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Taiwan approves first autonomous neurosurgical navigation robot

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Brain Navi's exclusive Surface Mapping Auto-registration Technology (SMART) is a significant surgical robotic breakthrough



NaoTrac, the CE-certified neurosurgical navigation robot by Taiwanese startup Brain Navi, has achieved approval from Taiwan's Food and Drug Administration (TFDA), and is planned for submission to the US Food and Drug Administration for clearance by the end of 2022.

The NaoTrac human trials were performed at the reputable Hualien Tzu-Chi Medical Center, with the External Ventricular Drain (EVD) placement abstract results published in the well-known European journal*Acta Neurochirurgica*.

Dr Tsung-Lang, Chiu stated, "NaoTrac has several advantages besides the high precision, like a non-invasive, non-contact patient registration process with a fast and accurate procedure, the system provides precise navigation to the surgical target. It's also user-friendly, and has many other benefits."

NaoTrac's technology, Surface Mapping Auto-Registration Technology (SMART), merges machine vision, robotics, and AI to streamline surgical procedures with real-time imaging and minimal invasive outcomes. NaoTrac will be used for other surgeries like endoscopic brain surgery, cell implantation, and other operations.