



Symani[®]
SURGICAL SYSTEM

Advancing Microsurgery with Robotics



Changing impossible.
Changing lives.

Microsurgical techniques remain largely unchanged and demand a high level of skill, precision, and expertise. The complexities of these procedures unveil challenges that **emphasize the need for a technological revolution in open surgery.**

Symani[®]
SURGICAL SYSTEM

This opens up everything.



Adding value for patients, surgeons, and hospitals



Enables

more treatment options for patients

Improve access to less invasive surgical treatment options for reconstruction and lymphedema



Elevates

microsurgical skills and accelerates the learning curve

Empower surgeons to expand into challenging micro- and supermicrosurgical applications such as perforator flaps and lymphatic surgery



Expands

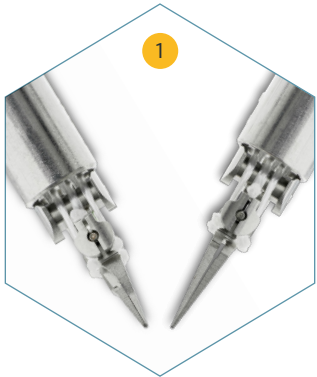
open surgery programs by enabling challenging clinical applications

Offer new and less invasive treatment options to expand open surgery programs to grow patient volumes



A first-of-its kind robotic technology that uniquely addresses the scale and complexities of microsurgery and supermicrosurgery to restore quality of life for more patients

Key system components



NanoWrist® Instruments

- The world's smallest wristed robotic instruments for enhanced **precision** and **control**

Cart with Macropositioner and Micromanipulators

- Portable cart on wheels designed for mobility between ORs
- Houses Macropositioner used to move instruments into operating field
- Micromanipulators hold NanoWrist Instruments that enable **7-degrees of freedom**



Surgeon Console

- Designed to optimize ergonomics
- OperaAir® Controllers and footswitch provide complete control of instruments with **7-20x motion scaling** and **tremor filtration**



Role of Symani

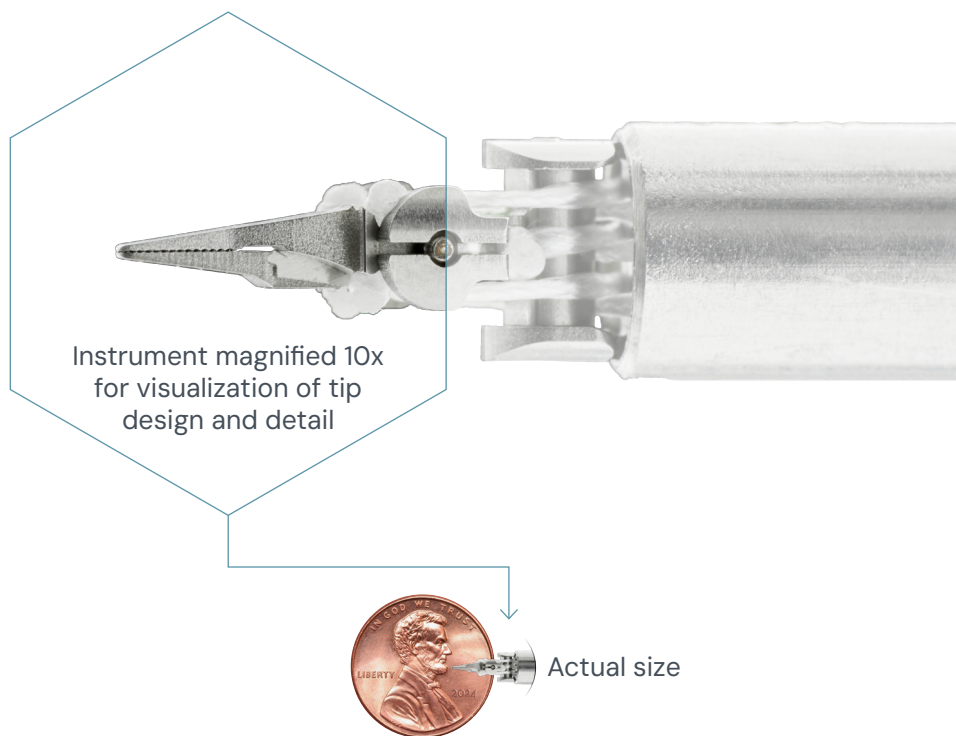
Anastomosis, suturing, and ligation of blood vessels and lymphatic ducts in open surgery

Lymphatic System Repair*



Lymphatic Surgery

*In the US, Symani is indicated for use in lymphatic repair of the extremities.



Recommended size compatibility

	Micro Instruments	SuperMicro Instruments
Available instruments	• Needle Holder Suture Cut • Dilator	• Needle Holder Suture Cut • Dilator
Vessels	>0.7 mm	<1.0 mm
Needles	70–150 um	50–100 um
Sutures	8-0 to 10-0	10-0 to 12-0

Microvascular
Repair*



Reconstructive
Plastic
Surgery



Head
& Neck
Surgery



Reconstructive
Trauma
Surgery

*In the US, Symani is indicated for use in free flap reconstruction of the breasts, extremities, mouth, and scalp.



Clinical benefits of robotic-assisted microsurgery



**Lower risk for
occlusive thrombus
formation¹**

0%
with
Symani

vs

6%
manual

**Reduced
vessel
trauma²**

13%
Lower
in veins

31%
Lower
in arteries



**Robotic precision has the potential to
achieve higher success rates⁴ and reduced
adverse events for patients³**





High free flap survival rates³

Post-market clinical study demonstrates comparable free flap survival rate to manual at discharge



Lead the way to better patient outcomes for breast reconstruction

Expand post-mastectomy care options to address a full range of patient needs, including lymphedema prevention or treatment

Pioneer technology-enabled autologous reconstruction that may improve functional outcomes and lessen the risk for surgical complications

Enhance precision for optimal outcomes to assist patients in achieving their goals of improved self-image and confidence, and restored quality of life



Changing impossible. Changing lives.

We're on a mission to advance robotic technology that pushes the limits of open surgery and opens new opportunities for surgeons to restore quality of life for more patients with complex conditions.

Starting a robotics program with Symani



Training

Comprehensive hands-on training for surgeons and staff



A dedicated team

Onsite support for optimal program efficiency



Service

Expert technical service through onsite and remote support



Learn more about starting a microsurgical robotics program at www.mmimicro.com

References

1. SAFE Microsurgery GLP preclinical study. Data on file.
2. Ballestin A, et al. Microsurgical robotic system enables the performance of microvascular anastomoses: a randomized in vivo preclinical trial. Sci Rep. 2023;13(1):14003. doi: 10.1038/s41598-023-41143-z. Data derived from animal models may not be predictive of human clinical experience. Score includes vessel reaction, inflammation, host reaction. Total average host reaction score compared to manual.
3. PRIMO PMCF clinical study. Data on file.
4. Data on file.



The Symani Surgical System is authorized for use in the U.S. by the FDA and is a CE marked medical device. Consult your local representative to confirm availability in other geographies. For product indications specific to your region, visit www.mmimicro.com/indications.

Caution: Federal law restricts this device to sale by or on the order of a physician.

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MKT-00039 Rev.02



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