萊昇創新醫學科技
Lyson Medical Technology

PRODUCT CATALOG

AI-Powered Bionic MedTech Solutions

Lyson Medical Technology is a company dedicated to surgical training systems and simulation. Our vision is to enhance surgical safety and improve healthcare outcomes for patients worldwide. In addition to developing standardized surgical training systems, we also offer biomimetic phantom solutions that can be integrated into medical technology companies' products. By quickly incorporating clients' specific needs into customized product experiences, we help accelerate the market adoption of related medical innovations.

- ✓ A series of surgical skill training products
- ✓ Medical phantom models with realistic tissue properties
- ✓ Utilizes an intelligent circulation system to simulate human blood flow characteristics


High-Fidelity Surgical Training


Enhance Surgical Precision


Streamline Surgical Procedures


Shorten the Technical Learning Curve


Bio-Mimetic Protein Material


Minimally Invasive Surgery Models


Intelligent Circulatory System


Customized Solutions

Contents

Minimally Invasive Surgical Training System for Head and Neck Thermal Ablation

This product is specifically designed for precise and immersive minimally invasive surgical training. It enables practice of puncture biopsy and various thermal ablation procedures on a modular thyroid phantom. With quickly interchangeable thyroid modules, the platform can simulate nodules of different sizes and supports advanced techniques such as hydrodissection training. This facilitates safe and effective surgical skill development, enhancing proficiency in thyroid treatments.

USD$6,800

Procedures

- Thyroid Nodule Radiofrequency Ablation (RFA).
- Thyroid Nodule Microwave Ablation (MWA).
- Thyroid Nodule Laser Ablation.
- Thyroid Nodule Cryoablation.
- Thyroid Nodule Core Needle Biopsy (CNB).
- Thyroid Nodule Fine Needle Aspiration (FNA).

Key Features

1. Suitable for ultrasound-guided procedures, clearly visualizing:
   - Thyroid
   - Nodules
   - Trachea
   - Dangerous triangular vascular area (carotid artery and jugular vein)
   - Hyperechoic ultrasound images post-ablation
2. Supports embedding nodules of different sizes (2 cm / 3.2 cm).
3. Neck phantom model allows up to 100 punctures.
4. Modular design enhances cost-effectiveness of training.
5. High realism provides a more immersive learning experience.
6. Comes with a portable storage case, ideal for mobile use.

Product Specifications

Net Dimensions	20×20×14cm
Net Weight	2.5kg
Gross Dimensions	45×30×30cm
Gross Weight	5kg

Model Number

THY Portable Set

- Suitable for RFA, MWA, Laser, Cryoablation, CNB, and FNA procedures.
- Set Content: Portable case, trachea base, neck phantom model (THY-L01), thyroid ablation-specific models (THY-L02 / L02H), phantom model preservation solution, and negative electrode patches.

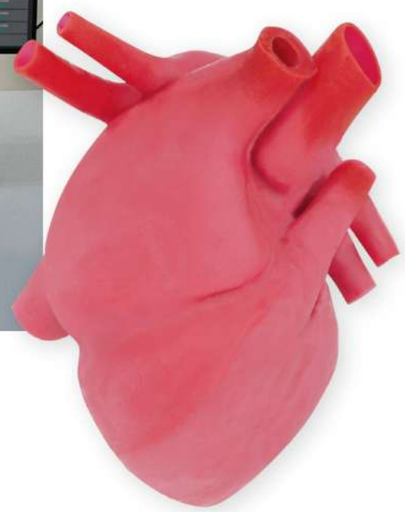
Product Components

Model No.	Description
THY-L01	Neck phantom model
THY-L01H	Enlarged neck phantom model
THY-L02	Thyroid with two 2cm nodules (suitable for MWA, RFA, Laser, Cryoablation)
THY-L02H	Thyroid with two 2cm nodules (suitable for Hydrodissection, MWA, RFA, Laser, Cryoablation)
THY-L03	2cm thyroid nodule for CNB
THY-L04	2cm thyroid cyst for FNA

Transcatheter Aortic Valve Implantation (TAVI) Skills Training Platform

This platform can be paired with the Cardiovascular Blood Simulation Pump System and the Electro-Hydraulic Pulse Generator to simulate realistic heart rates and blood pressure in the systemic circulation, providing a more authentic training experience. Replaceable valve consumables are used within the system for practicing heart valve replacement procedures. Through immersive design, it effectively enhances the realism and efficiency of medical skills training. Customization options are also available. For more details, please contact our technical sales team.

USD$12,000



AOV-N01

AOV-C01

HT-C01

Procedures

- Operation of self-expanding and balloon-expandable valve devices.
- Catheter manipulation and navigation skills.
- Deployment of valve delivery catheter system.
- Valve positioning and release techniques.
- Intraoperative complication simulation and management.

Key Features

1. Palpable vascular pulsation.
2. Pulsation visible under ultrasound-guided procedures.
3. Can be used independently or combined with other products to generate desired pulsatile blood flow.
4. Container and artery feature quick-connect fittings for easy installation and removal.
5. Adjustable heart rate and blood pressure.
6. Can be stored in a portable case for easy mobility and use.

Model Number

- PG-B01
- For generating arterial pulsation.
- Includes a carrying case, main unit, a 150 cm arterial catheter (with quick-connect fittings and valves at both ends, PG-S01), an open vessel and control valve assembly (PG-S02), and a liquid expansion tank (PG-S03).
- Typically used in conjunction with the following training platforms: Central Venous Catheter and Implantable Port Training Platform (CVC-B02) and Femoral Artery Puncture Trainers (FVA-B01 and FVA-B02).

Product Components

Model No.	Description
HT-C01	Complete cardiac anatomy model (compatible with external circulation system)
AOV-N01	Standard aortic valve model
AOV-C01	Aortic valve calcification model

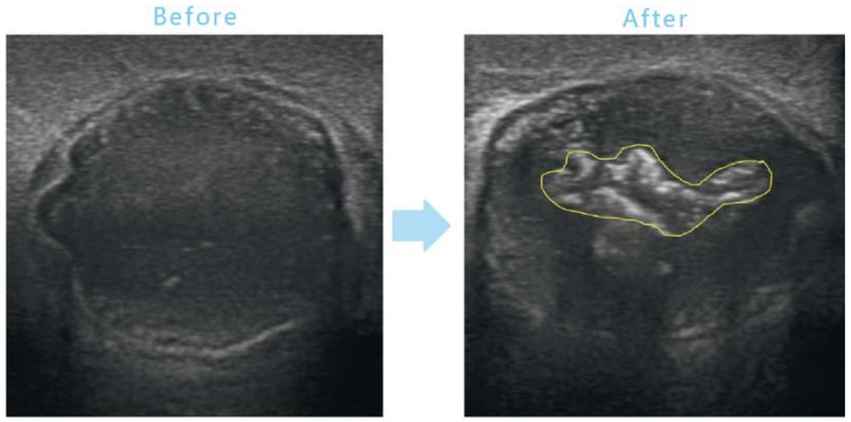
Product Specifications

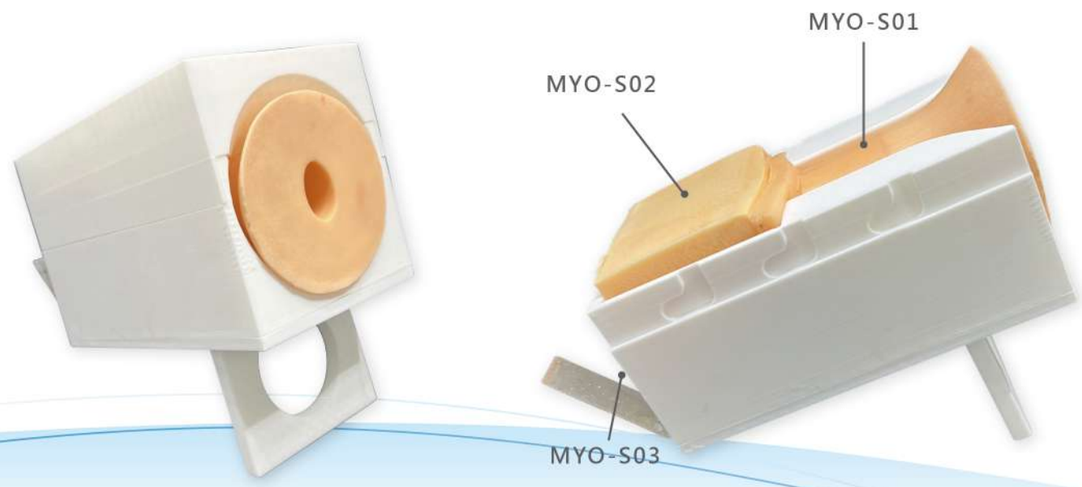
Cardiac Phantom Model	
Dimensions (L x W x H)	10x10x10cm
Weight	0.9kg
Electro-Hydraulic Pulse Generator	
Heart Rate	30–180 beats per minute (bpm)
Fluid Storage Capacity	350~850ml
Net Dimensions (LxWxH)	25.5x18x11.3cm
Net Weight	8 kg
Gross Dimensions	90 cm × 50.5 cm × 35.5 cm
Gross Weight	19 kg

Uterine Fibroid (Myomas) Morcellation and Thermal Ablation Training Platform

Provides practical training for gynecological surgeries, including fibroid ablation and ultrasound-guided examination, aimed at improving the accuracy and skills of minimally invasive thermal ablation procedures under ultrasound guidance. This contributes to hands-on training in gynecological care. Customization options are also available. For more details, please contact our technical sales team.

USD$3,500





Procedures

- Percutaneous Uterine Fibroid Microwave Ablation (MWA).
- Percutaneous Uterine Fibroid Radiofrequency Ablation (RFA).
- Percutaneous Uterine Fibroid Cryoablation.
- High-Intensity Focused Ultrasound (HIFU) Uterine Fibroid Ablation
- Transvaginal Ultrasound Examination
- Abdominal Ultrasound Examination
- Hysteroscopy
- Laparoscopic Myomectomy

Key Features

1. Made of soft material, supports up to 100 puncture procedures.
2. Compatible with ultrasound examination.
3. Anatomical structures include:
   - Uterine fibroid phantom with endometrium
   - Myometrium and serosa layers
   - Complete vaginal structure
4. Two embedded fibroids with a diameter of 3.2 cm placed on the uterine inner wall, visible under ultrasound.
5. Modular design reduces training costs.
6. Supports a range of ablation practices, enhancing training immersion.
7. Can be stored in a portable case for easy mobility and use.

Product Specifications

Vaginal Depth	6cm
Out Box Dimensions	30.5x49x22.5cm
Net Weight	10.5kg
Packaging Dimensions	70×40×32cm
Gross Weight	17.5kg

Model Number

MYO-B01

- Suitable for gynecological surgical training including HIFU, MWA, RFA, and cryoablation.
- Set contents: Carrying case, base, vaginal phantom (MYO-S01), uterine fibroid phantom (MYO-S02), foldable negative electrode patch (MYO-S03).

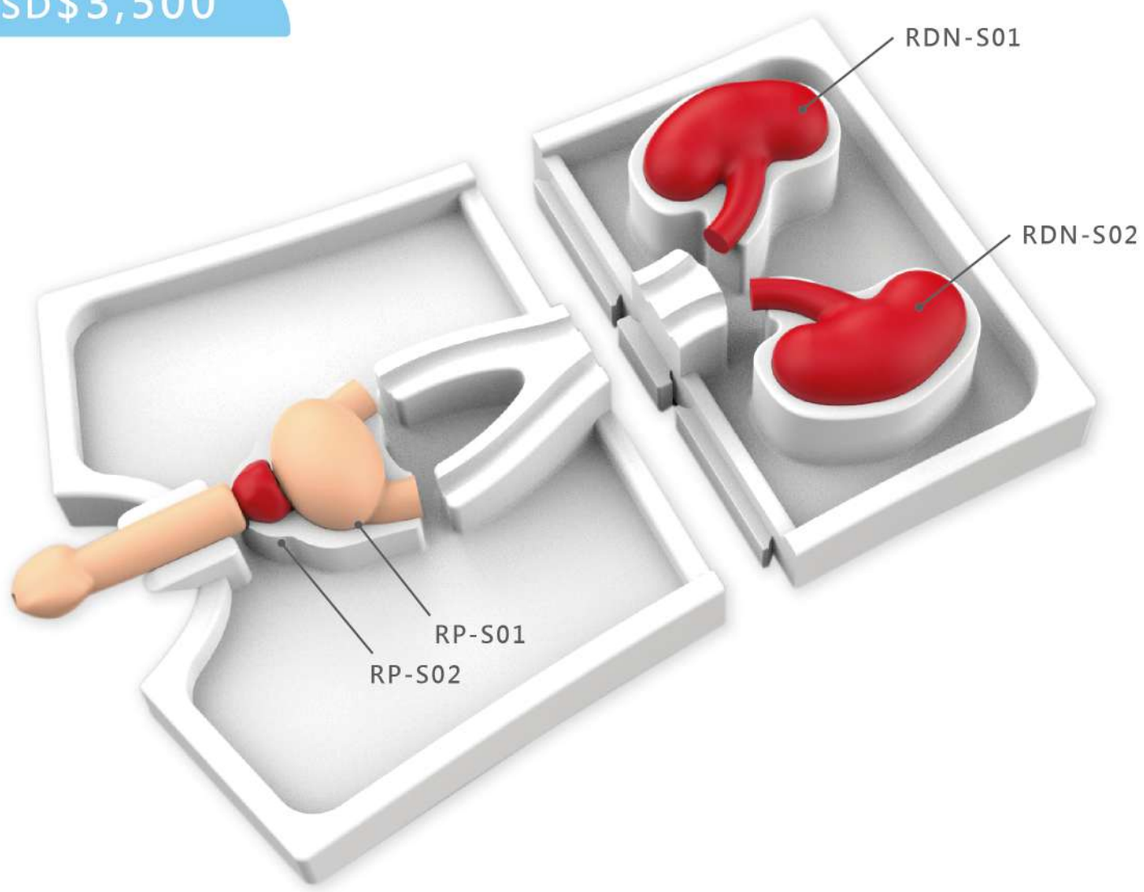
Product Components

Model No.	Description
MYO-S01	Vaginal phantom model
MYO-S02	Uterine fibroid phantom model (embedded with two 3.2 cm fibroids for ablation training)
MYO-S03	Detachable negative electrode patch

Minimally Invasive Thermal Ablation Surgical Training Platform for Benign Prostatic Hyperplasia (BPH)

Our company' s previous prostate phantom model offers an extremely realistic tactile feel, replicating human tissue characteristics and providing multiple size options. It is suitable for applications including transurethral endoscopy, transurethral prostate electrosurgical resection, laser vaporization/resection, steam thermal ablation therapy, and testing of various endoscopic medical devices. Customization options are also available. For more details, please contact our technical sales team.

USD$3,500



Procedures

- Transurethral Instrument Insertion and Navigation
- Transurethral Resection of the Prostate (TURP)
- Laser Vaporization/Enucleation of the Prostate
- Prostate Water Vapor Thermal Therapy (WVTT)

Key Features

1. Can simulate various pathological conditions (such as fluid-filled cysts, fibrous cysts, calcified nodules, and benign prostatic hyperplasia).
2. Customization services available upon customer request.
3. Compatible with various imaging devices (including ultrasound, X-ray, MRI, and CT scans).
4. Can be used in conjunction with various surgical instruments (such as needles, scalpels, lasers, radiofrequency ablation devices, bipolar and monopolar electrosurgical units, and ultrasonic surgical tools).

Product Specifications

Dimensions (LxWxH)	33.8x42.7x6.5cm
Weight	5 kg

Model Number

TURP-C01

- Suitable for guidewire and device placement training.
- Includes a training platform and a urethra-prostate and kidney model (lesions can be customized based on client requirements; the default lesion is benign prostatic hyperplasia).

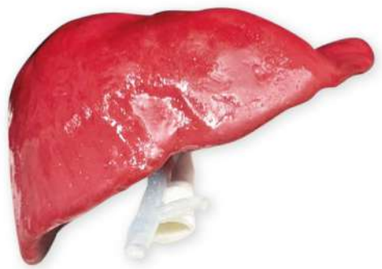
Product Components

Model No.	Description
RP-S01	Bladder Model
RP-S02	Urethra and Prostate Model
RDN-K01	Elastic kidney phantom (left)
RDN-K02	Elastic kidney phantom (right)

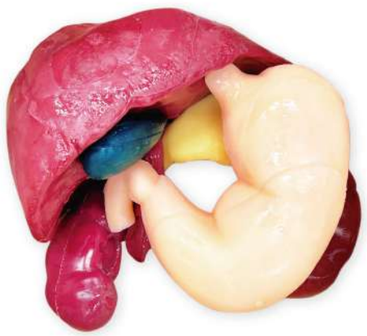
Minimally Invasive Laparoscopic Liver Surgery Training Platform

This platform enables minimally invasive surgical training and testing under simulated physiological conditions comparable to those of living tissues. The intra-abdominal phantoms exhibit realistic tensile modulus, abrasion resistance, penetration force, friction coefficient, and thermal conductivity. All synthetic phantoms are validated for dielectric properties and MRI compatibility to ensure their surgical responses closely mimic those of real biological tissues.

USD$8,600



LIV-S01



Procedures

- Laparoscopic access and endoscopic navigation techniques
- Liver thermal ablation procedure simulation
- Liver segmental anatomy guidance and resection practice

Key Features

1. All intra-abdominal organs are interchangeable (liver, gallbladder, spleen, stomach, kidneys).
2. Complete hepatic vasculature.
3. Operable laparoscopic endoscope.
4. Motorized blood circulation system and respiratory simulation.
5. Adjustable blood flow and respiratory rate.
6. Integrated into a portable case for convenient transport and off-site training.

Product Specifications

Dimensions (L x W x H)	60 x 40 x 17.5cm
Weight	25 kg

Model Number

LIV-A01

- Suitable for living donor liver transplant and minimally invasive thermal ablation training.
- Optional body circulation platform / solid or hollow elastic vessels (configurable based on customer requirements).

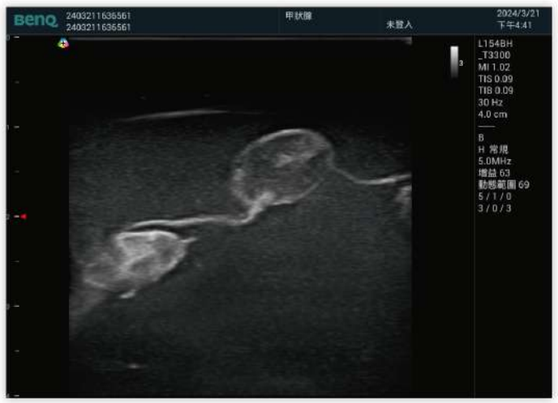
Product Components

Model No.	Description
LIV-S01	Elastic liver phantom (with vasculature)
RDN-K01	Elastic kidney phantom (left)
RDN-K02	Elastic kidney phantom (right)
STO-S01	Elastic hollow stomach phantom
GAL-S01	Elastic gallbladder phantom
SPL -S01	Elastic spleen phantom

Breast Ultrasound, Biopsy, and Thermal Ablation Training Platform

This platform provides realistic haptic feedback, suitable for training in palpation, biopsy, cryoablation, and microwave ablation of breast mass and cyst models. The realistic design enhances training precision and helps medical professionals refine their diagnostic and interventional skills in breast care. Customization options are also available. Please contact our technical sales team for more details.

USD$1,000



BU-C01/BU-C02

Procedures

- Breast Tumor Radiofrequency Ablation (RFA)
- Breast Tumor Microwave Ablation (MWA)
- Breast Tumor Cryotherapy
- Core Needle Biopsy (CNB) for Breast Tumor
- Fine Needle Aspiration (FNA) for Breast Tumor
- Breast Lump Palpation

Key Features

1. Compatible with ultrasound use.
2. Can embed different types of lumps or cysts to meet various training needs.
3. Embedded lumps are distributed at different depths, from the areola to the chest wall.
4. Lump diameters range from 1.8 cm to 2.5 cm.
5. Lumps can be pre-designed as benign or malignant lesions according to training requirements.
6. Modular design helps reduce training costs.
7. Realistic appearance enhances immersive learning experience.
8. The entire platform can be housed in a portable case for easy transportation and use.

Product Specifications

Net Dimensions	15x12.5x6.5cm
Net Weight	2kg
Packaging Dimensions	25x22.5x12.2cm
Gross Weight	4kg

Model Number

BU-B01 Complete Set Model

- Suitable for RFA, MWA, cryotherapy, CNB, and FNA (Type of embedded lumps or cysts configurable per customer request)
- Contents: portable case, platform base, and 2 unilateral breasts

BU-C01

- Suitable for RFA, MWA, cryotherapy, and CNB
- Includes: unilateral breast (BU-CO1) and support base

BU-C02

- Suitable for FNA
- Includes: unilateral breast (BU-CO2) and support base

Product Components

Model No.	Description
BU-C01	Includes 5 lumps, suitable for RFA, MWA, cryotherapy, and CNB.
BU-C02	Includes 5 cysts, suitable for FNA
BU-B01	Breast support base

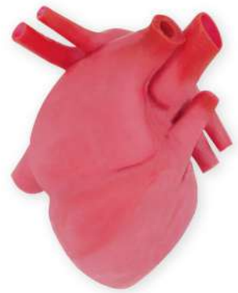
Head & Neck

Model No.	Description	Prise(USD)
THY-L01	Neck phantom model	$350
THY-L01H	Enlarged neck phantom model	$350

Model No.	Description	Prise(USD)
THY-L02	Thyroid with two 2cm nodules (suitable for MWA, RFA, Laser, Cryoablation)	$200
THY-L03	2cm thyroid nodule for CNB	$200
THY-L04	2cm thyroid cyst for FNA	$200

Model No.	Description	Prise(USD)
THY-L02H	Thyroid with two 2cm nodules (suitable for Hydrodissection, MWA, RFA, Laser, Cryoablation)	$200

Cardiovascular System



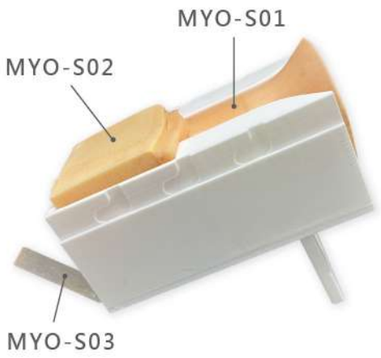
Model No.	Description	Prise(USD)
HT-C01	Complete cardiac anatomy model (compatible with external circulation system)	$2,000


AOV-N01


AOV-C01

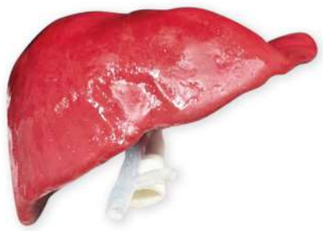
Model No.	Description	Prise(USD)
AOV-N01	Standard aortic valve model	$200
AOV-C01	Aortic valve calcification model	$200

Gynecological Surgery



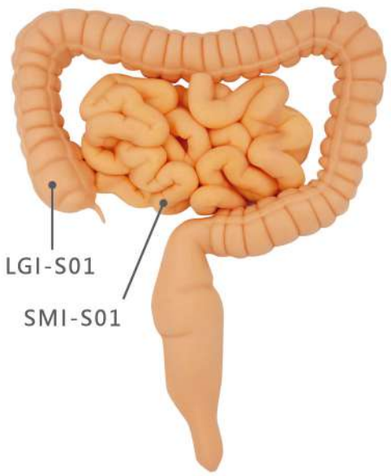
Model No.	Description	Prise(USD)
MYO-S01	Vaginal phantom model	$350
MYO-S02	Uterine fibroid phantom model (embedded with two 3.2 cm fibroids for ablation training)	$350
MYO-S03	Detachable negative electrode patch	$350

Abdominal Region



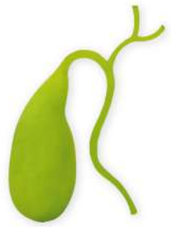
Model No.	Description	Prise(USD)
LIV -S01	Elastic liver phantom (with vasculature)	$2,100

Model No.	Description	Prise(USD)
STO-S01	Elastic hollow stomach phantom	$590



Model No.	Description	Prise(USD)
LGI-S01	Elastic colonic phantom	$570
SMI-S01	Elastic intestinal phantom	$430

Model No.	Description	Prise(USD)
PAN-S01	Elastic pancreatic phantom	$210



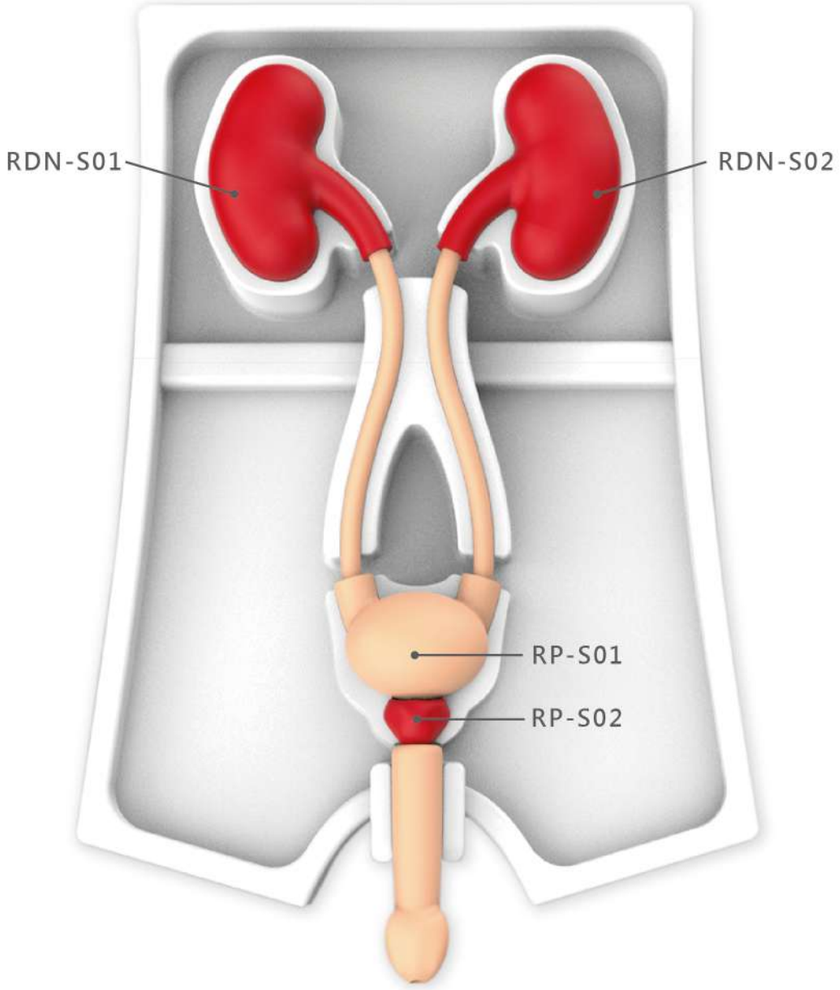
Model No.	Description	Prise(USD)
GAL -S01	Elastic gallbladder phantom	$260

Model No.	Description	Prise(USD)
SPL -S01	Elastic spleen phantom	$180

Breast Surgery

Model No.	Description	Prise(USD)
BU-C01	Includes 5 lumps, suitable for RFA, MWA, cryotherapy, and CNB.	$400
BU-C02	Includes 5 cysts, suitable for FNA	$400

Urinary System



Model No.	Description	Prise(USD)
RP-S01	Bladder Model	$300
RP-S02	Urethra and Prostate Model	$200
RDN-K01	Elastic kidney phantom (left)	$500
RDN-K02	Elastic kidney phantom (right)	$500

Customized solutions available for your product

In addition to independently developing high-fidelity training products, we actively collaborate with medical technology companies to integrate their equipment with our simulated phantom solutions. We possess the capability to rapidly incorporate customer requirements, creating customized operation and testing platforms for innovative medical devices such as robotic arms and minimally invasive surgical instruments. This accelerates clinical validation and product adoption curves while enhancing user interaction and learning efficiency.

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Lyson Medical Technology

Precision with LYSON, Innovation in Healthcare

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