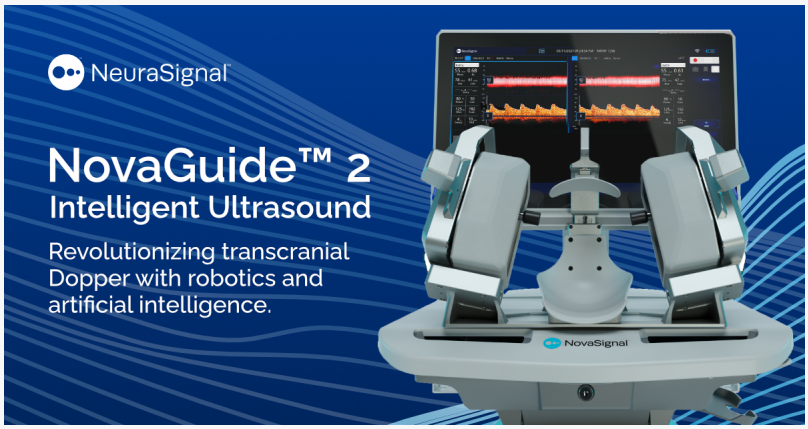
# NeuraSignal, Canada's Only Licensed Transcranial Doppler (TCD) Manufacturer Cleared by Health Canada

LOS ANGELES, CA, UNITED STATES, March 18, 2025 /EINPresswire.com/ -- NeuraSignal, a global leader in Transcranial Doppler (TCD) technology and the only licensed TCD manufacturer cleared by Health Canada, solidified its position as an industry leader elevating clinical standards in neurovascular care.



NG2 Intelligent Ultrasound

NeuraSignal Inc. Logo

NeuraSignal's advanced TCD systems are redefining accuracy, efficiency, and usability in detecting and managing neurological conditions, such as Right-to-Left Shunt (RLS) / Patent Foramen Ovale (PFO), vasospasm, and cryptogenic stroke. With this latest release on the new, healthcare providers across Canada now have access to cutting-edge robotic TCD technology that combines unparalleled performance with intelligent automation.

"This clearance represents a pivotal moment for NeuraSignal and the healthcare providers we serve," said Robert Hamilton, CEO at NeuraSignal. "Being the only licensed TCD manufacturer cleared by Health Canada, we are empowering clinicians with state-of-the-art tools to better treat and manage their patients across all of the United States and Canada."

Key Features and Benefits

- Precision and Automation: NeuraSignal's intelligent robotic TCD technology ensures highly accurate and reproducible data, enabling confident clinical decision-making.
- User-Friendly Interface: Intuitive controls and advanced automation streamline workflows, saving time and improving operator efficiency.
- Unmatched Clinical Data: NeuraSignal is unmatched in the presentation and publication of clinical study and real-world data, with the most recent work focusing on detection of RLS and

PFO for patients with cryptogenic stroke.

- Next-Generation Performance: Optimized for reliability, portability, and scalability to meet the evolving demands of modern healthcare.

This achievement reflects NeuraSignal's dedication to innovation and leadership in neurovascular diagnostics. By delivering cutting-edge technology that meets rigorous Health Canada standards, NeuraSignal continues to support clinicians in providing earlier and more accurate detection along with improved workflows.

NeuraSignal Mobile App

Healthcare providers in Canada can now leverage NeuraSignal's next-generation TCD systems to stay at the forefront of neurovascular care.

About NeuraSignal

NeuraSignal is a leading innovator in Transcranial Doppler (TCD) technology, committed to delivering advanced, AI-driven solutions that improve diagnostic accuracy and patient care. As the only licensed TCD manufacturer cleared by Health Canada, NeuraSignal continues to set new standards in neurovascular diagnostics worldwide.

For more information about NeuraSignal and its cutting-edge TCD solutions, visit: neurasignal.com

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Understanding Transcranial Doppler (TCD)

What is a TCD?

Transcranial Doppler (TCD) is a non-invasive ultrasound technique that measures cerebral blood flow velocity in major brain arteries. By analyzing the speed and direction of blood flow, TCD helps clinicians assess neurovascular health in real-time.

Common Uses of TCD

- Detection of Right-to-Left Shunt (RLS) and Patent Foramen Ovale (PFO): TCD is widely used in

bubble studies to identify microbubbles passing from the venous to arterial system, helping diagnose conditions linked to cryptogenic strokes.
- Monitoring for Vasospasm: TCD is the gold standard for detecting vasospasm following subarachnoid hemorrhage, allowing early intervention to prevent complications.
- Stroke Risk Assessment: TCD helps evaluate patients at risk for stroke by assessing cerebral hemodynamics, embolic events, and occlusive diseases.
- Head Trauma and Brain Injury Assessment: Used in emergency and intensive care settings to evaluate intracranial pressure and cerebral autoregulation.
- Sickle Cell Disease Management: Helps monitor children with sickle cell disease for stroke risk and guides preventive treatment strategies.

Benefits of TCD
- Non-Invasive: No radiation exposure or need for contrast agents.
- Real-Time Data: Provides immediate insights into cerebral circulation.
- Portable and Cost-Effective: More accessible compared to other neurovascular imaging techniques like MRI or CT angiography.
- Dynamic Assessment: Capable of continuous monitoring during procedures or over time.

Key Medical Terms Explained

Right-to-Left Shunt (RLS)
An abnormal passage allowing blood to bypass the lungs and move directly from the right side of the heart to the left, often linked to conditions like PFO. This can increase the risk of stroke due to unfiltered blood carrying microemboli to the brain.

Patent Foramen Ovale (PFO)
A small, flap-like opening between the atria of the heart that fails to close after birth. While usually benign, a PFO can allow blood clots or air bubbles to travel to the brain, increasing the risk of cryptogenic stroke.

Vasospasm
A condition where blood vessels constrict, reducing blood flow and potentially leading to stroke or brain damage. Commonly occurs after a subarachnoid hemorrhage (bleeding around the brain). TCD is the standard tool for early detection and management.

Cryptogenic Stroke
A stroke of unknown cause, often linked to hidden embolic sources such as PFO or atrial fibrillation. TCD helps in detecting underlying conditions contributing to cryptogenic strokes, guiding appropriate treatment.
By integrating Transcranial Doppler (TCD) technology into clinical practice, NeuraSignal empowers healthcare professionals with critical insights for early detection, diagnosis, and management of neurovascular conditions, ultimately improving patient outcomes.

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