

PRESS RELEASE

13 September 2021 16:35:00 CEST

Studies show both financial savings and patient benefits with the introduction of quantitative monitoring

NEWS: Uppsala September 13 2021. Recently published studies with an EMG monitor shows that the purchase can result in a robust cost benefit despite the expense associated with the technology, by reducing the risk of postoperative residual neuromuscular blockade and associated respiratory complications.

Senzime's vision is a world without anesthesia-related complications. Our EMG system TetraGraph® digitally and continuously measures the degree of neuromuscular blockade to prevent complications, improve clinical precision and simplify care management. In 2021, a number of studies have been published globally in the field, highlighting the connection between residual neuromuscular blockade and increased risk of complications, advantages of EMG technology compared to AMG and well as value-cases calculating the cost of a sample hospital to introduce quantitative monitoring of all patients where muscle relaxants are used.

A study at Temple University Hospital[1] calculated how cost-effective it is to use a quantitative EMG TOF monitor given the cost of purchase and annual use, compared to the savings that can be made in care if monitoring helps reduce the cost of serious complications such as pneumonia and re-intubation. The conclusion was that purchasing and introduction may be justified bases solely on the potential institutional cost savings.

Another study[2] investigated the link between residual neuromuscular block and Critical Respiratory Events (CRE's). As in previous similar studies it shows that residual neuromuscular block is a significant contributing factor to the development of CRE's. To improve patient safety, the authors recommend routine quantitative neuromuscular monitoring.

An Italian study[3] compares TetraGraph with TOF-watch and its older acceleration-based AMG technology. The results are in line with previous research in the field and shows, among other things, that AMG technology overestimates the degree of recovery and that TetraGraph delivers more repeatable results during recovery from neuromuscular blockade.

"Complications due to inadequate monitoring of patients remains high worldwide, and it is therefore gratifying to see a great number of new studies focusing on this important area", says Pia Renaudin, CEO Senzime

ABOUT EMG

Like other techniques, EMG involves stimulation of a peripheral nerve and measurement of the response generated by the contraction of the innervated muscle. The difference compared to other techniques is that EMG measures an electrical event that occurs in the neuromuscular connection. As the measurement is not dependent on a physical movement (required by other technologies in the field such as AMG and KMG), EMG is a better indicator of pure neuromuscular function. Anesthesia experts worldwide believe that EMG is the new gold standard in NMT monitoring.

[1] Edwards L-A, Ly N, Shinefeld J, Morewood G – *Universal Quantitative neuromuscular blockade monitoring at an academic medical center—A multimodal analysis of the potential impact on clinical outcomes and total cost of care*, Perioperative Care and Operating Room Management, Volume 24, September 2021, 100184

[2] Alenezi F K, Alnababtah K, Alqahtani M M, Olayan L, Alharbi L – *The association between residual neuromuscular blockade (RNMB) and critical respiratory events: a prospective cohort study*, Alenezi et al. Perioperative Medicine (2021) 10:14

[3] Giudici G, Piccioni F, Proto P, Valenza F - *A comparison of accelerometric monitoring by TOF Watch® SX and electromyographic monitoring by Tetragraph® for recovery from neuromuscular blockade*, Journal of Clinical Anesthesia 75 (2021) 110481

For further information, please contact:

Pia Renaudin, CEO of Sensime AB

Phone: +46 (0) 70-813 34 17, email: pia.renaudin@senzime.com

About Sensime

Senzime develops and markets CE- and FDA cleared patient monitoring systems driven by unique algorithms and sensors to closely monitor patients under anesthesia. TetraGraph is a system that digitally and continuously measures the degree of neuromuscular blockade in the patient. The goal is improved clinical precision and simplified management in healthcare. By preventing complications and enabling healthcare professionals to follow guidelines and drug recommendations, TetraGraph can contribute to shorten hospital stays and lower healthcare costs. The vision is a world without anesthesia related complications, where everyone wakes up safely after surgery. Sensime operates in growing markets that in Europe and the United States are valued in excess of SEK 15 billion. The company's shares are listed on Nasdaq Stockholm's main market (ticker SEZI) since June, 30 2021. www.senzime.com

Attachments

[Studies show both financial savings and patient benefits with the introduction of quantitative monitoring](#)