

# Comparative Investigation of TetraGraph and TOF-Watch SX

### Press release

Uppsala, 23 October 2017. Dr Réka Nemes at the University of Debrecen, Department of Anesthesiology and Intensive Care, Debrecen, Hungary, reports results from the Comparative Investigation of TetraGraph and TOF-Watch SX.

The results will be presented at the American Society of Anesthesiologists (ASA) Annual Meeting in Boston, USA. For more than 67 years, the ASA annual meeting has been the most comprehensive anesthesia-related educational event in the world, bringing together top influential and notable professionals in anesthesiology, pain medicine and critical care medicine.

Study purpose. The aim of the study was to compare the accuracy and performance of the EMG-based TetraGraph prototype to the most widely used AMG-based TOF-Watch SX in a two-arm pilot study in a clinical setting.

Background. Most widely used acceleromyography (AMG)-based monitors have limitations that make them unpopular among anesthesiologists. Limitations include a lengthy set-up time, the need to use a preload and to secure the hand in a fixed position to obtain precise and repeatable measurements. Electromyography (EMG)-based monitors are reported to be free of most of these limitations. In addition, EMG monitors reflect the function of the neuromuscular junction itself. <sup>1</sup>

Conclusion. The new EMG-based TetraGraph monitor was easy to use and fast to set up. The device displays the actual muscle action potentials in real time, allowing the clinician to determine the validity of the responses. The EMG-derived data correlated with the AMG-obtained data. The clinical testing of the prototype identified needed refinements in the EMG sensing threshold, which have been implemented in the final version of TetraGraph software that is currently available.

"These results comparing the TetraGraph to the former golden standard TOF-Watch validate our product and will provide anesthesiologists an accurate, easy to use monitor that can help prevent complications, avoid unnecessary patient suffering and save medical costs," says Lena Söderström, CEO of Senzime.

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### TO THE EDITORS

#### **About Senzime**

Senzime develops unique patient-oriented monitoring systems that make it possible to assess patients' biochemical and physiological processes before, during and after surgery. The portfolio of technologies includes bedside systems that enable automated and continuous monitoring of life-critical substances such as glucose and lactate in both blood and tissues, as well as systems to monitor patients' neuromuscular function perioperatively and in the intensive care medicine setting. The solutions are designed to ensure maximum patient benefit, reduce complications associated with surgery and anesthesia, and decrease health care costs. Senzime operates in growing markets that in Europe and the United States are valued in excess of SEK 10 billion. The company's shares are listed on Nasdaq First North (ticker SEZI). FNCA is Certified Adviser for Senzime. <a href="https://www.senzime.com">www.senzime.com</a>

This information is insider information that Senzime AB is obliged to make public pursuant to the EU Market Abuse Regulation. The information was submitted for publication through the agency of the contact person set out above, on October 23, 2017.

<sup>&</sup>lt;sup>1</sup> Comparative Investigation of TOF-Watch SX and a New Electromyography-Based Neuromuscular Monitor, the TetraGraph, *R.Nemes, A.Pongracz et al. Anesthesiology*