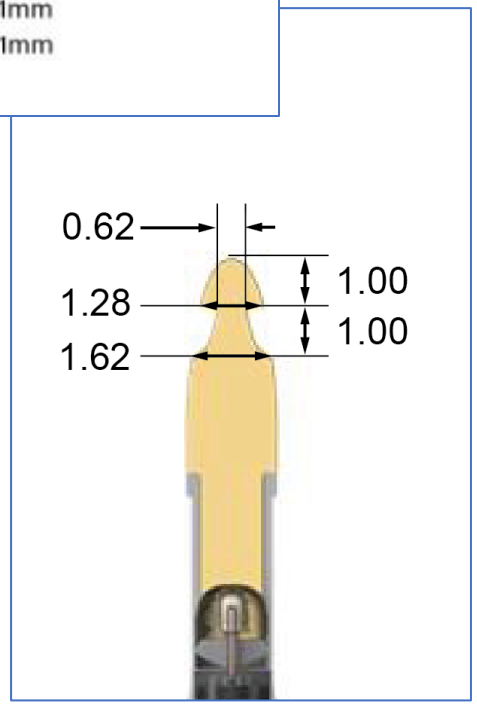


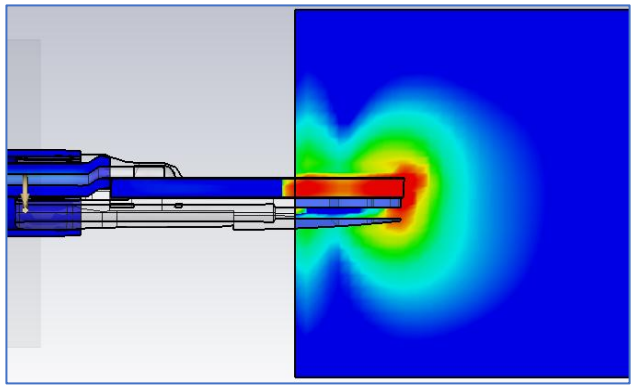


Speedboat Ultra Slim

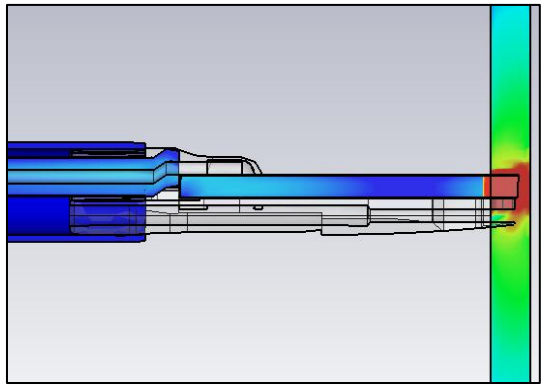
Energy Maps-Microwave: Speed boat Notch



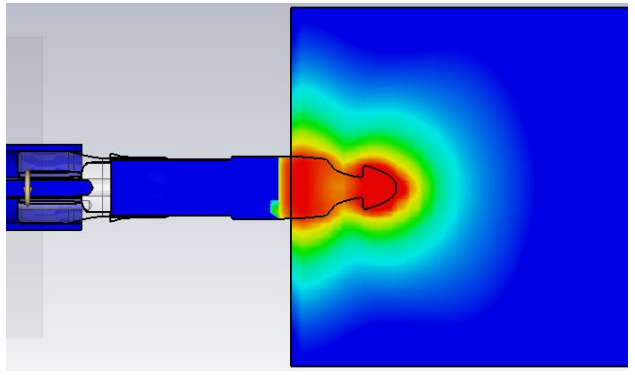




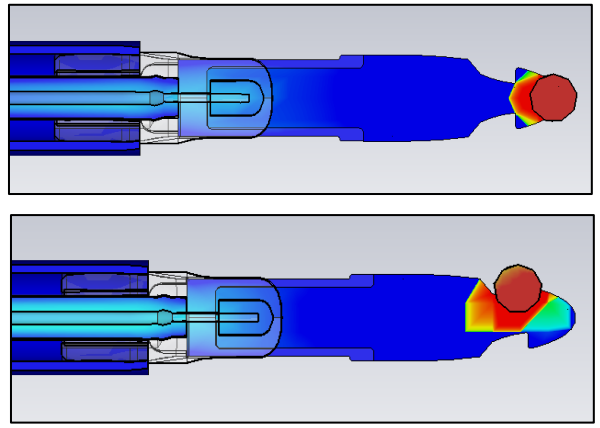
SB1 Notch Power Loss Density map (Tip 3mm into Liver Model) (75/110 scaling)



SB1 Notch Power Loss Density map (Tip into 1mm dia Blood Vessel Model) (75/110 scaling)



SB1 Notch Power Loss Density map (Top down view) (Tip 3mm into Liver Model) (75/110 scaling)

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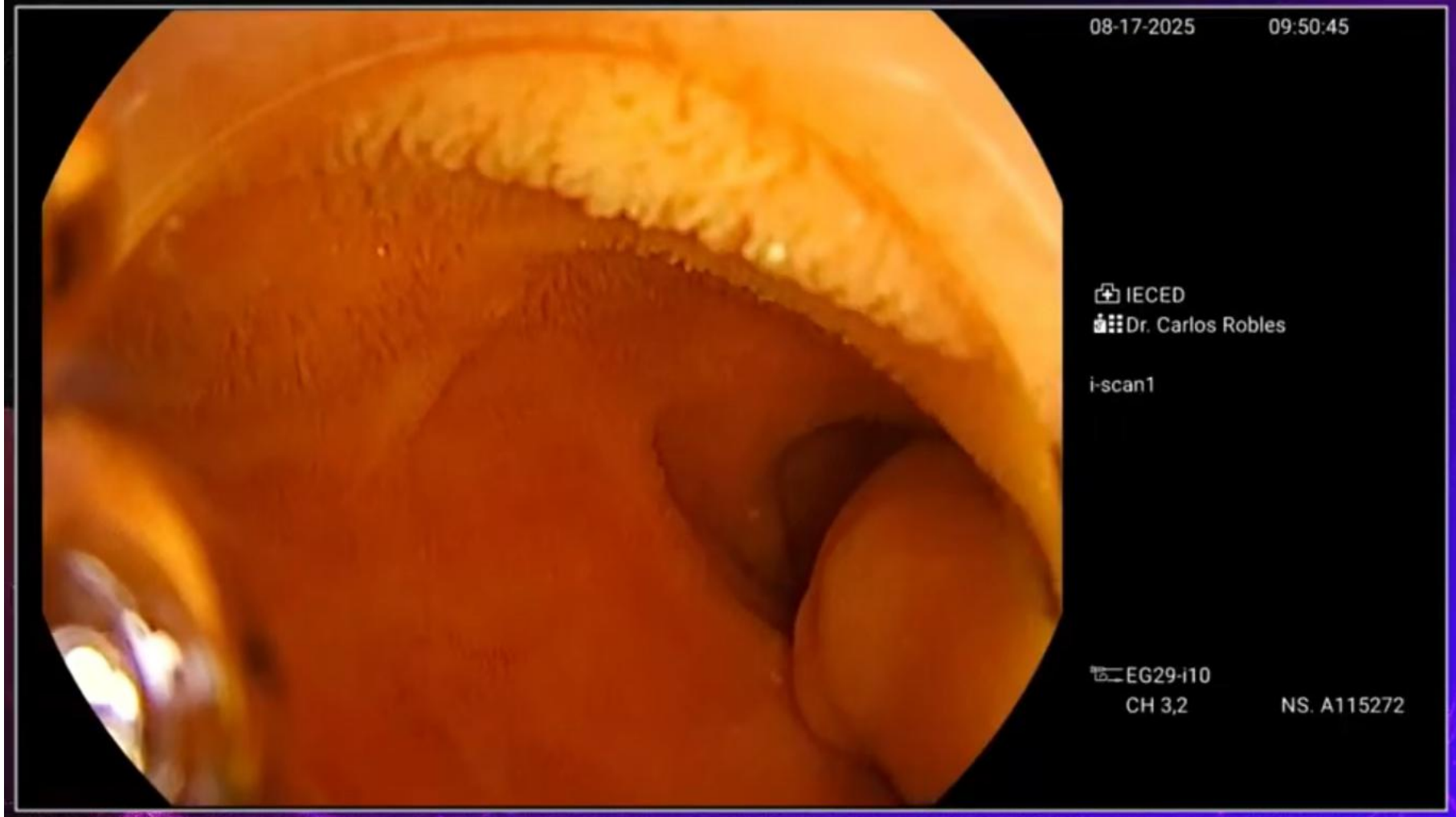

9th ONLINE
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ENDOSCOPY COURSE
IECED & PTCE

DRA. DANIELA TABACELIA
RUMANIA

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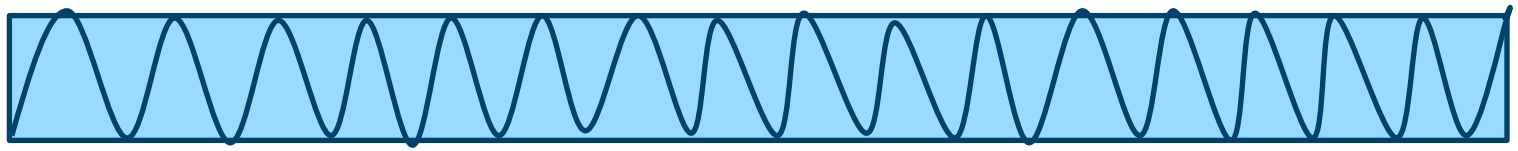
Microwave Technologies in Medicine

- • Non-ionizing spectrum



300 MHz 300 GHz

- • Thermal & non-thermal biological interactions

THERMAL BIOLOGICAL INTERACTION: MICROWAVE TECHNOLOGY

VIDEO CASE REPORT

Novel EUS-guided microwave ablation of an unresectable pancreatic neuroendocrine tumor

Carlos Robles-Medranda, MD, Martha Arevalo-Mora, MD, Roberto Oleas, MD, Juan Alcivar-Vasquez, MD, Raquel Del Valle, MD

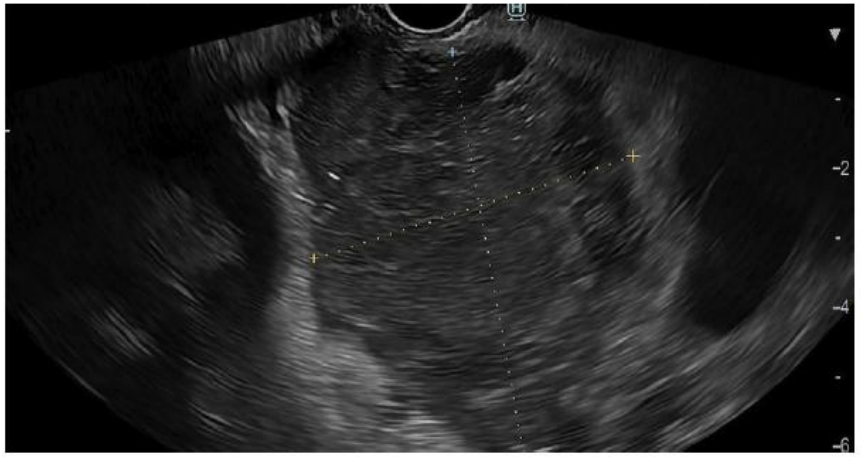


Figure 3. A decrease in the size of the pancreatic neck lesion and complete ablation was noted after intervention on EUS.

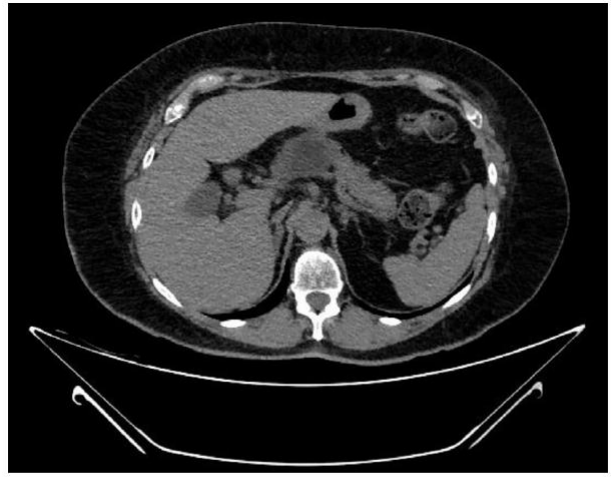


Figure 4. Four-week follow-up CT scan on the cross-sectional plane showed good radiologic response with an avascular area in the head of the pancreas corresponding to the ablation zone.

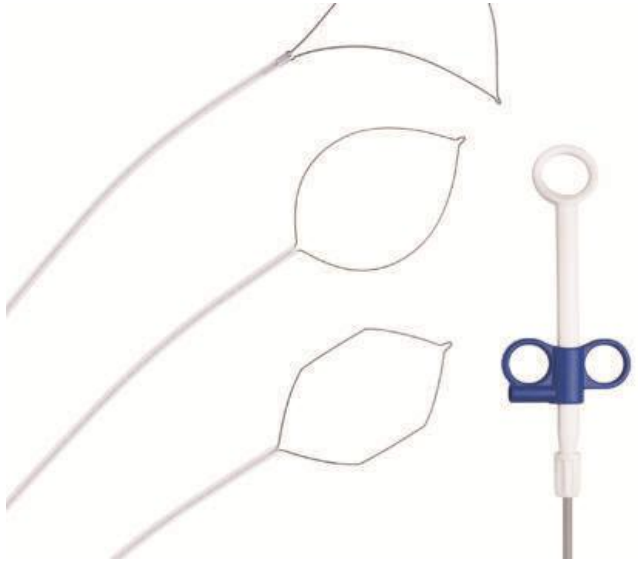
Robles-Medranda C, et al. Video GIE 2022; 74-76

THE FUTURE:

1. NEW ADVANCE ENERGY ENDOSCOPY INSTRUMENTS
2. MICROWAVE TECHNOLOGY IN MEDICINE NON-THERMAL BIOLOGICAL INTERACTIONS & AI
3. BIPOLAR TECHNOLOGY & AI

BIPOLAR TECHNOLOGY IN ENDOSCOPY:

NEW ADVANCE ENERGY ENDOSCOPY INSTRUMENTS



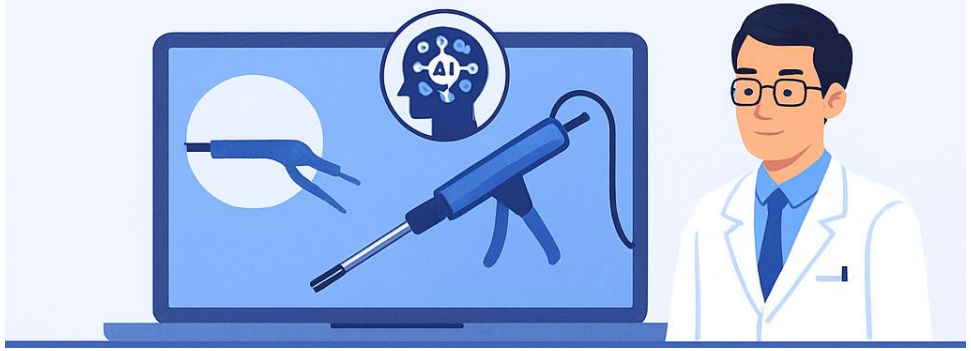
SNARE POLYPECTOMY

SPHYNCTEROTOME &
MW ABLATION CATHETER

COAGULATION AND HOT GRASPER
WITH MICROWAVE

CYSTOSTOME

AI-ENHANCED BIPOLAR ENERGY IN MEDICINE



BIPOLAR ENERGY

Two electrodes on instrument lower thermal spread, reducé risk of stray burns

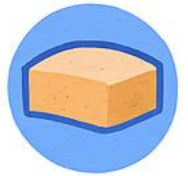
CLINICAL ADVANTAGES

More Precise
Optimal energy doses

Safer
Lower risk of injuries

More Reproducible
Standardizes procedures

HOW AI ENHANCES BIPOLAR ENERGY SYSTEMS



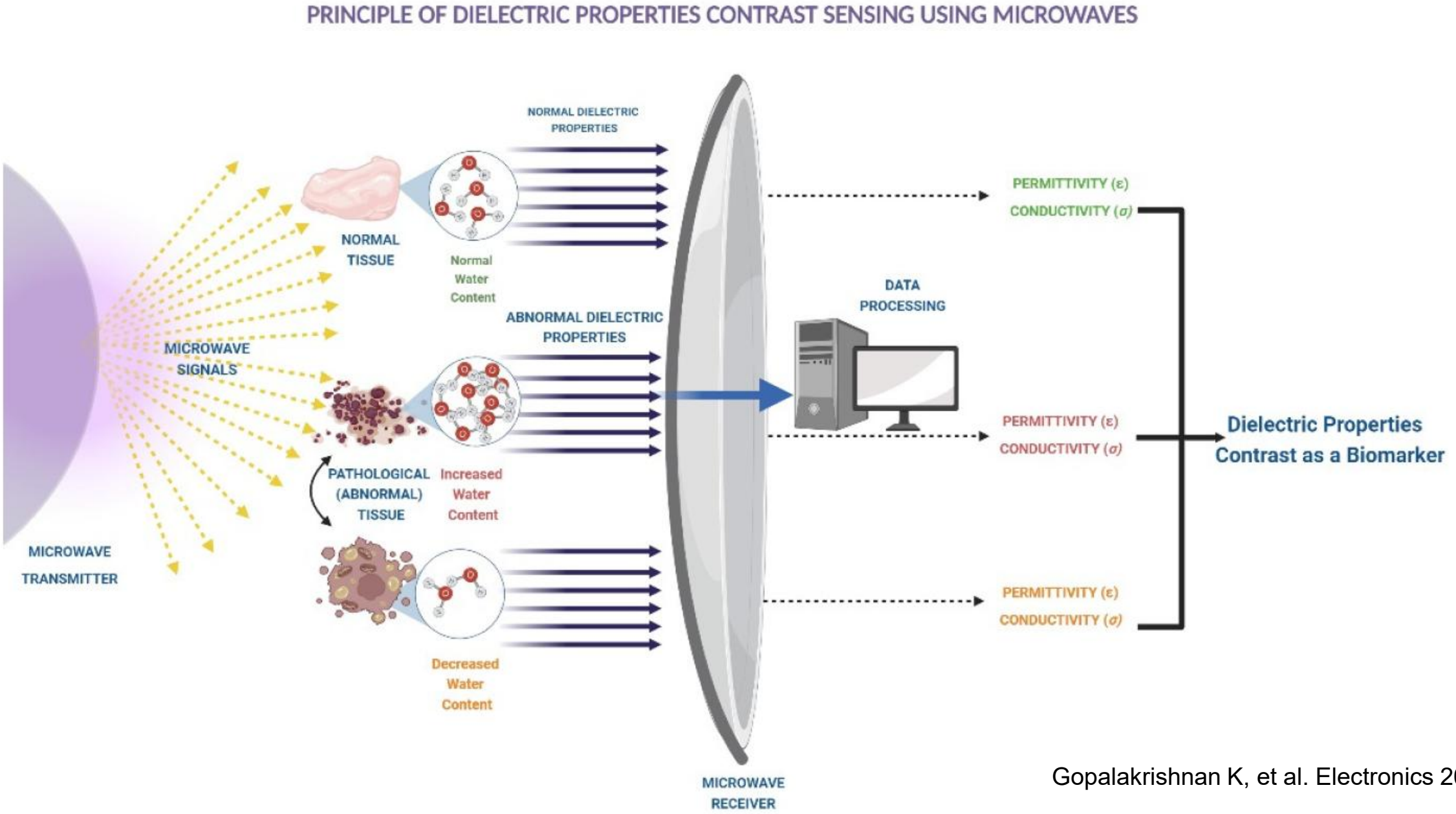
Real-Time Tissue Characterization
AI classifies tissue type by analyzing sensor data

Intelligent Energy Modulation
AI adjusts energy output to the specific tissue sutype

Predictive Safety Monitoring
AI detects early signs of excessive heat

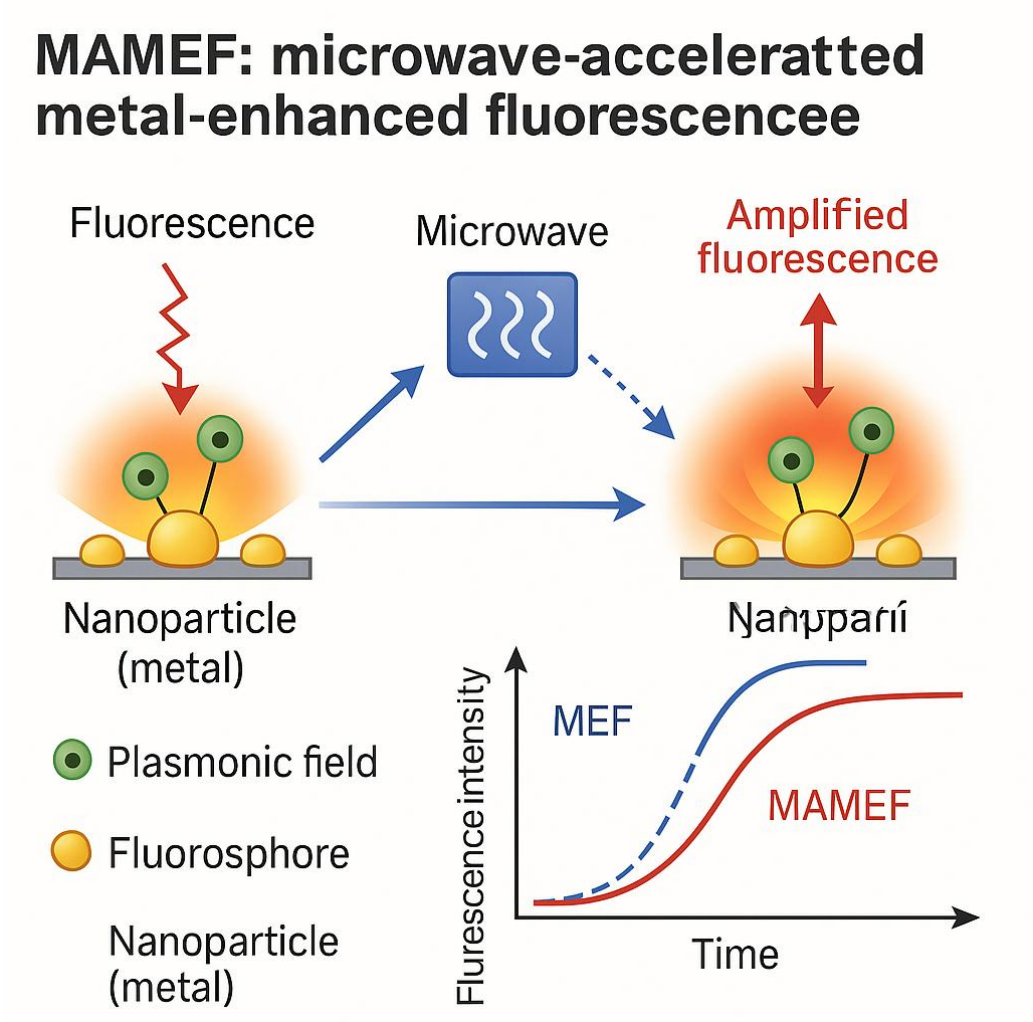
Integration with Imaging and **Robotics**
AI regulates energy delivery based of imaging or robotic inputs

Source: Ohasd et al., Diagnostics, 2022



Gopalakrishnan K, et al. Electronics 2023

Figure 1. Principle of dielectric properties contrast sensing using microwaves [8].



- It is a technology that combines **microwaves + metallic nanoparticles + fluorescence** to produce **much stronger and faster fluorescent signals**.
  It is used in biomedicine, molecular diagnostics, biomarker detection, point-of-care systems, and ultra-rapid biosensors.
- Key benefits:
  ✅ Extremely high sensitivity
  ✅ Ultra-fast detection (seconds)
  ✅ Very low detection limits (femtomolar)
  ✅ Ideal for point-of-care diagnostics
  ✓ Viruses, bacteria, microRNAs, proteins
  ✓ Oncologic biomarkers
  ✓ Intraoperative detection

Microwave Technologies in Medicine: The Future

Table 1. Overview of microwave sensor design and applications in medicine.

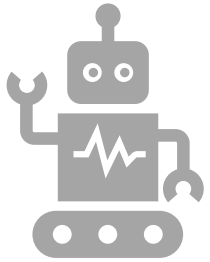
Application	Sensor Design		Frequency	Reference
Blood Pressure Estimation	Continuous-wave radar sensor	The analysis is conducted by reflective pulse transit time (R-PTT) using the BP computation algorithm.	24 GHz	[127]
	Wrist Pulse Sensor	The sensor creates a focused electric field to detect wrist pulse waveforms in the near-field region. Then, the reflective pulse transit time is taken from this measured wrist pulse waveform and uses the blood pressure computational algorithm.	5.7 GHz	[128]
Dielectric Characterization	Microwave biochemical sensor	Circular substrate integrated waveguide (CSIW) topology.	1 to 6 GHz	[129]
	Microwave near-field sensor	The sensor is based on a small planar resonator and developed in a complete-cycle topology optimization where a binary particle swarm algorithm is applied.	5.63 GHz	[130]
	High-resolution probe	The probe is designed based on a small loop antenna which is loaded by spiral resonator.	915 MHz	[131]
Liquid Dielectric Characterization	Split-Ring Resonator Sensor	A small volume of liquid is considered to conduct complex permittivity ($\varepsilon' + j\varepsilon''$) characterization.	Up to frequencies of approximately 200 MHz	[132]
	MW sensor with Metamaterial Complementary Split Ring Resonator	A contactless sensor is proposed by using liquid samples placed normally on the sensor surface. The sample is placed inside capillary glass tubes to determine the dielectric properties of liquids. The samples that were placed inside the tubes changed the resonant frequency of the CSRR sensor.	2.4 GHz	[133]
Blood Glucose Level Monitoring	Millimeter-Wave Radar Sensor	The radar's several channels are used to gather the reflected mm waves, which serve as distinctive signatures for the internal synthesis and composition of the examined blood samples. Signal-processing techniques are used to distinguish between various glucose concentrations and link them to the reflected mm-wave data.	60 GHz	[134]
	Ultra-wide band transceiver	Non-invasive estimation is achieved by using UWB planar antenna as hardware and ANN with the signal acquisition as a software module.	4.7 GHz	[135]
	Non-invasive microwave sensor	An in house open-ended coaxial cable is used, and the complex permittivity values are determined with the help of ANN from the value of complex reflection coefficients. Debye complex permittivity model is used.	0.3 to 15 GHz	[136]
	Spiral microstrip resonator	An analytical new equation is constructed with the help of Newton–Raphson iterative method.	300 MHz to 2 GHz	[137]
Avian Influenza Virus	Biosensing metamaterial reflector	Different complex refractive indexes (CRIs) are detected	1.71464 THz	[138]
Kidney stones (renal calculi)	Open-ended contact probe	Newton–Raphson method is used to fit Cole–Cole parameters to the dielectric properties and k-nearest-neighbors (kNN) machine-learning algorithm is used for the classification.	500 MHz to 6 GHz	[39]

Table 1. Overview of microwave sensor design and applications in medicine.

Gopalakrishnan K, et al. Electronics 2023

Microwave Applications in Modern Medicine

Non-ionizing EM technology enabling safer diagnostics and therapy.



AI enhances clinical decision-making, reconstruction speed, and workflow efficiency.

Applications span imaging, molecular diagnostics, ablation, pathology, telemetry, and waste sterilization.

AI-Enhanced Imaging & Diagnostics

Microwave Imaging (MWI): leverages dielectric contrast for non-invasive, radiation-free diagnostics.

Deep learning accelerates reconstruction and increases diagnostic precision.

Molecular diagnostics: MAMEF + AI improves sensitivity and reduces turnaround time.

Dielectric spectroscopy + ML: high-accuracy tissue classification across organs.

Therapeutic Applications & Emerging Technologies

- Microwave Ablation (MWA): effective for liver, kidney, lung, thyroid, bone, and gynecologic tumors.
- Outperforms RF in select cases (e.g., perivascular lesions) with larger, predictable ablation zones.
- Drug delivery acceleration using microwave-activated nanoparticles.
- Microwave sensors and telemetry enabling continuous remote monitoring.

Gopalakrishnan K, et al. Electronics 2023

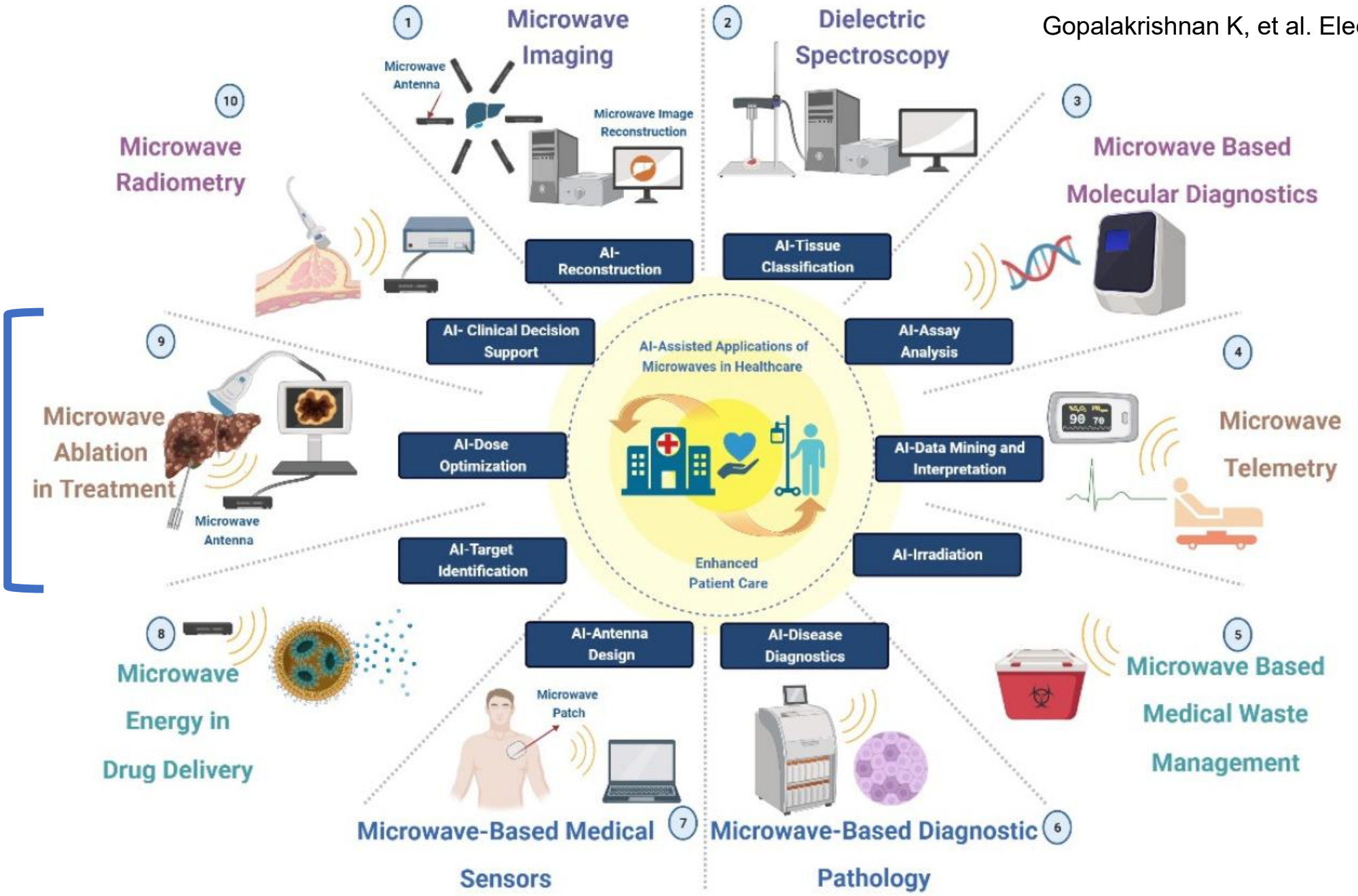


Figure 2. AI applications of microwaves in medicine to enhance patient care [8].

WHAT SHOULD WE UNDERSTAND?

Key Takeaways & Strategic Vision

- Microwave technologies are shifting from niche tools to mainstream medical platforms that could increase healthcare technology to treat patients and diseases, increasing sales and revenues.
- AI integration transforms data-rich microwave and bipolar systems into precision diagnostic and therapeutic devices.
- Clinical impact: faster diagnosis, minimally invasive treatments, improved patient outcomes.
- Investor perspective: scalable hardware, AI-software stack, multi-market expansion (oncology, pathology, imaging, tele-health, sterilization including surgical romos and devices).
- High-growth potential driven by unmet needs in non-invasive diagnostics and targeted therapy.


WEO
World Endoscopy
Organization
PENTAX
TRAINING CENTER
IECED

THANK YOU

Dr Benjamin Tharian

MBBS MD MRCP FACP FACG FRACP FASGE
Interventional Endoscopist and Chief of Endoscopy
Department of Gastroenterology and Hepatology
Division of Medicine, Orlando Health, BayFront Hospital
Digestive Health Institute (DHI)
Center for Advanced Endoscopy, Research and Education (CARE)

What is POEM and Which disorders does it treat?

- **Peroral Endoscopic Myotomy (POEM)** - minimally invasive endoscopic procedure used to treat swallowing disorders caused by muscle dysfunction

- **Disorders treated:**
  - Achalasia
  - Diffuse esophageal spasm (DES)
  - Hypertensive LES
  - Spastic disorders

Indications for POEM

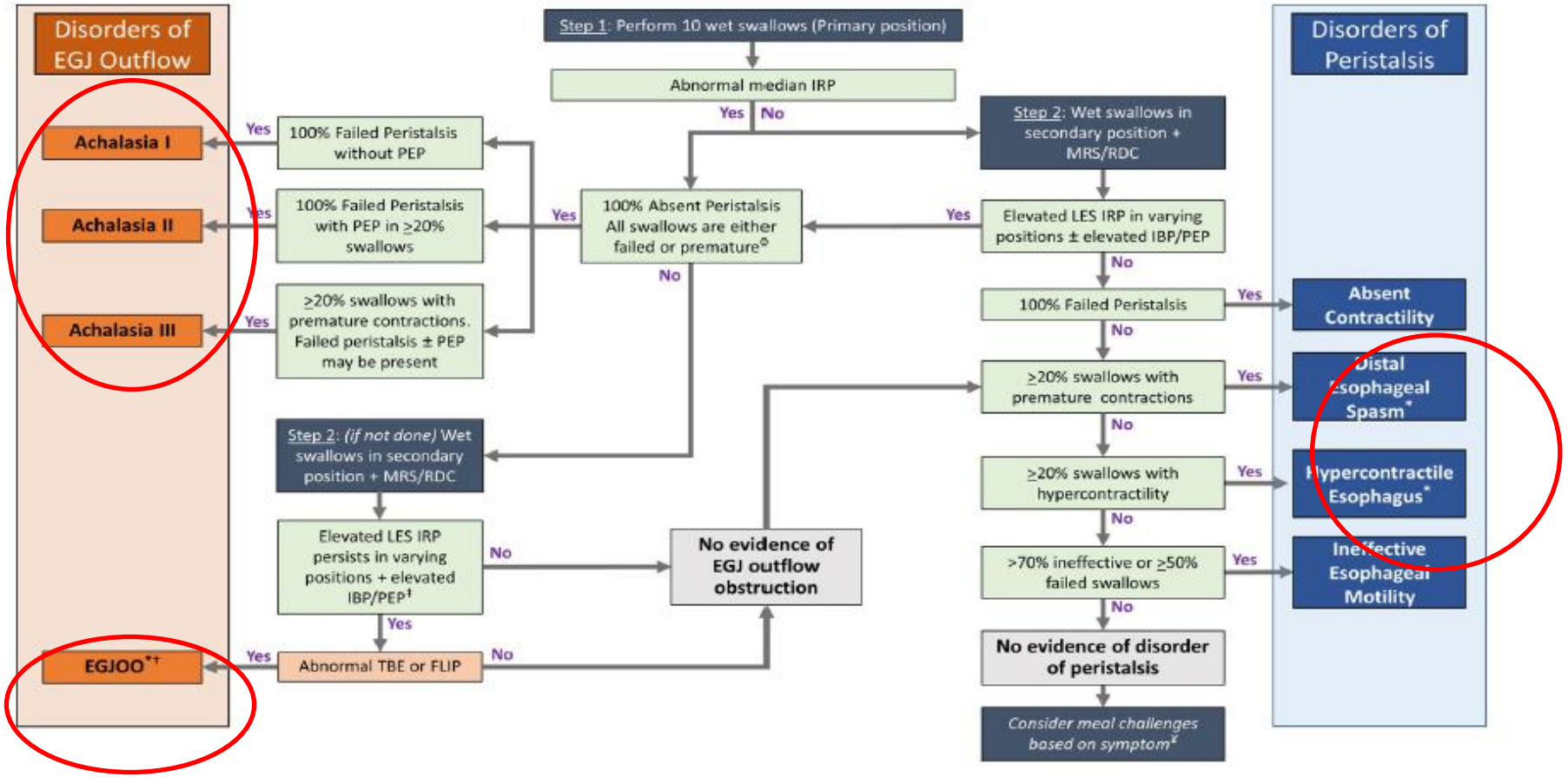
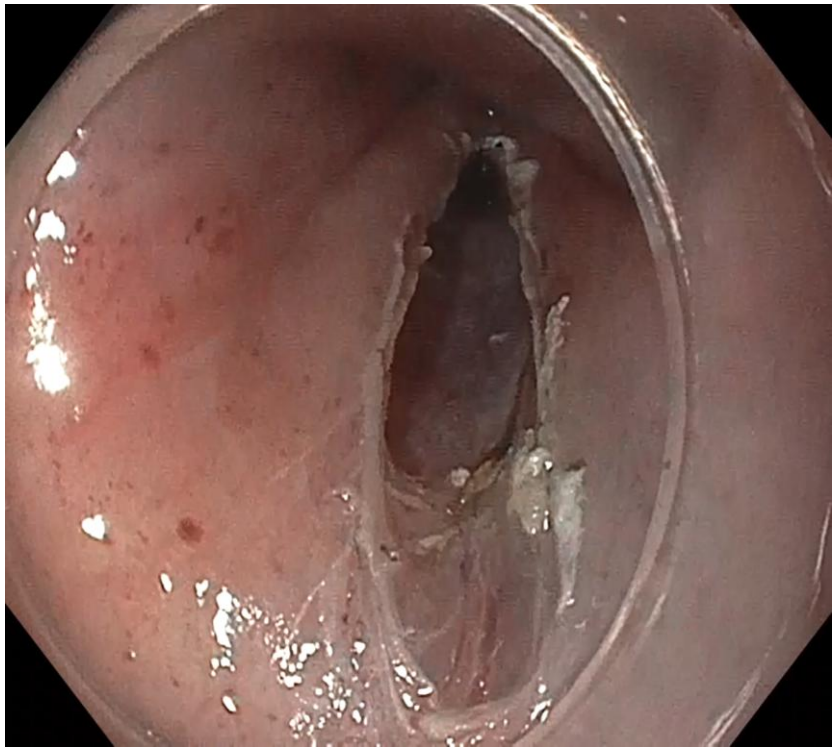
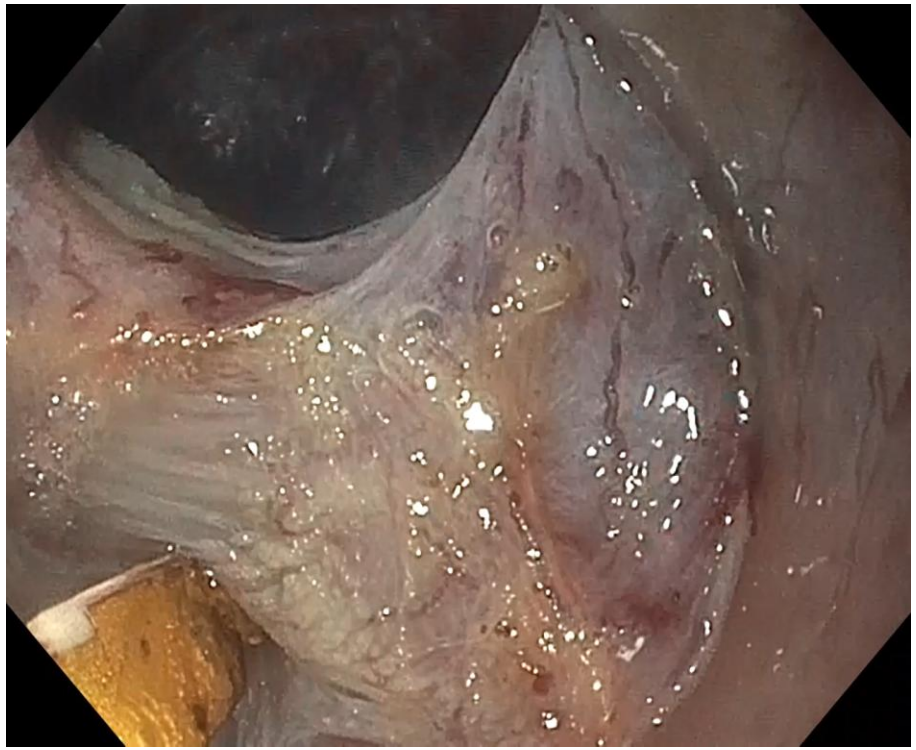


FIGURE 3 Chicago Classification 4.0 Hierarchical Classification Scheme. This flow diagram represents a conceptual model of a state-of-the-art algorithm that defines the flow process of how the CCv4.0 diagnosis is generated within the constructs of the various phases

The Myotomy





Clinical Evidence on Efficacy

- Regarded as the first-line treatment option for oesophageal motility disorders in international guidelines
  - (Rohof et al. Gastroenterol, 2013 Kumbhari et al. Endosc Int Open, 2015)
- Type III achalasia: POEM vs. Heller's Myotomy- 98% vs. 80,8%
  - (Khashab et al. Endosc Int Open, 2018)
- Distal Esophageal Spasm: 94,1%
  - (Khashab et al. Endosc Int Open, 2018)
- Jackhammer Esophagus: 75%
  - (Khashab et al. Endosc Int Open, 2018)
- Esophageal-Gastric Outlet Obstruction: 93,3%
  - (Pérez-Fernandez et al. N&M, 2018)

ASGE American Society for Gastrointestinal Endoscopy

ESGE European Society of Gastrointestinal Endoscopy

ISDE The International Society for Diseases of the Esophagus
CELEBRATING 40 YEARS

POEM vs Surgery

Direct Comparison: POEM vs Heller

Aspect	POEM	Heller Surgery
Clinical efficacy	83% success at 2 years	81.7% success at 2 years
Hospitalization	24-48 hours	2-3 days
Postoperative pain	Minimal (no incisions)	Moderate
Recovery	7-10 days	2-3 weeks
Postoperative reflux	44% at 2 years	29% at 2 years
Type III achalasia	Superior	Standard

POEM vs Hellers for Achalasia: Updated Guideline 2025

Scientific Society Recommendations

The American Gastroenterological Association and American Society for Gastrointestinal Endoscopy clinical guidelines establish clear recommendations:

Type I and II Achalasia

Both techniques recommended as first-line options with equivalent efficacy.

Type III Achalasia

POEM as preferred due to its greater myotomy length and better symptomatic response.

Market Opportunity and Procedural Growth

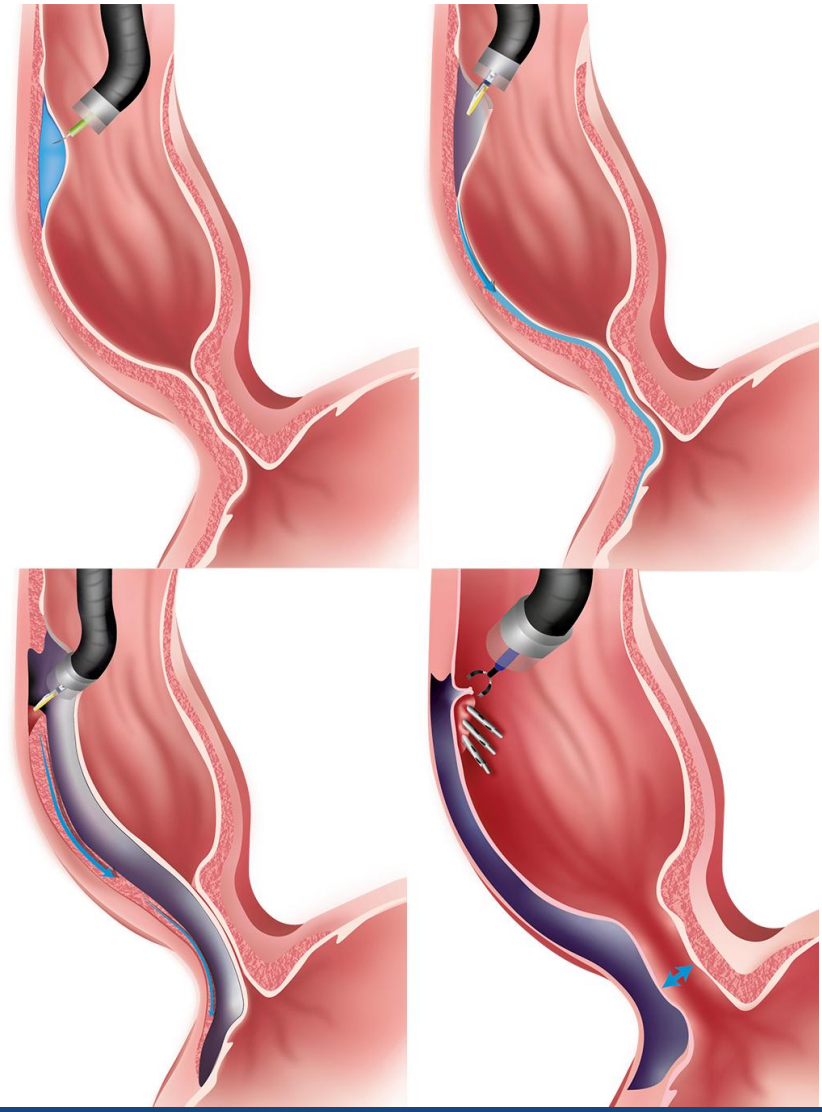
From 2010 to 2017, the proportion of achalasia procedures using POEM in a commercial claims database increased from 1.1% to 18.9%, reported Alex Lois, MD, MS, of the University of Washington in Seattle

Reimbursement driving growth

- 2022 AMA grants CPT for POEM
- Drives increase in cases
- 2024 reimbursement increased by 60%
- Has resulted in continued growth of procedures
- New physicians looking to learn technique

Why Speedboat is superior for POEM

- Dual-modality energy: bipolar RF for cutting, MW for coagulation.
- Bipolar vs monopolar, **safer, easier to learn**
- Protective hull prevents deep injury – critical for ESD and POEM.
- Pain related to advanced energy and less thermal damage --> downstream impact on patient QOL and hospital economics
- Less device exchange
- Precision in preserving muscle layers, **improving outcomes and reducing complications**
- Localized effect → reduced thermal spread and improved safety.
- 1:1 rotational control for accurate, controlled dissection.



Advantages Observed

- **Enhanced safety profile**: less thermal spread vs monopolar.
- Improved visibility due to **reduced charring** and sticking.
- Stable traction with the notch **significantly aids selective dissection**.
- **Predictable microwave hemostasis** even in fibrotic submucosa.
- **Smooth dissections**, Minimal tissue charring
- **Reliable bleeding control**, Shorter workflow

Clinical evidence

Randomized Controlled Trial Comparing the Clinical Efficacy of a Bipolar Current Knife versus Monopolar Current Knife During Esophageal PerOral Endoscopic Myotomy: A Multicenter Non-inferiority Study

Salmaan Jawaid, MD [1] · Mohan Ramchandani, MD, DM [2] · Pradev Inavolu, MD, DM [2] · ... · Tara Keihanian, MD, MPH [1] · Haydee Cueto, CRA [1] · Mohamed O. Othman, MD [1] ... Show more

Affiliations & Notes Article Info

Show Outline

Abstract

Background and Aims

With injection, dissection and coagulation capability, use of a novel BC (Bipolar Current Knife) during POEM may be advantageous. This randomized controlled trial (RCT) compared the clinical outcomes of BC vs MC (Monopolar Current Knife) during E-POEM.

Learning curve

ueg week

NHS University College London Hospitals NHS Foundation Trust

Pilot data evaluating learning curve in speedboat-assisted submucosal dissection (SSD) in a UK tertiary hospital – a single-operator experience without on-site tutoring

Bee Tan[1], Kader R[1], Ahmad OF[1], Seward E[1], Vega R[1]

[1] University College London Hospital (UCLH), London, United Kingdom (UK)

BACKGROUND

- Endoscopic submucosal dissection (ESD) is widely performed in Asia.
- Its adoption in Western countries has been slow, primarily due to concerns about longer learning curves and higher complication rates.
- A new ESD service based on a single operator without an on-site tutor was introduced in a UK tertiary hospital exclusively using speedboat-RS2 device (advanced bipolar radiofrequency for cutting and microwave coagulation).
- This was compared to a previous single operator study in the west which recommended 250 cases to meet ESD markers of proficiency.

AIMS

- To evaluate the learning curve and outcomes of the first 100 SSDs.

METHODS

- Data was prospectively collected from September 2019 to April 2023.
- To evaluate the learning curve, 25 consecutive patients were grouped into separate cohorts.
- The outcomes evaluated were:
  - ❑ Resection speed
  - ❑ En-bloc and R0 resection rate
  - ❑ The adverse events rate in the first 30 days post-SSD

Age (mean)	67 years (25-88y)
Gender	Male (61%), Female (31%)
Charlson Co-morbidity Index (mean)	3

Table 1: Patient Demographics

RESULTS

Sizes of Polyps	< 2cm	3 (3%)
	> 2cm	97 (97%)
SMSA scores (size, morphology, site & access)	<10	10 (10%)
	>10	90 (90%)
Histology	Tubolovillous adenoma low grade dysplasia	66 (66%)
	Tubulovillous adenoma high grade dysplasia	19 (19%)
	Adenocarcinoma	12 (12%)
	Other	3 (3%)
Location	Proximal to Rectum	53 (53%)
	Rectum	47 (47%)

Table 2: Polyp characteristics

Cohort	Patients	Number of En-bloc resections	Resection Speed (cm2/hr)	En-bloc (%)	R0 resection (%)	Mean duration (mins)	Mean size of lesions (cm)	Adverse events
1	1 - 25	16	4.0	64	63	233	4.9	Sydney type III mucosal injury n = 1
2	26 - 50	17	6.6	68	71	194	4.8	Sydney type III mucosal injury n = 1 Bleeding n = 1
3	51 - 75	21	6.7	84	67	152	4.7	Bleeding n = 1
4	76 - 100	21	7.9	84	76	142	5.2	Bleeding n = 2

Table 3: SSD outcomes per cohort (n=25). DMI – Deep Mucosal injury

- Remarkable improvement was demonstrated from 1st to 4th quartile in:
  - ❑ En- bloc resection rate (64% → 84%)
  - ❑ R0 resection rate (63% → 76%)
  - ❑ Resection speed (4.0 cm²/hr → 7.9cm²/hr)
  - ❑ Mean duration of procedure (233 → 142 minutes)

Learning curves for SSD outcomes per cohort (n=25)

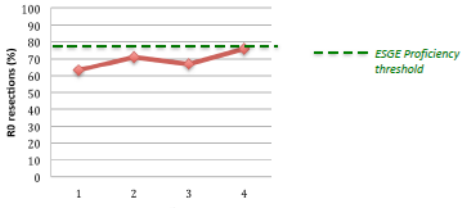


Figure 1: R0 resection rates (%)

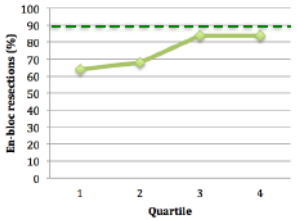


Figure 2: En-bloc resection rates (%)

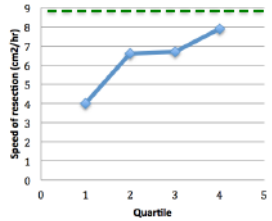


Figure 3: Speed of resection (cm²/hr)

CONCLUSION

- This study demonstrated that a new ESD service based on a single-operator without on-site tutoring achieved safety outcomes and R0 resection rate recommended by ESGE.
- Further experience is required to achieve recommended en-bloc resection rates of ≥90% and resection speeds of ≥9cm²/hr
- The results from the first 100 cases suggest that the learning curve for SSD without onsite tutoring may be shorter than previously reported in the West.

Why the U.S. Is Behind

- Shortage of formal ESD training
- High medicolegal scrutiny / hesitation
- Reimbursement challenges
- Long procedure duration vs U.S. throughput demands
- Poor reimbursement for long procedures
- Staff unfamiliarity slows procedures
- Surgical dominance in early GI neoplasia management
- Limited surgical collaboration

Creo Speedboat - U.S. Market

- Major U.S. opportunity in underserved ESD/POEM market
- Speedboat solves the barriers limiting adoption
- Positioning Creo as the leader in third-space endoscopy

Why Speedboat Is a Breakthrough

- Bipolar RF = precise, safe dissection
- 5.8 GHz microwave = reliable hemostasis
- Protective hull reduces perforation risk
- Notch improves traction and depth control
- Fewer exchanges = faster procedures

Market Opportunity

- 150M+ annual GI procedures in the U.S.
- Growing demand for minimally invasive options – patients / hospitals

- Dedicated CPT code will standardize national reimbursement
- Improves payer consistency for gastric and colonic ESD
- Expected to dramatically accelerate U.S. adoption
- Projected 8–12× growth in ESD/POEM

- Economic Driver - Lower costs, Less LOS, Attractive ROI

Conclusion: Strategic Value for Investors

- Speedboat represents the **next evolution in therapeutic endoscopy**
- **Only integrated RF + microwave** + traction notch platform
- Combines precision, safety, and efficiency → highly scalable
- Steeper and smoother learning curve
- Ideal for global expansion, training centers, and clinical adoption
- Evidence strongly supports its clinical value and future potential

Summary

- Third space growth imminent
- Creo Speedboat ideal platform and well positioned to lead
- **Right technology, Right time**

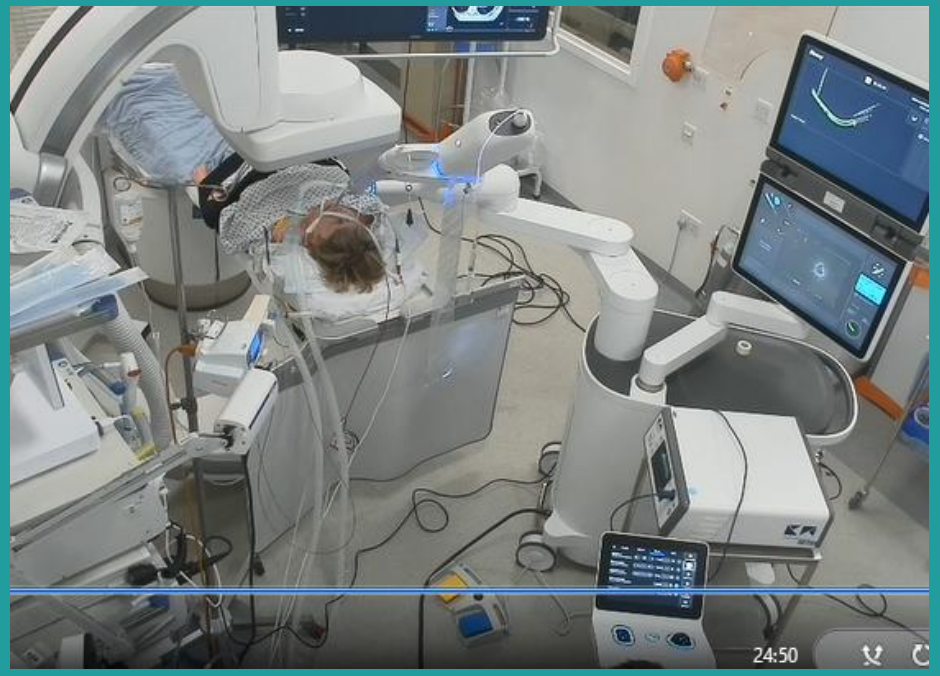
CREO MEDICAL

Anything is Possible with the Right Approach

Agenda

Title		Time	Owner
Welcome		3:00 - 3:05	Kevin Crofton, Chair
Corporate Update		3:05 - 3:15	Craig Gulliford, CEO
Powering the Next Era of Endoscopy: Why Advanced Bipolar RF and Microwave Energy Are Redefining the Field	Dr Roser Vega	3:15 – 3:25	Dave Woods, CCO
	Dr. Carlos Robles-Medranda	3:25 – 3:35	
	Dr. Benjamin Tharian	3:35 – 3:45	
Panel – Gastroenterology		3:45 – 4:05	
Coffee break		4:05 – 4:15	
Transforming Lung Cancer Care: Novel Ablation Technologies in the Era of Lung Screening		4:15 - 4:35	Professor Pallav Shah (UK)
Q&A - Bronchoscopic ablation		4:35 – 4:50	Moderated by Charlie Campion, CPO
From Specialist Innovation to Broad Adoption: Unlocking the Full Potential of Kamaptive Technology		4:50 – 4:55	Charlie Campion, CPO
Financial Outlook -Turning Creo's technology into commercial delivery & Q3 trading update		4:55 – 5:10	Richard Rees, CFO
Wrap up		5:10 - 5:20	Craig Gulliford, CEO
Drinks reception and product demonstrations		5:20 - 6:30	All

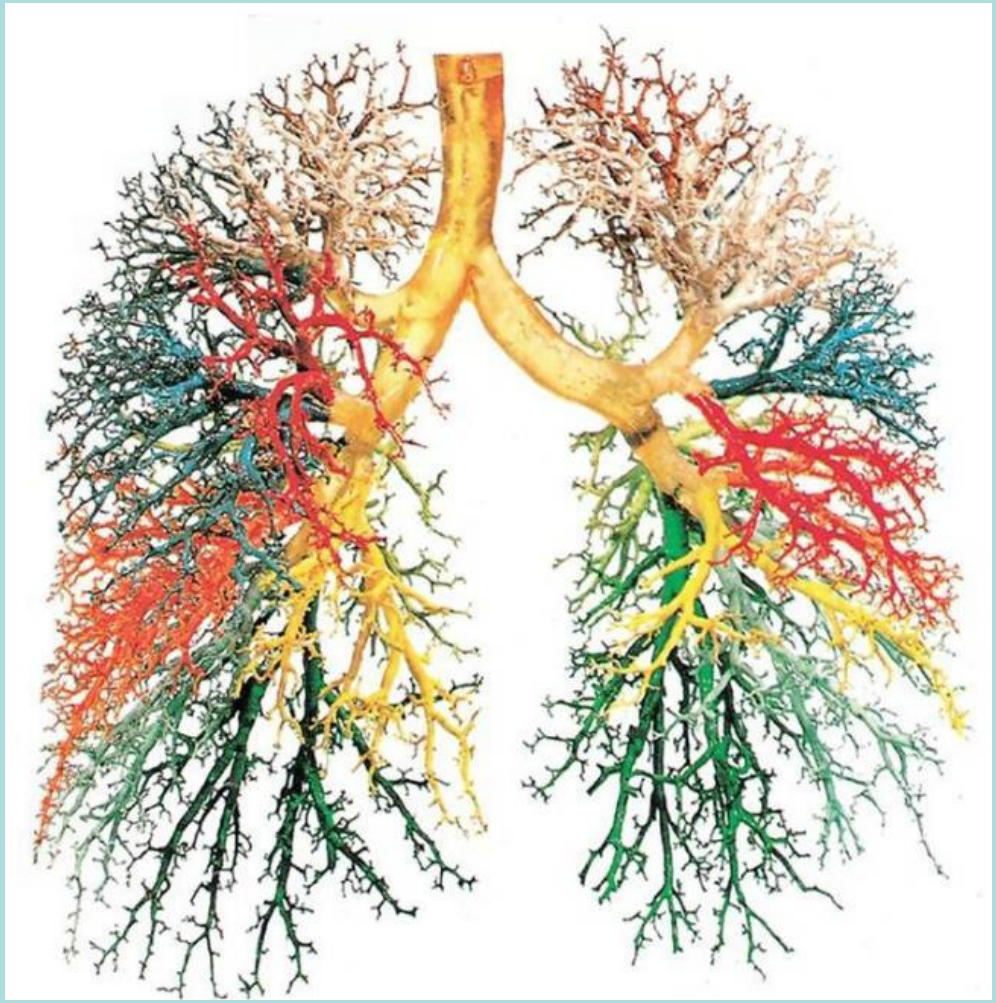
Transforming Lung Cancer Care:
Novel Ablation Technologies in the Era of Lung Screening

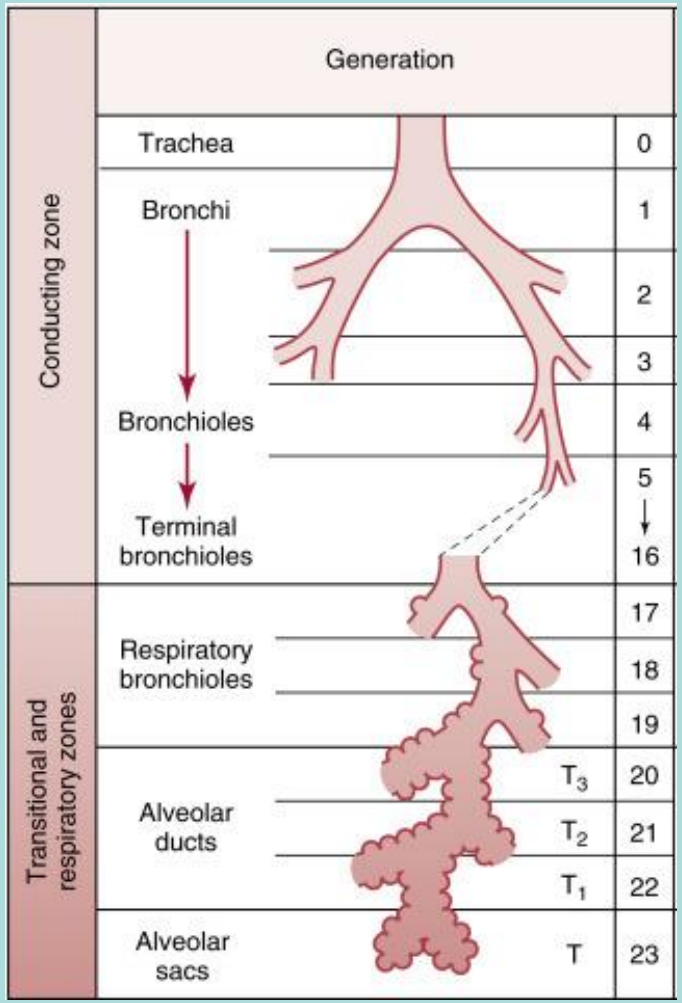


Professor PALLAV L SHAH

Professor of Respiratory Medicine
Royal Brompton Hospital
Imperial College

Airway Tree

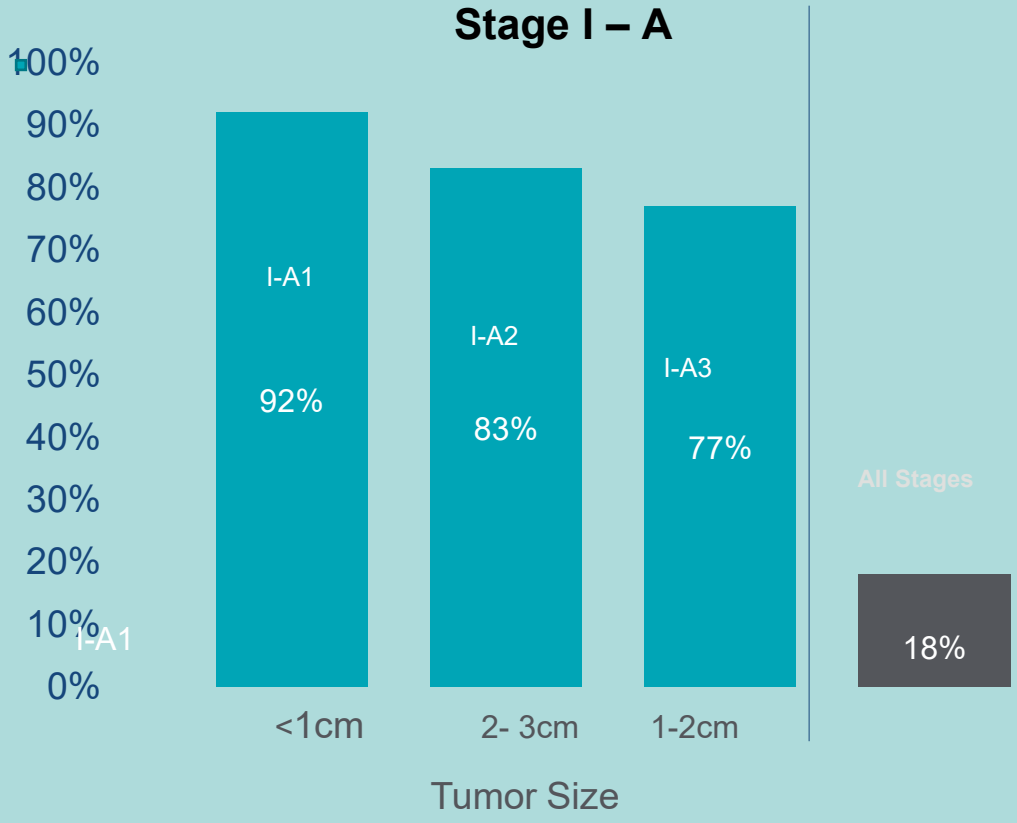




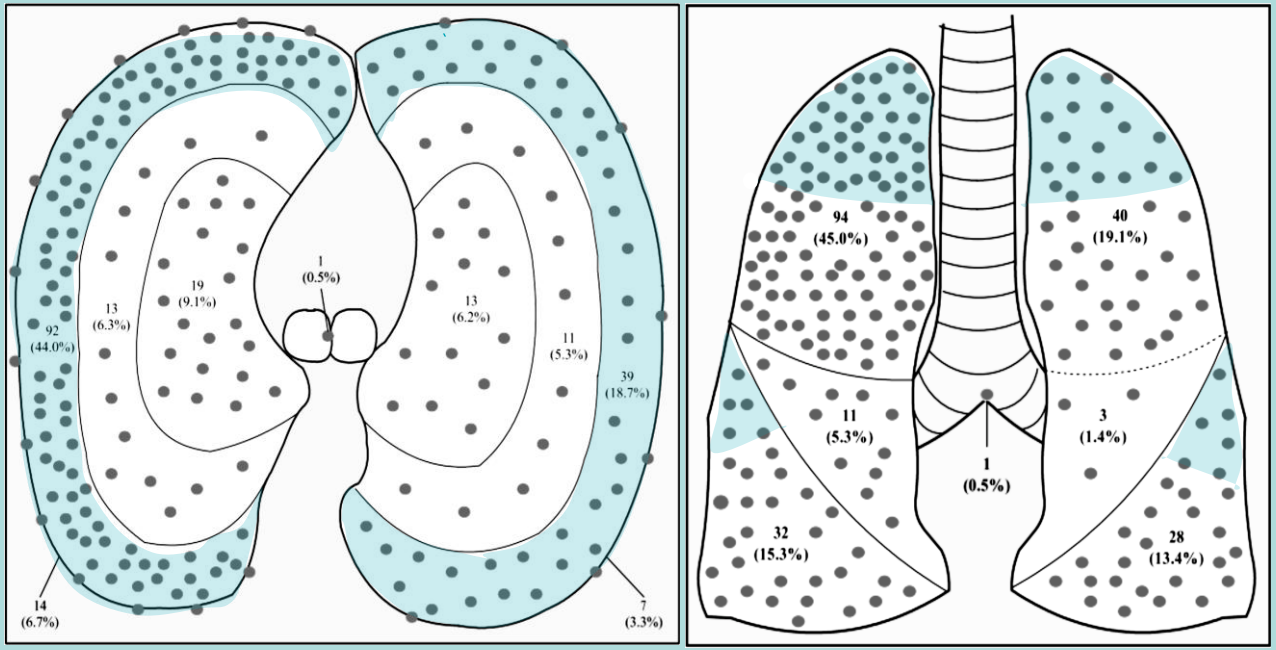
- 16 generations of airways
- 50 to 100,000 bronchioles
- 300 million alveoli

Early Lung Cancer: Key Issues

Lung cancer 5-year survival rate[3]

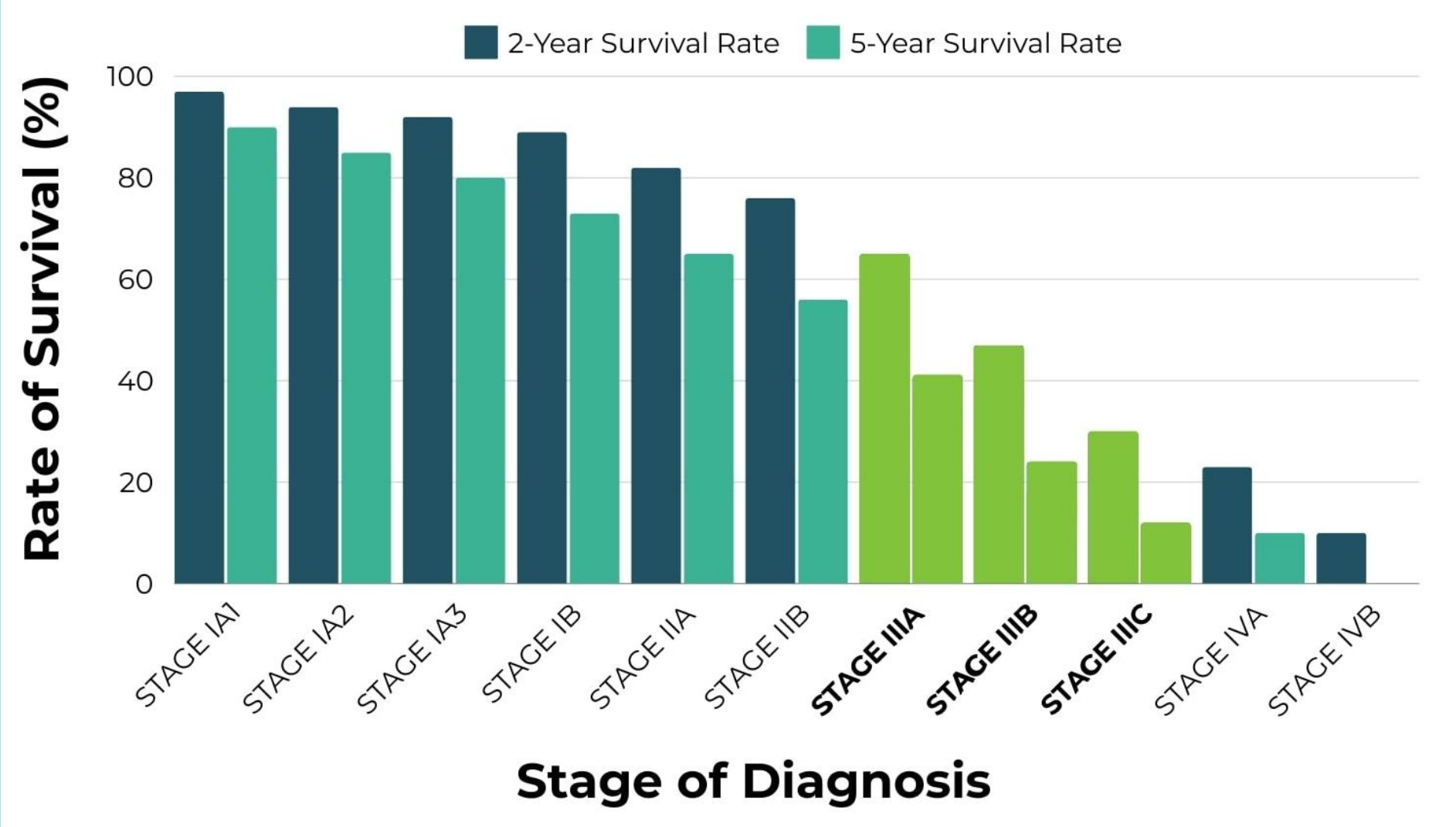


- Distribution of lung cancer detected in the NELSON trial[4]



[3] UICC 8th Edition (Proposal), J Thorac Oncol. 2016 Jan;11(1):39-51 [4] Horeweg, N., et al. (2013). Am J Respir Crit Care Med 187(8): 848-854

Early Lung Cancer: Key Issues



USA SEER database

5.8 GHz Super High Frequency Microwave

ELECTROMAGNETIC WAVES FOR **CONSISTENT ENERGY DELIVERY**

Microwave energy radiates electromagnetic waves, unlike RF which uses electrical current transmitted from one point to another through the body. As tissue changes with thermal damage, current cannot easily pass through, whereas electromagnetic waves can penetrate tissue with minimal impact from resistive changes for consistent energy delivery.

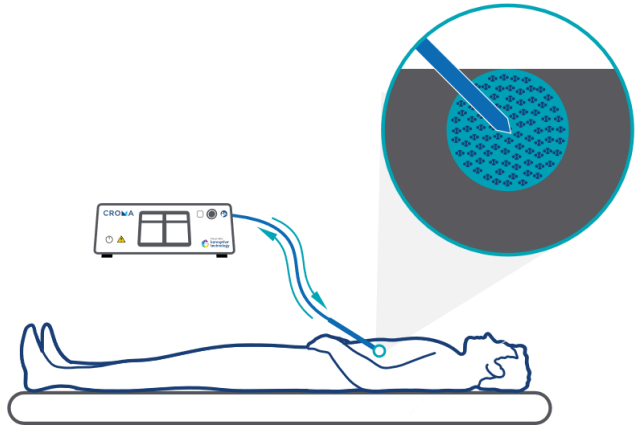
Ablation – 5.8 GHz Microwave Energy

Controlled & Consistent

- ✓ Electromagnetic wave
- ✓ Controlled depth
- ✓ Homogeneous energy delivery

Tissue effect controlled by

- Instrument design
- Time of application
- Frequency of microwave



Water molecule

Frictional heating

Radiating electromagnetic field (microwave)

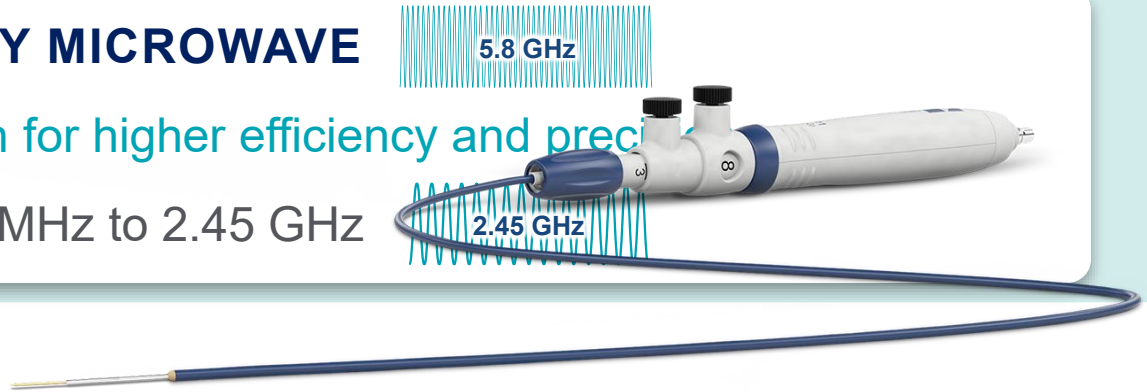
The heating zone is controlled by several factors including:

- Power
- Frequency
- Antenna Design
- Tissue property in the near-field of the antenna

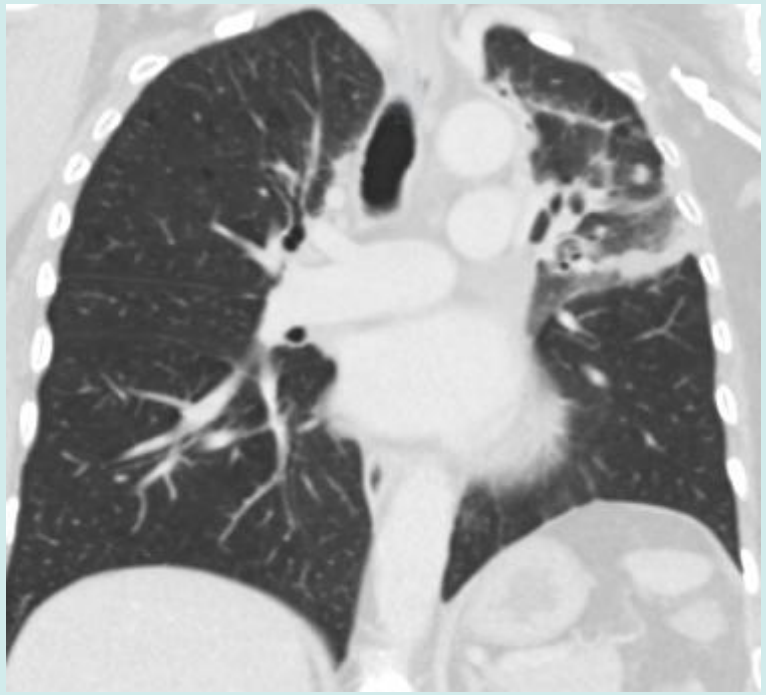
5.8 GHz SUPER HIGH FREQUENCY MICROWAVE

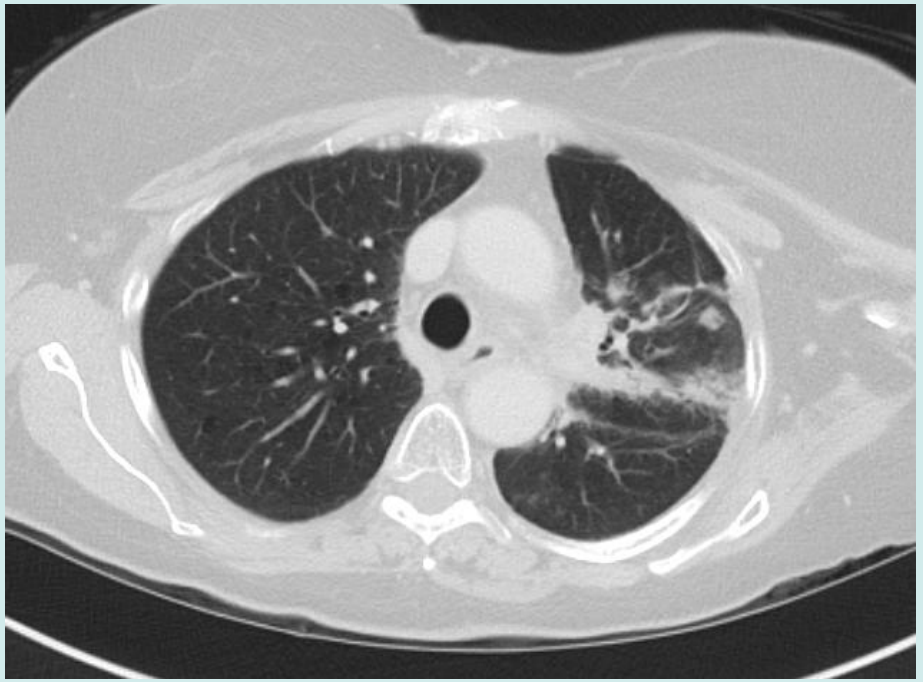
Higher frequency means shorter wavelength for higher efficiency and preci

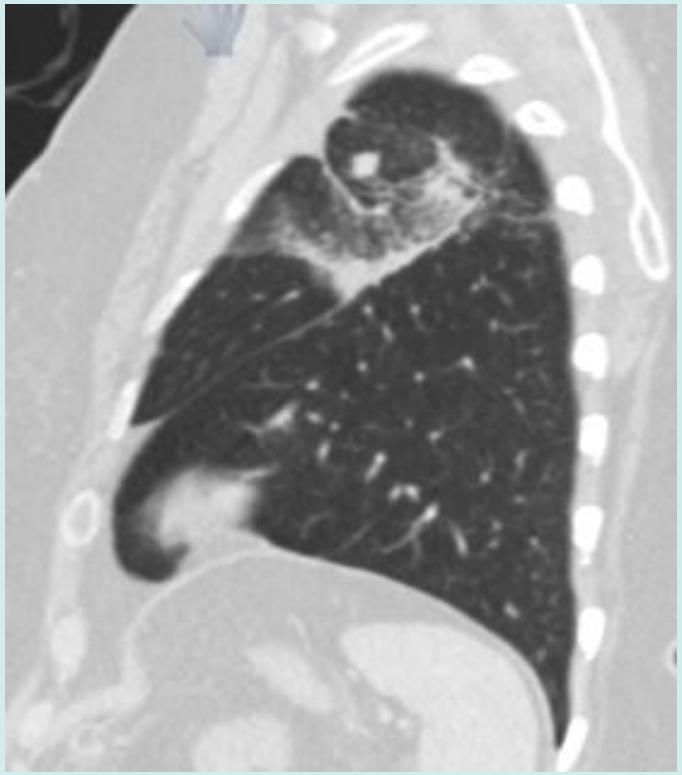
Standard Microwave Frequency = 951 MHz to 2.45 GHz



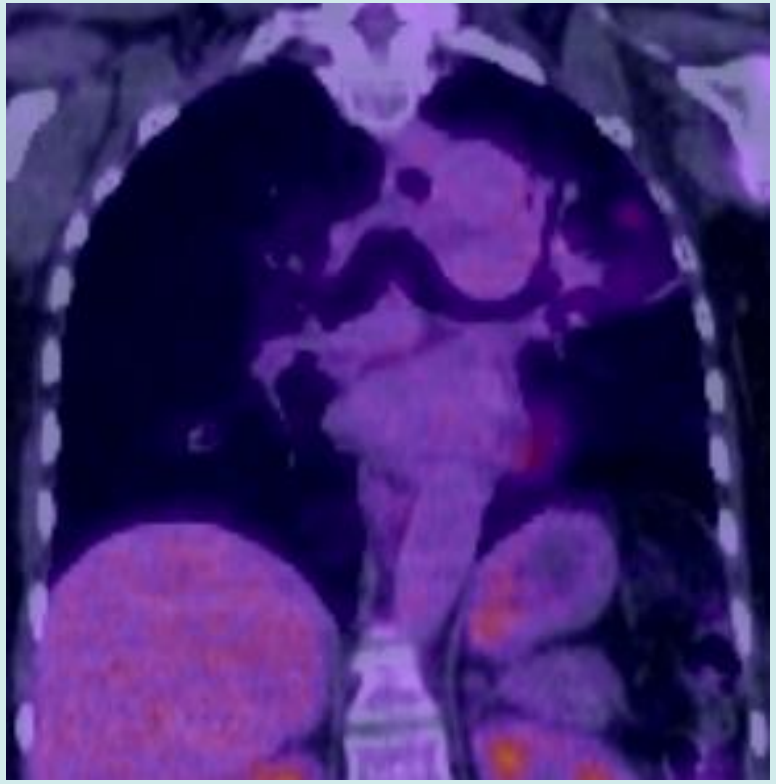
Case LUL

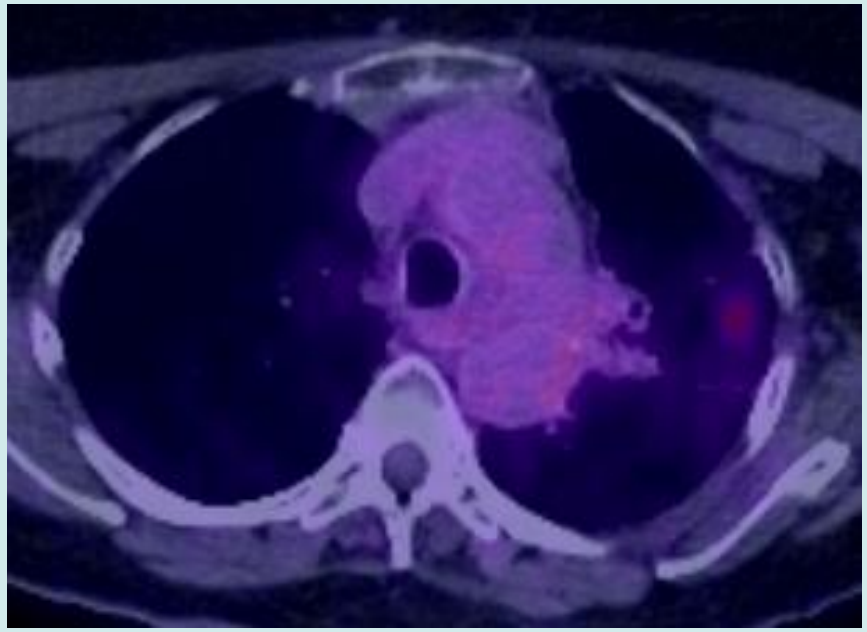


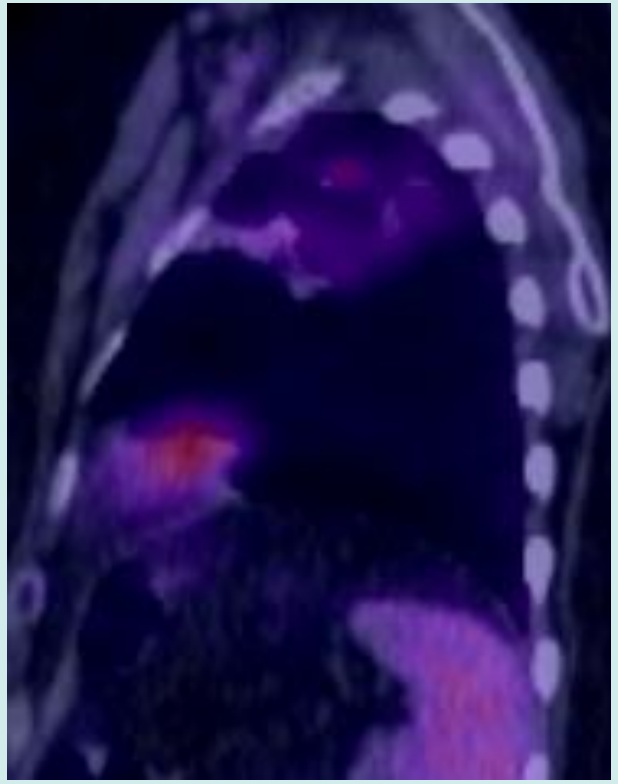




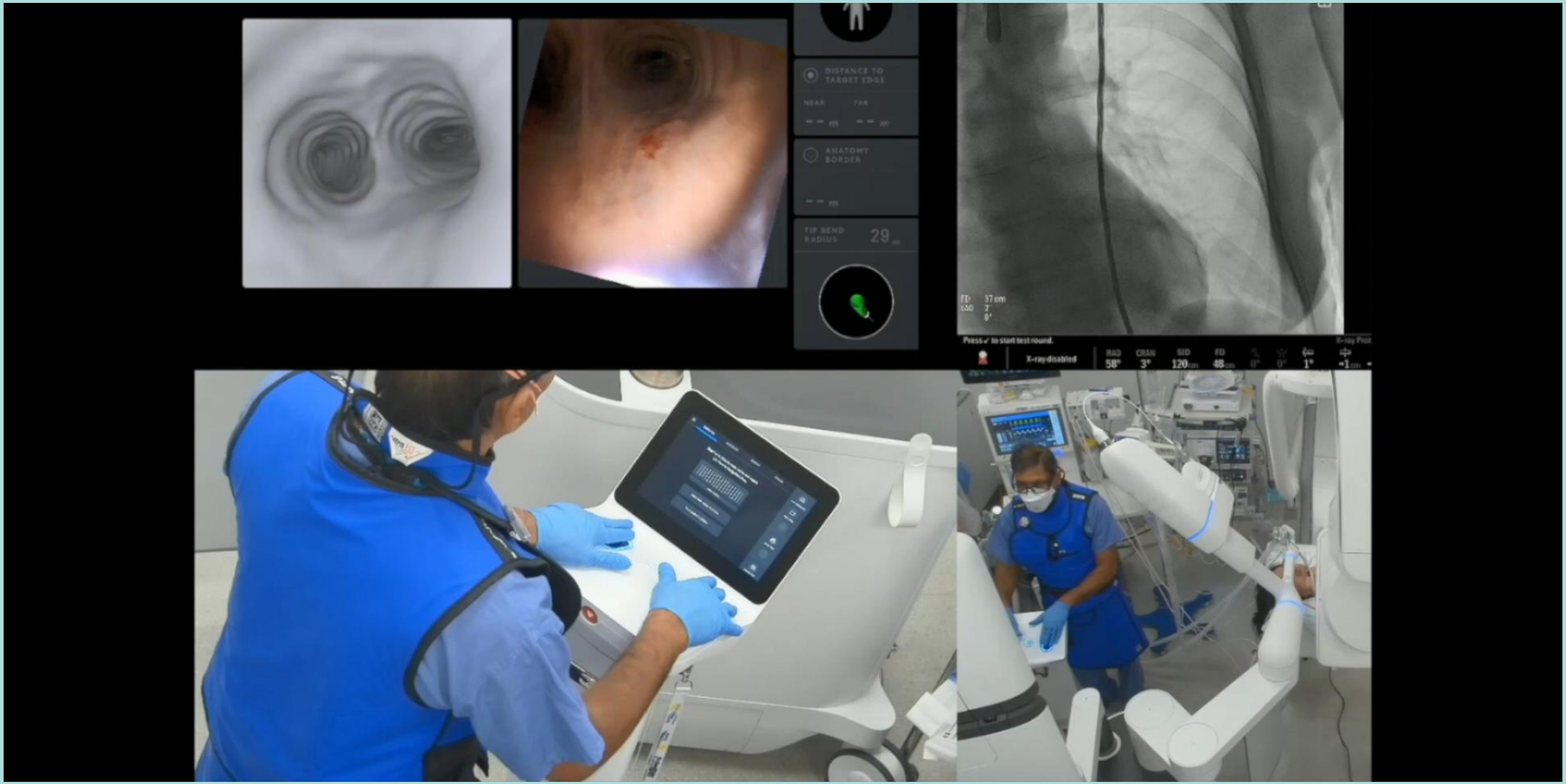
Case LUL: key PET images





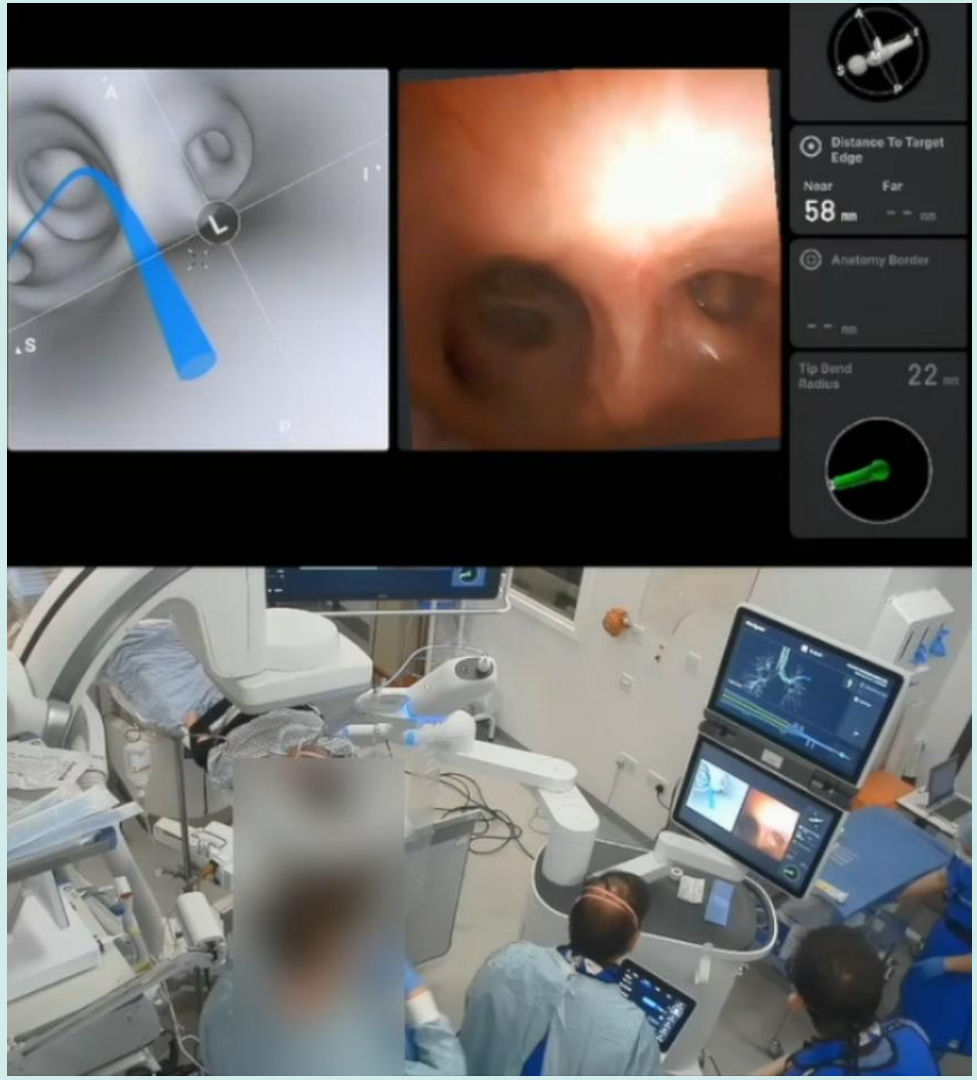


Registration



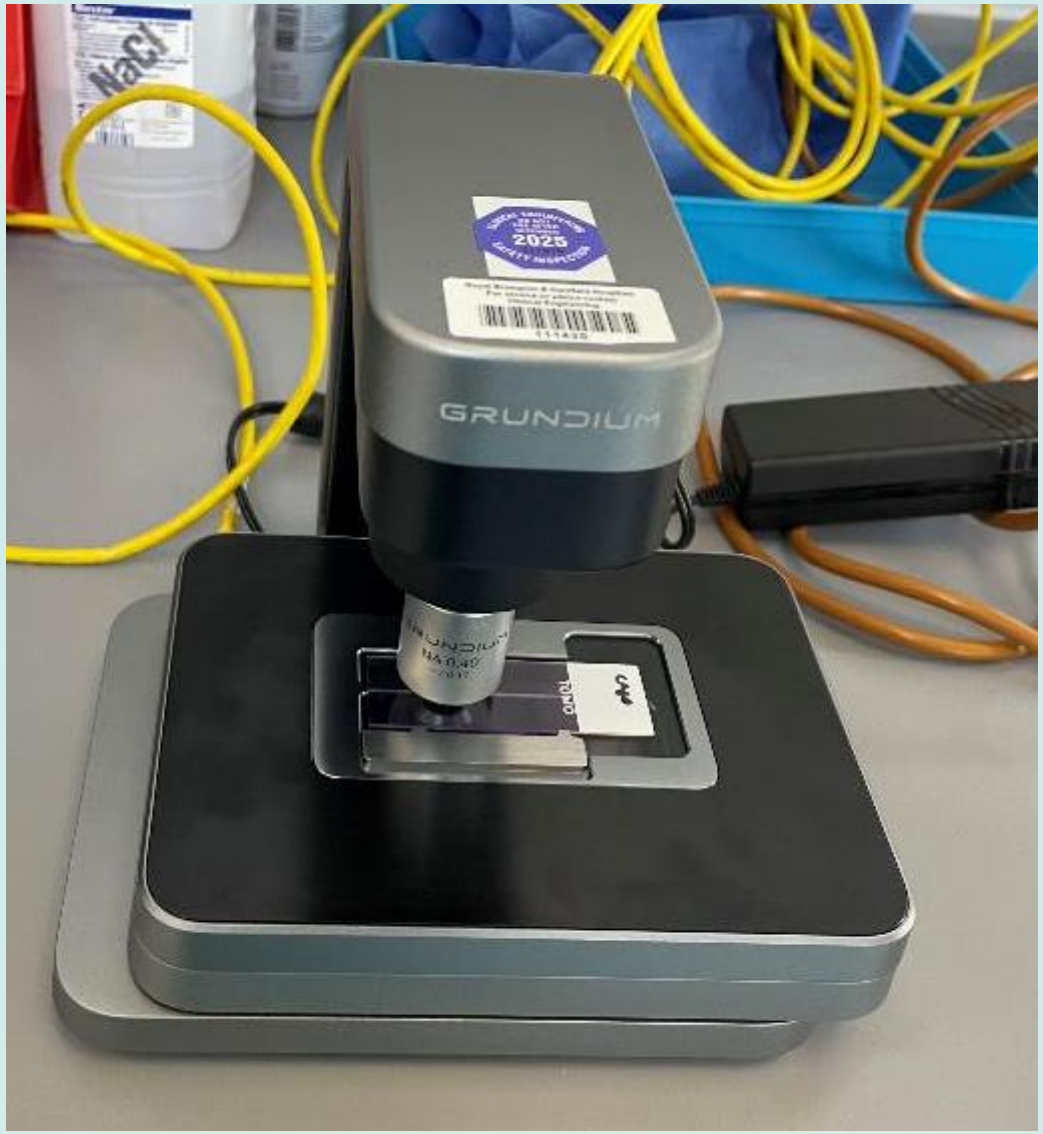
Robotic Assisted Bronchoscopy: Navigation

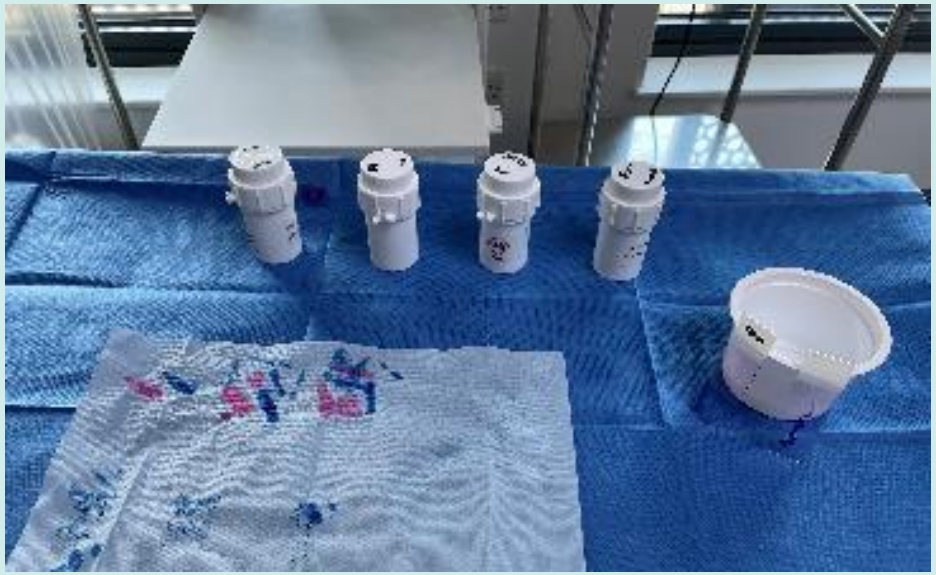
Robotic Assisted Bronchoscopy: Navigation

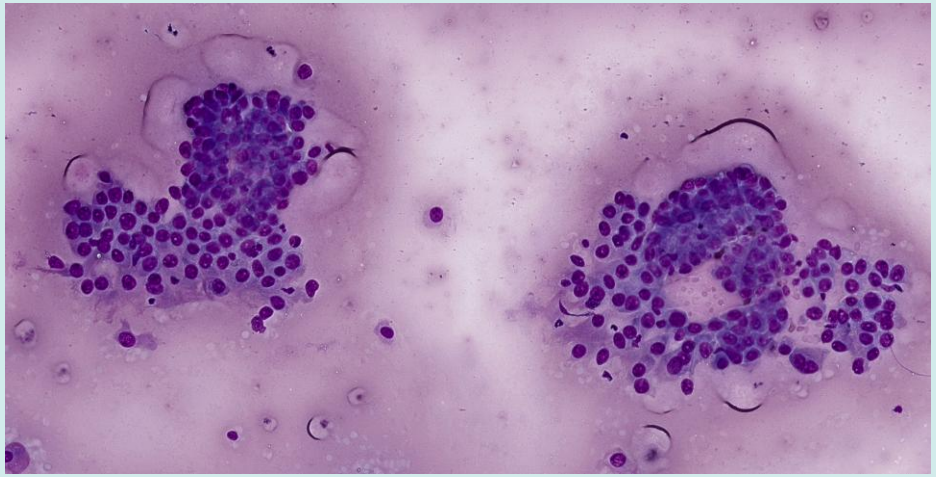


Robotic Assisted Bronchoscopy: Confirmation

On Site Digital Cytology

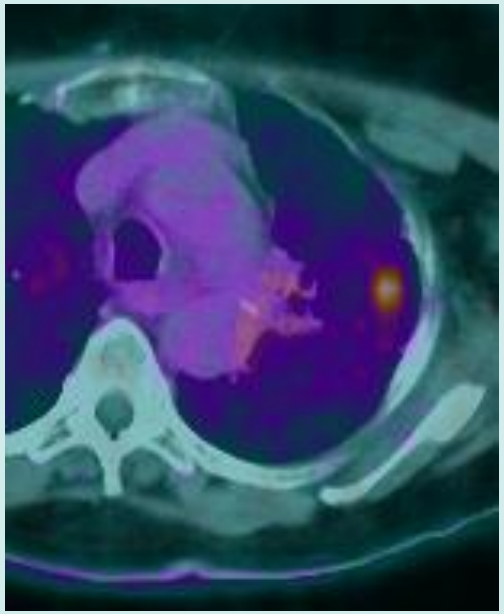
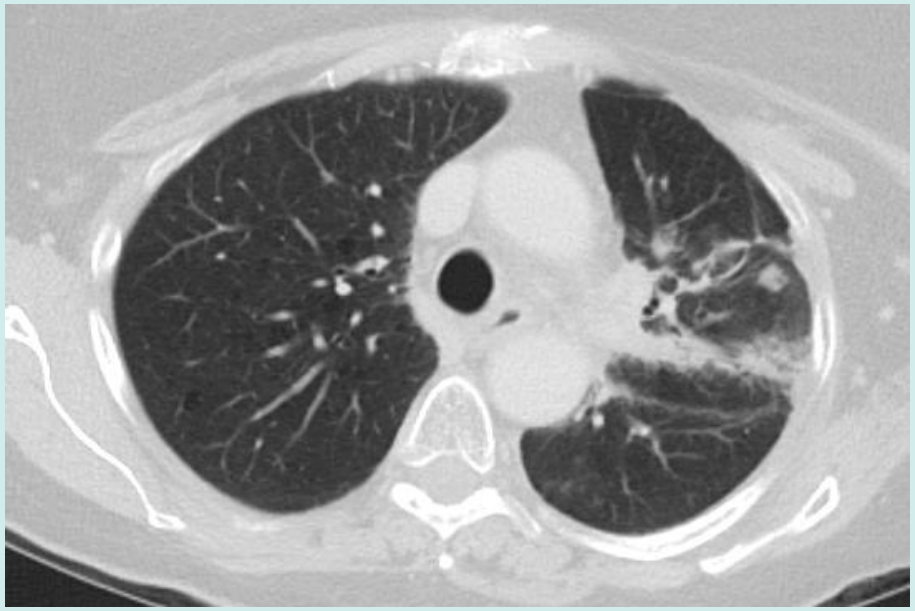


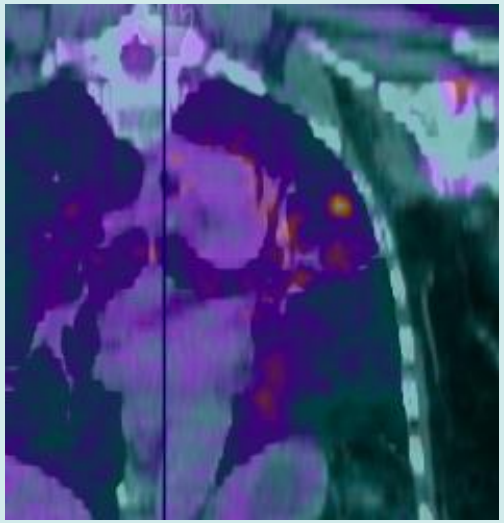
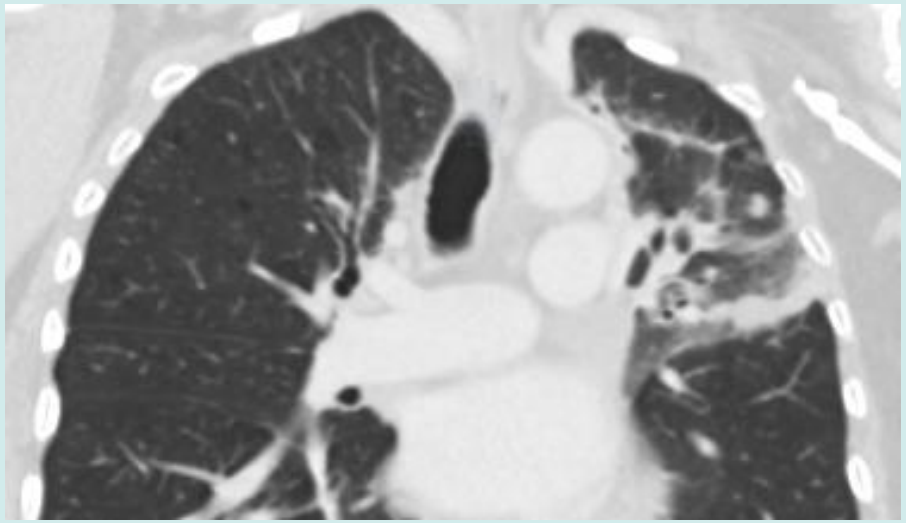
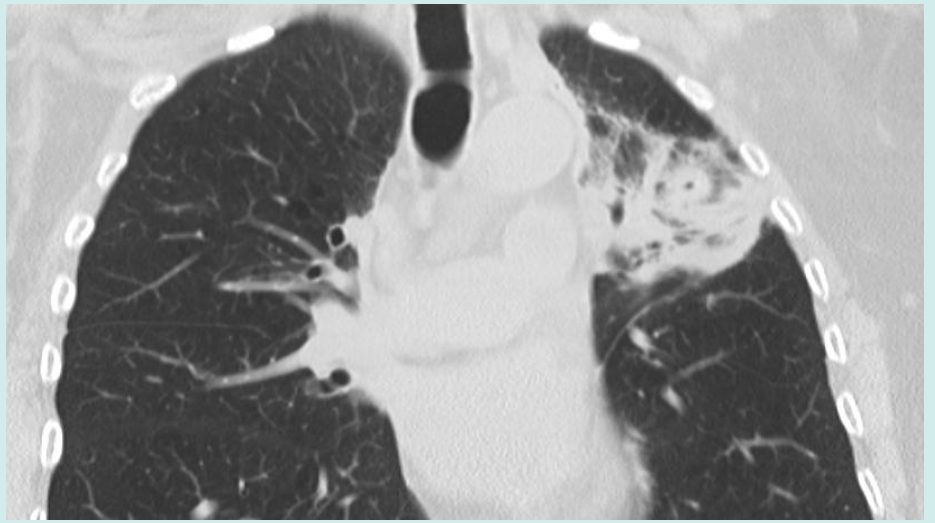




Robotic Assisted Bronchoscopy: Planning & Ablation

Case LUL: Robotic Ablation

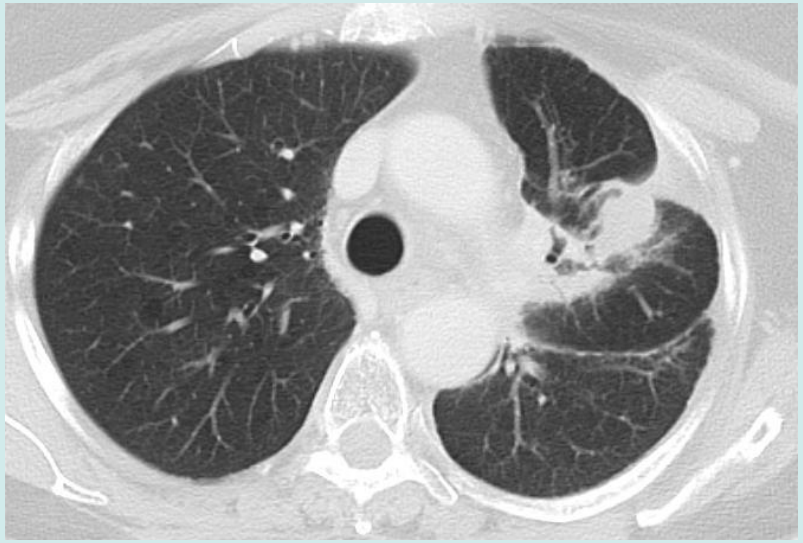




Case LUL: Robotic Ablation follow uo

Day 0

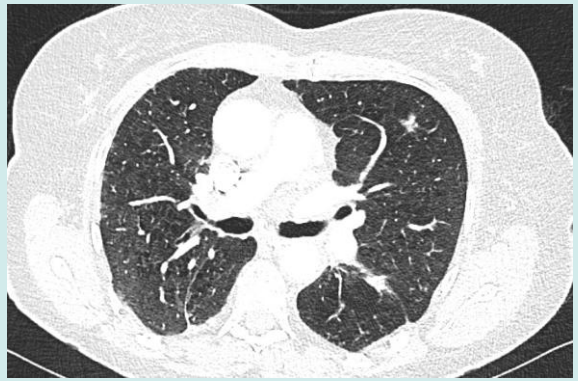
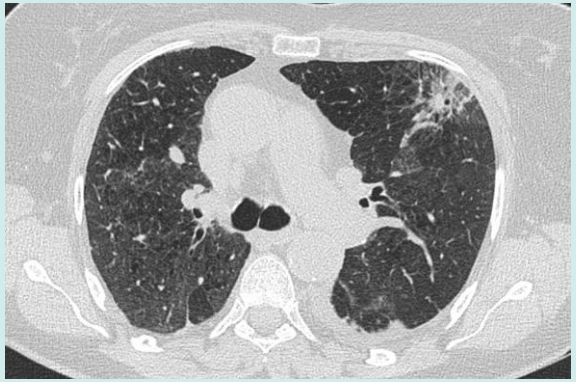
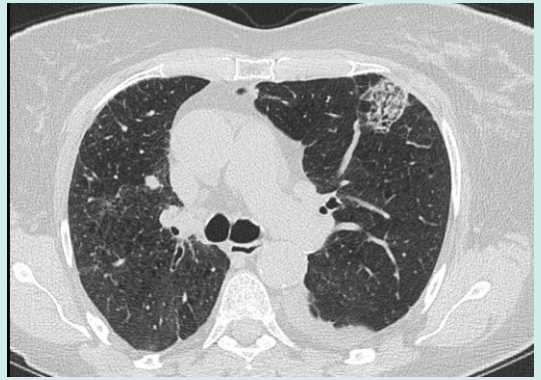
Day 1

3 months

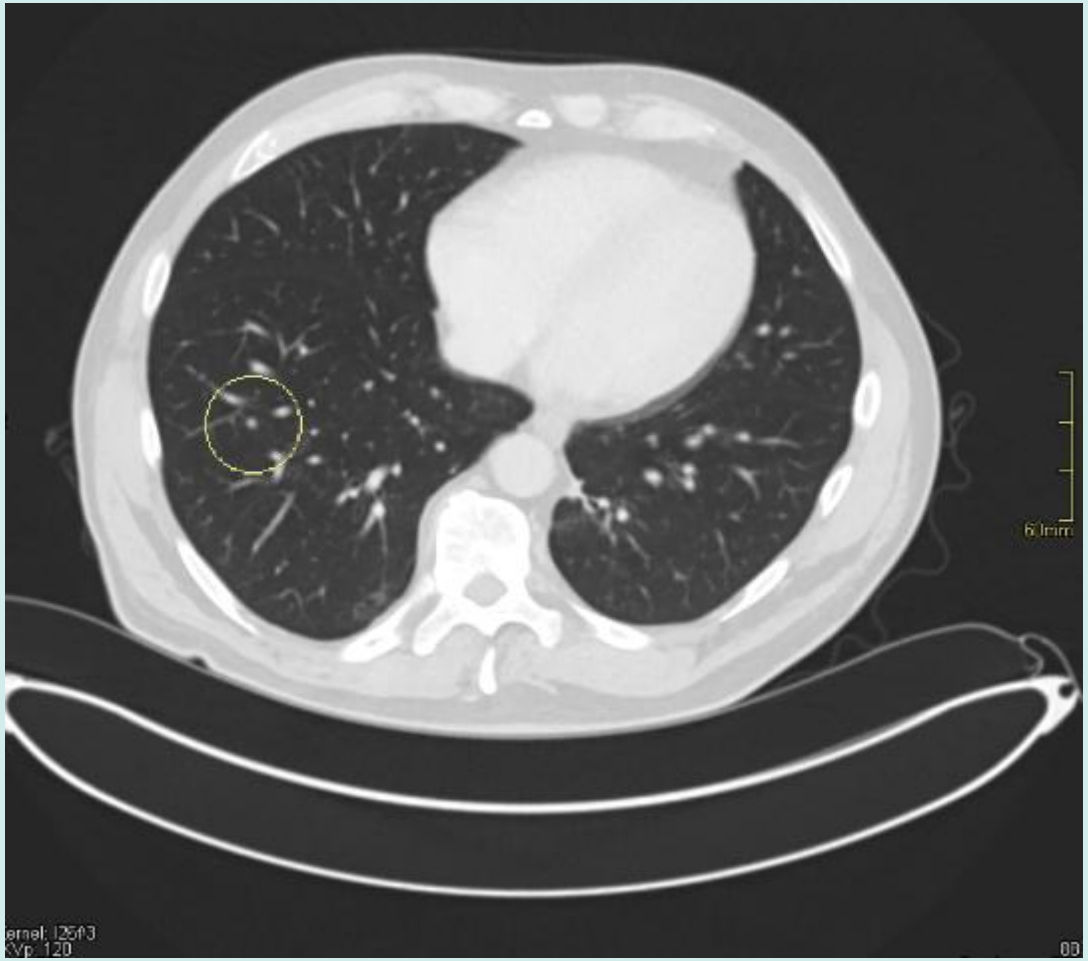


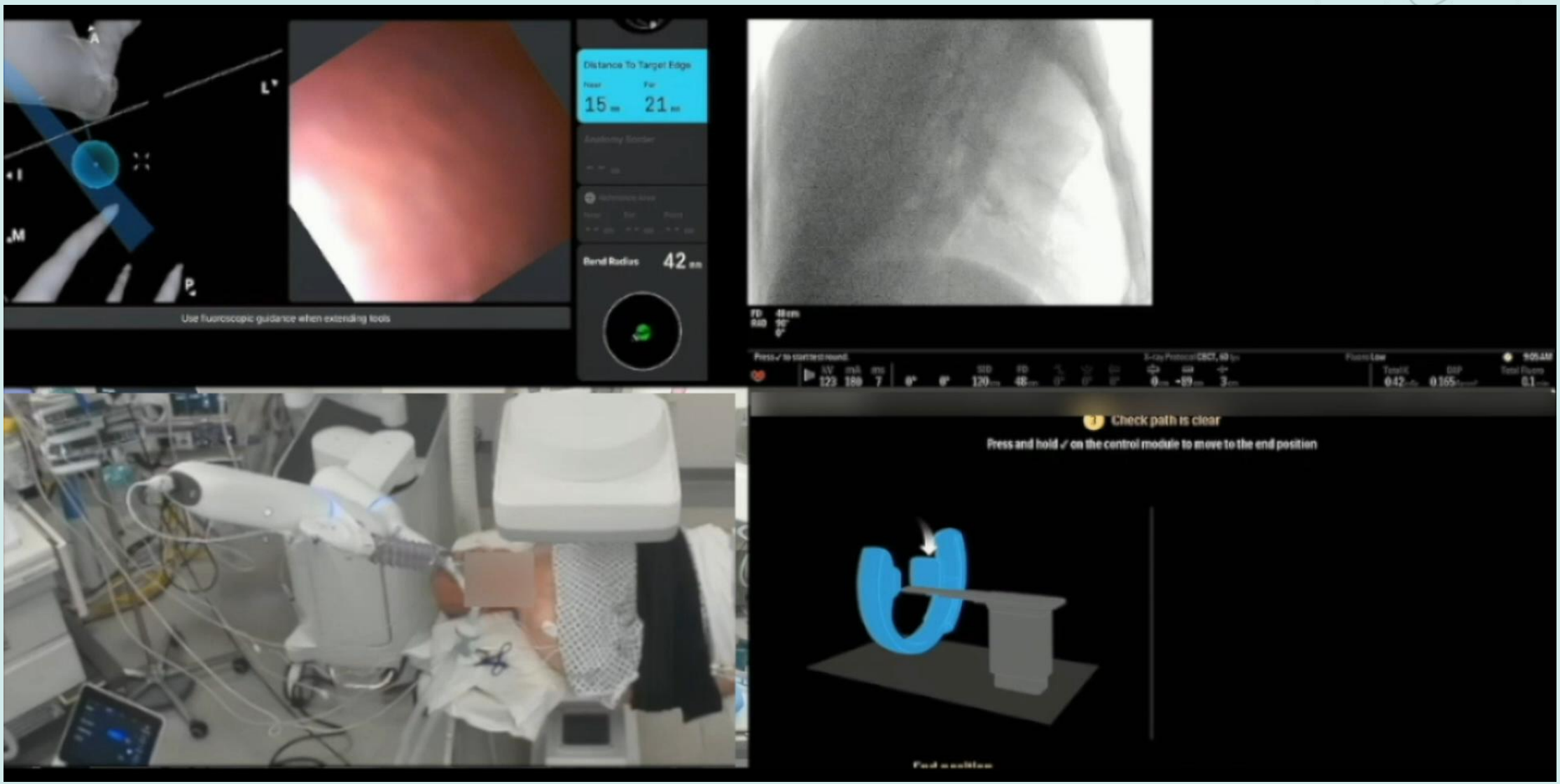
6 months

Case Examples

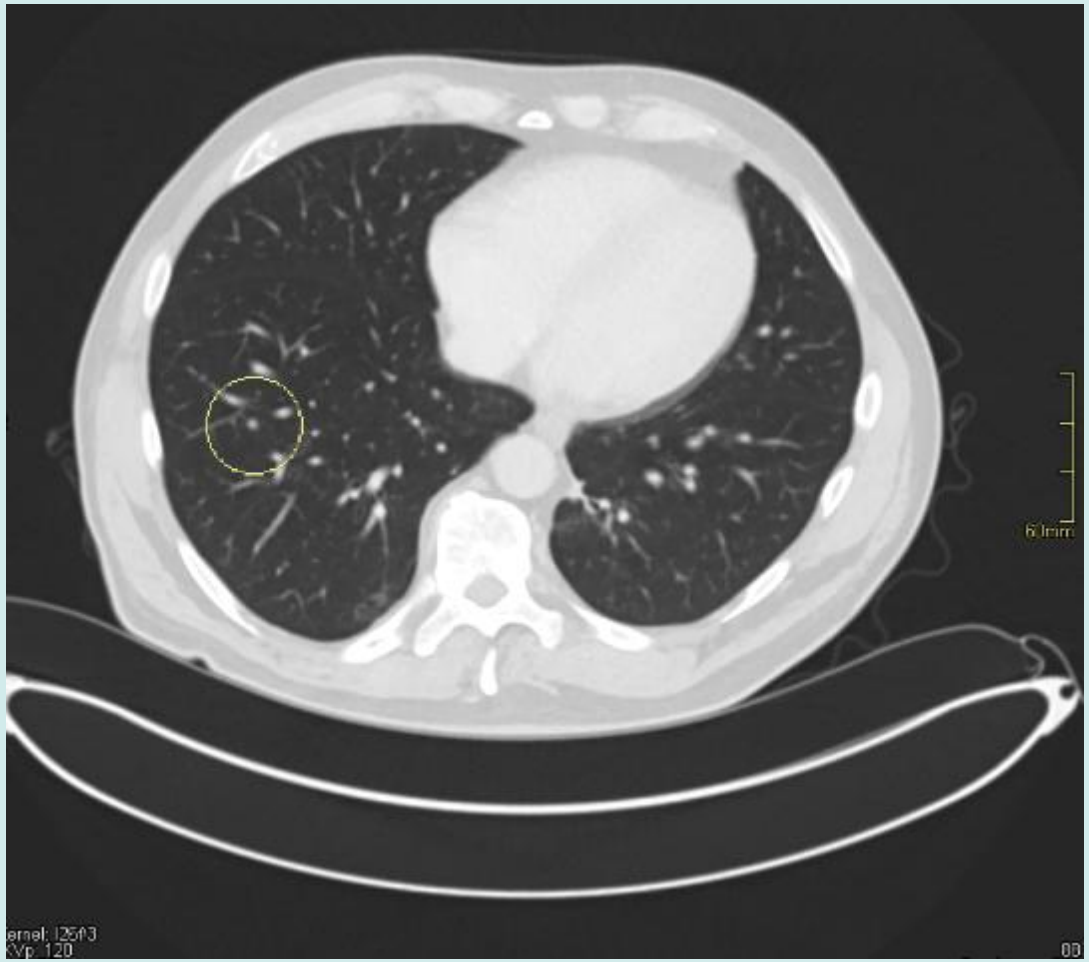
	Day 0	Day 1	3 months	12 months
01				
02				

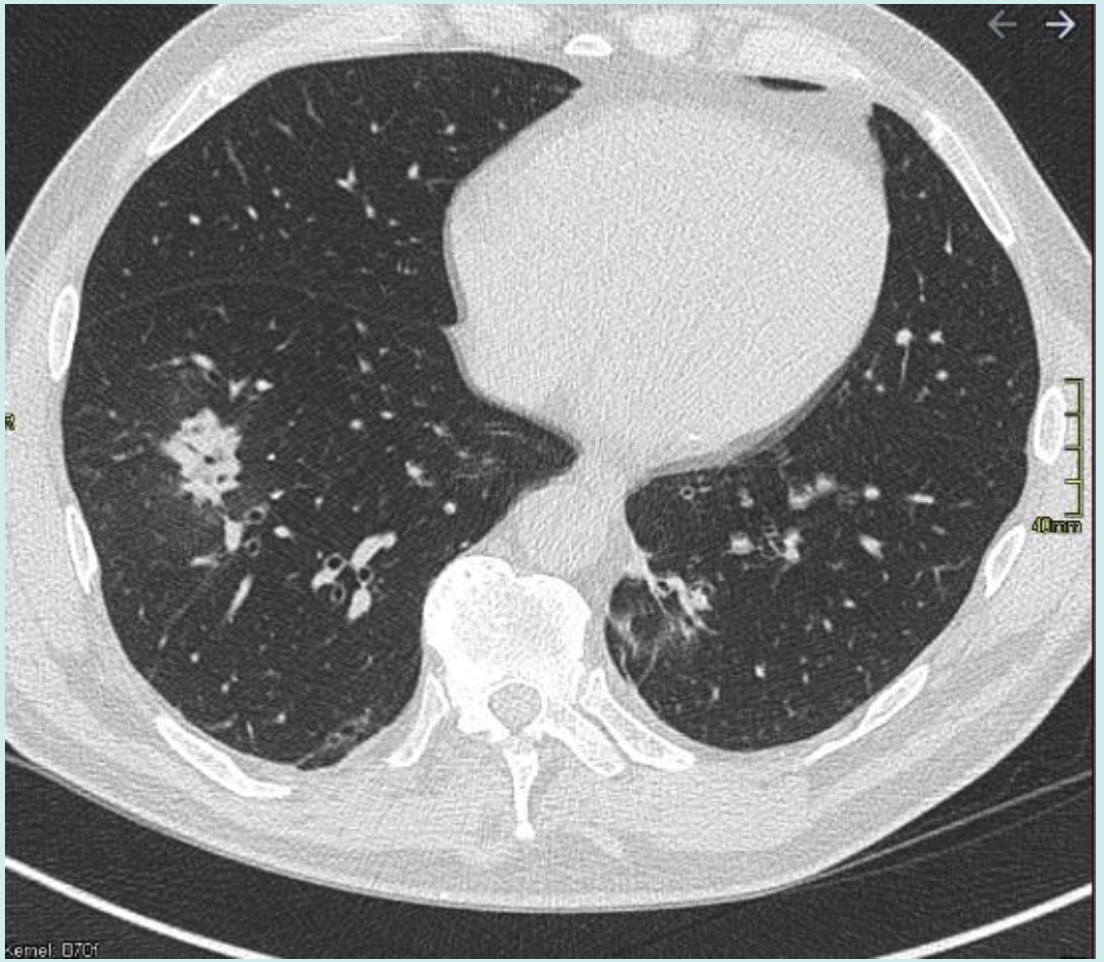
Colo-rectal Metastases: Spot the Nodule



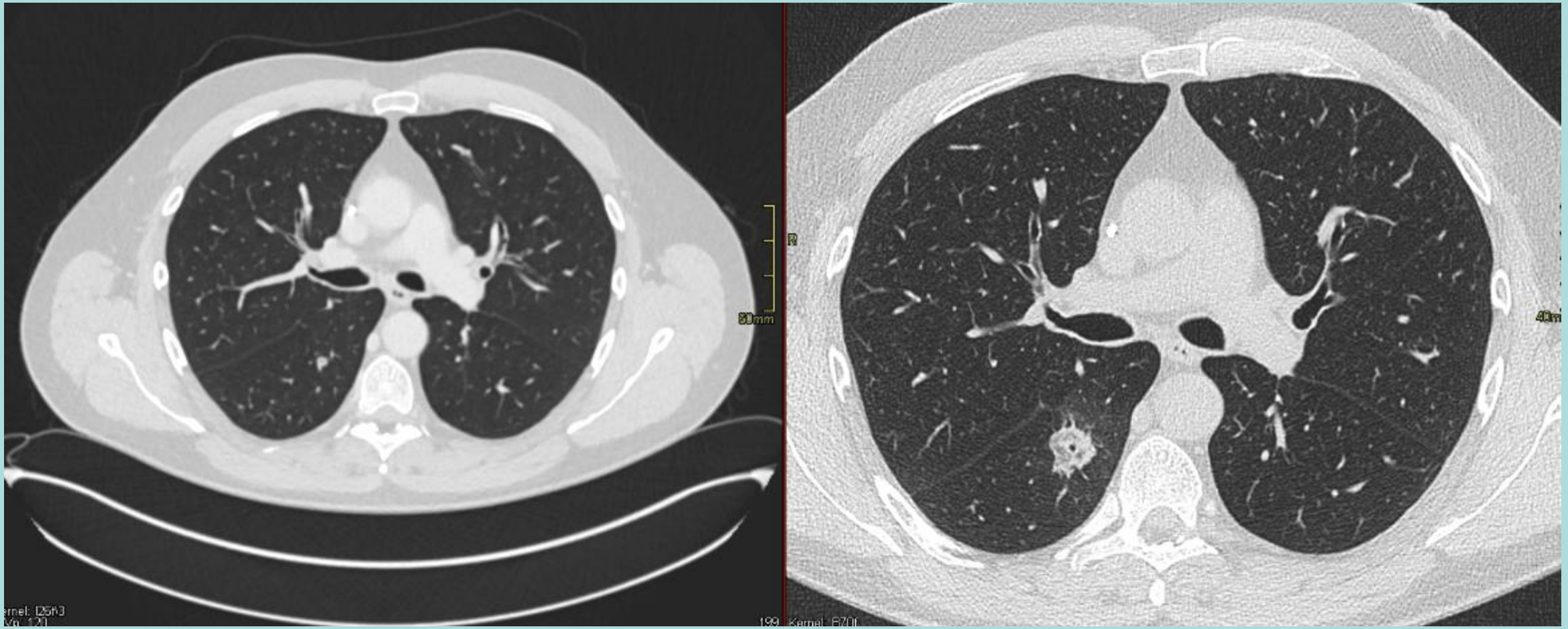

Distance To Target Edge
Near
15
Far
21
Bend Radius
42
Use fluoroscopic guidance when extending tools
Check path is clear
Press and hold ✓ on the control module to move to the end position

Colo-rectal Metastases: Spot the Nodule

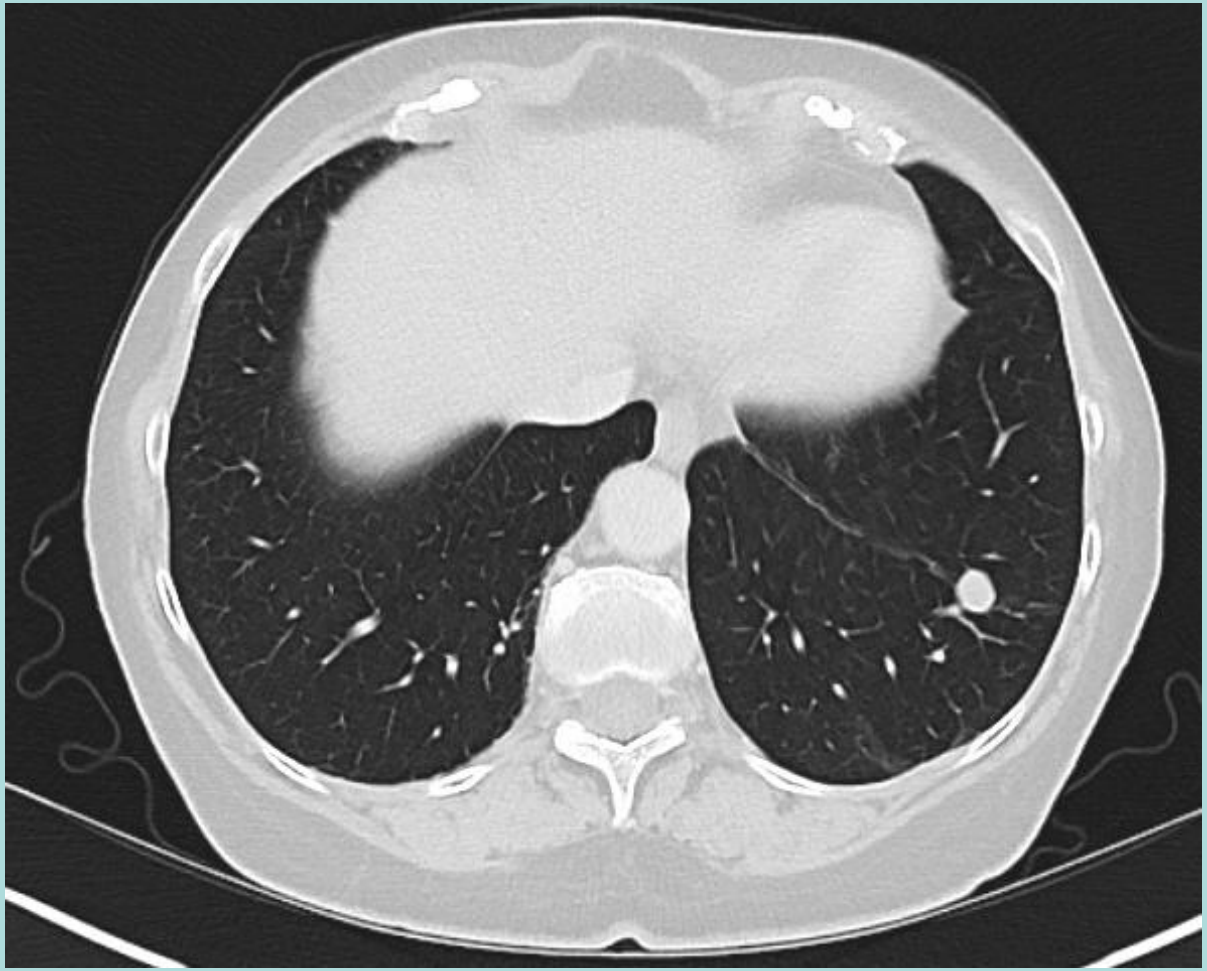


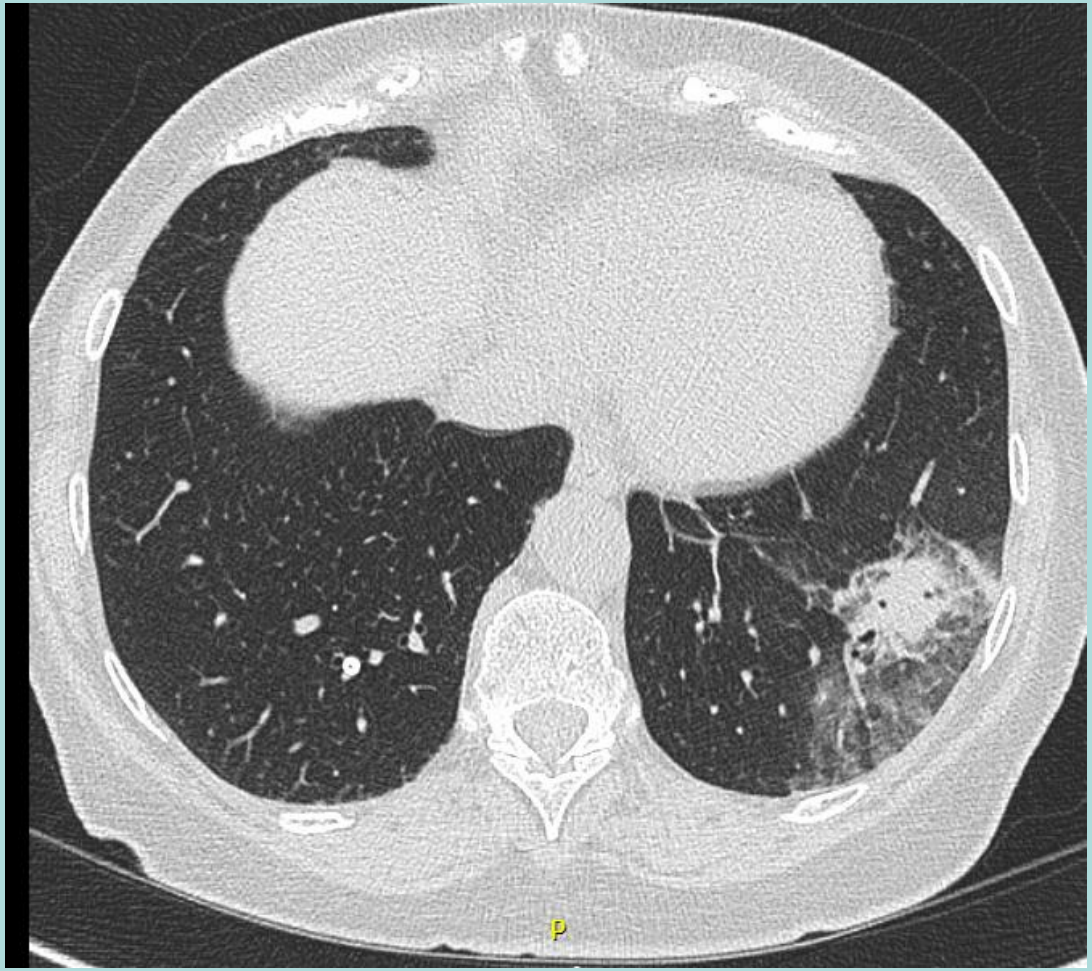


Colo-rectal Metastases



Melanoma Metastases





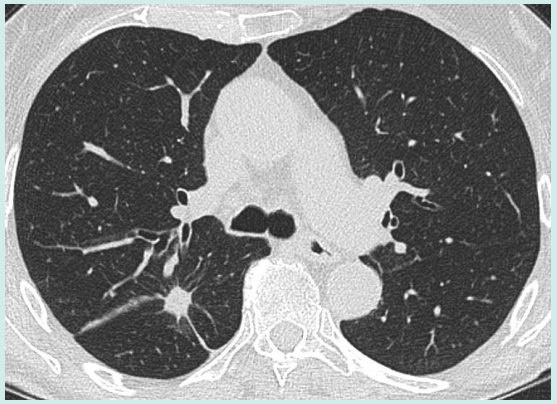
Case Examples

07

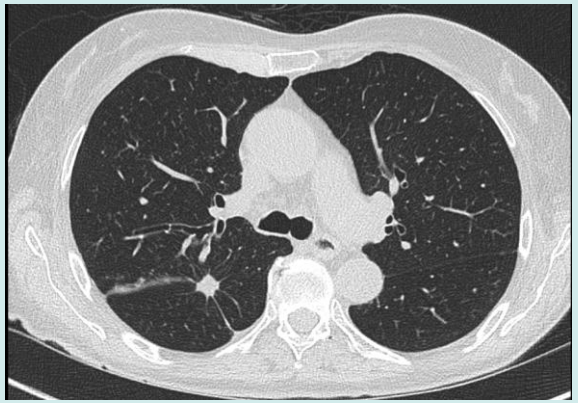
Day 0

Day 1

3 months



6 months



Time post-ablation	Day 1 (n=31)	Month 1 (n=27)	Month 3 (n=24)	Month 6 (n=17)	Month 12 (n=12)
Median long axis ablation zone (IQR)	25.9mm (13.9)	20.44mm (9.7)	17.7mm (7.1)	16.9mm (9.8)	14.9mm (10.5)
Median short axis ablation zone (IQR)	20.3mm (8.5)	14.5mm (5.9)	12.6mm (5.9)	11.8mm (5.8)	11.2mm (3.2)

Results

PATIENT CHARACTERISTICS	
Participants	30
Age (Years)	74 (14.25)
Sex	
Male	11 (37%)
Female	19 (63%)
BMI	28.2 (8.1)
Smoking Status	
Former	27 (90%)
Current	-
Never	3 (10%)
History Of Cancer	
None	5 (17%) *
Thoracic	16 (53%)
Extra-Thoracic	17 (57%)
History of thoracic surgery / chemoradiation/ablation	16 (53%)
Lung function tests	
FEV1 (L)	1.95 (0.54)
FEV1 (%)	87 (21.6)
FVC (L)	3.02 (1.28)
FVC (%)	102 (21.6)
TLCOc	5.02 (2.12)
TLCOc (%)	78.7 (31.7)

NODULE CHARACTERISTICS	
Total	31
Biopsy and ablation performed in the same setting	
Yes	16 (53%)
No	14 (47%)
Lesion size (mm)	
Median (IQR)	10.1 (6.05)
<10mm	15 (48%)
10 to 20mm	16 (52%)
Lobar location	
Right upper lobe	9 (29%)
Right middle lobe	4 (13%)
Right lower lobe	3 (9.5%)
Left upper lobe	7 (22.6%)
Lingula	2 (6.5%)
Left lower lobe	6 (19.4%)
Nodule type	
Solid	20 (64.5%)
Part solid	9 (29%)
GGO	2 (6.5%)
Tumour type	
Lung adenocarcinoma	21 (70%)
Metastasis from extrapulmonary primary	9 (30%)
Median Distance from pleura (IQR, mm)	18.1 (12.5)
Median Distance to central zone (IQR, mm)*	43.1 (26.6)

Results

	Baseline N = 30	Pre-Ablation N = 30	Post-Ablation Day 1-4 N = 30	1 Month N = 27	3 Month N = 22	6 Month N = 17	9 Month N = 14	1 Year N = 12
EQ Index								
Median (IQR)	0.8 (0.2)	0.8 (0.2)	1.0 (0.2)	0.8 (0.3)	0.8 (0.2)	0.9 (0.2)	0.9 (0.1)	0.9 (0.2)
P-Value [1]		0.067	<0.001	0.080	0.206	0.123	0.031	0.156
Health Today (VAS)								
Median (IQR)	70.0 (25.0)	72.0 (20.0)	80.0 (20.0)	80.0 (17.5)	80.0 (25.0)	77.0 (25.0)	75.0 (10.5)	70.0 (35.0)
P-Value [1]		0.628	0.042	0.698	0.155	0.276	0.281	0.406
QLQ-C30 Total Score								
Median (IQR)	87.6 (17.0)	90.2 (16.7)	87.0 (9.9)	81.8 (24.0)	85.5 (20.5)	84.2 (22.9)	91.2 (11.5)	92.2 (9.1)
P-Value [1]		0.055	0.094	0.497	0.978	0.781	0.195	0.078
Pain Score								
Median (IQR)	0.0 (3.0)	0.0 (2.0)	0.0 (1.0)	0.0 (2.0)	0.0 (0.0)	0.0 (1.0)	0.0 (0.0)	0.0 (0.0)
P-Value [1]		0.344	0.102	0.594	0.281	0.250	0.063	0.063

P-value for the per-patient difference in score from baseline is derived from a one-sided, Wilcoxon sign-rank test at a=0.025 with the null hypothesis $\mu_0 = 0$.

Results

Transthoracic Ablation (meta-analysis)

- Death (0.1% to 2%)
- Pneumothorax 33.9% (CI; 23.8% to 44.8%)
  -requiring intervention (4.5% to 19.72%)
- Pleural effusion 9.6(CI; 1.5% to 22.4%)
- Haemorrhage (2% to 34%)
- Broncho-pleural fistula (0.1% to 4%)
- Air embolism (0.1% to 1 %)
- Infection: *pneumonia, lung abscess, invasive fungal infection* (1.4% to 7%)
- Post Ablation syndrome (4% to 7%)

NICE IPG716: Interventional procedure overview of microwave ablation for primary or metastatic cancer in the lung

Adverse Events (Creo Device)

Post procedure syndrome (mild-moderate events, possible infection/inflammation) 11/30 patients (37%)

Chest infection/Pneumonia (confirmed radiologically and biochemically) 1/30 (3.3%)

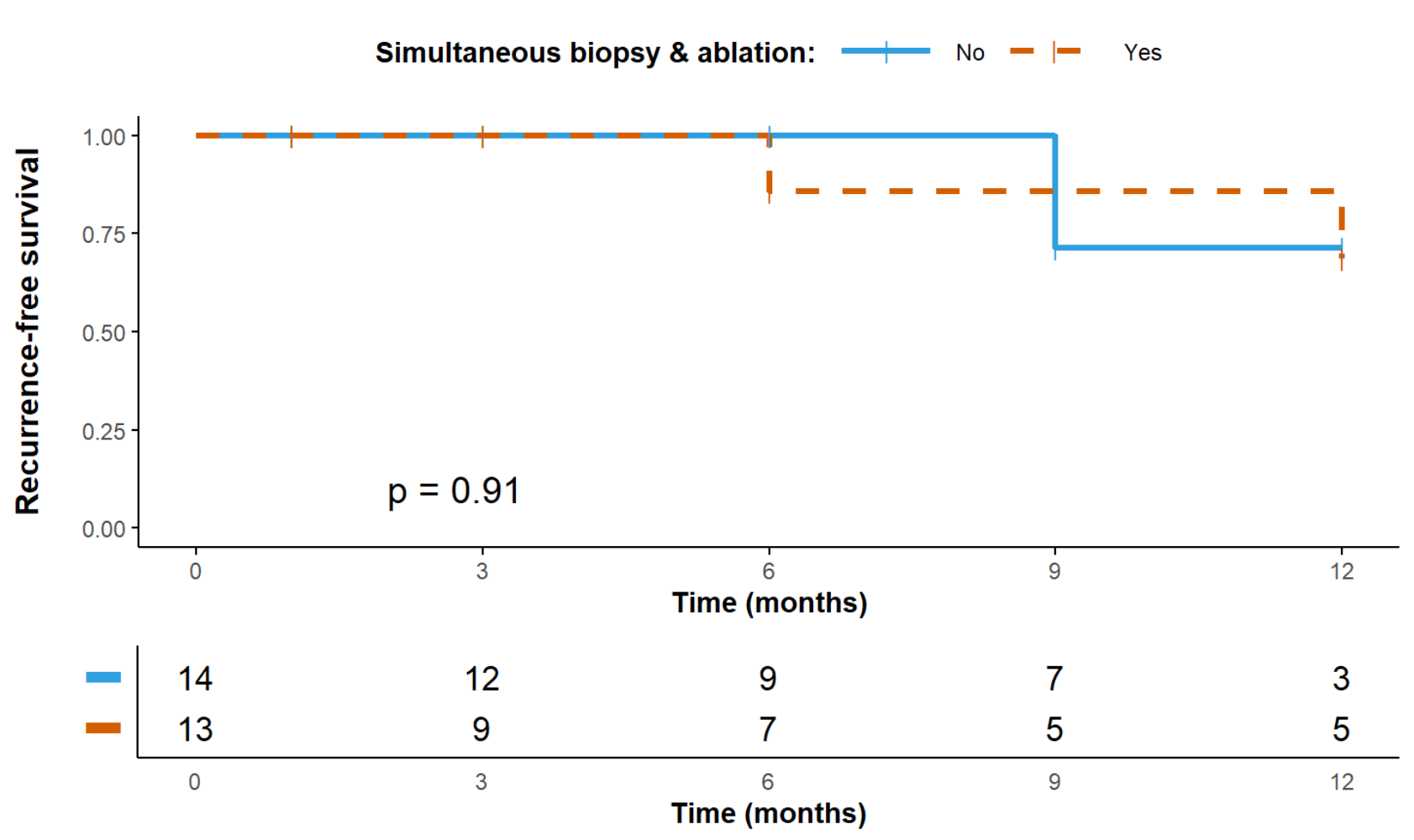
Exacerbation of underlying lung disease 2/30 (6.7%)

Pneumothorax 1/30 patients (3.3%) – 2 patients had pneumothorax due to pre-ablation cryobiopsy managed with simple aspiration only. These were detected on CBCT prior to ablation

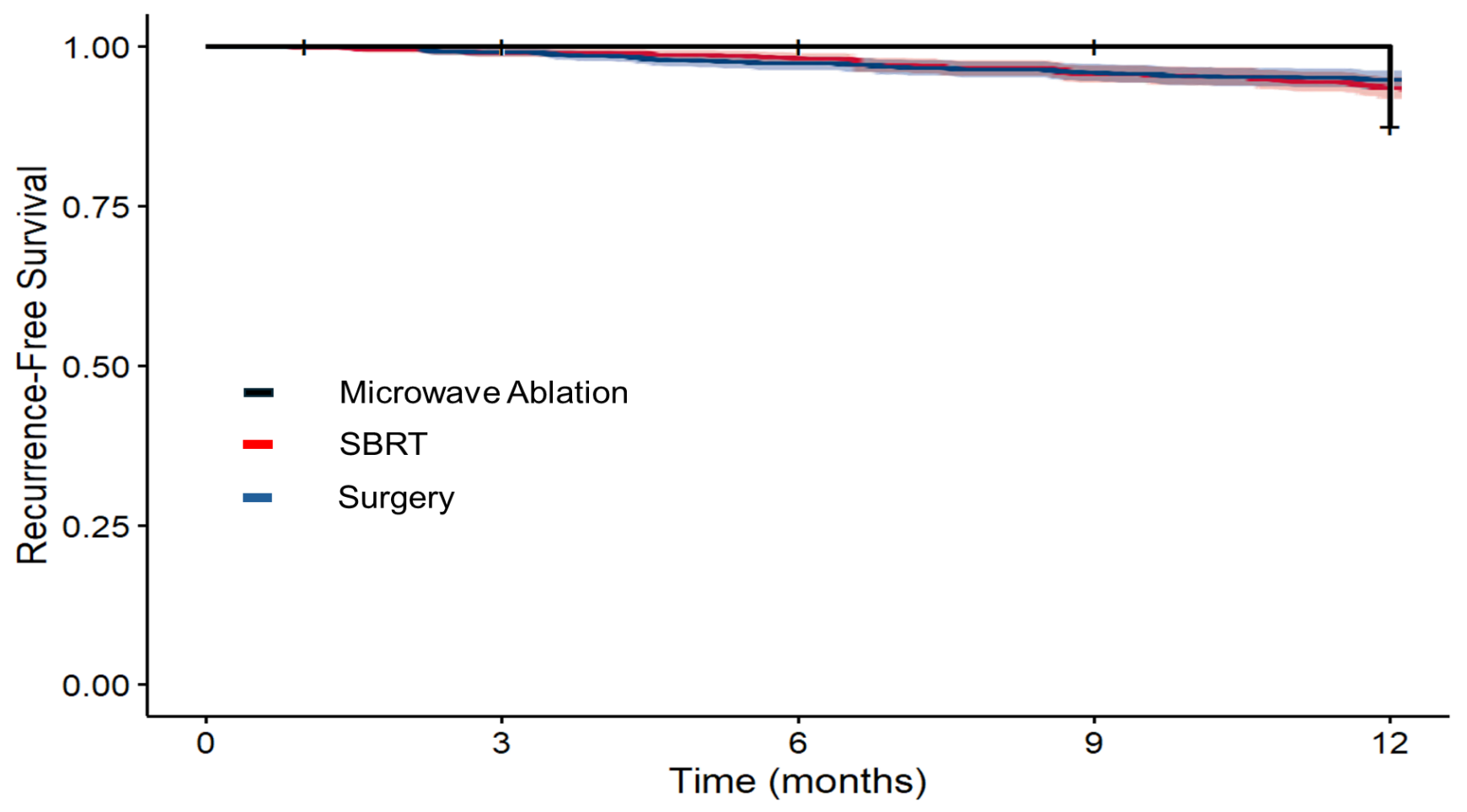
Local recurrence 4/30 (13.3%)

Death 1/30 – admitted to local hospital 10 days later with exacerbation of COPD and type 2 respiratory failure. Local team decided not to manage with NIV. No evidence of effusion, consolidation or pneumonitis on CXR

Recurrence Free Survival



Recurrence-Free Survival Primary NSCLC



Overlay with SBRT and surgery for NSCLC

Cao et al. A Systematic Review and Meta-Analysis of Stereotactic Body Radiation Therapy versus Surgery for Patients with Non-Small Cell Lung Cancer. J Thorac Cardiovasc Surg. 2018

Conclusion

- Technically possible
- Diagnosis & Ablation in one step is possible
- Lower risk of pneumothorax
- Less post procedure chest pain
- Good patient reported outcomes
- Long term efficacy data required

Q&A

Bronchoscopic Ablation

Moderated by Charlie Campion, CPO

Agenda

Title		Time	Owner
Welcome		3:00 - 3:05	Kevin Crofton, Chair
Corporate Update		3:05 - 3:15	Craig Gulliford, CEO
Powering the Next Era of Endoscopy: Why Advanced Bipolar RF and Microwave Energy Are Redefining the Field	Dr Roser Vega	3:15 – 3:25	Dave Woods, CCO
	Dr. Carlos Robles-Medranda	3:25 – 3:35	
	Dr. Benjamin Tharian	3:35 – 3:45	
Panel – Gastroenterology		3:45 – 4:05	
Coffee break		4:05 – 4:15	
Transforming Lung Cancer Care: Novel Ablation Technologies in the Era of Lung Screening		4:15 - 4:35	Professor Pallav Shah (UK)
Q&A - Bronchoscopic ablation		4:35 – 4:50	Moderated by Charlie Campion, CPO
From Specialist Innovation to Broad Adoption: Unlocking the Full Potential of Kamaptive Technology		4:50 – 4:55	Charlie Campion, CPO
Financial Outlook -Turning Creo's technology into commercial delivery & Q3 trading update		4:55 – 5:10	Richard Rees, CFO
Wrap up		5:10 - 5:20	Craig Gulliford, CEO
Drinks reception and product demonstrations		5:20 - 6:30	All

From Specialist Innovation to Broad Adoption

Unlocking the Full Potential of Kamaptive Technology

Charlie Campion - CPO

Where Creo's Platform Treats Disease Today

Pre and Early-Stage Cancer

Esophageal Cancer

Endoscopic Submucosal Dissection (ESD) for advanced resection of pre-cancerous and early-stage lesions

Lung Cancer

Bronchoscopic Microwave Ablation of Non Small Cell Lung Cancer Nodules

Stomach (Gastric) Cancer

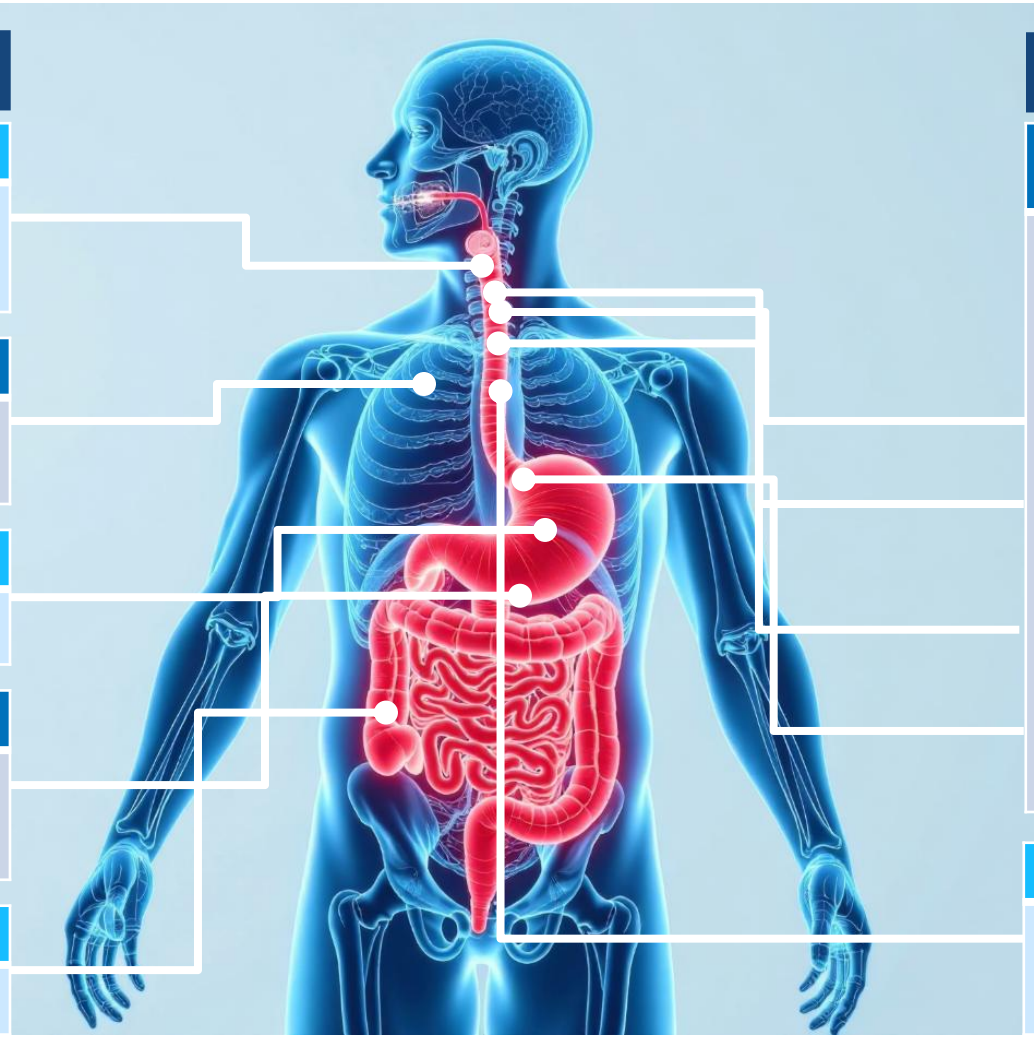
ESD of lesions in the stomach

Pancreas, Liver & Kidney Cancer

Endoscopic Ultrasound Guidance (EUS) Microwave Ablation of soft-tissue tumours

Colorectal Cancer

ESD of lesions in the colon and rectum



GI Disorders

POEM Procedures

Per Oral Endoscopic Myotomy (endoscopic surgery) procedures to correct GI disorders:

- **Achalasia:** POEM to correct the inability to swallow
- **Zenkers Diverticulum:** Z-POEM to correct weakness, herniation and pouches in the esophagus
- **Reflux Fundoplication**: F-POEM. POEM plus fundoplication to manage Reflux
- **Gastroparesis**: G-POEM: to treat restrictions on stomach emptying

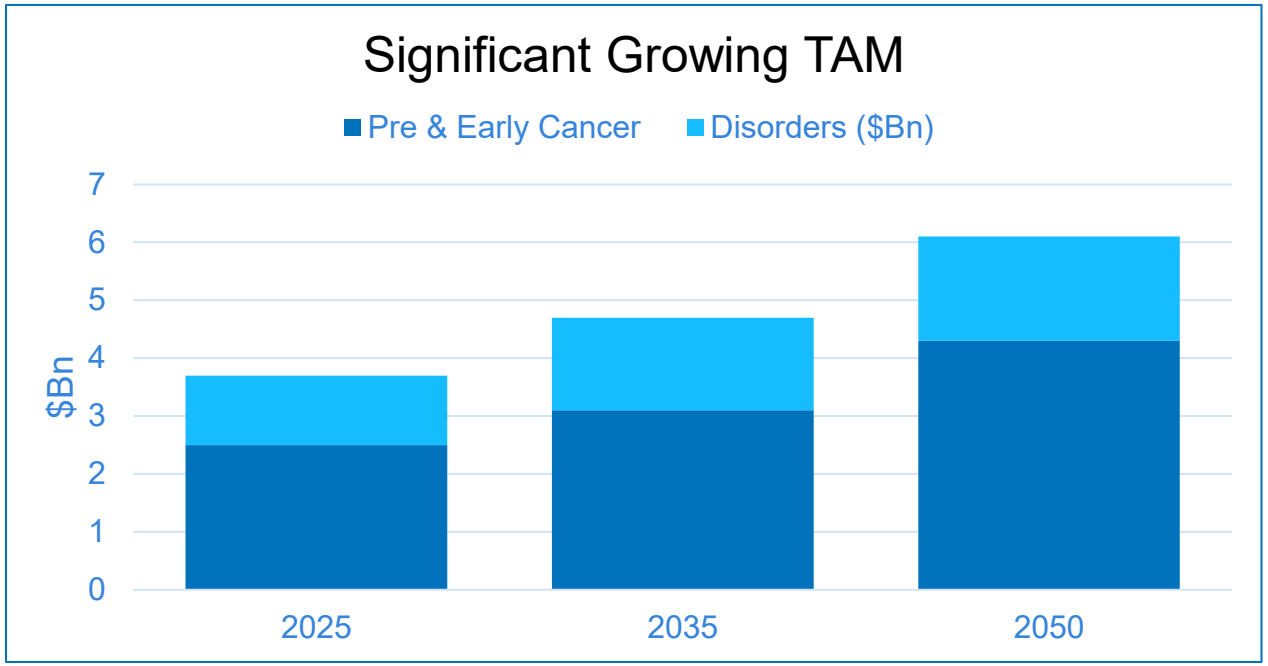
Barrett's Esophagus

Endoscopic surgery to remove abnormal cells in the Esophagus caused by Reflux, which could become Esophageal cancer

Significant TAM Expansion Driven by Early Detection

Pre & Early-Stage Cancer	Region	Cases	TAM $m	SAM $m
GI Resection	World	547k	$547m	$315m
Ablation	World	477k	$2.0b	$872m

	Region	Cases	TAM $m	SAM $m
GI Disorders	World	1.1b	$1.1b	$405m



Why Early Detection Drives Endoscopic Intervention

5 Year Survival rates:

Detection Pre-cancer/Stage 0	Diagnosis at Stage I&II	Diagnosis at Stage III&IV
c.100% - c.90%	c.77% - 55%	c.34% - 8%

Creo area of focus

Pre-cancer I Stage 0 I Carcinoma in Situ

- Mainly driven by screening, sometimes incidental finding
- Population screening: Colorectal, Breast, Cervix
- Emerging targeted screening: Lung
- Liquid Biopsy, Imaging and AI + Government intentions to pivot-to-prevention will drive more Stage-0 detection

Cancer I Staged I-II-III-IV

- Many cancers are detected at later stage
- Significant variation in 5-year survival early vs late stage
- Screening detects pre-cancers and early-stage-cancers

Powering the next era of endoscopy: Adaptive Multimodal Energy (AME)

AME is a new class of therapeutic energy that:

- Combines **adaptive bipolar RF** and **super-high-frequency microwave** in one platform
- Modulates energy delivery based on **real-time tissue response**
- Provides **predictable, precise** effects through a flexible endoscope or robotic access
- Powers advanced resection, dissection, coagulation, and ablation workflows

AME unlocks:

- **New endoscopic options** previously limited to surgery
- More controlled and confident therapy in **complex anatomy**
- Reduced device exchanges → smoother, safer workflows
- A consistent, **future-proof energy architecture** teams can rely on

Why Now?

- Therapeutic endoscopy is expanding rapidly
- Surgical energy tools haven't kept pace with flexible access
- Robotics and image-guided navigation demand **next-generation energy control**
- Hospitals need to shift suitable cases from OR to endoscopy to free capacity

Kamaptive® Energy — Creo's proprietary implementation of Adaptive Multimodal Energy — establishes a new standard for precision-based therapeutic endoscopy.

A Unified GI Energy Ecosystem for Modern Endoscopy

A full three tier replacement for ERBE platform:

Via unique Kamaptive Ecosystem

- Tier 1: Advanced: Speedboat, SpydrBlade, MicroBlate Fine and Flex
- Tier 2: Bipolar Range:
  - Bipolar Knife
  - Bipolar Grasper
  - Bipolar Sphincterotome
  - Bipolar Snares
- Tier 3: Consumables – everyday GI products
  - Hemoclips, Biopsy Forceps, Snares
  - Injection needles, Grasping forceps etc

Commercialisation Roadmap: From Specialist Adoption to Platform Scale

Product	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Core Products										
Speedboat Inject	Launched									
Speedboat UltraSlim										
Speedboat Notch										
SpydrBlade Flex							Launched *			
MicroBlate Fine							Limited Market Release			Full commercial launch
MicroBlate Flex							Limited Market Release *			Full commercial launch
CROMA										
Software Enhancements										
Outsourced										
Bipolar Knife										
Bipolar Snare										
Bipolar Grasper										
Bipolar Sphincterotome										
Specialty growth										
Utility growth										

Market Disruption

* First commercial sales of SpydrBlade, MicroBlate Flex and MicroBlate Fine recorded in 2025

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Financial Outlook

Richard Rees - CFO

Significant Market Potential

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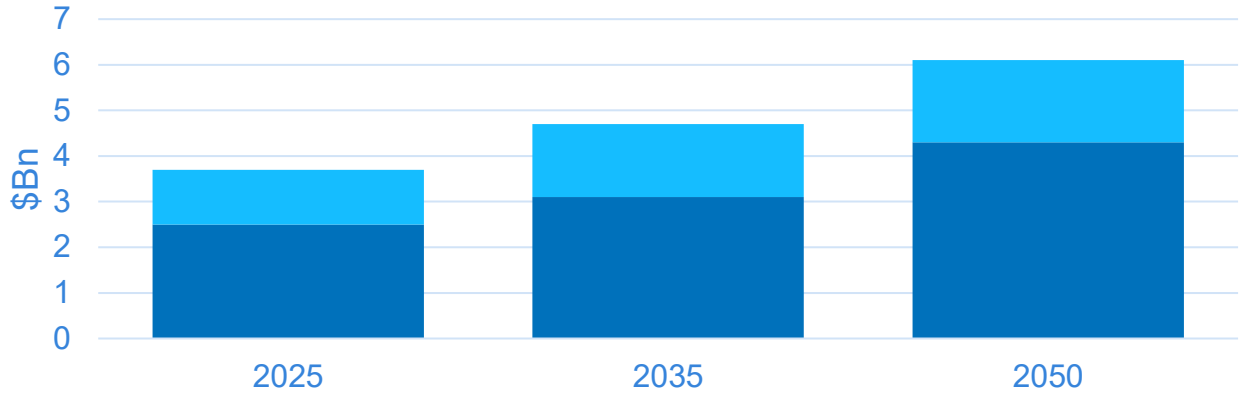
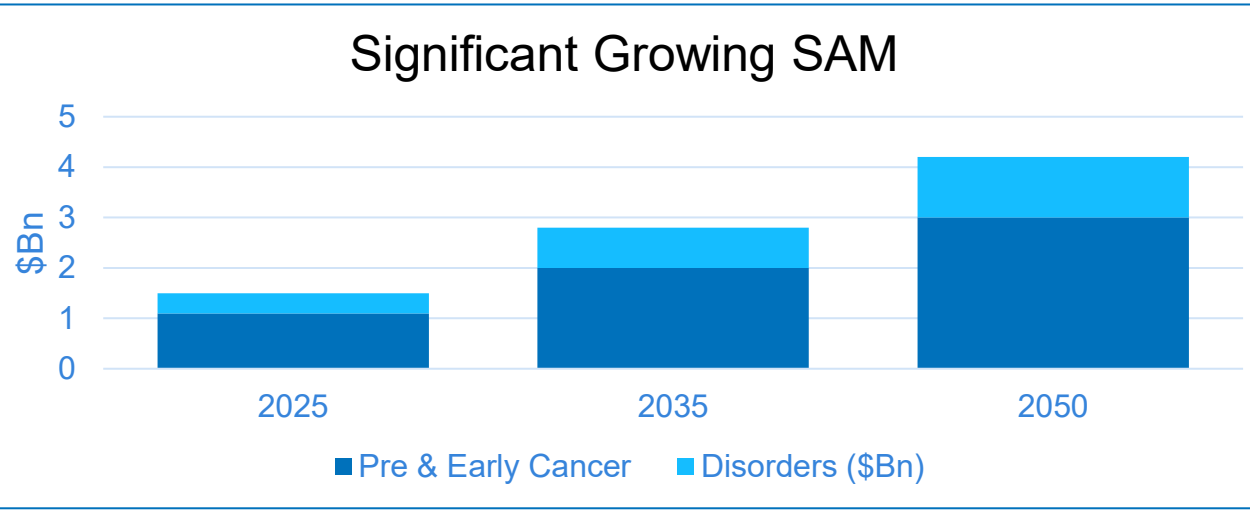
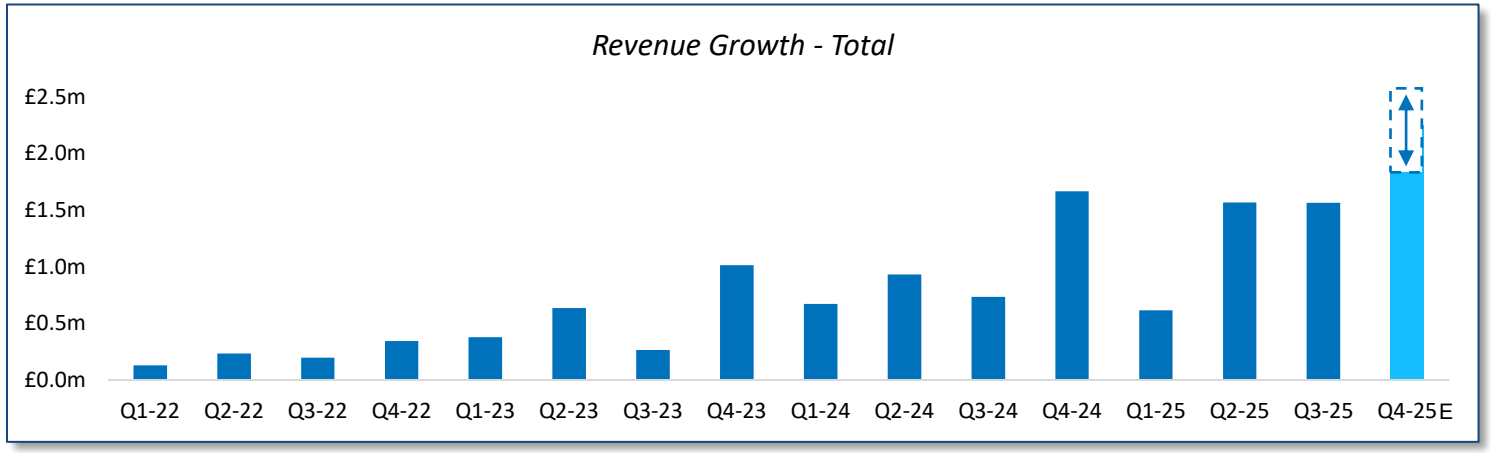
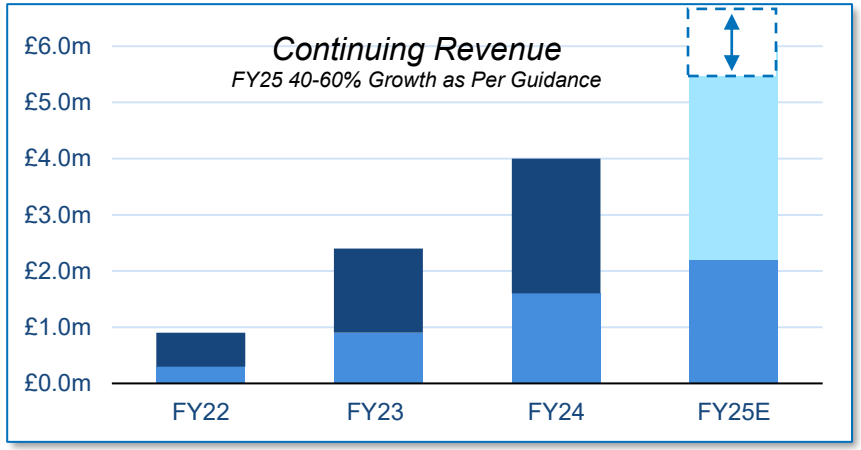




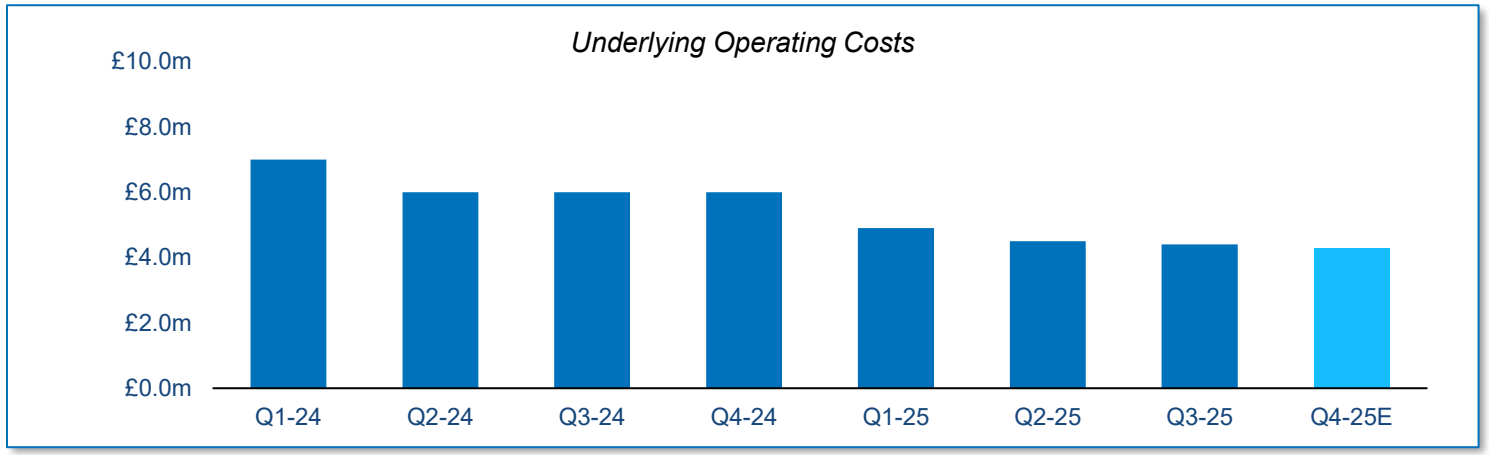
Revenue and Cost Progression

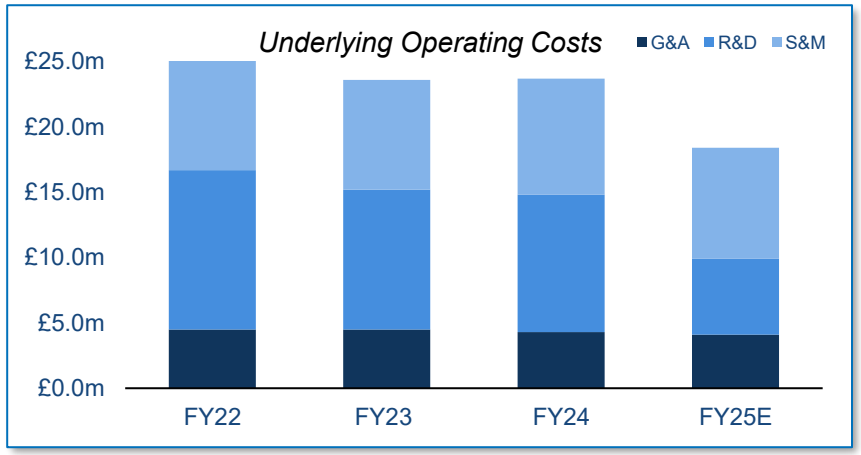
Revenue guidance of 40-60% growth YOY in FY25





c30% Annualised Cost Reduction from £25m in FY24

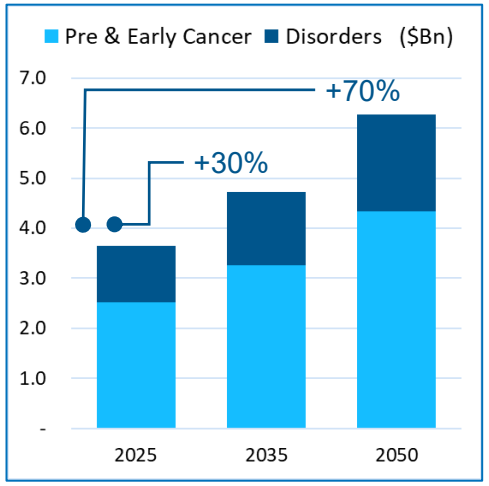




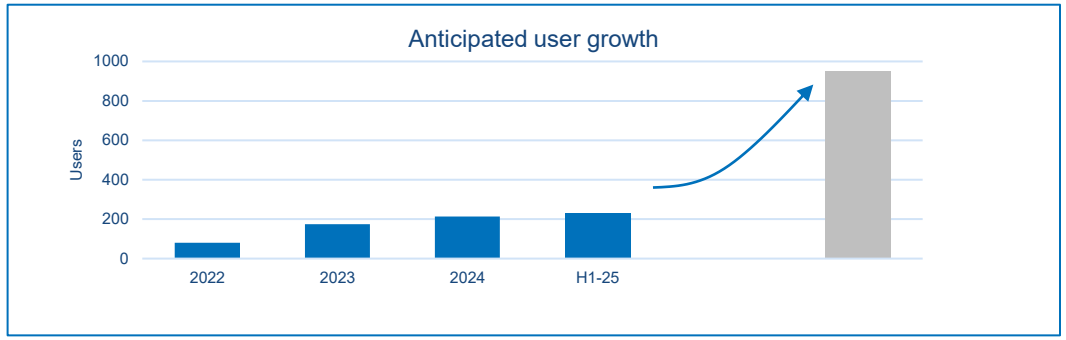
Market and Revenue progression

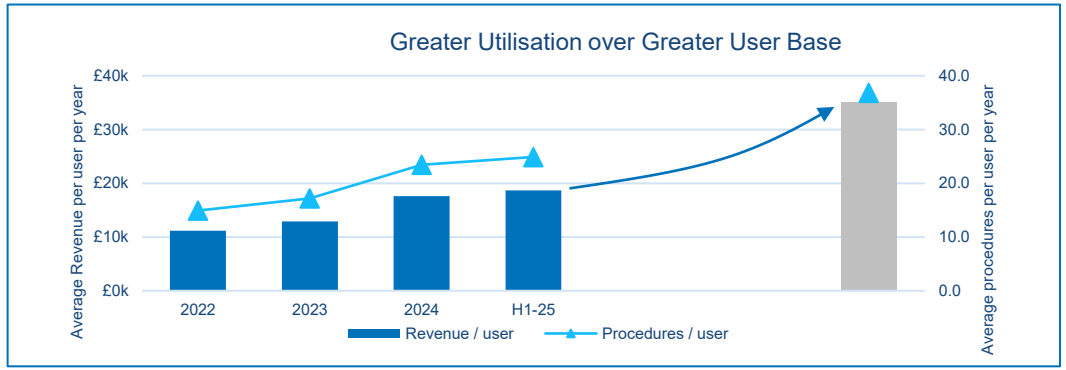
Markets and growth

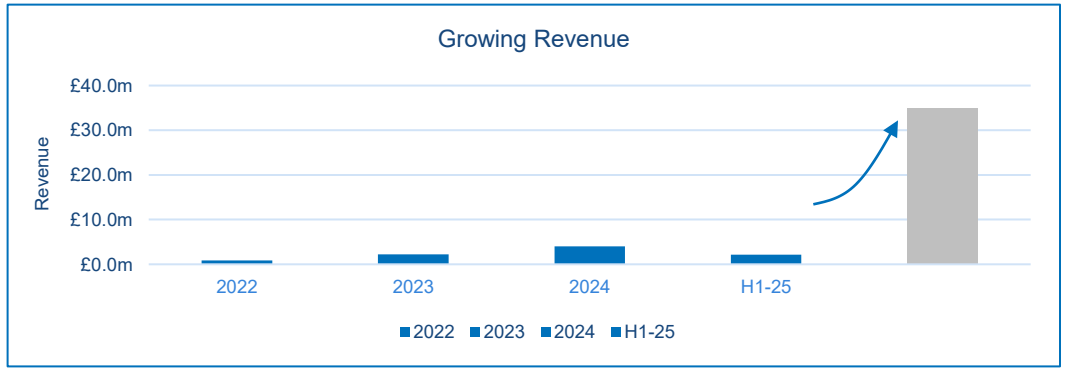
US$Bn	SAM25	SAM35	SAM50
Resection - cancer	$0.5	$0.7	$0.9
Ablation - cancer	$2.0	$2.5	$3.4
Pre & Early cancer	**$2.5**	**$3.3**	**$4.3**
Resection - disorders	$1.1	$1.5	$1.9
Total	**$3.6**	**$4.7**	**$6.3**



- Focus on growing utilisation per user as well as users through next 1-3 years
- Full product portfolio allows access to significant SAM
- Guidance of 40-60% revenue growth YoY in FY25
- Controlled and reduced cost base







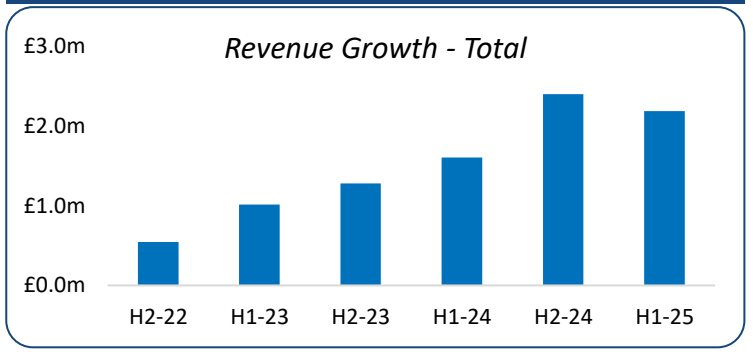
Wrap Up

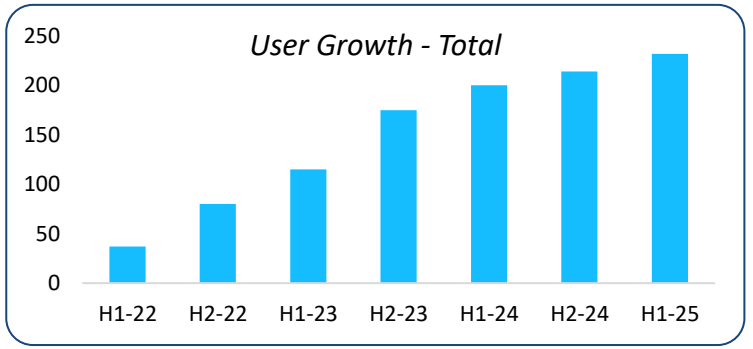
Craig Gulliford - CEO

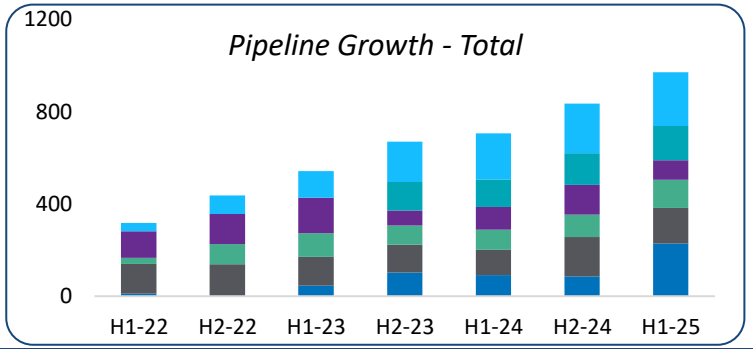
Summary and Outlook

- Increasing utilisation per user on core products. Speedboat UltraSlim, SpydrBlade and Speedboat Notch increasing CROMA platform utilisation and revenue
- Collaborating with Micro-Tech to grow Creo Medical Europe and increase overall Creo revenue
- Strong H1-25 and Q3-25 performance driven by Speedboat UltraSlim and Speedboat Notch, supporting revenue growth of 40-60% for FY25
- Cost reductions from 2024 benefiting 2025, aiding the transition to commercial profitability and well positioned to achieve positive cash flow and profitability by 2028
- Developing relationships with Ion and expanding MicroBlate Flex sites to generate revenue transitioning to Commercialisation
- Poised to launch unmatchable plug and play, advanced energy for all endoscopists everywhere

Strong track record of delivering growth







CREO MEDICAL

Anything is Possible with the Right Approach