

# Investor Newsletter

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 **MicroPort**<sup>®</sup>

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## MicroPort®'s Two Products Approved for **Fast-Track Registration** as **Innovative Medical Device in China**

Recently, the PulseMagic™ Single-Use Cardiac Pulsed Field Ablation Catheter (PulseMagic™), developed by MicroPort® EverPace, and the Total Wrist System, developed by MicroPort® Orthopedics China, received approval for fast-track registration as innovative medical devices in China.

The PulseMagic™ catheter, designed for compatibility with pulsed ablation devices, seamlessly integrates with Columbus® 3D EP Navigation System. It provides real-time measurement of the contact force between the catheter tip and the cardiac wall, along with accurate positioning data. These features enable surgeons to optimize catheter placement for improved pulsed field ablation outcomes. PulseMagic™ has successfully completed pre-market clinical trials, with all enrolled patients achieving positive results.

The Total Wrist System features a 3D-printed trabecular bone structure independently developed by MicroPort® Orthopedics China. This system promotes bone ingrowth, enhancing both initial and long-term implant stability. Compared to traditional fusion procedures, its design improves joint mobility, better meeting the requirements of daily activities and increasing post-surgery patient satisfaction.

The approval to enter the fast-track registration program will accelerate the market launch of these two innovative products, further expanding clinical options for physicians and ensures that more patients benefit from cutting-edge medical technology.

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## Toumai® Laparoscopic Surgical Robot Achieves Milestone with **First Implantation in Europe**

On 11 November, the Toumai® Laparoscopic Surgical Robot System, developed by MicroPort® MedBot™, successfully performed a combined adrenal tumor and gallbladder removal surgery in Italy. This landmark achievement marks a significant milestone in Toumai®'s expansion into the global market.

MicroPort® MedBot™ has pioneered cutting-edge technologies in laparoscopic surgical robotics, achieving world-class standards in product quality, advanced research, and multi-disciplinary clinical applications. Toumai® offers unique advantages, including:

- *Force Rendering Technology: The world's first sensory feedback system for laparoscopic surgical robots.*
- *Safety Features: Multi-layer safeguards with real-time sensing and automatic locking mechanisms.*
- *Advanced Imaging System: Provides 10x optical magnification and naked-eye 3D imaging for a high-definition view.*
- *Robotic Arm System: Features seven degrees of freedom, tremor filtration, and flexible wristed instruments that surpass the dexterity and precision of the human hand.*

The lead surgeon remarked, "We are honored to be the first European hospital to utilize the Toumai® robot. Today's operation was a success, and we were impressed by its precision and stability. It is a sophisticated and advanced system. Additionally, Toumai®'s innovative 5G remote surgery technology, already applied in Asia and Africa, offers tremendous potential to enhance medical care in remote regions. We look forward to using Toumai® for more complex procedures to achieve exceptional outcomes for our patients."





## MicroPort NeuroScientific Completes First Implantation of Tubridge™ Plus in China

MicroPort NeuroTech (Shanghai) Co., Ltd., a subsidiary of MicroPort NeuroScientific, recently completed the first post-market implantation of its next-generation Tubridge™ Plus Flow Diverter (Tubridge™ Plus) in China.

The procedure was conducted by the Neurovascular Center team at Changhai Hospital, led by Professors Jianmin Liu, Rui Zhao, and Yina Wu. In their inaugural use of Tubridge™ Plus, they treated a 46-year-old male patient with an ophthalmic segment aneurysm in the left internal carotid artery. Demonstrating exceptional wall apposition and full-body radiopacity, Tubridge™ Plus provided immediate positive results upon deployment.

Following the procedure, Professor Jianmin Liu highlighted that Tubridge™ Plus is, to their knowledge, the world's first flow diverter featuring "two-dimensional 3D" full-body radiopacity. Each braided wire is fully radiopaque, and two helically wound marker wires enhance contour visibility, enabling precise assessment of deployment and wall apposition. The stent opened smoothly, naturally conforming to the vessel wall without the need for excessive manipulation. Compared to the original Tubridge™ Flow Diverter (Tubridge™), Tubridge™ Plus offers enhanced radial support and is designed for single-person, single-handed deployment through a 27-microcatheter with reduced resistance. The procedure yielded promising results, with follow-up assessments expected to confirm ongoing success.





## MicroPort® Unveils Prototype of Totally Implantable Cochlear Implant (TICI)

Shanghai MicroPort Medical (Group) Co., Ltd., in partnership with Shanghai Ninth People's Hospital Affiliated to Shanghai Jiao Tong University School of Medicine, has recently introduced a prototype of its totally implantable cochlear implant (TICI).

TICI represents a transformative advancement in the field of hearing solutions. Unlike conventional cochlear implant systems, all components of the TICI are implanted entirely under the skin, making it completely invisible externally. This innovation allows for 24-hour seamless sound access and indistinguishable appearance from others, encouraging more patients to consider this technology.

The development of an implantable acoustic sensor and body noise cancellation technique has been one of the greatest challenges to overcome while developing TICI. Through close collaboration with Shanghai Ninth Hospital, MicroPort® has overcome this challenge by achieving breakthroughs in subcutaneous high-sensitivity acoustic sensing technology and body noise cancellation algorithm.

Prof. Hao Wu, the project's chief scientist, has highlighted the broad frequency response, wide dynamic range, and exceptional sensitivity of this prototype. Furthermore, the prototype is compatible with 3.0T MRI and incorporates novel neural stimulation encoding strategy to enhance patients' music perception capabilities.



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