

PRESS RELEASE 21 May 2024 11:30:00 CEST

## New clinical study published in Anesthesiology confirms the leading accuracy and precision of Senzime's TetraGraph system

In a new clinical study published in the high-impact Anesthesiology journal, a team of USbased researchers compared the accuracy and precision of commercially available neuromuscular block monitors. The study confirms the leading accuracy and precision of Senzime's TetraGraph system, which produced results similar to a gold-standard laboratory reference, while the conventional AMG-based monitors have substantial variability and imprecision that could be clinically significant.

Recently published guidelines and recommendations by ASA (American Society of Anesthesiologists) and ESAIC (European Society of Anaesthesiology and Intensive Care) have called for routine use of quantitative neuromuscular monitoring to prevent residual neuromuscular block. There are currently two types of neuromuscular block monitors on the market that conform to these guidelines: acceleromyography (AMG)- and electromyography (EMG)-based monitors.

The study, "Accuracy and Precision of Three Acceleromyographs, Three Electromyographs and a Mechanomyograph Measuring the Train-of-Four Ratio in the Absence of Neuromuscular Blocking Drugs" by Wedemeyer Z et al. was designed to compare three commercially available AMG monitors and three EMG-based monitors, to a laboratory gold-standard mechanomyograph (MMG).

The study concluded that the AMG-based monitors produced overshoot of measurements and had substantial variability in the data that could be clinically significant. Senzime's EMG-based TetraGraph-system was shown to measure the responses with minimal overshoot and variability, in line with the gold-standard MMG reference technique

"This is an important, high-impact study that confirms the leading accuracy and precision of EMG as well as our TetraGraph system. This study may well solidify the role of the EMG-based TetraGraph as the new clinical standard, and certainly confirms what should be the preferred monitoring system for hospitals that are conforming to the new guidelines," comments Philip Siberg, CEO of Senzime.

AMG utilizes an accelerometer to measure the acceleration of muscle contraction in response to nerve stimulation. Important limitations of AMG include its time-consuming calibration procedure, reported variability and overshoot of data, and limitations of use in certain surgeries when free movement of the monitored muscle (thumb) cannot be assured. EMG differs as uses a disposable sensor and advanced algorithms that measure events at the neuromuscular junction – where the drugs work. The use of a disposable sensor to measure electrical activity is very precise and does not require the patient's thumb to move freely, hence eliminating many of the limitations of AMG technology.

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## **About Senzime**

Senzime, headquartered in Sweden, is a leading medical device company that develops, manufactures, and markets CE- and FDA-cleared patient monitoring systems. The company provides an innovative portfolio of solutions, including the TetraGraph® and ExSpiron® 2Xi for accurate monitoring of neuromuscular and respiratory functions, typically under and after surgery. The goal is to help eliminate in-hospital complications, and radically reduce health care costs related to surgical and high acuity procedures.

Senzime targets a market opportunity valued more than SEK 40 billion per year, and operates with sales teams in the world's leading markets. The company's shares are listed on Nasdaq Stockholm Main Market (Nasdaq: SEZI) and cross-traded in the US on the OTCQX market (OTCQX: SNZZF). More information is available at senzime.com.

## Attachments

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