

Press release

Lund, Sweden, 25<sup>th</sup> of April 2022

## Positive results from clinical study on 50 newborn infants with GPX Medical's medical device for oxygen measurement in the lungs - NEOLA<sup>®</sup>

**Today, clinical researcher and neonatologist Jurate Panaviene presents the results and conclusions from the first 50 newborn infants participating in the ongoing clinical study NIOMI (Non-Invasive Lung Oxygen Monitoring in Term Infants) at the Biophotonic Congress: Biomedical Optics in Fort Lauderdale, Florida, USA. The study uses GPX Medical's medical device NEOLA<sup>®</sup>.**

"The results from the clinical study confirm that the technology works well for measurements on newborns' lungs, which strengthens our perception of NEOLA<sup>®</sup>'s future position in neonatal intensive care", says Hanna Sjöström, CEO of GPX Medical.

Last year, University Cork College initiated a clinical study at the Infant Centre to investigate the possibility to provide real time information on the lung function of newborn babies. In the study, the gaseous volume of the lungs was successfully monitored in 48 out of 50 babies with the medical device for continuous lung monitoring NEOLA<sup>®</sup>. The influence of the location of the probes on the signals were examined, which provide information on how to optimally place the probes on the chest of the infant for best monitoring performance.

'The initial results from the first user initiated clinical study on newborn infants with NEOLA<sup>®</sup> is highly encouraging', says Hanna Sjöström, CEO of GPX Medical. This is the largest clinical study initiated with NEOLA<sup>®</sup> and the comprehensive data resulting from this study will be important for further product development.

'This system has the potential to significantly improve the way we monitor babies in the neonatal intensive care unit, especially preterm infants and term babies on mechanical ventilation', says Professor Eugene Dempsey, the Horgan Chair in Neonatology at UCC, Clinical Lead for Neonatal Research and Principal Investigator with the INFANT Research Centre. 'Not only can we potentially monitor them more closely in real-time, but we can also reduce X-ray exposure and limit blood tests being performed', says Dempsey.

Professor Stefan Andersson-Engels, Head of Biophotonics at Tyndall National Institute, and Professor of Physics at University Cork College, explains: 'The study is central to our research within the Biophotonics team and we are encouraged by the initial results, and look forward to the next phase. We are very excited to collaborate in this tri-helix setting with clinicians, industry and academia to assess the potential and further advance this novel technology. It is an excellent example of how multi-disciplinary research supported by Science Foundation Ireland can lead to ground-breaking medtech innovations that can deliver real societal and economic impact".

### **About the NIOMI study**

The study is planned to include up to 100 infants and begins with newborns without respiratory issues and then also includes newborns with different types of breathing problems and infants in different weight classes. More precisely, the study will evaluate the placement of the NEOLA<sup>®</sup> probes in different areas of the infants' chest. The study is led by Professor Eugene Dempsey, Horgan Chair in Neonatology, INFANT Center, University College Cork (UCC).

### **About NEOLA<sup>®</sup>**

NEOLA<sup>®</sup> is a medical device for continuous and non-invasive lung monitoring of premature babies developed by GPX Medical. The system measures changes in lung volume and oxygen concentration in the lungs of premature infants with the possibility of immediately detecting complications such as respiratory failure, a blocked airway, or a misplaced tracheal tube. This means that healthcare professionals are alerted to complications in real time and can treat patients directly.

**For more information, contact:**

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*GPX Medical AB (publ) develops medical technology device for continuous monitoring of preterm born infants' lungs. Immediate detection of complications provides the possibility of early treatment and improved health care. The patented technology is based on a spectroscopic method developed at Lund University in Sweden. The company was founded in 2016 as a wholly owned subsidiary of Gasporox AB (publ) and is listed on NASDAQ First North Growth Market (ticker: GPXMED). Read more on [www.gpxmedical.se](http://www.gpxmedical.se). The company's Certified Adviser is FNCA Sweden AB, tel: +46 (0)8-528 00 399, e-mail: [info@fnca.se](mailto:info@fnca.se)*