



Accessible | Affordable | Functional

# Product Catalogue



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## Mission

# To become the world's partner for surgical training

Established in 2012, Inovus Medical is an award winning UK-based designer and manufacturer of healthcare simulators. With a focus on meeting the diverse needs of surgical simulation, we understand that a one-size-fits-all approach is insufficient.

Inovus Medical is driven by the principles of affordability, accessibility, and functionality in the development of our products. Our ultimate goal is to become the world's partner for surgical training by delivering an evolving ecosystem of simulation solutions that cater to the entire spectrum of training requirements. This includes low-fidelity task trainers, high-fidelity full procedure simulators, and everything in between.

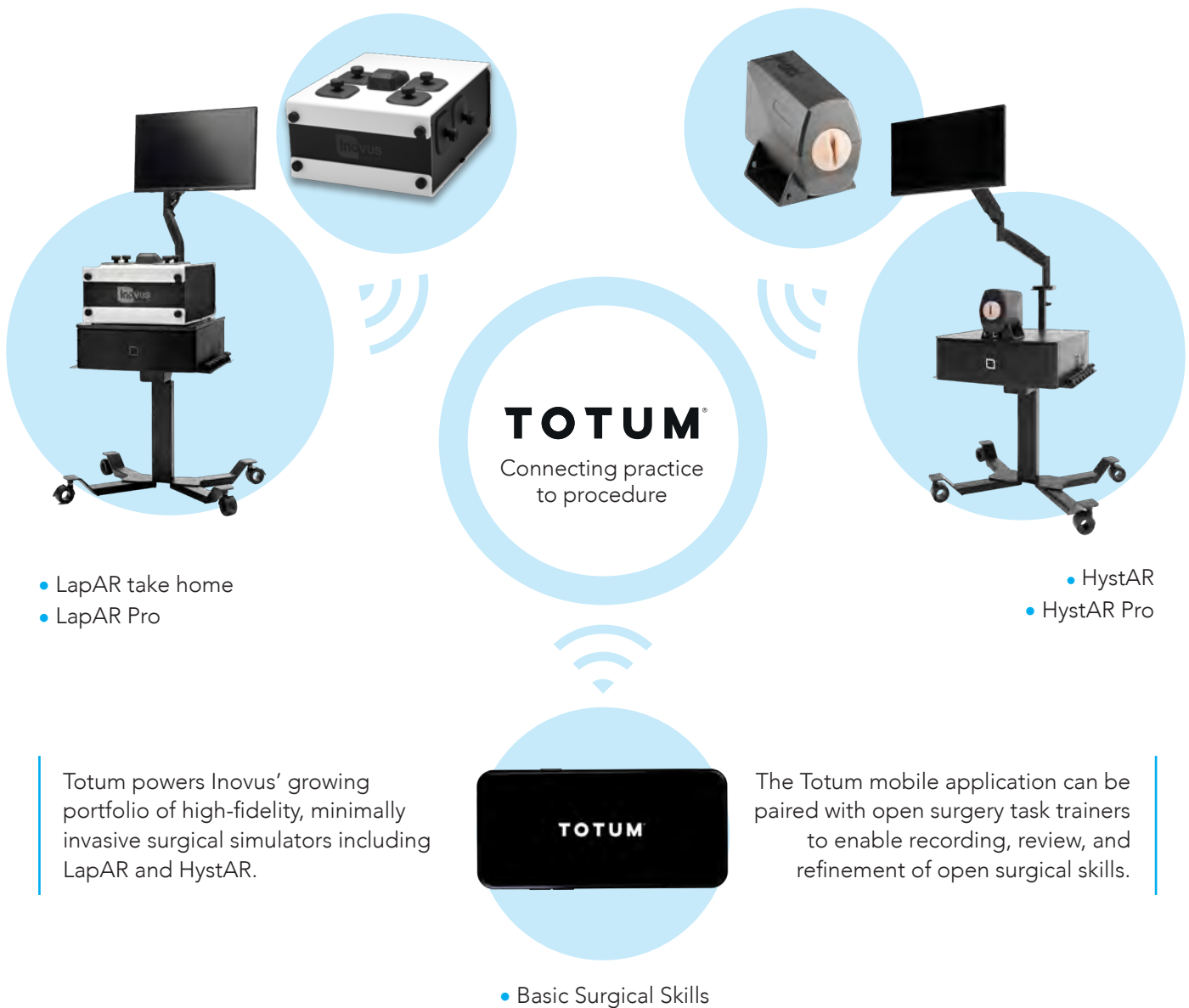
By placing clinicians at the forefront, we ensure that our products address the specific demands of surgical simulation. This approach enables us to create simulators that effectively enhance surgical skills and provide a realistic training experience.

The company has received multiple awards for its innovative contributions to the field of healthcare simulation. This recognition further underscores our commitment to excellence and our dedication to advancing surgical training worldwide.

In summary, we are transforming surgical training by specialising in the design and manufacturing of healthcare simulators. Our products prioritize affordability, accessibility, and functionality, catering to the diverse needs of clinicians across the globe.

# Totum - Surgical Training Remastered

Totum is an accredited digital surgery platform powering an evolving ecosystem of surgical simulators, dedicated to supporting surgical training, skills acquisition, and data aggregation.



**TOTUM**

The single source for all your surgical training data, aggregating minimally invasive and open procedural data into a single platform, with a single log in, for review and management of training without boundaries.

# Totum - Connect to perfect surgical technique



## Guiding the way to surgical success

Inovus' simulators allow surgeons to practice procedures with real instruments and simulated tissues that create natural haptics. The augmented reality overlays of Totum are uniquely streamed direct to a screen, providing 'headset free', immersive training experiences. Totum connects surgeons of all grades with mentors, peers, and examiners to share best practice through its web-based learning portal.



## Harnessing the power of data to transform surgical training

The powerful computer vision algorithms of Totum track instrument motions during training. The instruments are simultaneously mapped and recorded digitally. The data collected from practice is then aggregated, managed, and shared in each trainee's portfolio within Totum. These objective performance metrics guide improvements in surgical technique and operative flow.



## Unlocking the power of practice

Totum's video capture and debrief portal provides a platform for review, refinement, and mastery of surgical procedures. Record training events, receive written, time-stamped feedback, and compare this to objective data to guide training needs. Utilise the task management portal to set training goals and review progress.



## Dynamic assessment, universal recognition

Totum allows the digitalisation of skills curriculums by integrating them with the Inovus ecosystem of simulators. Use Totum to scale delivery and certification of national programmes such as LapPass. The assessment and certification portal can be used to issue certificates of competency for recognised curriculums, claim CPD/CME points for time spent training, and perform work-based assessments and OSATS.

## Key features of Totum

- Natural Haptics
- Compatible with any surgical instrument or device
- Distance learning
- Single log in, multiple devices
- Web and mobile compatible
- Accredited by RCS England
- Gain CPD points while training
- Reduces operating time by 41%
- Improves surgical efficiency by 60%

# TOTUM®

To learn more about connected surgical training powered by Totum, visit [www.inovus.org](http://www.inovus.org)

# Laparoscopic simulators

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As medical simulation and training specialists, Inovus Medical introduced the concept of take-home laparoscopic surgical training with the launch of the original Pyxus Laparoscopic Simulator in 2012. Since then, the popularity of these simulators has grown significantly, with thousands of units being sold worldwide.

By providing surgical trainees with the opportunity to practice laparoscopic procedures in a simulated environment, our simulators offer a valuable tool

for skill development and proficiency. Trainees can familiarise themselves with laparoscopic instruments and techniques, refine their hand-eye coordination, and enhance their decision-making abilities in a safe and controlled setting.

Overall, the simulators from Inovus Medical cater to the needs of surgical trainees seeking convenient and effective methods to enhance their laparoscopic skills.





# Low fidelity laparoscopic simulators





With thousands of Pyxus simulators now sold worldwide, their popularity continues to grow with surgical trainees all over the globe.

The Pyxus HD and Pyxus HD Move are ideally suited to surgical trainees looking to hone their laparoscopic skills at home or on the move. Their flatpack nature makes them highly portable, fitting in perfectly with the busy lifestyle of the training surgeon.

# Pyxus HD

The Pyxus HD consists of a four piece high grade composite shell casing. The silicone skin is held in place with a bracket and allows for insertion of the Inovus Medical dummy trocars. The fixed internal camera provides a clear, HD image once attached

to a laptop or PC. The integrated light source in the camera provides direct illumination of the operative field and is a unique feature of the Pyxus HD and Pyxus HD Move.

A lightweight, sleek device ideal for take home surgical training, fully flatpack for added portability

## Included in the package:

- fixed 1080p HD camera as standard
  - perfect for solo training
- Compatible with MAC & PC
  - USB connectivity
- needle holder
- scissors
- Maryland grasping forceps
- ratcheted Johan forceps
- 4 x skills tasks

Product code: 00000916



\*Laptop not included

# Pyxus HD Move

The Pyxus HD Move has the most lifelike dummy laparoscope of any take home box trainer on the market with an integrated light source providing direct illumination of the operative field. The dummy laparoscope offers the ability to develop camera operator skills as well as allowing the solo trainee to

manually zoom the camera when performing intricate tasks such as suturing, giving an even more realistic representation of the challenges faced in minimally invasive surgery.

Ideal for developing camera operation and advanced laparoscopic skills

## Included in the package:

- dummy laparoscope with 1080p HD camera can be fixed for solo training  
Compatible with MAC & PC  
- USB connectivity
- needle holder
- scissors
- Maryland grasping forceps
- ratcheted Johan forceps
- 4 x skills tasks

Product code: 00000919



\*Laptop not included

# Medium fidelity laparoscopic simulators

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Inovus Medical is recognised as a global leader in the delivery of “Hub and Spoke” surgical training, ensuring a consistent training experience from the hospital to the trainees’ home environments.

The specific simulators provided by Inovus Medical for group-based and simulated laparoscopic stack system surgical teaching may vary. However, Inovus is renowned for its commitment to innovation and advancing surgical training. Our Simulators are designed to replicate real-world surgical scenarios and provide trainees with a realistic and interactive learning environment.

By utilising these simulators within hospitals and educational settings, surgical trainees can benefit from hands-on practice, collaboration with peers, and guidance from experienced instructors. The simulators enable trainees to develop and refine their surgical skills, enhance teamwork and communication, and gain confidence in performing laparoscopic procedures.

Inovus Medical’s approach to “Hub and Spoke” surgical training ensures that the training experience is consistent across different settings, allowing trainees to seamlessly transition between the hospital and their home-based training. This continuity in training contributes to improved learning outcomes and better-prepared surgeons.

Overall, Inovus Medical’s simulators for group-based and simulated laparoscopic stack system surgical teaching offer a comprehensive solution for delivering effective and standardised surgical training within hospitals and educational settings.





# Pyxus Pro Move

The Pyxus Pro Move is the most affordable way to train the three core fundamental skills of laparoscopic surgery from a single platform. It allows simulation of camera handling and navigation, instrument handling and has the ability to train trocar insertion under view from the laparoscope; a crucial step in laparoscopic surgery and a functionality unique to the Inovus Medical institutional simulators.

The Pyxus Pro Move utilises the Inovus Medical trocar insertion pad to offer realistic feel and resistance experienced in trocar insertion whilst offering the ability to view the trocar entry internally using the laparoscope. The trocar insertion pad can be replaced ensuring high volume trocar insertion training (see accessories for replacement pad).

The Pyxus Pro Move not only allows dual training of camera operator and surgeon but also allows for solo training, ideal for examination/testing environments. The laparoscope is easily held in a fixed position with the bracket provided and allows adjustments of camera position by a solo operator.

Inovus Medical is a world leader in delivery of 'Hub and Spoke' surgical training, providing a consistent training experience from hospital to home. The Pyxus Pro Move delivers an institutional based training experience consistent with that encountered on the Pyxus HD and Pyxus HD Move take home simulators.

## Included in the package:

- real-feel trocar insertion with peritoneal 'pop'
- zero lag 1080p dummy laparoscope
- 2 x Maryland forceps
- 2 x 5mm trocars included as standard
- 15" monitor and monitor stand included as standard
- flatpacked for easy set up and storage

Product code: 00000891



• 2 x 5mm trocars



• 2 x Maryland forceps

The integrated screen, plug and play capability, and comparatively low cost make the Pyxus Pro Move the perfect solution for delivering group-based surgical teaching within hospitals and other educational settings.



# Bozzini Laparoscopic

The Bozzini Laparoscopic Simulator by Inovus Medical is the world's first 'simulated laparoscopic stack system', offering true-to-life laparoscope and camera handling simulation at a fraction of the cost of using a retired or repurposed stack system. This high fidelity simulator utilises the proprietary Bozzini light source and camera technology to deliver a full stack system experience through an affordable, compact, table top device.

The Bozzini light source is USB powered and, as with the camera system, connects directly to the monitor supplied, removing the need for multiple power outputs and bulky camera/light source units. The

simulator comes with a flatpack laparoscopic box trainer meaning the entire system can be packed away into an easy to store carry case. The box trainer has multiple camera and instrument entry ports. It comes with the proprietary trocar insertion pad, as seen on the Pyxus Pro Move, allowing close to life port insertion under camera view as well as advanced laparoscopic skills training.

## Included in the package:

- 1 x 10mm laparoscope
- 1 x bozzini light source
- 1 x fibreoptic light lead
- 1 x camera unit
- 1 x 15" monitor
- 1 x monitor stand
- 1 x 10mm trocar
- 2 x 5mm trocars
- 4 x laparoscopic instruments: needle holder, scissors, Maryland forceps, ratcheted Johan forceps
- 1 x box trainer with trocar insertion pad
- 1 x scope bracket for fixing laparoscope

Product code: 00000960

Two Year Extended Warranty

Product code: 00000891



- Titratable light source.

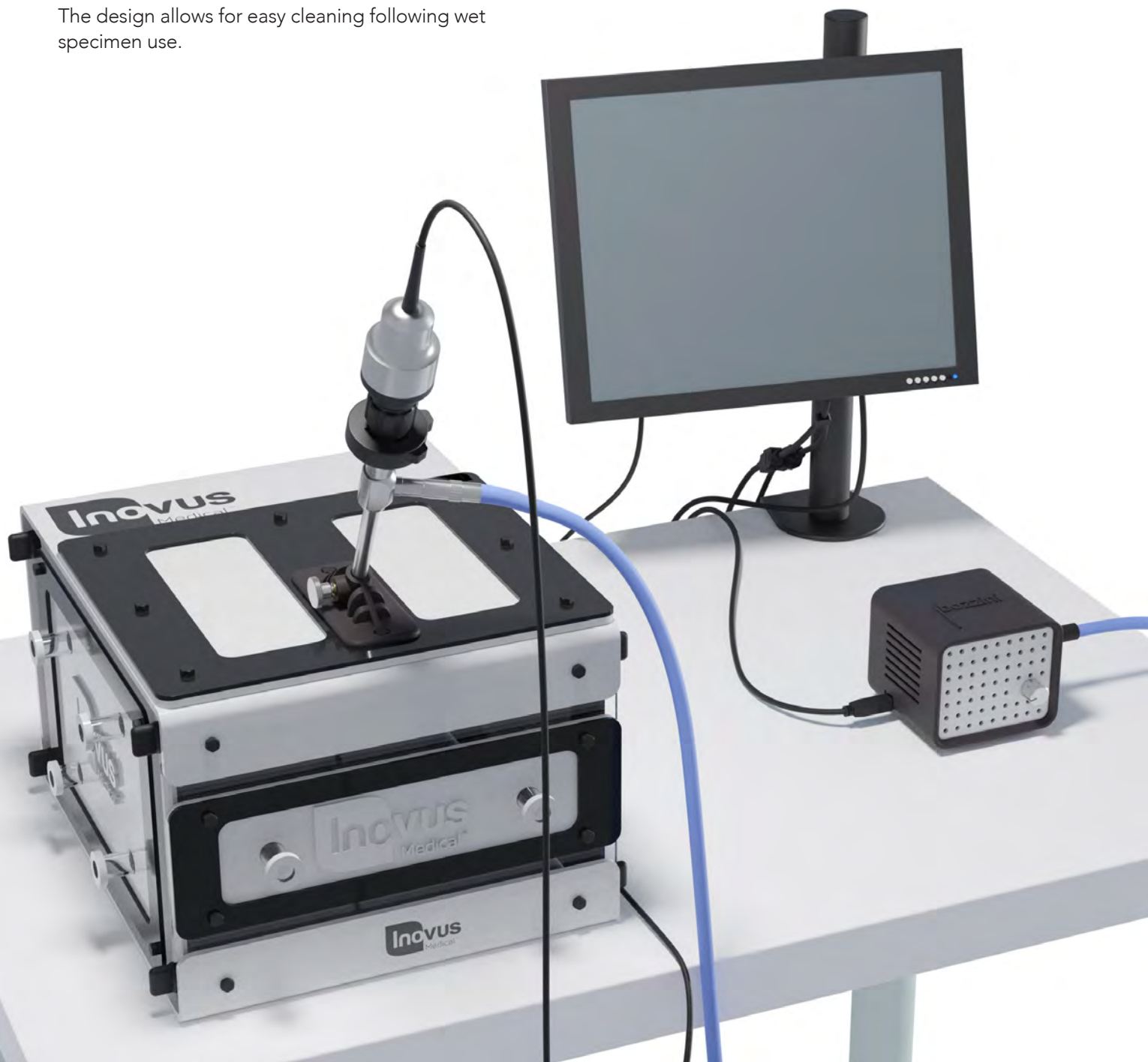


- Instruments included in the package.


The box trainer supplied with the system is perfect for use with Inovus Medical's range of synthetic soft tissue models and can also be used with wet specimens.

The design allows for easy cleaning following wet specimen use.

The box trainer can also be substituted for a cadaver or animal model making the Bozzini Laparoscopic Simulator the perfect system for running high fidelity wet lab courses.



# High fidelity laparoscopic simulators



The LapAR, developed by Inovus Medical, marks a significant breakthrough in healthcare simulation comparable to the transformative impact of the Model T car. This high fidelity laparoscopic simulator combines patent-pending Augmented Reality (AR) technology with the Inovus Medical box trainer model, resulting in the world's first affordable and accessible simulator of its kind.

One of the key distinguishing features of the LapAR is its utilisation of real-feel soft tissue models and actual laparoscopic instruments, revolutionising haptic realism. This innovation allows surgeons to experience unparalleled functionality, replicating the tactile feedback and sensations encountered during real laparoscopic procedures.

The LapAR simulator caters to a wide range of surgical procedures within the domains of general surgery and gynaecology. Surgeons can practice various techniques and refine their skills in a simulated environment that closely mimics real surgical scenarios.

The simulator incorporates instrument tracking technology, enabling the capture of instrument handling and performance metrics. This data, including performance statistics and key metrics, can be accessed and analysed through an online portfolio. This feature provides surgeons with valuable feedback on their performance and allows for continuous skill development and improvement.

By combining cutting-edge AR technology, realistic soft tissue models, and instrument tracking capabilities, the LapAR simulator offers an unprecedented level of realism and functionality in laparoscopic training. Its affordability and accessibility make it an attractive option for surgeons looking to enhance their laparoscopic skills without the constraints of traditional training methods.





## RCS accreditation

Inovus Medical is proud to be accredited by the Royal College of Surgeons for England (RSCEng). This accreditation recognises our commitment to delivering high quality surgical education and training.

After undergoing a rigorous accreditation process, our LapAR ecosystem was deemed to deliver excellence as an educational product. This state-of-the-art simulator empowers training centres to provide surgical training in person and remotely.

An augmented reality-based platform, the LapAR connects trainees and faculty through Totum, our transformative technology that provides objective metrics, performance tracing, and video recording to help trainees feel as confident as possible ahead of their formal assessments.

With RSCEng accreditation, trainee surgeons using the LapAR ecosystem can also now earn Continuing Professional Development (CPD) points for their practice.





# LapAR - Democratising high fidelity surgical simulation

The LapAR serves the demand for distance learning in laparoscopic simulation. The simulator allows the user to perform simulated full surgical procedures as well as basic skills tasks by connecting the simulator to their PC or laptop\*.

Powered by the Totum digital surgery platform, users' performance data is captured and displayed in the web portal and can be downloaded and added to surgical training portfolios and logbooks.

## Included in the package:

- LapAR box trainer with integrated 1080p USB camera
- model mounting jig and abdominal wall skin
- 4 x laparoscopic instruments: Maryland forceps, Johan forceps, scissors, needle holder
- 1 x LapPass kit
- 1 x pack of sutures
- 5 x medical models
- single user licence for Totum

Product code: 00000502

\*Laptop not included



To facilitate practice in ipsilateral port placement and suturing, additional side panels are available for purchase.

Product code: 00001605

# Totum - Connect to perfect surgical technique

LapAR simulators are powered by Totum, the holistic platform that creates a connected surgical training ecosystem.

Totum allows instrument motions to be mapped and recorded digitally, to generate rich objective

data on surgical performance. The objective data is aggregated, managed, and shared with trainers via the Totum web portal.



LapAR  
LapAR Pro  
Powered by

**TOTUM**



#### Guiding the way to surgical success

Connect with mentors, peers, and examiners to share best practice



#### Harnessing the power of data to transform surgical training

Objective performance metrics guide improvements in surgical technique and operative flow



#### Unlocking the power of practice

Video capture and debrief provides an ecosystem for review, refinement, and mastery of surgical procedures



#### Dynamic assessment, universal recognition

Issue certificates of competency, gain CPD/CME points for time spent training, perform work based assessments and OSATS

**TOTUM**

To learn more about the complete Totum ecosystem of connected surgical training, visit [www.inovyus.org](http://www.inovyus.org)

# LapAR Pro - Democratising high fidelity surgical simulation

LapAR Pro is a hybrid high fidelity laparoscopic simulator. The system combines patented Augmented Reality (AR) technology with the Inovus box trainer model. LapAR Pro is powered by the Totum digital surgery platform, providing a connected ecosystem for surgical training.

The LapAR Pro represents a paradigm shift in haptic realism utilising real-feel soft tissue models and real laparoscopic instruments to provide unparalleled 'natural haptics'.

The simulator allows surgeons to practise a range of procedures across the specialities of general surgery and gynaecology. Instrument tracking technology enables capture of instrument handling and performance metrics with performance data displayed in the Totum platform.

## Key features of LapAR

- Natural haptics through synthetic soft tissue models
- Realistic digital anatomy fully integrated with soft tissue models
- Full procedure simulation (multiple specialties)
- Trigger and manage intraoperative complications
- Objective feedback on key metrics of surgical performance
- Performance tracking on validated curricula
- Record and review training progress with online portfolio



Shown to save healthcare systems

**>\$115 million**

per year through operative efficiencies when integrated into training programmes.



Full procedure simulation across gynaecology and general (including paediatric) surgery.

# LapAR Pro

The institutional version of LapAR offers educational and training institutions the opportunity to deliver high fidelity, fully tracked laparoscopic simulation at an unprecedented scale. The sleek, compact trolley system meets all laparoscopic training requirements from delivering basic, intermediate, and advanced laparoscopic skills courses in simulation centres,

through to pre-operative warm up in the clinical setting. LapAR Pro provides unlimited access to the Totum digital surgery platform, meaning there is no limit to the number of surgeons that can be trained with LapAR Pro.

## Included in the package:

- LapAR Pro box trainer with integrated 1080p USB camera
- model mounting jig and abdominal wall skin
- 5 x laparoscopic instruments: Maryland forceps, Johan forceps, scissors, and needle holder (x2)
- 1 x LapPass kit
- 1 x pack of sutures
- mobile trolley system with adjustable operating height
- 1 x Integrated computer with Totum software pre-installed
- 22" touch screen monitor
- monitor mounting system – can be converted to table top mounting
- unlimited user licences
- admin access to Totum

Product code: 00001526



## Laparoscopic Accessories

Inovus Medical boasts an ever expanding range of laparoscopic training bases that can be used to develop a range of skills in minimally invasive surgery.

Our multi-use skills tasks are perfect for developing basic and intermediate skills and for pre-operative warm up.

### Threading base

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Product code:  
00000911



- Develops intermediate minimally invasive surgical skills
- Narrow eyelets are spaced in order to produce a challenging task
- Bilateral manual dexterity, depth perception & proprioceptive skills

### Ring stack base

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Product code:  
00000904



- Develops intermediate minimally invasive surgical skills
- Grasp, lift, and relocate rings
- Bilateral manual dexterity, depth perception & proprioceptive skills

### Maze base

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Product code:  
00000899



- Develops intermediate minimally invasive surgical skills
- Negotiate rings around a series of direction changes and breaks
- Bimanual dexterity, proprioceptive skills & surgical finesse

### Bead stack base

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Product code:  
00000881



- Develops intermediate minimally invasive surgical skills
- Pick up beads and transfer between towers of varied heights
- Fine motor skills and surgical finesse

### Shape manipulation base

Product code:  
00000907



- Develops intermediate minimally invasive surgical skills
- Stabilise the base whilst manipulating the shape through the target
- Bilateral manual dexterity, surgical finesse

### Suturing base

Product code:  
00001442



- Develops advanced minimally invasive surgical skills
- Basic and advanced suturing tasks
- Supplied with suturing skin

### Suturing refill

Product code:  
00001444



- 1 x replacement suturing skin for suturing base

### Surgical Sutures 3.0 Silk Braided

Product code:  
00001286



- 12 x Surgical sutures (3/0 silk braided) not for human use

### Replacement trocars

Product code:  
00001205



- 2 x replacement trocars for Pyxus HD, Pyxus HD Move, and Bozzini Laparoscopic Simulators

### Soft padded carry case

Product code:

00001236



- Accommodates Pyxus HD, Pyxus HD Move, and LapAR
- Separate zip pocket for instruments
- Room for accessories

### Hard shell carry case

Product code:

Pyxus Pro Move

00001335

Product code:

Bozzini Laparoscopic

00001333



- Accommodates Pyxus Pro Move, Bozzini Hysteroscopy, and Bozzini Laparoscopic Simulators Hard outer shell with custom foam inserts to accommodate entire system and associated instruments

### Hard shell carry case

Product code:

00001079



- Accommodates LAPAR, hard outer shell with custom foam inserts to accommodate entire flat packed system, associated instruments and parts



## Hard Shell Flight Case

Product code:

00001233



The wheeled hard outer shell flight case is designed to offer maximum protection, ease of use, and mobility for the LapAR Pro system and its instruments. With its durable construction, secure latching mechanisms, and user-friendly features like the custom foam inserts and drop-down ramp, this flight case ensures safe and efficient transportation of the system and associated instruments.

- Wheeled hard outer shell flight case with custom fitted foam inserts
- 5-ply, phenolic bond marine plywood, 8mm thickness
- Fixed reinforced galvanised steel edging to all sides
- 4 x butterfly recessed galvanised steel latches
- 4 x recessed galvanised steel handles
- Fixed internal drop down ramp
- Equipped with 4 x 100 mm blue industrial style wheels (2 x with brakes)

### Maryland grasper

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Product code:  
00000963

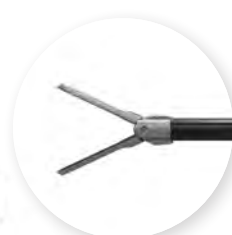


- 5mm laparoscopic Maryland grasping forceps
- Comes as standard with all laparoscopic simulators

### Ratcheted grasper

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Product code:  
00001216



- 5mm laparoscopic ratcheted grasping forceps
- Ideal for more advanced laparoscopic skills training

### Laparoscopic scissors

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Product code:  
00001217



- 5mm laparoscopic scissors
- Ideal for more advanced laparoscopic skills training

### Needle holder

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Product code:  
00001218



- 5mm laparoscopic needle holder
- Ideal for more advanced laparoscopic skills training

### Replacement skin LapAR

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Product code:  
00001567



- Replacement background skin for LapAR
- Compatible with LapAR and LapAR Pro systems

### Replacement trocar insertion skin

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Product code:  
00000995



- Replacement trocar insertion pad for Pyxus Pro Move and Bozzini Laparoscopic Simulators
- Up to 120 individual port insertions per skin

### Replacement nuts and bolts

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Product code:  
00001536



### Replacement Model cable

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Product code:  
00001243



### Replacement Power cable

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Product code:  
00000779



### Endoscopic Camera

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Product code:  
00001047



### Replacement Camera cable

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Product code:  
00001084



### LED Light lead

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Product code:  
00001264



### Replacement light source cable

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Product code:  
00001268



### Replacement WiFi dongle

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Product code:  
00001537



### Replacement screen cable

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Product code:  
00000857



## Laparoscopic Accessories

### General Surgery

#### Appendix model

Product code:

00001211



Single use model with standard anatomy  
Work through the critical steps in laparoscopic appendectomy.

All non-AR models require a method of retaining the task, Inovus Medical recommends their suturing base for this.

LapAR variant only compatible with the Inovus Medical LapAR simulator.

The skills that can be practised on the model include:

- mobilising the appendix
- Blunt dissection of mesoappendix
- ligate appendix
- dissect appendix
- visceral control
- perform a fully immersive procedure and track your performance with the LapAR simulator

#### Gallbladder model

Product code:

00001553



Work through the critical steps in laparoscopic cholecystectomy.

Standard anatomy including gallbladder, cystic duct, cystic artery, and common hepatic duct.

Hyper-realistic tissue handling and real time haptic feedback.

All non-AR models require a method of retaining the task, Inovus Medical recommends their suturing base for this. LapAR variant only compatible with the Inovus Medical LapAR simulator.

The skills that can be practised on the model include:

- dissection of Calot's (cystohepatic) Triangle
- clipping of cystic artery
- clipping of cystic duct
- ligation of cystic artery
- ligation of cystic duct
- dissect cystic artery
- dissect cystic duct
- visceral control
- perform a fully immersive procedure and track your performance with the LapAR simulator

### Bowel anastomosis model

Product code:

00001447



Two sections of simulated bowel.

Develops advanced minimally invasive surgical skills.

Perform basic suturing and bowel anastomosis.

Perform a fully immersive procedure and track your performance with the LapAR simulator.

All non-AR models require a method of retaining the task, Inovus Medical recommends their suturing base for this.

LapAR variant only compatible with the Inovus Medical LapAR simulator.

### LAP adhesiolysis model

Product code:

00000618



Accurate feel and representation of Adhesions present in the abdominal cavity.

Simulated adhesions that need to be identified and treated through blunt and sharp dissection.

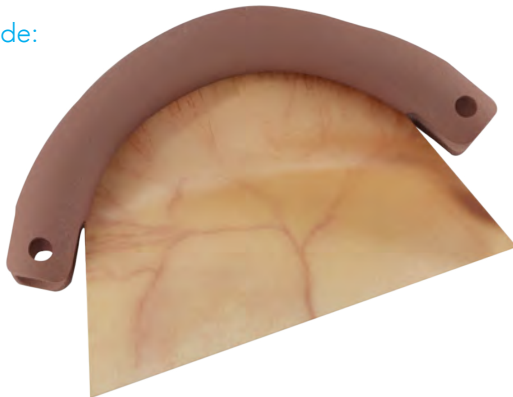
Compatibility with laparoscopic instruments, allowing trainees to practice using the tools and techniques required for adhesiolysis.

Realistic tissue properties and textures to mimic the feel of performing the procedure on live tissue.

### Bowel enterotomy model

Product code:

00000303



Anatomically accurate representation of the bowel.

Simulated bowel tissue with realistic texture and properties to mimic the feel of performing the procedure on live tissue.

Capability to create and suture simulated enterotomies, allowing trainees to practice the precise techniques required for this procedure.

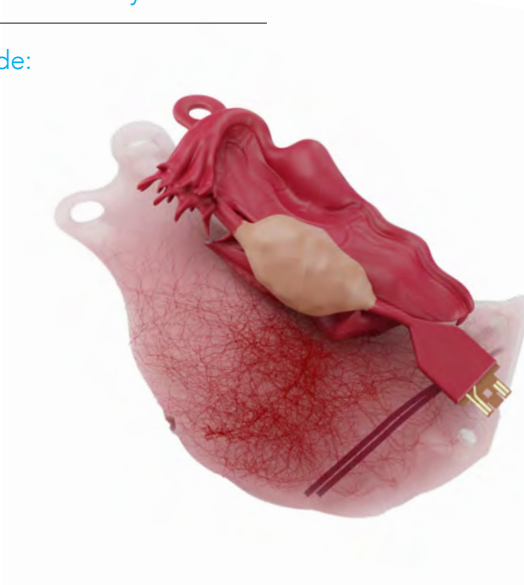
## Laparoscopic Accessories

### Gynaecology

#### Female Pelvic Anatomy LEFT

Product code:

00000407



Single use model for practising the core steps in salpingostomy +/- salpingectomy. Hyper-realistic tissue handling and real time haptic feedback.

All non-AR models require a method of retaining the task, Inovus Medical recommends their suturing base for this. LapAR variant only compatible with the Inovus Medical LapAR simulator.

The skills that can be developed with this model include:

- incision of the fallopian tube
- identification of ectopic embryo
- removal of ectopic embryo
- suturing of fallopian tube
- visceral control
- perform a full salpingectomy on the remaining anatomy
- perform a fully immersive procedure and track your performance with the LapAR simulator

#### Female Pelvic Anatomy RIGHT

Product code:

00001572



Single use model for practising the core steps in salpingostomy +/- salpingectomy. Hyper-realistic tissue handling and real time haptic feedback.

All non-AR models require a method of retaining the task, Inovus Medical recommends their suturing base for this. LapAR variant only compatible with the Inovus Medical LapAR simulator.

The skills that can be developed with this model include:

- incision of the fallopian tube
- identification of ectopic embryo
- removal of ectopic embryo
- suturing of fallopian tube
- visceral control
- perform a full salpingectomy on the remaining anatomy
- perform a fully immersive procedure and track your performance with the LapAR simulator

#### Vaginal vault model

Product code:

00000376



Highly realistic vaginal vault model.

True-to-life tissue handling and real time haptic feedback.

Multi use model, perfect for high volume vault closure training.

Perform a fully immersive procedure and track your performance with the LapAR simulator.

Required for use in hysterectomy 'campaign mode' in LapAR.

### LAP adhesiolysis model

Product code:  
00000618



Accurate feel and representation of Adhesions present in the abdominal cavity. Simulated adhesions that need to be identified and treated through blunt and sharp dissection. Compatibility with laparoscopic instruments, allowing trainees to practice using the tools and techniques required for adhesiolysis. Realistic tissue properties and textures to mimic the feel of performing the procedure on live tissue.

### Myomectomy model

Product code:  
00001311



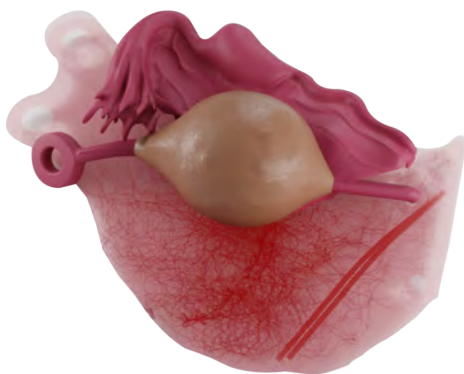
Operate on a highly realistic 4cm fibroid. Single use model for practising the core steps in laparoscopic myomectomy. Hyper-realistic tissue handling and real time haptic feedback. All non-AR models require a method of retaining the task, Inovus Medical recommends their suturing base for this. LapAR variant only compatible with the Inovus Medical LapAR simulator.

The skills that can be developed with this model include:

- incision of the perimetrium
- dissection of myometrium
- identification of fibroid
- mobilisation of fibroid
- removal of fibroid
- closure of myometrium
- visceral control
- perform a fully immersive procedure and track your performance with the LapAR simulator

### Female Pelvic Anatomy LEFT with Cystectomy

Product code:  
00000605



Anatomically accurate representation of the reproductive organs, including the ovary and fallopian tubes. Simulated fallopian tube with realistic texture and properties to mimic the feel of performing the procedure on live tissue.

Capability to simulate the steps involved in an ovarian cystectomy +/- salpingostomy, +/- salpingectomy including tissue dissection, ligation, and cyst removal.

# LapPass

- in association with



Thanks to our collaboration with the Association of Laparoscopic Surgeons of Great Britain and Ireland (ALSGBI), four essential laparoscopic tasks can now be practised on a range of simulators through the LapPass certification programme. This partnership democratises the LapPass programme by making it accessible to a wider audience.

Inovus Medical's LapPass kits have been specifically developed to meet the requirements of the existing LapPass curriculum while prioritising practicality and efficacy in laparoscopic skills training. Each kit advances surgical training by providing enhanced realism without sacrificing standardisation.

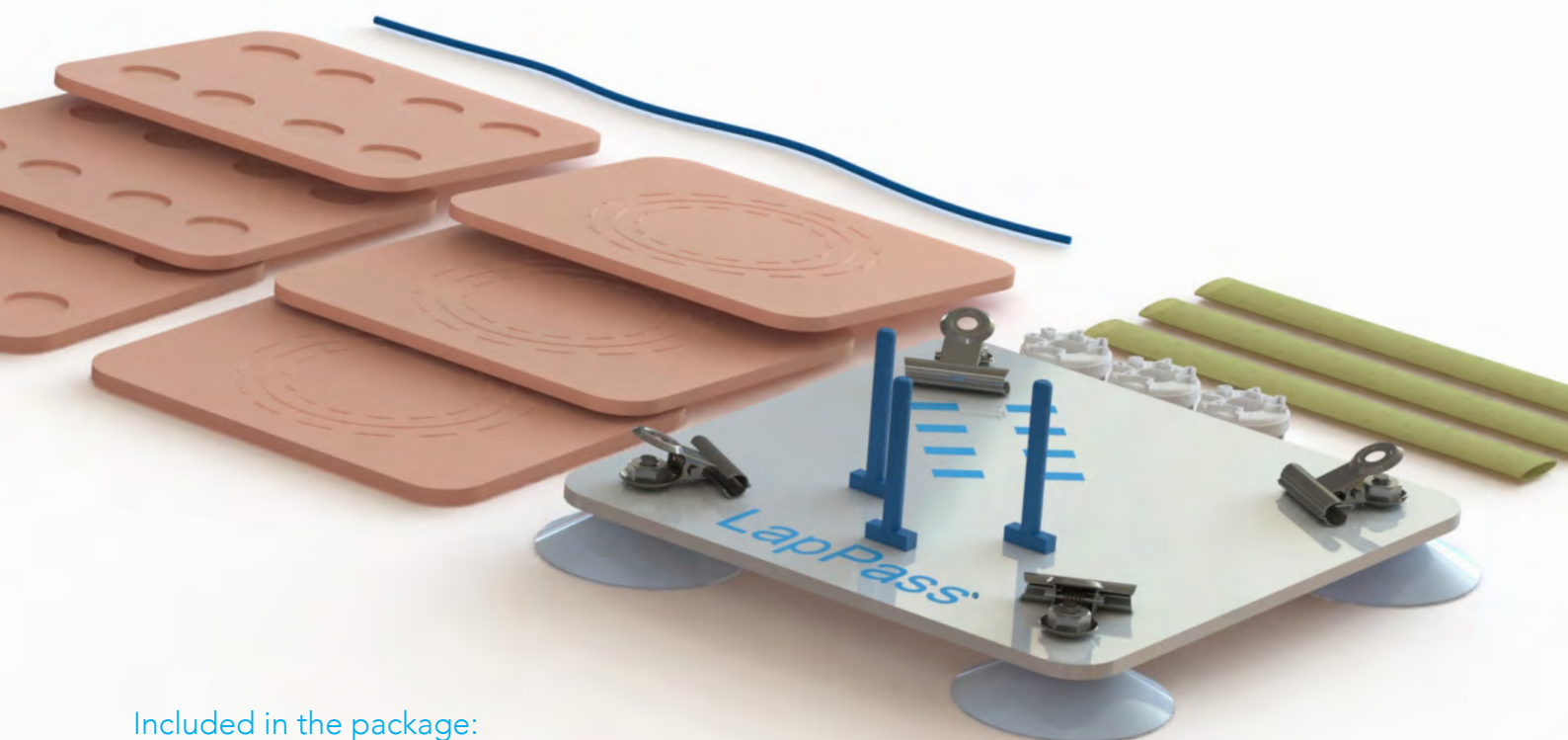




# LapPass

With the LapPass kit, trainees have access to various components that simulate different aspects of laparoscopic procedures. These interchangeable elements allow for a realistic and immersive training experience. Surgeons can practice essential skills such as trocar insertion, tissue manipulation, suturing, and other laparoscopic techniques required for the LapPass certification.

By offering a complete set of interchangeable elements, the LapPass kit ensures that surgeons have the necessary tools to train and progress through the certification program. Trainees can practice each skill in a controlled and repeatable manner, allowing for focused improvement and development.



## Included in the package:

- hoops
- pegs
- 14cm of blue thread Foam block
- penrose drains
- suturing skin
- cutting skin

Product code: 00000766

## LapPass Accessories

### Cutting skin refill

Product code:

00000715

(Single unit)

Product code:

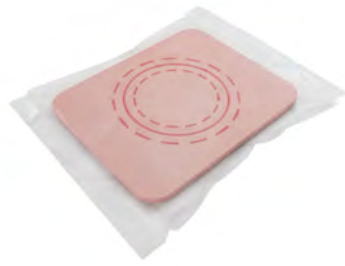
00001510

(Pack of 10)

Product code:

00001568

(Pack of 50)



### Suturing skin refill

Product code:

00001522

(Single unit)

Product code:

00001512

(Pack of 10)



### Penrose drain refill

Product code:

00001478

(Pack of 10)

00001569

(Pack of 50)



### Hoops refill

Product code:

00001516



### Pegs refill

Product code:

00001517



### Foam block refill

Product code:

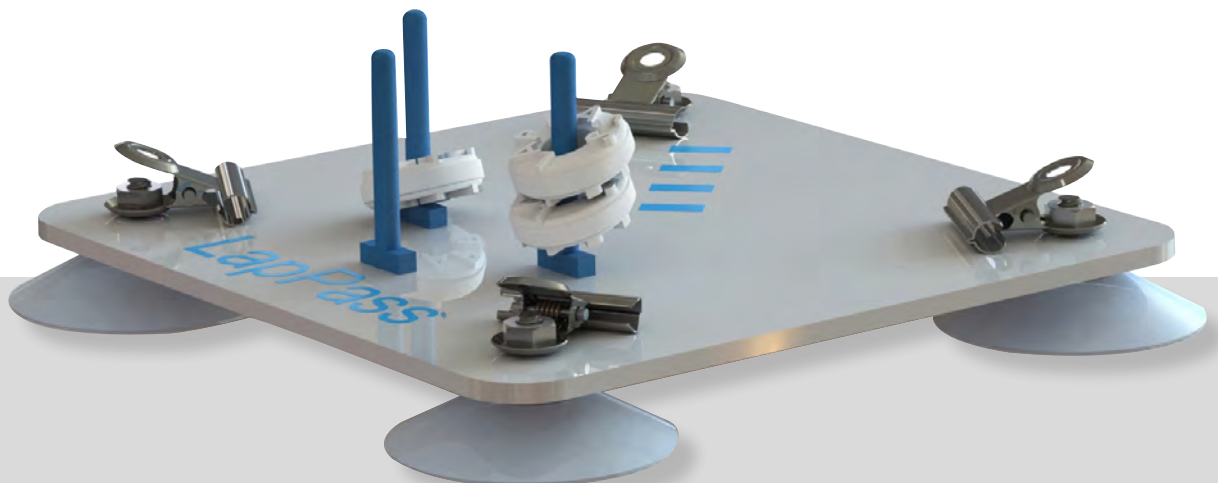
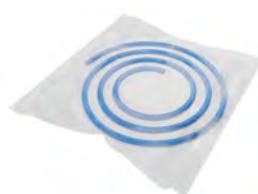
00000771



### Thread refill

Product code:

00001479







## partnership

Inovus Medical is proud to be the exclusive partner of the American Association of Gynaecological Laparoscopists (AAGL) and the global leader in women's health, Hologic, for the manufacturing and delivery of equipment for the Essentials in Minimally Invasive Gynaecologic Surgery (EMIGS) programme.

Through this landmark partnership, Inovus Medical's high fidelity hysteroscopy simulators, HystAR, and laparoscopic simulators, LapAR, will be provided to all 250 ACGME-approved residency programmes across North America. All residents working towards their EMIGS certification will also have access to our transformative surgical training platform, Totum. The hands-on laparoscopic curriculum will be delivered using our LaparoBowl modular platform, which is engineered to perfectly simulate operating in the female pelvis.

This collaboration allows us to play a key role in providing the tools needed for the EMIGS programme, ensuring that clinicians have access to high quality, specialized equipment and insightful real-time feedback that will enable them to train effectively and work towards skill mastery.

# LaparoBowl

The EMIG platform uses a special pelvis-shaped bowl (a LaparoBowl) to simulate gynecologic laparoscopic surgery. The LaparoBowl manufactured by Inovus Medical will fit into our full range of laparoscopic

box trainer allowing trainees to work through the EMIGS program for minimally invasive gynecologic surgery (MIGS) specific board certification.



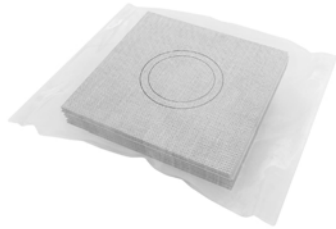
## Included in the package:

- guaze circle cutting task
- short penrose target
- long penrose target
- large foam block
- peg base and sleeves
- wedge
- square silicone
- triangle silicone

Product code: 00000788

Gauze circle  
cutting task

Product code:  
00001523  
(Pack of 100)



Short penrose target

Product code:  
00001570  
(Pack of 100)



Long penrose target

Product code:  
00001514  
(Pack of 10)



Replacement square  
silicone for LaparoBowl

Product code:  
00000687



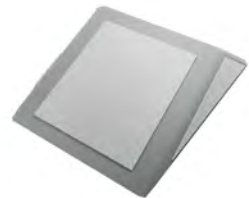
Replacement triangle silicone  
for LaparoBowl

Product code:  
00000698



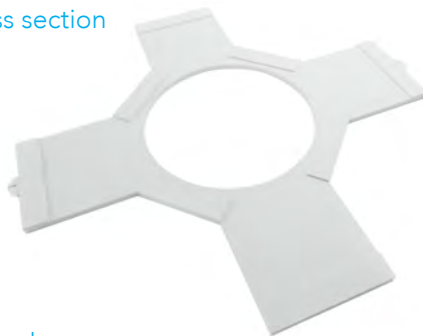
Replacement wedge for  
LaparoBowl

Product code:  
00000798



Replacement cross section  
for LaparoBowl

Product code:  
00000790



Replacement large foam  
block for LaparoBowl

Product code:  
00000691



Replacement 6 peg base  
for LaparoBowl

Product code:  
00000706



Replacement sleeves for  
6 peg base

Product code:  
00000692



Replacement pegs for  
LaparoBowl

Product code:  
00000740



# Hysteroscopy simulators



Inovus Medical introduces the Bozzini Hysteroscopy range of simulators, representing a groundbreaking advancement in hyper realistic, affordable, and turnkey hysteroscopy simulation. These simulators offer an anatomically correct uterus, complete with interchangeable pathologies, allowing practitioners to practice diagnosis and intraoperative management effectively.

The Bozzini Hysteroscopy simulators provide an opportunity to simulate various pathologies commonly encountered in hysteroscopy procedures.

These pathologies include endometrial polyps, intrauterine adhesions, and fibroids. Each pathology is meticulously designed to offer realistic tissue handling, enhancing the overall training experience.

By offering interchangeable pathologies, the Bozzini Hysteroscopy simulators allow for repeated practice of core hysteroscopic skills in an affordable manner. Surgeons and trainees can develop and refine their skills in diagnosing and managing these specific pathologies, ensuring competence and proficiency in hysteroscopy procedures.





## partnership

Through our partnership with the Global Congress on Hysteroscopy (GCH), Inovus Medical has been able to advance hysteroscopy training by providing accessible state-of-the-art simulators to hysteroscopists worldwide.

Inovus Medical's evolving ecosystem of hysteroscopy simulators will play a crucial role in hands-on skills training workshops at GCH training events and the GCH congress, offering a comprehensive, immersive learning experience for attendees.

The partnership also includes a collaborative research project to validate the effectiveness of our HystAR simulators and Totum digital surgery platform in delivering remote hysteroscopy skills training and certification. Through rigorous research, we aim to ensure these tools deliver optimal outcomes and meet the highest possible standards in surgical training.





## Low fidelity hysteroscopy simulators

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The low fidelity Bozzini Hysteroscopy Basic package offered by Inovus Medical is a cost-effective and portable system designed specifically for hysteroscopy simulation. This package caters to the requirements of training centres and medical device companies that already have imaging capabilities in place but are seeking to enhance their training experience with the realistic features of the Bozzini Hysteroscopy system.

The basic package is designed to complement existing imaging setups, allowing users to integrate the Bozzini Hysteroscopy system seamlessly into their current infrastructure. By doing so, training centres and medical device companies can take advantage of the life-like simulation provided by the Bozzini system without duplicating imaging capabilities they already possess.





# Bozzini Basic

## Hysteroscopy Simulator

The basic package allows the end user to experience hands on “wet lab” simulation thanks to its fully irrigatable uterine models. The models are specifically designed to offer highly realistic simulation of irrigation management during hysteroscopy.

The package comes with five anatomically correct uteri that can be mounted in an anteverted or retroverted position. The uteri allow simulated vaginoscopy, visualisation of the external os, navigation of the cervical canal and visualisation of the uterine cavity and ostia. Each wet lab uterus contains 8 to 10 resectable polyps that are manufactured from a proprietary water based substrate. The polyp substrate reacts like real tissue when operated on with energy devices and morcellators making this the perfect option for demonstration and training of medical devices. The hyper-realistic tissue handling

not only shows medical devices in their best light but also offers the perfect platform for affordable, high volume training with standard hysteroscopy instruments.

The Bozzini system can be used anywhere, from the skills lab to a conference centre, making it a clean and portable solution for training the skills required for operative and office-based hysteroscopy procedures.

### Included in the package:

- uterus retaining case and mount system
- table clamp
- drip tray
- 5 x single use wet lab uterus
- models (with 8-10 polyps)
- soft carry case

Product code: 00001259



- Uterus base unit and stand



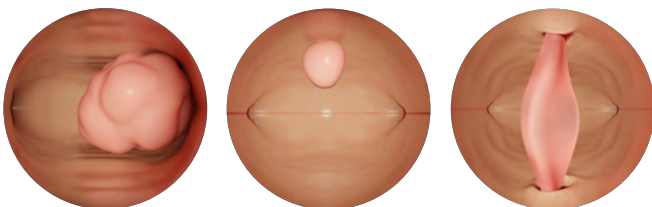
- Drip tray



- 5 x Uterus models



#### Internal views of pathologies



# EMIG Hysteroscopy

## H1 and H2 Task Trainer

The EMIG Hysteroscopy Trainer H1 and H2 provide comprehensive tools for teaching and improving essential hysteroscopy techniques.

The H1 model is suited for basic to intermediate training, while the H2 model offers advanced features for more complex training scenarios. Both models contribute significantly to the skill development of medical professionals in the field of gynecology, with a primary focus on teaching correct hysteroscopy techniques and emphasizing positional awareness and accuracy.

H1 and H2 models offer a realistic and controlled environment for trainees to practice and refine their hysteroscopy techniques, specifically designed for use with the Hystar system.

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### Included in the package:

- uterus retaining jig
- cervix
- H1 and H2 Tasks
- pack of 15 polyps

Product code: 00001582



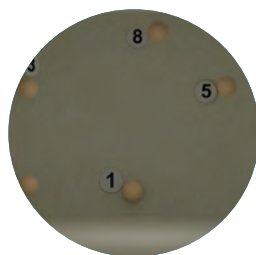
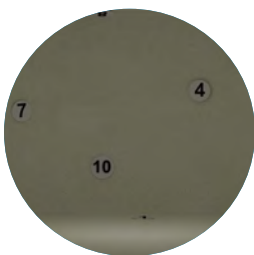


- H1 task

- H2 task



- Pack of 15 polyps



Internal views of EMIG hysteroscopy H1 and H2 tasks

**AGL**  
partnership

# Medium fidelity hysteroscopy simulators

The Bozzini Hysteroscopy medium fidelity simulators provided by Inovus Medical offer a simulated “full stack system” that delivers a highly realistic experience for training hysteroscopy skills.

These simulators are designed to provide trainees with a hyper-realistic experience, allowing them to develop and enhance their hysteroscopy skills in an immersive environment.

The medium fidelity simulators of the Bozzini Hysteroscopy range replicate the full stack system of hysteroscopy procedures. This means that the simulator includes all the essential components and instruments typically used in hysteroscopy, such as the hysteroscope itself, fluid management systems, and other necessary tools. By incorporating these components, the simulator aims to recreate the entire hysteroscopy setup and provide a comprehensive training experience.





# Bozzini

## Hysteroscopy Simulator

This simulator is supplied with a standard 4mm hysteroscope, two hysteroscopic instruments, an HD camera system, and 15" monitor and monitor stand. The compact table top design makes it the perfect system for use in simulation centres, doctors' offices or as a mobile training solution.

The camera and hysteroscope are powered by the Bozzini light system. The Bozzini light system allows simulated endoscopic procedures to be performed with real endoscopic devices at an affordable price.

### Included in the package:

- hysteroscopy base unit to position uterus
- clamp for fixing base unit
- 2 x non-pathological uterus – also used for interchangeable polyps and adhesions
- 1 x uterus with submucosal fibroid
- 50 x polyps
- 3 rolls of adhesions
- 1 x 4mm, 30° or 0° hysteroscope
- 1 x hysteroscope introducer
- 1 x hysteroscopic grasping forceps
- 1 x hysteroscopic scissors
- 1 x camera unit
- 1 x bozzini light source
- 1 x light lead
- 1 x 15" monitor
- 1 x monitor stand

Product code: 00001265

Two Year Extended Warranty

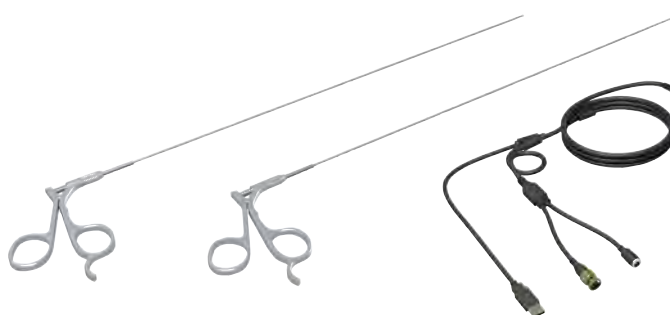
Product code: 00001583



- Uterus base unit and stand



- Bozzini light source



- Hysteroscopic grasping forceps and scissors



- Practice scope handling with real scope and camera

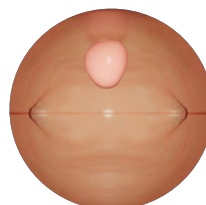


- 2 x non-pathological uterus and 1 x uterus with submucosal fibroid, polyps, and adhesions

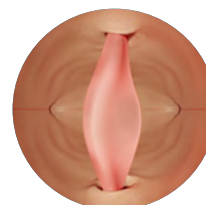
#### Internal views of pathologies



Hyper-realistic pathologies




Resection of polyps



Resection of adhesions

# High fidelity hysteroscopy simulators



The HystAR Pro and HystAR are advanced technologies that provide educational institutions and device companies with a unique opportunity to deliver highly realistic and fully tracked hysteroscopy simulations. These simulations offer a level of fidelity and scale that was previously unachievable.

One of the key features of the HystAR Pro and HystAR systems is their ability to track the user's movements and actions in real-time. This means that the system can provide immediate feedback and performance metrics, allowing users to dynamically assess their technique and improve their skills.

The tracking technology also enables instructors or supervisors to monitor and evaluate trainees' progress remotely, enhancing the efficiency and effectiveness of the training process.

By offering hysteroscopy simulation at an unprecedented scale, the HystAR Pro and HystAR systems have the potential to revolutionise hysteroscopy education and device training. These technologies provide a safe and controlled environment for learners to practice and refine their skills without the need for live patients.



Inovus  
Model 81

# HystAR

The HystAR serves the demand for distance learning in hysteroscopy simulation by providing a convenient and accessible platform for education and training. It allows learners to develop their skills in hysteroscopy at their own pace and from any location, minimising the need for physical resources and increasing the efficiency of training programmes.

Overall, the HystAR contributes to advancing the field of hysteroscopy education by offering a novel and immersive approach to distance learning, helping to meet the demand for skilled hysteroscopy practitioners.

## Included in the package:

- hysteroscopy base unit to position uterus
- clamp for fixing base unit
- 2 x non-pathological uterus – also used for interchangeable polyps and adhesions
- 1 x uterus with submucosal fibroid
- 50 x polyps
- 3 rolls of adhesions
- 1 x 4mm, 30° or 0° hysteroscope
- 1 x hysteroscope introducer
- 1 x hysteroscopic grasping forceps
- 1 x hysteroscopic scissors
- 1 x camera unit
- 1 x bozzini light source
- 1 x light lead



Product code: 00001290

\*Laptop not included

# HystAR and Totum - Connect to perfect surgical technique

HystAR simulators are powered by Totum, the holistic platform that creates a connected surgical training ecosystem.

Totum allows instrument motions to be mapped and recorded digitally, to generate rich objective

data on surgical performance. The objective data is aggregated, managed, and shared with trainers via the Totum web portal.



HystAR  
HystAR Pro  
Powered by

**TOTUM®**



## **Guiding the way to surgical success**

Connect with mentors, peers, and examiners to share best practice



## **Harnessing the power of data to transform surgical training**

Objective performance metrics guide improvements in surgical technique and operative flow



## **Unlocking the power of practice**

Video capture and debrief provides an ecosystem for review, refinement, and mastery of surgical procedures



## **Dynamic assessment, universal recognition**

Issue certificates of competency, gain CPD/CME points for time spent training, perform work based assessments and OSATS

**TOTUM®**

To learn more about the complete Totum ecosystem of connected surgical training, visit [www.inovus.org](http://www.inovus.org)

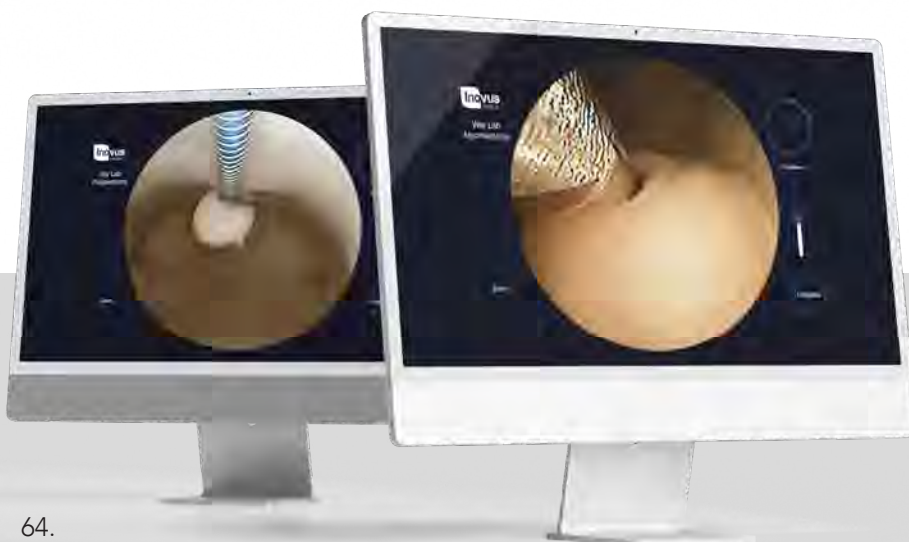
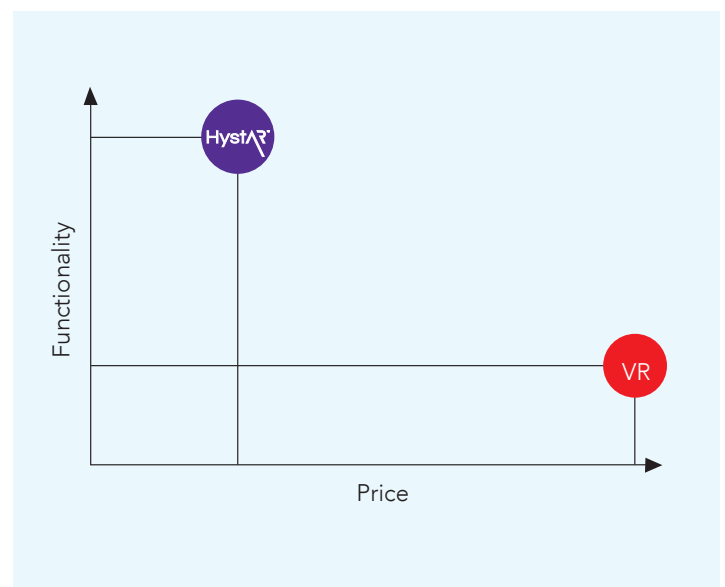
# HystAR Pro - Democratising high fidelity hysteroscopy simulation

The HystAR Pro simulator includes dry lab and wet lab uterus models. All models are anatomically correct including vaginal vault, cervix, and intrauterine landmarks. The dry lab models have interchangeable pathologies for practising diagnosis and intraoperative management. Dry lab pathologies include endometrial polyps, intrauterine adhesions, and fibroids. The pathologies offer true-to-life tissue handling and are a low-cost way of delivering repeated practice of these core hysteroscopic skills.

The wet lab models include polyps, fibroids, and a model for endometrial resection. The wet lab pathologies are made from Inovus Medical's proprietary water-based substrate and produce natural haptics when operating with a range of hysteroscopic devices such as morcellators and resectoscopes. Both types of uterus model can be positioned in an anteverted and retroverted orientation allowing trainees to experience the different approach needed for each.

## Key features of HystAR Pro

- Soft tissue models with full anatomy including vaginal vault, cervix, and uterine landmarks
- Full procedure simulation including polypectomy, myomectomy, and adhesiolysis
- Record, review, and track training progress and performance with Totum
- Soft tissue models generate natural haptics
- Learn safe use of real instruments including morcellators and energy devices
- Objective feedback on key metrics of surgical performance



Full procedure simulation across dry lab and wet lab procedures.

# HystAR Pro

This sleek, compact trolley system meets all hysteroscopy training requirements from delivering basic, intermediate, and advanced hysteroscopy skills courses in simulation centres through to pre-operative

warm up in the clinical setting. Unlimited user licences mean there is no limit to the number of surgeons that can be trained with the HystAR Pro.

## Included in the package:

- 1 x uterus mounting case and table mount
- 1 x clamp for fixing uterus mounting case and table mount
- 1 x hysteroscopic scissors
- 1 x hysteroscopic biopsy forceps
- 3 x non-pathological uterus models (INO-UT-01)
- 5 x pack of adhesions
- 5 x pack of polyps
- 1 x bottle of lubricant
- 1 x mobile trolley system with adjustable operating height and integrated fibreoptic light source
- 1 x integrated computer with Totum software pre-installed
- 1 x 22" touch screen monitor
- 1 x 4mm, 0° or 30° hysteroscope (depending on centre preference)
- 1 x hysteroscope introducer
- 1 x endoscopic camera
- 1 x light lead
- 1 x monitor stand
- 1 x operating stool for seated procedures
- admin access to Totum

Product code: 00001482



## Hysteroscopy Accessories

### Replacement uterus non-pathological

Product code:

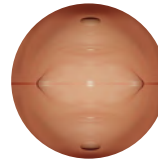
5mm 00001310

3mm 00001316

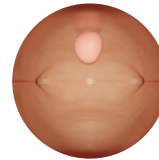


- Comes as standard with the Bozzini Hysteroscopy Simulator, HystAR and HystAR Pro
- Can be used with the Bozzini Hysteroscopy Basic
- Use as a non-pathological uterus for basic camera handling skills
- Realistic vaginal canal, os, fundus, and ostia for landmark recognition
- Add adhesions and polyps for dry lab procedural training
- Available with a 5mm or 3mm cervical canal

### Internal views of pathologies



Hyper-realistic  
pathologies



Resection  
of polyps



Resection of  
adhesions

### Adhesions refill

Product code:

00001273



- Pack of 3m for Bozzini Hysteroscopy Simulator, HystAR, and HystAR Pro
- For use with 00001310/00001316

### Polyps refill (sharp dissection)

Product code:

00001275



- Pack of 50 for Bozzini Hysteroscopy Simulator, HystAR, and HystAR Pro
- For use with 00001310/00001316

### Polyps refill (blunt dissection)

Product code:

00001276



- Pack of 50 for Bozzini Hysteroscopy Simulator, HystAR, and HystAR Pro
- For use with 00001310/00001316

### Replacement uterus fibroid

---

Product code:

5mm 00001319

3mm 00001318



- Comes as standard with the Bozzini Hysteroscopy Simulator
- Can be used with the Bozzini Basic, HystAR, and HystAR Pro
- Use multiple times for diagnostic procedures
- Perform myomectomy with cold cutting scissors
- Realistic vaginal canal, os, fundus, and ostia for landmark recognition
- Available with a 5mm or 3mm cervical canal

#### Internal view of pathology

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### Replacement uterus polyps for morcellator

---

Product code:

5mm 00001343

3mm 00001344



- Single use wet lab training model
- Comes as standard with the Bozzini Hysteroscopy Basic
- Contains nine polyps for morcellation training designed for use with distension media and morcellators
- Realistic vaginal canal, os, fundus, and ostia for landmark recognition
- Available with a 5mm or 3mm cervical canal

#### Internal view of pathology

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### Replacement uterus wetlab

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Product code:

5mm 00001360

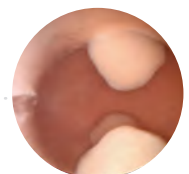
3mm 00001359



- Single use wet lab training model
- Suitable for TRS or bipolar resection
- Realistic vaginal canal, os, fundus, and ostia for landmark recognition
- Available with a 5mm or 3mm cervical canal

#### Internal view of pathology

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### Retained Products of Conception (RPOC)

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Product code:

00001102



- A single-use training model
- Suitable for training of hysteroscopic tissue removal, specifically for Retained Products of Conception (RPOC) with hysteroscopic shaving devices and bipolar energy devices.
- Features 1x endothelial lesion and 1x trophoblastic pathology

#### Internal view of pathology

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### Multi Modality Training Model

---

Product code:

00001439



- A single-use training model
- Suitable for training of hysteroscopic visual dilation and curettage (D&C)
- Cervix compatible with dilators
- Completely resectable endometrium for generous training provision of curettage.

#### Internal view of pathology

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### Septum Uterus

---

Product code:

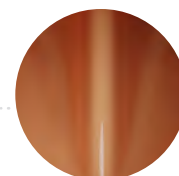
00001440



- A single-use training model
- Suitable for training of hysteroscopic septum dissection with scissors, bipolar instrumentation and hysteroscopic shaving devices

#### Internal view of pathology

---



### Replacement polyps

Product code:

00001470



- Pack of 15 polyps
- For use with the EMIGS Hysteroscopy Trainer 00001582

### Hysteroscopy biopsy forceps

Product code:

00000667



### Hysteroscopy scissors (flexible)

Product code:

00001267



### Hysteroscopy scissors (rigid)

Product code:

00001263



### Obturator

Product code:

00000987



### Hysteroscope 0°

Product code:

00000661



### Hysteroscope 30°

Product code:

00001260



### Endoscopic Camera

Product code:

00001047



## Hysteroscopy Accessories

Replacement  
screen cable

Product code:  
0000857



Replacement  
Power cable

Product code:  
00000779



Replacement  
Light source cable

Product code:  
00001268



LED Light lead

Product code:  
00001264



Replacement nuts  
and bolts

Product code:  
00001536



Replacement  
WiFi dongle

Product code:  
00001537



Hard shell carry case

Product code:  
00001237



- Accommodates Bozzini Hysteroscopy Simulator
- Hard outer shell with custom foam inserts to accommodate entire system and associated instruments

### Wheeled carry case

Product code:

00000211



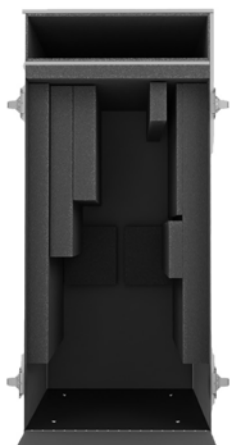
- Outer soft shell wheeled carry case containing the following inner cases:
  - Inner case to house HystAR components and camera
  - Camera case
  - Instrument case
  - Scope and introducer case



### Hard Shell Flight Case

Product code:

00001234

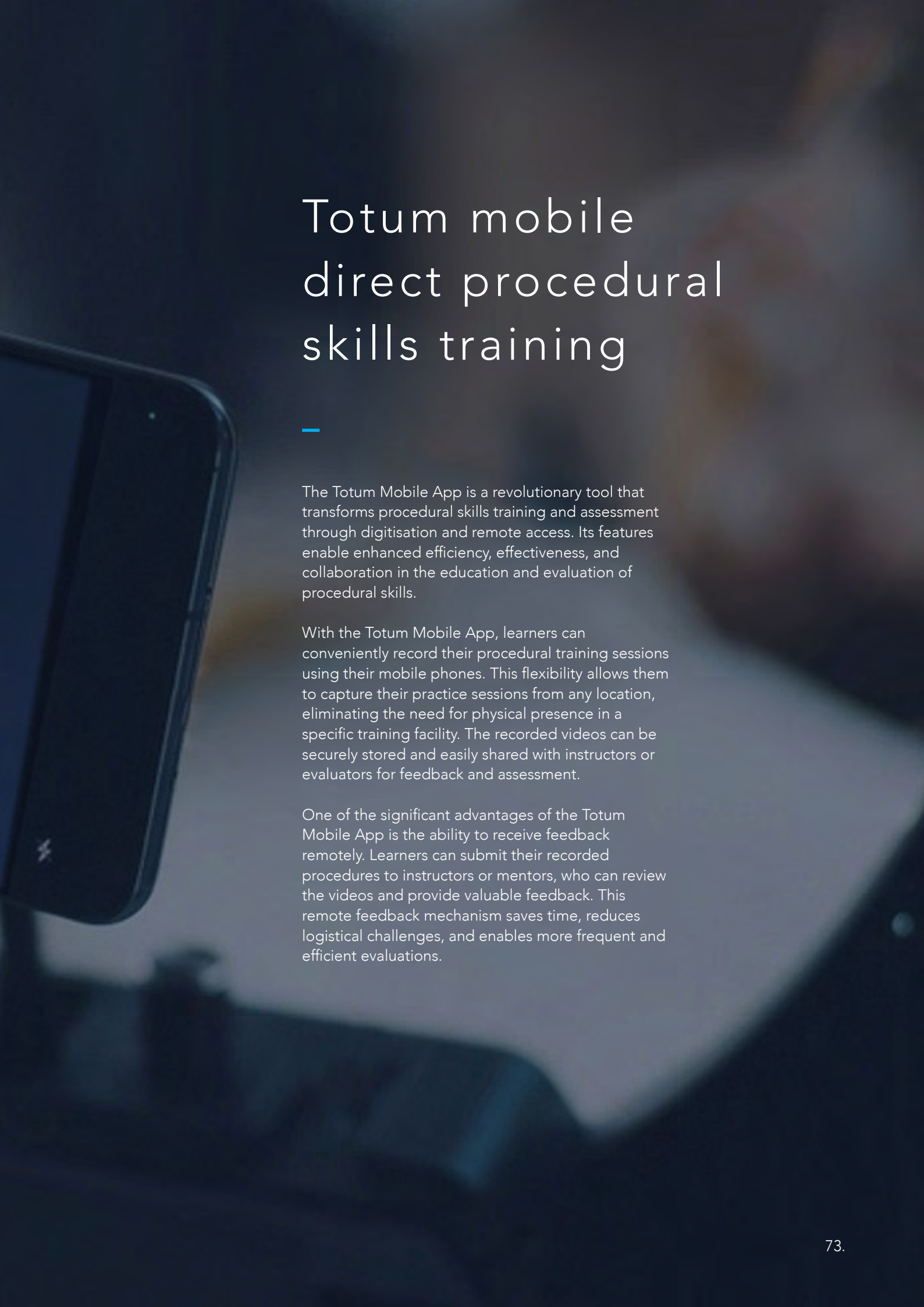


The wheeled hard outer shell flight case is designed to offer maximum protection, ease of use, and mobility for the HystAR Pro system and its instruments. With its durable construction, secure latching mechanisms, and user-friendly features like the custom foam inserts and drop-down ramp, this flight case ensures safe and efficient transportation of the system and associated instruments.

- Wheeled hard outer shell flight case with custom fitted foam inserts
- 5-ply, phenolic bond marine plywood, 8mm thickness
- Fixed reinforced galvanised steel edging to all sides
- 4 x butterfly recessed galvanised steel latches
- 4 x recessed galvanised steel handles
- Fixed internal drop down ramp
- Equipped with 4 x 100 mm blue industrial style wheels (2 x with brakes)



TOTUM



# Totum mobile direct procedural skills training

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The Totum Mobile App is a revolutionary tool that transforms procedural skills training and assessment through digitisation and remote access. Its features enable enhanced efficiency, effectiveness, and collaboration in the education and evaluation of procedural skills.

With the Totum Mobile App, learners can conveniently record their procedural training sessions using their mobile phones. This flexibility allows them to capture their practice sessions from any location, eliminating the need for physical presence in a specific training facility. The recorded videos can be securely stored and easily shared with instructors or evaluators for feedback and assessment.

One of the significant advantages of the Totum Mobile App is the ability to receive feedback remotely. Learners can submit their recorded procedures to instructors or mentors, who can review the videos and provide valuable feedback. This remote feedback mechanism saves time, reduces logistical challenges, and enables more frequent and efficient evaluations.

# Totum - Digitising the learning of procedural skills

With the Totum Mobile App, direct procedural skills training can now be recorded, shared, and assessed from any location. Totum mobile allows the digitization of any procedural skills trainer, allowing programmes to fast track their digitalisation of procedural skills teaching and assessment.

The user's mobile phone is mounted above task trainers such as the Inovus Basic Surgical Skills Base. The phone records procedures, which can then be reviewed and assessed in the Totum web application.

## Remote learning and certification



# Powered by Totum for purposeful practice

Totum's video capture and debrief feature allows users to review their performance and receive remote coaching from connected mentors. Mentors and examiners can issue certificates of competence directly through the Totum portal.

By linking with the Totum platform, the app allows over 30 direct procedural skills to be assessed remotely by trainers. In this way coaching can be closely focused on the individual's technique and specific areas for improvement.

The Totum Mobile App can be used to capture training sessions on any brand of procedural skills trainer by setting the mobile phone up in its cradle and focusing the phone's camera on the skills trainer. Procedural videos are captured and aggregated in Totum, allowing programs to easily and cost-effectively digitise their procedural skills learning, and assessment.

## Key features of Totum

- Designed for use with iOS and Android devices
- Recorded procedure simulations stored, managed, and available to share remotely
- Procedures categorised by skill type, making them easily retrievable by mentors and peers for review and assessment
- Create certificate templates specific to your programme and issue these within Totum
- Expand the capacity of your skills lab by delivering remote skills training and assessment

### Totum mobile licence

Product code:

00001589



# TOTUM®

To learn more about the complete Totum ecosystem of connected surgical training, visit [www.inovus.org](http://www.inovus.org)

# Basic Surgical Skills

## Tabula base

Product code:

00000743



- Advanced laparoscopic skills & basic surgical skills training
- Perform knot tying and tying at depth
- Ideal for institutions performing basic surgical skills training

## Basic surgical skills base

Product code:

00000651



Affordable and realistic platform for teaching Basic Surgical Skills  
Designed alongside senior surgical educators  
Highly realistic incision and suturing skin pads  
Perform deep and superficial wound closure  
The Inovus Medical BSS base allows the following skills to be practised:

- surgical hand ties
- surgical instrument ties
- tying at depth
- basic skin incision
- suturing
- I&D of abscess
- drainage of cyst
- wide local excision of skin lesion with wound closure

## TOTUM package

Product code:

00001461



The Totum package includes:

- surgical hand ties
- surgical instrument ties
- tying at depth
- basic skin incision
- suturing
- I&D of abscess
- drainage of cyst
- wide local excision of skin lesion with wound closure
- suturing instrument kit
- tripod
- mobile phone app subscription

## Basic Surgical Skills Accessories

### Basic surgical skills suturing refill

Product code:  
00001432



- Refill for the incision and suturing pad on the BSS base
- Designed specifically for use with the Inovus Medical BSS base
- Tissue under tension when incised
- Reusable

### Basic surgical skills abscess refill

Product code:  
00001406



- Refill for the incision and suturing pad on the BSS base
- Designed specifically for use with the Inovus Medical BSS base
- Realistic training on abscess I&D, cyst drainage, and wide local excision of a skin lesion
- Single use product must be replaced after use

### Totum package tripod

Product code:  
00001462



### Totum package suturing kit

Product code:  
00001464



\*Mobile phone  
not included

### Mycro Full Kit

Product code:

00001990



- Mycro is a pocket-sized simulation kit for microvascular anastomoses and microsutures designed to be used in multiple disciplines.
- Dual use:
  - Anastomoses
  - Microsutures

### Mycro Full Kit w/Loupes

Product code:

00001991



- Mycro Full Kit with Loupes
- Mycro is a pocket-sized simulation kit for microvascular anastomoses and microsutures designed to be used in multiple disciplines.
- Dual use:
  - Anastomoses
  - Microsutures

### Mycro Vessels Pack - 1mm

Product code:

00001996



- Mycro Vessel Pack 3 pieces - 1mm
  - Disposable vessels for anastomoses with dissectable adventitia.
- Practice anastomoses:
- end to end
  - end to side
  - side to side

### Mycro Vessels Pack - 2mm

Product code:

00001997



- Mycro Vessel Pack 3 pieces - 2mm
  - Disposable vessels for anastomoses with dissectable adventitia.
- Practice anastomoses:
- end to end
  - end to side
  - side to side

### Mycro Vessels Pack Mix

Product code:

00001998



- Mycro Vessel Pack 3 pieces - Mixed
  - Disposable vessels for anastomoses with dissectable adventitia.
- Practice anastomoses:
- end to end
  - end to side
  - side to side

### Skin Pad Light Tone

Product code:

00001992



### Skin Pad Dark Tone

Product code:

00001993



### Skin Pad Light with Instruments

Product code:

00001994



### Skin Pad Dark with Instruments

Product code:

00001995



- The SkinPad is a remarkable advancement designed specifically for practicing sutures on the delicate layers of skin and subcutaneous tissue.
- It can withstand multiple suture placements and removals, making it a cost-effective and long-lasting training tool.
- Perfect your skin suturing skills with precision.
- Master subcutaneous sutures to perfection.
- Available in both dark and light skin tone.
- Perfect your skin suturing skills with precision.
- Master subcutaneous sutures to perfection.
- Instruments included.
- Perfect your skin suturing skills with precision.
- Master subcutaneous sutures to perfection.
- Instruments included.





## Cranial Series

### Surgical Training Technologies for Cranial Neurosurgery



UpSurgeOn offers hyper-realistic surgical simulations featuring tissue bleeding, intricate layers, and life-like physics. The modularity and compactness of this series enable advanced cadaver-free training in any setting, with optimised costs.

Our mission is to give any trainee the possibility to enhance their surgical skills globally.

How? Through advanced and accessible simulation based cadaver-free training solutions.

Our advanced Technologies enhance skills with realistic, globally standardized simulations. Each Simulator offers 360° pre-operative solutions, blending physical and digital components for flexible, cost-effective training anytime, anywhere.

# PterionalBox

Frontotemporal approaches to the anterior and middle cranial fossa.

Perform craniotomies, dural openings, and reconstructions using the Pterional Skull.

Then replace it and start again.

## What you can explore:

- II: Optic Nerve
- ICA: Internal Carotid Artery
- ACA: Anterior Cerebral Artery
- A1: First segment of ACA
- AComA: Anterior Communicating Artery
- MCA: Middle Cerebral Artery
- III: Oculomotor Nerve
- PComA: Posterior Communicating Artery
- PCA: Posterior Cerebral Artery
- Ophthalmic Artery
- Pituitary Stalk
- Perforating Arteries
- Lamina Terminalis
- Insula Heubner Artery (origin)
- Optic Chiasm
- Basilar Tip



Product code: 00001893

# TemporalBox

Temporal approaches to the middle cranial fossa.

Perform craniotomies, dural openings, and reconstructions using the Temporal Skull.

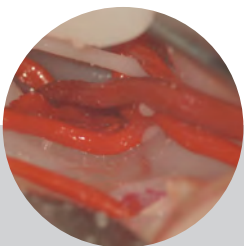
Then replace it and start again.

## What you can explore:

- II: Optic Nerve
- ICA: Internal Carotid Artery
- ACA: Anterior Cerebral Artery
- AComA: Anterior Communicating Artery
- III: Oculomotor Nerve
- PComA: Posterior Communicating Artery
- PCA: Posterior Cerebral Artery
- Pituitary Stalk
- Perforating Arteries
- Optic Chiasm
- Basilar Tip
- Basal vein
- Internal Cerebral veins
- Vein of Galeno
- SCA: Superior Cerebellar Artery
- IV: Trochlear nerve
- Mesencephalus
- Tentorium
- Middle skull base fossa
- Temporal lobe



Product code: 00001894



# RetrosigmoidBox

Retrsigmoid approaches to the posterior cranial fossa.

Perform craniotomies, dural openings, and reconstructions using the Retrsigmoid Skull.

Then replace it and start again.

## What you can explore:

- III: Oculomotor Nerves
- PComA: Posterior Communicating Artery
- PCA: Posterior Cerebral Artery
- Pituitary Stalk
- Perforating Arteries
- Basilar Artery
- Vertebral Artery
- SCA: Superior Cerebellar Artery
- AICA: Anterior Inferior Cerebellar Artery
- PICA: Posterior Inferior Cerebellar Artery
- Mammillary bodies
- IV: Trochlear nerve
- V: Trigeminal nerve
- VI: Abducens nerve
- VII/VIII: Facial/vestibular nerves
- IX-X-XI: Mixed cranial nerves
- XII: Hypoglossal nerve
- Mesencephalus
- Pons
- Medulla oblongata
- Tentorium
- Posterior skull base fossa



Product code: 00001895

# InterhemisphericBox

Interhemispheric approaches to the midline.

Perform craniotomies, dural openings, and reconstructions using the Interhemispheric Skull.

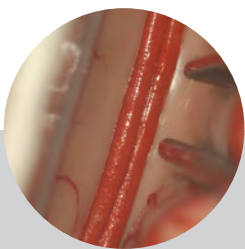
Then replace it and start again.

## What you can explore:

- Mid frontal hemisphere
- Mid parietal hemisphere
- Third and fourth segment of the anterior
- ACA: Cerebral Artery
- Corpus callosum



Product code: 00001896



# SuboccipitalBox

Suboccipital approaches to the craniocervical junction.

Perform craniotomies, dural openings, and reconstructions using the Retractor Skull.

Then replace it and start again.

## What you can explore:

- Basilar Artery
- Vertebral Artery
- SCA: Superior Cerebellar Artery
- AICA: Anterior Inferior Cerebellar Artery
- PICA: Posterior Inferior Cerebellar Artery
- Mammillary bodies
- V: Trigeminal nerve
- VII/VIII: Facial/vestibular nerves
- IX-X-XI: Mixed cranial nerves
- XII: Hypoglossal nerve
- Mesencephalus
- Pons
- Medulla oblongata
- Posterior skull base fossa



Product code: 00001897

# AneurysmBox

Aneurysm clipping.

Perform craniotomies, dural openings, and reconstructions using the Pterional Skull.

Then replace it and start again.

AneurysmBox is a Pterional Box with the addition of 5 aneurysms.

## What you can explore:

- II: Optic Nerve
- CA: Internal Carotid Artery
- ACA: Anterior Cerebral Artery
- A1: First segment of ACA
- AcomA: Anterior Communicating Artery
- MCA: Middle Cerebral Artery
- III: Oculomotor Nerve
- PComA: Posterior Communicating Artery
- PCA: Posterior Cerebral Artery
- Ophthalmic Artery
- Pituitary Stalk
- Perforating Arteries
- Lamina Terminalis
- Insula Heubner Artery (origin)
- Optic Chiasm
- Basilar Tip

## Aneurysm Cases

Case 1: Middle Cerebral Artery

Case 2: Basilar Tip

Case 3: Carotid Bifurcation

Case 4: Anterior Communication Artery

Case 5: Posterior Communication Artery

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Product code: 00001898



# TNSBox

Endoscopic Transsphenoidal approaches to a pituitary adenoma.

Prepare the nasal cavities and perform an adenoma resection tumor.  
Then replace the cavity and start again.

## What you can explore:

- Septal Cartilage
- Vomer
- Mucosa
- Perpendicular plate of Ethmoid Bone
- Sphenoidal Crest
- Nasal Cavity
- Inferior Choana
- Middle Choana
- Superior Choana
- Sphenoid Sinus
- Pituitary Tumor
- Polyposis

TNSBox is available with  
two different disposable cavities:  
Disposable Cavity with Pituitary Tumor  
Disposable cavity with Pituitary  
Tumor and Polyposis.



Product code: 00001899

# Brain TumorBox

Bleeding 5-ALA-enhanced Glioblastoma for US-guided resection.

Perform a craniotomy and remove the tumor. Then replace the cartridge and the skull and start again.

## What you can do:

- Learn how to handle microsurgical instruments
- Learn how to perform a white matter dissection
- Learn how to perform a microsurgical resection under the microscope/exoscope
- Learn how to perform an ultrasound guided resection
- Learn how to manage intraoperative bleeding
- Resect and remove a fluorescent-guided (5-ALA) intraparenchymal glioblastoma with epicenter in the frontal white matter



## Fluorescence: 5ALA

With the Brain TumorBox you can resect a intraparenchymal glioblastoma guided by 5-ALA fluorescence and Ultrasounds

Product code: 00001901



# FlourescentBox

5-ALA, Fluorescein, ICG fluorescence.

Perform craniotomies, dural open=nings, and reconstructions using the Pterional Skull.

## What you explore:

FluorescentBox is designed to stimulate 3 different fluorescences:

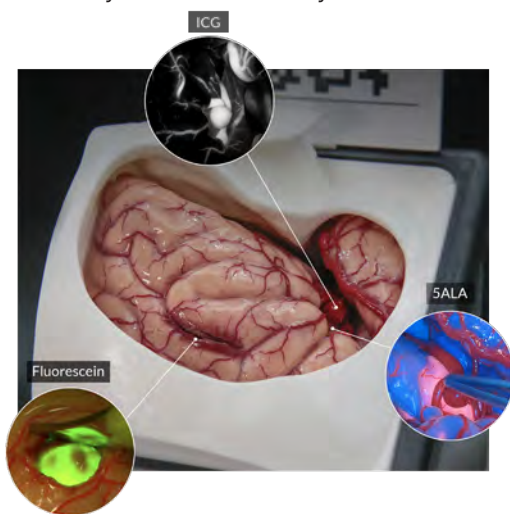
FLUORESCENIN, 5ALA and ICG

Fluorescein: 1 deep frontal tumor glioma

5ALA: 1 superficial insular glioma

ICA: 5 fluorescent (ICG) aneurysms in different locations (Carotid bifurcation, MCA, AComA, PComA, Basilar tip).

With the FluorescentBox you can explore all the anatomy of the PterionalBox, and all 5 aneurysms of the AneurysmBox.



Product code: 00002002

# NavigationHead

Head clamp and standard neuronavigation of PterionalBox, AneurysmBox and FluorescentBox.  
Perform craniotomies, dural openings, and reconstructions using the Pterional Skull.  
Then replace it and start again.

## What you can explore:

Neuronavigation is a technology that helps neurosurgeons design the best trajectory to an intracranial pathology.

It allows you to replace your scenario\* inside of it, fix the head with a head holder and carry out Neuronavigation.

MRI with different pathologies included  
(depending on the scenario)

Compatible with any neuronavigation system.

\*The pterional approaches are  
sold separately.



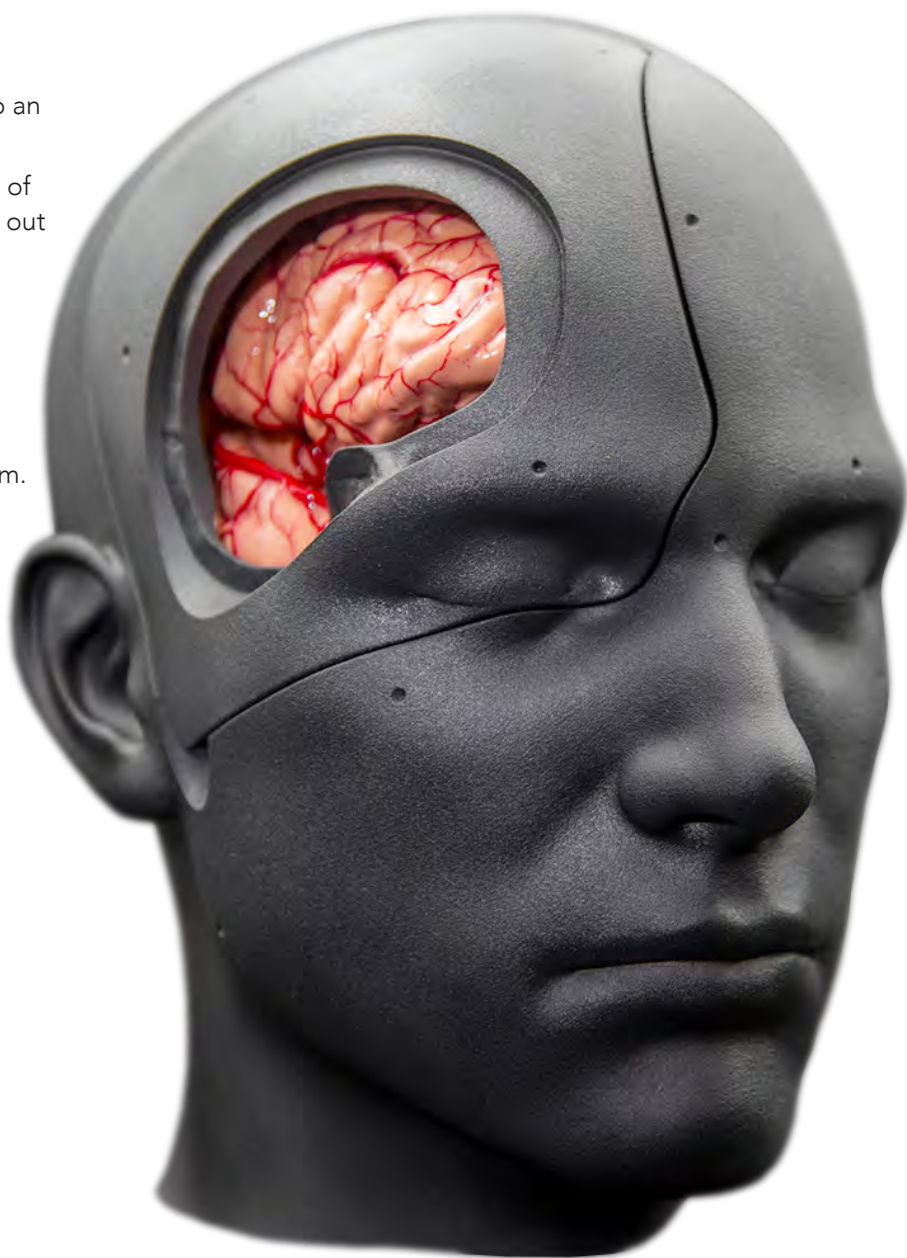
## Compatible Boxes

NavigationHead is compatible with all the Pterional Approaches:

- PterionalBox
- AneurysmBox
- FluorescentBox

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Product code: 00001902



## Cranial Series Accessories

### Disposable Skulls Pterional

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Product code:

00001903



### Cartridge Pterional

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Product code:

00001908



### Disposable Skulls Temporal

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Product code:

00001904



### Cartridge Temporal

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Product code:

00001909



### Disposable Skulls Retrosigmoid

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Product code:

00001905



### Cartridge Retrosigmoid

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Product code:

00001910



## Cranial Series Accessories

### Disposable Skulls Interhemispheric

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Product code:

00001906



### Cartridge - Interhemispheric

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Product code:

00001952



### Disposable Skulls Suboccipital

---

Product code:

00001907



### Cartridge Suboccipital

---

Product code:

00001911



### Disposable Skull - Aneurysm

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Product code:

00001948



### Cartridge Aneurysm

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Product code:

00001912



## Cranial Series Accessories

### Cartridge TNS w/Polyps

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Product code:

00001913



### Cartridge TNS

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Product code:

00001914



### Cavities - TNS

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Product code:

00001954



### Cavities - TNS with Polyps

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Product code:

00001955



### Disposable Skull - TNS

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Product code:

00001949



## Cranial Series Accessories

Cartridge  
Tumour 5ALA

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Product code:

00001915



Cartridge  
Tumour ICG

---

Product code:

00001916



Cartridge  
Tumour U/S

---

Product code:

00001917



Cartridge  
ICH

---

Product code:

00002001



Disposable Skull  
- Tumour

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Product code:

00001951





## Spine Series

Surgical Training  
Technologies for  
Spine Surgery

Life-like as never before!

The modularity and compactness of this series enable advanced cadaver-free training in any setting, with optimised costs.

Designed to provide infinite training, disposable parts are intended to be used with the Box and replaced to keep track of your training.



# Anterior CervicalBox

Multilevel Spondylotic  
Myelopathy and  
Radiculopathy C3 - C7

## What you can do:

- Skin incision
- Layer by layer soft tissue dissection
- Platysma incision
- Detection of carotid artery
- Multilevel decompressions for spondylotic myelopathy
- Multiple discectomies and corpectomies
- Any kind of anterior cervical spine
- Fluoroscopy and CT scans

## Hyperrealism

Experience unparalleled surgical realism with Anterior CervicalBox. From the moment you make your incision to the intricate maneuvers around delicate structures, every aspect is meticulously crafted to mirror the complexities of real surgery.



Product code: 00001918

# Composition of Anterior CervicalBox

## Skin Level - Disposable

Bleeding skin and subcutaneous tissue  
Platysma  
Connective tissues  
Sternocleidomastoid muscle  
Trachea and oesophagus (medial mass)  
Crotid Artery

## Spine Level - Disposable

Prevertebral fascia  
Paravertebral muscles  
Vertebral bodies and discs from C3 to C7  
Spinal cord  
Peridural fat

## Box - Reusable



# Posterior CervicalBox

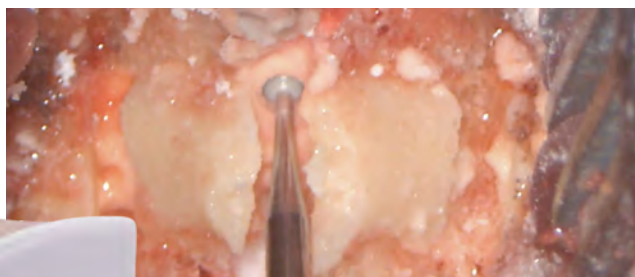
Multilevel Posterior  
Cervical Compression  
C2-C6

## What you can do:

- Multilevel decompressions for spondylotic myelopathy
- Laminectomies
- Flavectomies
- Laminoplasty
- Any kind of posterior cervical spine fixation
- Fluroscopy and CT scans

## Hyperrealism

Experience unparalleled surgical realism with Anterior CervicalBox. From the moment you make your incision to the intricate maneuvers around delicate structures, every aspect is meticulously crafted to mirror the complexities of real surgery.



Product code: 00001918

# Composition of Posterior CervicalBox

## Skin Level - Reusable

Dissected Skin and subcutaneous tissue

Dissected paravertebral muscles



## Spine Level - Disposable

Ligaments

Vertebrae from C2 to C6

Spinal cord

Peridural fat

Vertebral arteries



## Box - Reusable



# Posterior LumbarBox

10 Operable Levels L1-S1

3 Paramedian Herniations

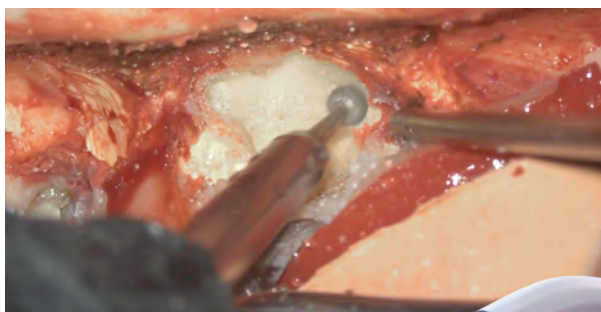
2 Foraminal Herniations

1 Central Herniation

1 Canal Stenosis

## What you can do:

- Laminectomies
- Flavectomies
- Discectomies
- Corpectomies
- Any kind of posterior lumbar spine fixation
- Fluroscopy and CT scans



Product code: 00001920

# Composition of Posterior LumbarBox

## Skin Level - Reusable

Dissected Skin and subcutaneous tissue

(Open & MIS Skin)

Dissected paravertebral muscles



## Spine Level - Disposable

L1-2 Left Paramedian Herniation

L1-2 Right Extraforaminal Herniation

L2-3 Central Herniation

L3-4 Left Foraminal Herniation

L3-4 Right Paramedian Herniation

L4-5 Right Extraforaminal Herniation

L4-5 Canal Stenosis

L5-S1 Left Foraminal Herniation

L5-S1 Right Paramedian Herniation



## Box - Reusable

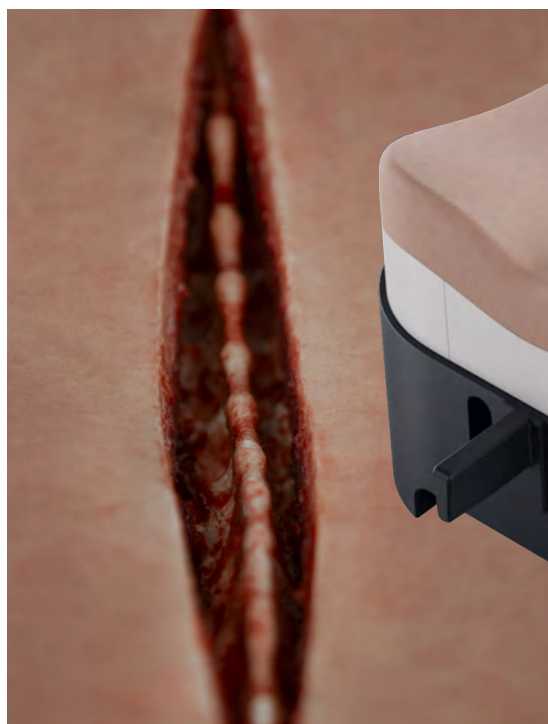


# ThoracolumbarBox

10 Operable Levels L8-S1

## What you can do:

- Posterior decompression and fixation of the lower thoracic and lumbosacral segments
- PLIF (Posterior Lumbar Interbody Fusion)
- TLIF (Tranforaminal Lateral Interbody Fusion)
- Open and MIS Approaches (using open Reusable Skin Level and MIS Disposable Skin Level, respectively)



Product code: 00001921

# Composition of ThoracolumbarBox

## Skin Level - Reusable

Reusable: Open Skin (Dissected Skin and subcutaneous tissue)

Disposable: Closed Skin - MIS (Minimally invasive surgery)



## Spine Level - Disposable

Vertebrae from T8 to S1 Ligaments

Cauda equina and lumbar nerve roots Peridural fat Lumbar discs with herniations



## Box - Reusable



# Anterior-Lateral LumbarBox

Multilevel Discopathy L2-S1

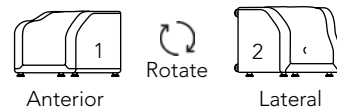
The simulator is designed to simulate both spine and lateral positions, facilitating the simulation of all oblique and lateral anterior approaches to the lumbosacral spine.

## What you can do:

- ALIF (Anterior Lumbar Interbody Fusion)
- OLIF (Oblique Lateral Interbody Fusion)
- XLIF (Extreme Lumbar Interbody Fusion, aka LLIF, Lateral Lumbar Interbody Fusion)



## Dual Surgical position



Product code: 00001922

# Endoscopic LumbarBox

10 Operable Levels L1-S1 Left/Right

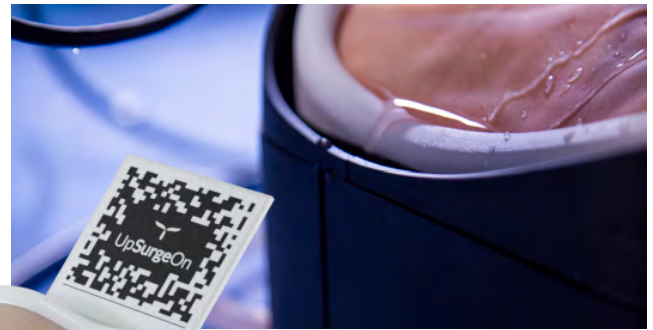
2 Sets of pathologies

## What you can do:

- PELD (Percutaneous Endoscopic Lumbar Discectomy)
- TELD (Transforaminal Endoscopic Lumbar Discectomy)
- Monoportal and biportal procedures

## Smart Water Management

The simulator is equipped with an internal water drainage and outflow system, facilitating the management of high endoscopic flows anywhere and preventing any leakage during surgical procedures.



Product code: 00001923

# Composition of Endoscopic LumbarBox

## Skin Level - Disposable

The most durable Skin ever

Reusable multiple times



## Spine Level - Disposable

Pathology Set 1:

L1-2 Left Paramedian  
Herniation

L1-2 Right Extraforaminal  
Herniation

L2-3 Central Herniation

L3-4 Left Foraminal Herniation

L3-4 Right Paramedian  
Herniation

L4-5 Canal Stenosis

Pathology Set 2:

L1-L2 Bilateral paramedian  
Herniation

L2-L3 Bilateral paramedian  
Herniation

L3-L4 Bilateral paramedian  
Herniation

L4-L5 Bilateral paramedian  
Herniation

L5-S1 Bilateral paramedian  
Herniation



## Frame - Reusable

The frame with the drainage  
grid for the Water Management  
System



## Collection Base - Reusable

Water collection base



## Spine Series Accessories

### Disposable Anterior Cervical Skin Level

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Product code:

00001924



### Disposable Anterior CervicalBox - C Spine Level

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Product code:

00001925



### Disposable Posterior CervicalBox - C Spine Level

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Product code:

00001926



### Disposable Posterior LumbarBox - L Spine Level

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Product code:

00001927



### Disposable Posterior LumberBox - L Skin Level

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Product code:

00001928



## Spine Series Accessories

### ThoracolumbarBox - MIS Skin

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Product code:

00001929



### ThoracolumbarBox - Open Skin

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Product code:

00001930



### ThoracolumbarBox - Spine Level

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Product code:

00001931



### ThoracolumbarBox - Robotic Spine

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Product code:

00001932



### ThoracolumbarBox - Bone Augmentation Spine

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Product code:

00001933



## Spine Series Accessories

### Endoscopic LumbarBox Extended (Set One)

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Product code:

00001934



### Endoscopic LumbarBox Extended (Set Two)

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Product code:

00001935



### Endoscopic LumbarBox Extended (Set Three)

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Product code:

00001936



### Endoscopic LumbarBox Extended

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Product code:

00001999



### Endoscopic LumbarBox Irrigation Kit

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Product code:

00002000

# SpineHUB



SpineHUB Pro is the result of a powerful collaboration between UpSurgeOn and Inovus Medical—merging the most advanced simulation and imaging technologies to create a fully integrated training platform for endoscopic spine surgery.

**Dual Anatomical Modules:** Seamlessly switch between UpSurgeOn's Endoscopic LumbarBox Extended and Endoscopic Posterior CervicalBox simulators to perform complete endoscopic lumbar and cervical procedures in a single session.

**Integrated Mobile X-Ray:** Train with UpSurgeOn's built-in Mobile X-Ray system to master image-guided techniques—without needing access to an OR suite.

**Integrated Imaging System:** The system includes Inovus Medical's Sim Station, with complete endoscope and imaging platform, providing high-resolution visualisation for realistic, hands-on training.

**Complete OR Toolkit:** Practice using the real surgical instruments provided by Inovus Medical, including rongeurs, nerve hooks, elevators, and forceps for maximum realism.

**Irrigation System:** Complete irrigation system by UpSurgeOn to perform life-like surgical procedures anywhere.

**Data-Driven Performance Analytics:** Utilise the Totum platform to capture instrument trajectories, force metrics, and procedure times, facilitating objective assessment and feedback.

A Collaborative **Technology** by





# SpineHUB Pro

SpineHUB Pro empowers surgical training programs, Medical Technology companies and healthcare institutions to deliver high-fidelity, fully immersive endoscopic spine simulation.

This compact, state-of-the-art system meets the full spectrum of endoscopic spine training needs—from foundational skills and procedural work-flows to advanced decompression and fusion techniques.

Ideal for both simulation centres, commercial labs and clinical environments, SpineHUB Pro supports everything from structured curriculum delivery to real-time preoperative warm-up. With unlimited Totum user licenses, the platform ensures that there are no barriers to training the next generation of spine surgeons.

## Included in the package:

- 1x Sim Station
- 1x Endoscopic LumbarBox Extended
- 1x Endoscopic Posterior CervicalBox
- 1x Endoscopic Camera
- 1x LED Light Lead
- 1x Spinal Endoscope
- 1x Rongeur (Uniportal)
- 1x Nerve Hook (Uniportal)
- 1x Elevator (Uniportal)
- 1x Biopsy Forceps (Uniportal)
- 1x Punch Forceps (Uniportal)
- 1x Bi-portal instrument set
- 1x Irrigation kit (pump, buckets, tubes)  
Irrigation bags
- 1x hard-shell carry case
- 1x Soft shell carry case

Product code: 00002200



# SpineHUB

## All-in-One HUB for Lumbar and Cervical Endoscopy

SpineHUB brings high-fidelity endoscopic spine simulation to any setting with its portable, tabletop design—perfect for individual training, workshops, and skills labs.

SpineHUB delivers powerful, fully tracked simulation capabilities, covering everything from core endoscopic spine techniques to complex procedural practice.

Designed for flexibility and accessibility, it supports remote learning, on-the-go training, and preoperative rehearsal without compromising on realism or performance. Totum Team licences ensure scalable training for residents, fellows, and practicing surgeons alike—anytime, anywhere.

### Included in the package:

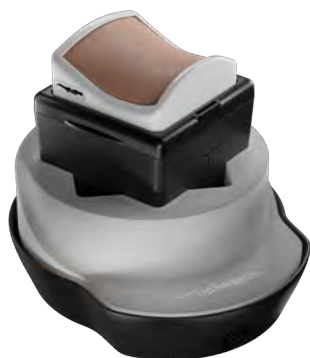
- 1x Endoscopic LumbarBox Extended
- 1x Endoscopic Posterior CervicalBox
- 1x Endoscopic Camera
- 1x LED Light Lead
- 1x Light Source
- 1x Spinal Endoscope
- 1x Rongeur (Uniportal)
- 1x Nerve Hook (Uniportal)
- 1x Elevator (Uniportal)
- 1x Biopsy Forceps (Uniportal)
- 1x Punch Forceps (Uniportal)
- 1x Bi-portal instrument set
- 1x Irrigation kit (pump, buckets, tubes) Irrigation bags
- 1x hard-shell carry case
- 1x Soft shell carry case



Product code: 00002199

Laptop not included in the package

Key components included in the SpineHUB and SpineHUB Pro package:



Endoscopic Posterior CervicalBox



Endoscopic LumbarBox Extended



Bi-portal instruments



Endoscopic Camera, Spinal Endoscope and instruments



Outer soft shell wheeled carry case containing the following inner cases:

- Inner case to house components and camera
- Camera case
- Instrument and scope case



Hard-shell carry case

# SpineHUB and SpineHUB Pro Training Capabilities

Advanced Surgical Training  
with Integrated Augmented Reality

## Lumbar Techniques

- Practice endoscopic lumbar discectomy, extraforaminal approaches and vertebroplasty across all levels from L1 to S1.

## Cervical Techniques

- Execute posterior cervical laminectomies, laminoplasties and artery exposures from C2 to C6.

## Immersive AR Assistance

- Leverage augmented-reality overlays for live anatomical guidance that sharpens spatial awareness and accuracy.

SpineHUB and SpineHUB Pro combines hyper-realistic anatomical models with cutting-edge technology to provide an immersive and effective training environment for endoscopic spinal surgeries.



## Totum Connect to perfect surgical technique



# Totum Connect to perfect surgical technique



## Guiding the way to surgical success

Connect with mentors, peers, and examiners to share best practice



## Unlocking the power of practice

Video capture and debrief provides an ecosystem for review, refinement, and mastery of surgical procedures



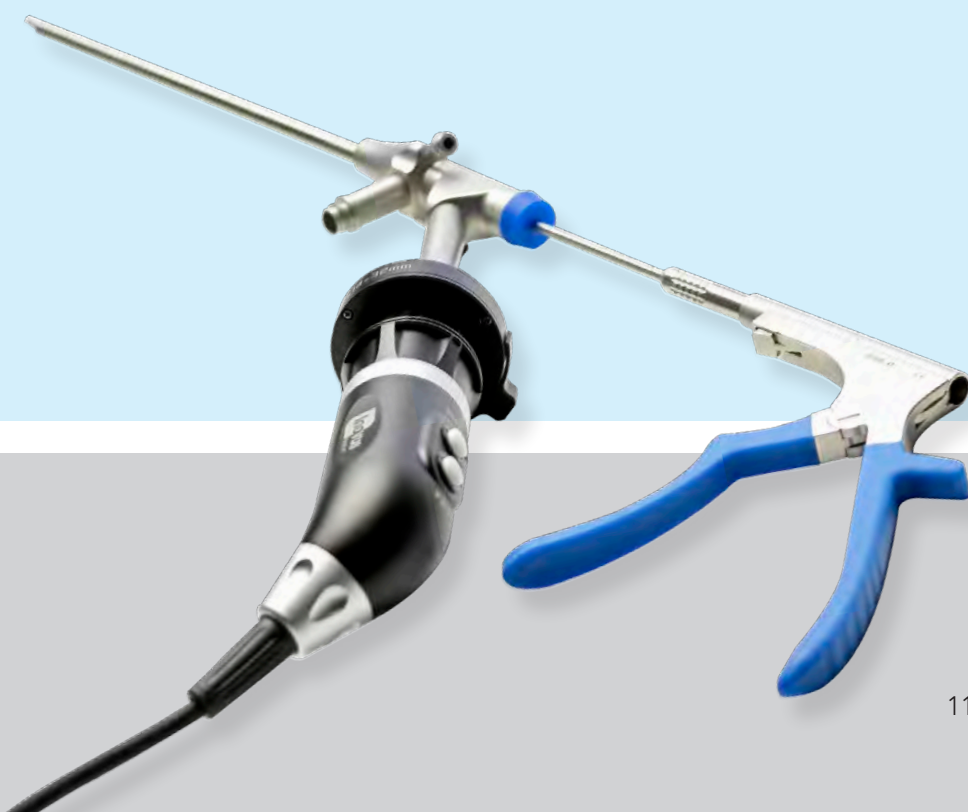
## Harnessing the power of data to transform surgical training

Objective performance metrics guide improvements in surgical technique and operative flow



## Dynamic assessment, universal recognition

Issue certificates of competency, gain CPD/CME points for time spent training, perform work based assessments and OSATS





## Surgical Training Remastered

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