Zamenix

The Advanced Robotic
Flexible Ureteroscopy System

Zamenix

The Pinnacle of Robotic Ureteroscopy

Zamenix is an advancement in the field of urology: a robotic platform compatible with commercial endoscopes designed to meticulously break and extract kidney stones with precision and effectiveness.

Our mission is to offer sustainable treatment solutions to dedicated urologists, enabling them to provide optimal care to a multitude of patients.

Precision Lasering

Zamenix empowers doctors to laser with precision and stability for safe and effective lithotripsy

Enhanced Precision

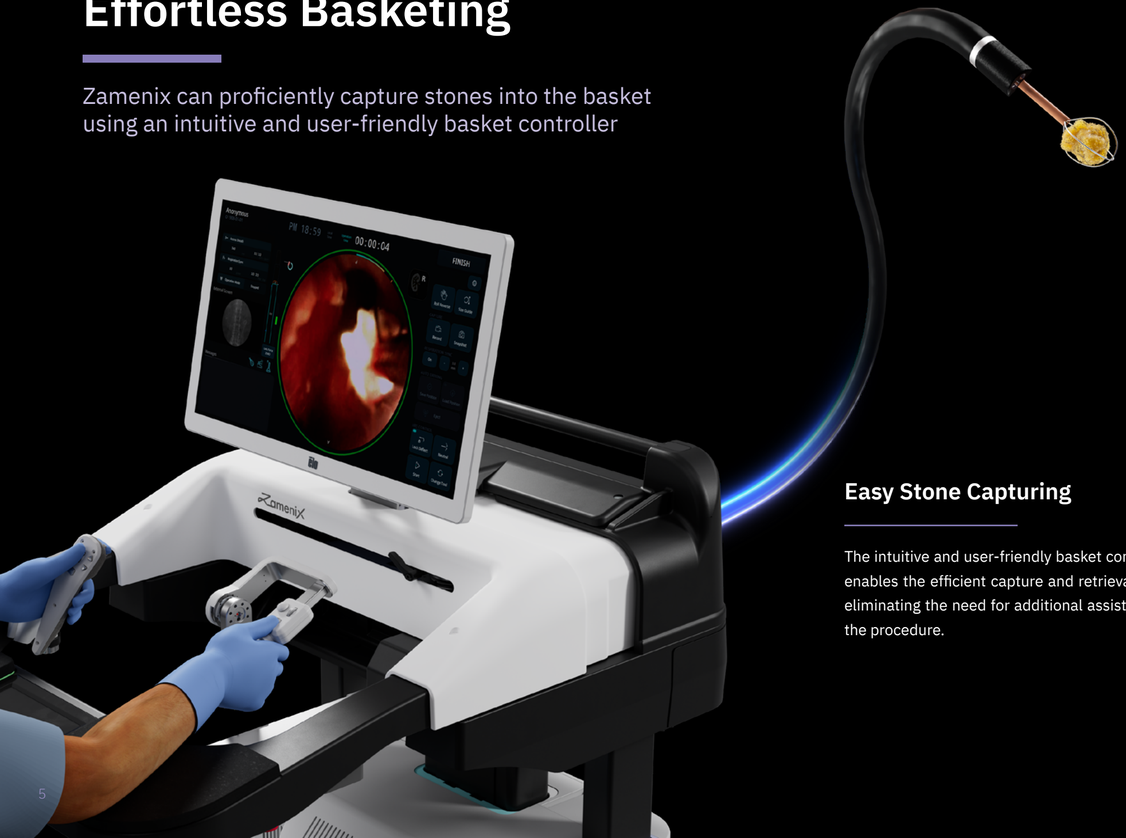
Precision in endoscopic operation is achieved by means of the ergonomic controller, sensitivity adjustment and effectively mitigating hand tremors. This, in turn, facilitates stable and accurate laser targeting during lithotripsy.

Respiration Sync

By synchronizing with the patient's respiratory motion, this feature aids in maintaining an optimal distance from the stone, thereby increasing the laser hit rate during fragmentation and minimizing the risk of mucosal injury.

Effortless Basketing

Zamenix can proficiently capture stones into the basket using an intuitive and user-friendly basket controller

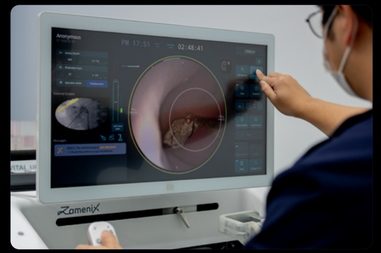


Easy Stone Capturing

The intuitive and user-friendly basket control system enables the efficient capture and retrieval of stones, eliminating the need for additional assistance during the procedure.

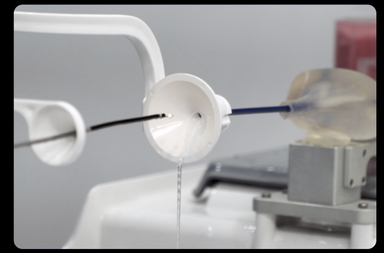
Stone Size Guidance

Enhanced stone extraction efficiency is facilitated through innovative stone size measurement technology.



Auto Driving

Enhanced repetitive work efficiency is achieved through the automated insertion and extraction of the endoscope within the access sheath. This system offers valuable assistance in navigating the endoscope within the confines of the kidney.



Intelligent Interface

Augmenting surgical convenience by delivering critical information through an intuitive interface display

Instrument status information

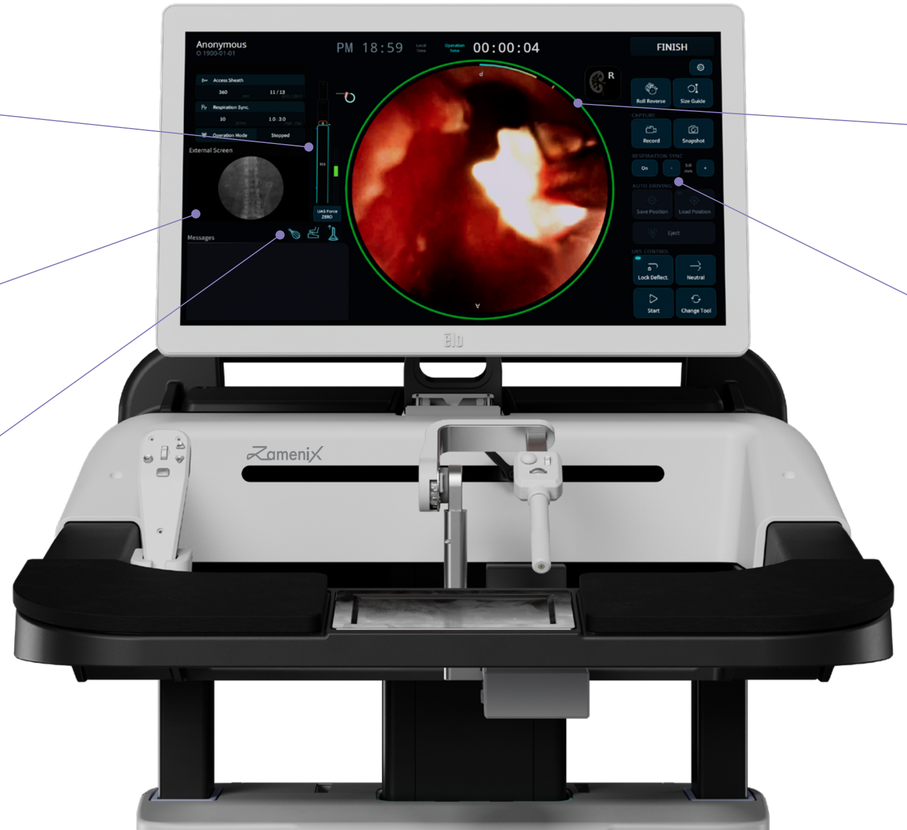
Provides the operator with comprehensive data on the endoscope's forward and backward movement, degree of bending, and the status of installed surgical tools. This information equips the operator to perform surgical procedures with confidence.

External image casting

Simply link the display output from fluoroscopy, CT and patient data to the Zamenix's interface and enjoy all the important information at a glance.

Supporting safety features

Real-time monitoring of the force applied to the access sheath assists the decision-making for safe stone extraction.
Additionally, a built-in alarm system helps preventing potential harm to ureter and kidney by alerting the operator when surgical tools such as the basket or laser fiber extend beyond the endoscope's reach during surgery.



Navigation assistance indicator

The ring around the scope image provides endoscope navigation guidance within the kidney by helping with orientation.

Interactive action buttons

Perform handy actions and customizations when needed thanks to the compact and proximate interface.

Ensuring Surgeon Sustainability

Less Fatigue

- The ergonomic design of the controllers and seating ensures minimal strain on the arms and wrists during long and consecutive sessions.
- The adjustable console controllers and pedals accommodate individual preferences and reduce user fatigue.

Less Radiation Exposure

- The operator remains seated at the console away from the radiation source, protecting the operator from intermittent radiation exposures.
- Placement of a radiation barrier in between the console and the radiation source can further protect the operator.

Clinical Research

EFFICACY and SAFETY validated from the clinical trial

Stone-free rate (93.48%)[1]

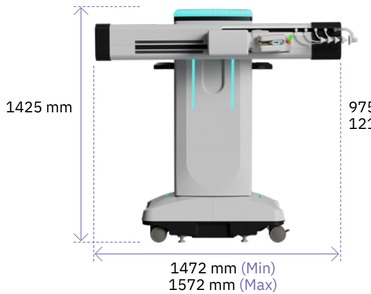
Postoperative complication (6.52%, Grade II, Clavien-Dindo Classification)

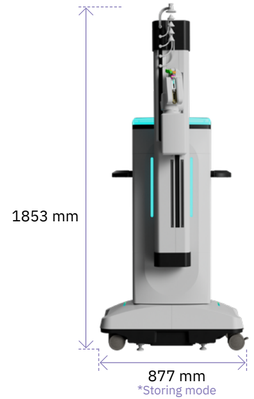
No ureteral injury related to the robotic procedure[1]

Study design: Multi-center, prospective, single arm, pivotal study, 47 patients having one or more 5-30 mm sized stones were treated with robotic RIRS. Stone-free status was defined as either having no identifiable stone or a fragment of <4 mm in size in the post-operative one month CT scan.

1. Cho S. Y. et al. Multi-Center, prospective, single arm, pivotal study to evaluate the efficacy and safety of robotic-assisted surgery easyUretero-100 (model name of Zamenix) in patients in need of retrograde intrarenal surgery. 38th Annual EAU Congress, 11 March, 2023. (First prize, Best Video Abstract Awards)

Dimension





Technical Specification

Power

- Rated voltage: 220 V
- Rated frequency: 60 Hz
- Power consumption : 1.04 kVA

Weight

- Master Console: 200 kg
- Slave Robot: 220 kg

Environmental Conditions

During Operations
- Temperature: 10° – 30°C / 50° – 86°F
- Humidity: 10 – 85% (Non-condensing)
- Atmospheric Pressure : 760 ~ 1115 hPa

During Storage
- Temperature: 0° – 50°C / 32°– 122°F
- Humidity: 5 – 90% (Non-condensing)
- 760 ~ 1115 hPa

Standards

- IEC 60601-1 Test (Safety Test)
- EMC (Electromagnetic Compatibility) Test
- Biocompatibility Test
- Usability Test

Certifications

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