NEWLY PUBLISHED STUDY SHOWS SENSOME CLOT-SENSING GUIDEWIRE ACCURATELY REVEALS TRUE CLOT MAKE-UP IN FULLY OCCLUDED BRAIN VESSELS FOR FIRST TIME

In Situ Clot Intelligence Designed to Address Imaging Blind Spots During Mechanical Thrombectomy

PARIS – MAY 4, 2026 – Sensome, the pioneer of microsensing technology for instant intra-operative tissue analysis, today announced the publication of first-in-human results from its CLOT OUT study demonstrating, for the first time, the ability to accurately characterize clot from inside a fully occluded brain vessel. Just published in the Journal of Neurointerventional Surgery, the study showed that Sensome's Clotild® Smart Guidewire System can differentiate clot from surrounding tissue and reveal true clot boundaries during mechanical thrombectomy.[1] The system also met all primary endpoints of the study.

Time is of the essence when treating stroke. However, today, physicians must often take a time-consuming trial-and-error approach to thrombectomy as available imaging is murky and provides little information about the occlusion they are treating. They can see a vessel is blocked but can neither reliably define the true clot boundaries nor characterize the clot's make-up to choose the right device or strategy at the point of action. The result is that 60% of mechanical thrombectomies are unable to achieve first-pass effect,[2] increasing patient risk and degrading outcomes.

By integrating the world's smallest electrical impedance sensor with predictive algorithms into a standard 0.014" guidewire, the Clotild clot-sensing guidewire is designed to provide physicians with real-time, in situ biological intelligence about the occlusion. This new source of information aims to reduce guesswork during thrombectomy and support more informed treatment decisions.

In the study, the Clotild guidewire:

- Successfully differentiated between blood, clot and arterial wall
- Identified the distal end of clots and thereby characterized clot length, with no use of contrast agent
- Showed no vessel perforation, dissection or serious adverse events

The authors concluded, "To our knowledge this is the first medical device able to provide in situ clot characterization with high precision."

They added, "In the future, it may be considered to complement angiography, providing periprocedural insights to guide the treatment strategy in neurovascular interventions."

CLOT OUT is a first-in-human, international, multicenter, single-arm study of the Clotild Smart Guidewire System used in 41 acute ischemic stroke patients at three centers in Australia and France.

"We know that factors such as clot length and platelet content affect outcomes, but we have only had an indistinct view from outside the body and have not had a way to accurately obtain this information. With continuous impedance measurements obtained during navigation with the smart guidewire, we were able, for the first time, to obtain detailed information from inside the occlusion itself and reconstruct the compositional scan of an in situ clot in an occluded vessel in the brain. This new intelligence has the

potential to improve outcomes at any center conducting mechanical thrombectomy by simply replacing a conventional guidewire with a smart one," said Andrew Cheung, MD, coordinating investigator of the CLOT OUT study at Liverpool Hospital in Australia and first author of the publication.

"We are excited that this study validates the unprecedented ability of our platform technology to lift the 'information fog' created by today's imaging and reveal the true make-up and position of an occlusion. By providing physicians with accurate biological intelligence for the first time, we intend to transform thrombectomy," said Franz Bozsak, CEO and co-founder of Sensome. "Our broader vision is to combine the detailed clot and tissue information obtained from our smart wires with imaging and clinical data in one valuable database that provides AI-fueled insights to support physicians."

ABOUT CLOTILD

The Clotild clot-sensing guidewire is based on electrical impedance spectroscopy, which measures the biophysical characteristics of fluids or tissues in 360° surrounding the sensor, analyzed by Sensome's proprietary predictive algorithms. Sensome has miniaturized the technology down to fit in the distal part of a standard 0.014" guidewire, directly proximal to a soft, atraumatic tip. The Clotild Smart Guidewire System has been designated as a Breakthrough Device by the FDA.

The Clotild Smart Guidewire System is considered an investigational device and is not approved for commercial use in the U.S or any other jurisdiction.

ABOUT SENSOME

Sensome, a clinical-stage healthtech start-up, provides biological intelligence to physicians during minimally invasive procedures, bridging gaps left by conventional imaging today. The company has developed a patented, breakthrough microsensor technology that combines the world's smallest impedance-based sensor with proprietary predictive algorithms to identify and characterize tissues in situ in real time. The technology has been studied in three clinical indications, including total occlusion characterization (ischemic stroke, peripheral vascular disease) and in situ tool-in-lesion confirmation (lung cancer). The company intends to leverage its growing tissue database to deliver AI-driven insights to physicians, and eventually, to couple this data with robotics to create physical AI enabling increasingly autonomous robotic minimally invasive interventions. Sensome partners with leading medtech companies to design, manufacture and distribute smart medical devices powered by its biological intelligence, including leading guidewire manufacturer ASAHI INTECC for the Clotild Smart Guidewire System.

REFERENCES

1. Cheung A, Rice H, *et al. In situ* impedance analysis device for clot characterization in Large Vessel Occlusion Acute Ischemic Stroke, a First-In-Human study. *Journal of NeuroInterventional Surgery* Epub ahead of print: 4 May 2026. doi:10.1136/jnis-2025-024772
2. Abbasi M, Liu Y, Fitzgerald S, *et al.* Systematic review and meta-analysis of current rates of first pass effect by thrombectomy technique and associations with clinical outcomes. *Journal of NeuroInterventional Surgery* 2021;13:212-216.

###

MEDIA CONTACT:

Michelle McAdam, Chronic Communications, Inc.
michelle@chronic-comm.com
+1 310-902-1274