

ECHOEXTRACT™

ENDOSCOPIC RETRIEVAL SYSTEM

LOCATE. VISUALIZE. RETRIEVE.

A next-generation medical device concept designed to locate, visualize and safely retrieve foreign bodies from traumatic wounds.



THE PROBLEM

The risk is not retrieval. The risk is blind retrieval.

Foreign bodies embedded in traumatic wounds can be difficult to see, localize and remove safely. Current workflows may be fragmented between imaging, lighting, retrieval tools and clinical decision-making under time pressure.

- Limited visibility in soft tissue wounds
- Fragmented workflow across separate tools
- Time pressure in trauma and emergency environments
- Clinical and regulatory risk must be validated before use

THE PROBLEM

FOREIGN BODIES IN TRAUMATIC WOUNDS ARE HARD TO FIND. HARD TO SEE. HARD TO REMOVE.

Current methods are limited, slow and carry risks. Every minute increases the chance of complications.



LIMITED VISIBILITY

Foreign bodies are often not visible on the surface. Imaging can be unclear or unavailable in real time.



IMPRECISION & RISK

Blind exploration increases the risk of damaging blood vessels, nerves and healthy tissue.



OUTDATED APPROACH

Traditional forceps, probes and baskets were not designed for today's complex trauma cases.



TIME IS CRITICAL

Delays increase complications, length of stay, costs and pressure on emergency resources.



RISING CASES

Trauma, accidents and conflict related injuries continue to rise worldwide.



THE IMPACT

1.5M+
Emergency visits annually related to retained foreign bodies (estimated).



\$3.5B+
Estimated annual cost of complications and extended care.



2-4 DAYS
Average increase in hospital stay due to delayed or incomplete removal.



HIGHER RISK
More complications including infection, chronic pain, reoperations and disability.



WORSE OUTCOMES
Incomplete removal can lead to long-term morbidity and reduced quality of life.



THE NEED IS CLEAR.
Clinicians need a better way to locate, visualize and safely retrieve foreign bodies.



A NEW STANDARD IS NEEDED.
Precision. Control. Better outcomes.





ECHOEXTRACT™
ENDOSCOPIC RETRIEVAL SYSTEM

WHY NOW

Portable medical hardware is moving toward smaller, smarter systems.

Miniaturized imaging, portable displays, modular instruments and emergency-care innovation create a realistic opportunity to explore compact image-guided retrieval systems.

Endoscopy

Established category

Trauma care

Workflow pressure

Field medicine

Portable need

Opportunity area: endoscopic devices + trauma care + emergency medicine + field medicine + surgical visualization.



THE SOLUTION

One workflow. Three critical actions.

ECHOEXTRACT™ is positioned around a simple product hypothesis: combine visualization, illumination and controlled retrieval into one portable concept-stage platform.

- Locate the foreign body in a trauma-focused workflow
- Visualize through an integrated camera and display
- Retrieve under control using modular retrieval tips

THE SOLUTION
LOCATE. VISUALIZE. RETRIEVE.™

An integrated endoscopic retrieval system for fast, safe and precise removal of foreign bodies in traumatic wounds.

1 LOCATE → **2 VISUALIZE** → **3 RETRIEVE**

Insert the ECHOEXTRACT™ system into the wound. The high-definition camera and LED illumination help you quickly identify the exact location of the foreign body.

High-definition endoscopic visualization provides a clear, magnified view of the foreign body and surrounding structures in real time.

Use the interchangeable atraumatic tools to securely grasp and remove the foreign body through the working channel with maximum control and minimal tissue trauma.



1 LOCATE

- Precise localization
- Bright LED illumination
- Real-time guidance

2 VISUALIZE

- HD image clarity
- Magnified detail
- Real-time on-screen view

3 RETRIEVE

- Atraumatic retrieval
- Interchangeable tools
- Minimize tissue trauma

ONE SYSTEM. MAXIMUM CONTROL. BETTER OUTCOMES.



PRODUCT CONCEPT

A handheld system concept, not a finished medical device.

The current presentation defines the product direction: white medical body, integrated LCD, surgical shaft, HD imaging, LED illumination, working channel and modular retrieval tips. Final mechanics require engineering validation.

- Integrated LCD concept
- 50 cm working shaft concept
- HD camera + LED illumination
- Modular retrieval tips
- Portable kit architecture



CURRENT STATUS

Where the project stands today.

ECHOEXTRACT™ has a defined concept, visual direction and investor narrative. It now requires capital, engineering execution and medical consultation.

Concept developed

Core product logic, visual identity and investor narrative are defined.

First milestone

Functional bench prototype with camera, LED, LCD interface and retrieval mechanism.

Pre-prototype stage

The device is not yet built, certified or clinically validated.

Capital required

Funding and specialist partners are required for engineering, testing and regulatory planning.

ECHOEXTRACT™ DEVICE
Central unit with integrated display, controls and rechargeable battery.

SURGICAL SHAFT (50 cm)
Stainless steel shaft with depth markings for precise insertion and control.

INTERCHANGEABLE TIPS
Atraumatic grasper, basket extractor, mini forceps and snare loop.

LCD DISPLAY
High-definition real-time visualization for clear and accurate guidance.

RECHARGEABLE BATTERY
High-capacity battery for extended operational use.

FAST CHARGER
Medical-grade charger for safe and efficient powering.

PROTECTIVE CASE
Durable, waterproof case for secure transport and storage.

COMPLETE. PORTABLE. READY.
Everything you need for precise foreign body retrieval.

SAFE & STERILIZABLE
All tips are autoclavable and medical-safe.

LIGHTWEIGHT DESIGN
Ergonomic and portable for any environment.

UP TO 3h OPERATION
Long-lasting battery for reliable performance.

PROTOTYPE DEMO VISION

The first prototype must prove the core experience.

The immediate technical goal is a functional bench prototype that demonstrates the most important assumptions before any clinical claims are made.

- Live camera feed on LCD
- LED illumination control
- Shaft handling and orientation
- Working-channel retrieval mechanism
- Controlled retrieval simulation on synthetic tissue models

LCD INTERFACE CONCEPT
Clarity. Control. Confidence.
Real-time visualization and intuitive control at your fingertips.

HD VISUALIZATION
High-definition camera delivers clear, detailed real-time imaging.

LED BRIGHTNESS
Adjust illumination levels for optimal visibility.

ZOOM CONTROL
Digital zoom for precise visualization in tight spaces.

TIP POSITION
On-screen indicator shows tip orientation and position.

CAPTURE IMAGE
Save still images for documentation and review.

RECORD VIDEO
Record procedures in real time.

LIGHT CONTROL
Adjust LED intensity to suit the situation.

TIP SELECTION
Select the active tip or instrument.

SETTINGS
Access system settings and preferences.

HD CAMERA
120° wide angle high definition

ADJUSTABLE LED
0 - 100% brightness control

DIGITAL ZOOM
1x - 3x smooth zoom

DEPTH INDICATOR
Real-time depth measurement

TIP STATUS
Active tip visual feedback

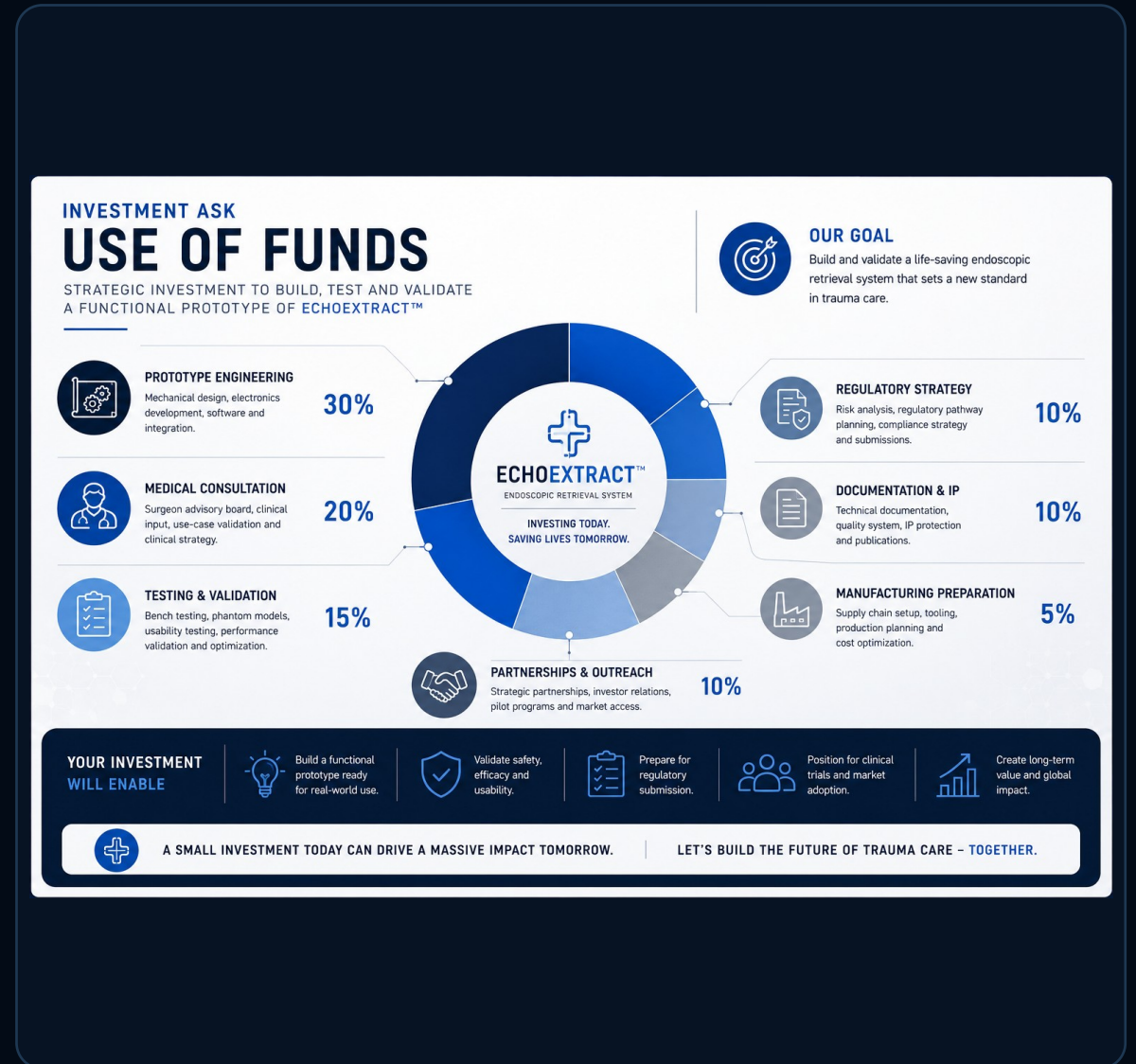
BATTERY STATUS
Live battery level indicator.

DE-RISKING PLAN

The investment path should reduce risk milestone by milestone.

The first capital should not be used to claim clinical readiness. It should fund validation of assumptions and development of a functional bench prototype.

- Clinical need validation with medical advisors
- Optics and visibility testing
- Tip mechanics and retrieval control
- Synthetic tissue model testing
- Regulatory classification review
- IP and documentation strategy



BUSINESS MODEL

Multiple revenue streams. One medtech platform.

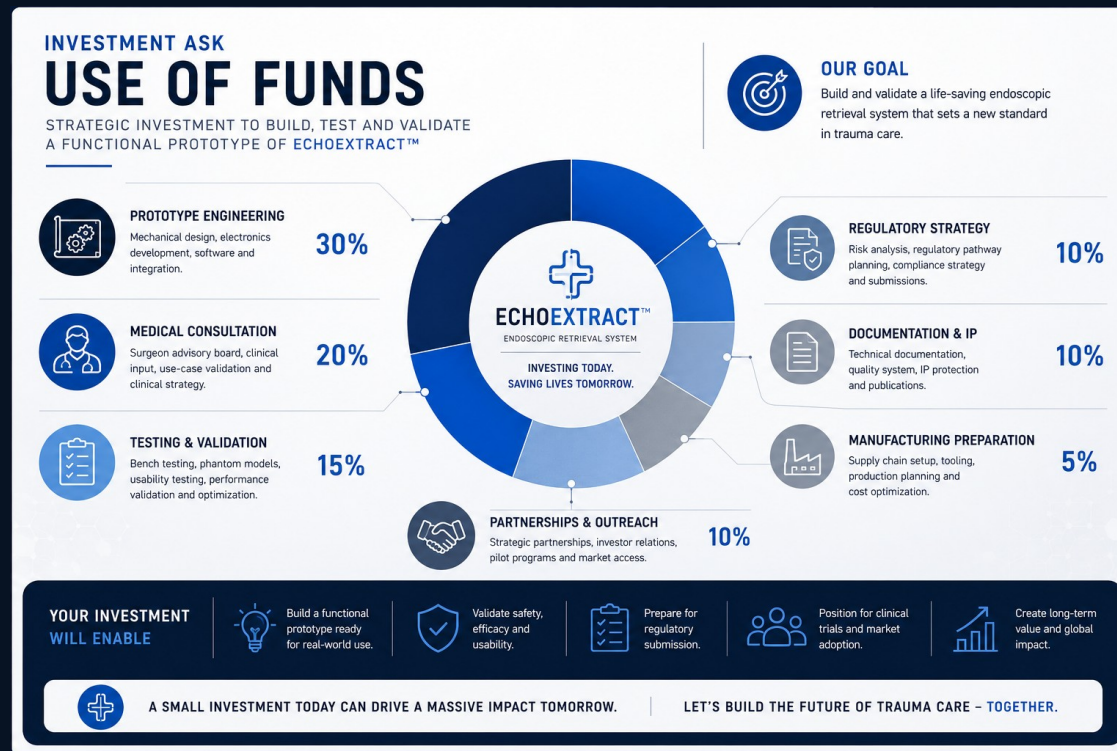
The long-term model can extend beyond device sales into recurring tips, sterile kits, service, training, licensing and strategic partnerships.



INVESTMENT ASK

Capital should fund a disciplined prototype and validation path.

Funding should be tied to concrete milestones: engineering, medical consultation, testing, regulatory strategy, documentation and partner development.



REGULATORY + IP

Credibility depends on responsible medical-device development.

ECHOEXTRACT™ is not yet approved, certified or validated for patient use. Any future device requires medical review, engineering validation, risk management and regulatory clearance before clinical deployment.

- Regulatory classification research
- Risk analysis and quality documentation
- Prototype validation plan
- Patent / IP filing strategy
- CE / FDA pathway analysis with specialists



REGULATORY PATHWAY

ECHOEXTRACT™ is being developed as a medical device with patient safety, clinical efficacy and regulatory compliance at the core of our mission.

OUR COMMITMENT

We are committed to following global regulatory standards to ensure ECHOEXTRACT™ meets the highest levels of safety, quality and performance.

-  **GLOBAL STANDARDS**
Design and development aligned with ISO 13485 and IEC 62304.
-  **SAFETY FIRST**
Risk management in accordance with ISO 14971.
-  **PATIENT IMPACT**
Built to improve outcomes and save lives in critical situations.

OUR PATH TO MARKET

A structured and responsible approach to bring ECHOEXTRACT™ to hospitals, trauma centers and emergency care teams worldwide.

01	02	03	04	05	06	07
						
MEDICAL ADVISORY REVIEW	RISK ANALYSIS & REQUIREMENTS	PROTOTYPE DEVELOPMENT & VERIFICATION	PRE-CLINICAL TESTING	REGULATORY CLASSIFICATION	CE / FDA PATHWAY ANALYSIS	CLINICAL EVALUATION PLANNING
<ul style="list-style-type: none"> • Engage surgeon advisory board • Define clinical needs and use scenarios • Validate intended use and indications 	<ul style="list-style-type: none"> • Comprehensive risk analysis (ISO 14971) • Define user requirements • Establish design controls (ISO 13485) 	<ul style="list-style-type: none"> • Engineering design and integration • Bench testing and performance validation • Usability engineering 	<ul style="list-style-type: none"> • Mechanical & functional testing • Biocompatibility evaluation • Animal / cadaver studies as required 	<ul style="list-style-type: none"> • Determine device classification • Prepare technical documentation • Quality management system implementation 	<ul style="list-style-type: none"> • Identify applicable regulations • Prepare for submissions • Engage with notified bodies / FDA 	<ul style="list-style-type: none"> • Clinical evaluation plan (MDR / 21 CFR Part 820) • Post-market surveillance strategy • Continuous improvement and real-world data

 Our goal is to deliver a safe, effective and innovative solution that meets global regulatory requirements and makes a real difference in trauma care.





PATENTED INNOVATION

INTELLECTUAL PROPERTY PROTECTION

ECHOEXTRACT™ is a unique and novel endoscopic retrieval system protected by intellectual property.

 **PATENT APPLICATION FILED**
The ECHOEXTRACT™ system is protected by a patent application covering its novel design, function and mechanism.

 **GLOBAL PROTECTION**
Patent protection is pursued in key markets worldwide to secure our technology and future opportunities.

 **UNIQUE & NOVEL DESIGN**
Our innovative atraumatic retrieval mechanism and integrated system architecture provide a significant advantage in the market.

 **BUILT FOR IMPACT**
Strong IP protection ensures the value of our technology and supports partnerships, investment and global expansion.

 **PROTECTED TODAY. SAVING LIVES TOMORROW.**

INNOVATION. PROTECTION. IMPACT.



VALUE CREATION

Future routes may include licensing, co-development or acquisition discussions.

A validated functional prototype could create strategic value for companies operating in endoscopy, trauma care, emergency medicine, field medicine or medical visualization.



Licensing

Established medtech players

Co-development

Engineering and clinical partners

Acquisition

After milestone validation



FOUNDER + CURRENT NEED

Created by Adam Adamski. Built for serious development with the right partners.

Adam Adamski is an independent concept creator focused on practical technologies for safety, emergency response and human survival. ECHOEXTRACT™ is currently seeking strategic investors, medical advisors and engineering partners.

- Capital for functional bench prototype
- Medical advisory from trauma and emergency experts
- Engineering partner for optics, mechanics and interface
- Regulatory and IP specialists for pathway planning



NEXT STEP

Start the investor conversation.

ECHOEXTRACT™ is a concept-stage opportunity. The immediate goal is not commercial deployment. It is to build and validate a functional bench prototype with the right medical, engineering and investment partners.

- Request the private investor deck
- Discuss NDA access and prototype partnership
- Review medical advisory and engineering roadmap
- Explore investment, licensing or co-development options

Contact: Adam Adamski

Project: ECHOEXTRACT™ | Concept-stage medtech platform

