



FOR IMMEDIATE RELEASE:

Assurance Biosense Announces Two New Scientific Abstracts Presented at 2013 Society for Technology in Anesthesia Meeting

Study Received an Award for Best Research

GLASTONBURY, CT – January 11, 2013

Assurance Biosense, Inc., a subsidiary of Xhale, Inc., announced today the presentation of two new clinical abstracts at the annual meeting of the Society for Technology in Anesthesia (STA) underway in Phoenix, AZ. One abstract, *“Single Breath Detection During Spontaneous Ventilation Using Alar Photoplethysmography,”* was one of just five abstracts to receive an award for the best research at the 2013 STA meeting. The STA conference is attended by physicians and other practitioners in the field of anesthesia from around the world.

The abstracts, presented by physicians from the University of Florida and Xhale, highlight the benefits of the Assurance[®] Alar Sensor for pulse oximetry measurement. The abstract *“Accuracy of a Nasal Alar Pulse Oximetry Sensor”* presents pulse oximetry accuracy data from a 12 subject study performed in the Hypoxia Research Laboratory at the University of California San Francisco. The results demonstrate the Assurance[®] Alar Sensor’s consistent accuracy throughout the ranges of 70-80%, 80-90% and 90-100% oxygen saturation.

The abstract *“Single Breath Detection During Spontaneous Ventilation Using Alar Photoplethysmography”* presents respiratory rate accuracy data from 39 subjects using the photoplethysmography (PPG) signal from the Assurance[®] Alar Sensor. The results show strong correlation between the PPG-derived respiration and that from thermistor flow in detecting individual breaths in spontaneously breathing patients. This holds the promise of reliable respiratory rate detection with a low incidence of false alarms.

“One of our key strategic goals is to build a solid base of published clinical data in support of the upcoming launch of our Assurance[®] Alar Sensor,” said Andrew E. Kersey, President of Assurance Biosense. “The data presented highlights the accuracy and performance of our unique sensor not only as a highly accurate pulse oximetry sensor, but as a means to reliably extract respiration rate from the PPG signal.”

“There is growing awareness of the great need for a reliable method to monitor ventilation and oxygenation in spontaneously breathing patients,” said Dr. Richard J. Melker, presenting author and Chief Technology Officer of Assurance Biosense. “In an August, 2012 Sentinel Alert issued by The Joint Commission, opioid analgesics were reported to rank among the drugs most frequently associated with adverse drug events, and may cause respiratory depression in post-surgical patients, who often receive them for pain management. The Joint Commission has published recommendations to address these risks, including urging hospitals to continuously monitor patients’ blood oxygenation and ventilation. Our single-point-of-contact Assurance[®]



Alar Sensor can provide a unique solution, capable of monitoring both ventilation and oxygenation of spontaneously breathing patients in a simple, cost effective manner.”

Abstracts

Accuracy of a Nasal Alar Pulse Oximeter Sensor. Richard J. Melker, Ph.D., M.D.; Timothy E. Morey, M.D.; Mark J. Rice, M.D.; Donn M. Dennis, M.D.; Department of Anesthesiology, University of Florida, Gainesville, FL. (Abstract # 22).

Single Breath Detection During Spontaneous Ventilation Using Alar Photoplethysmography. Richard J. Melker, Ph.D., M.D.; Timothy E. Morey, M.D.; Mark J. Rice, M.D.; Judith Wishin, R.N.; Donn M. Dennis, M.D.; Department of Anesthesiology, University of Florida, Gainesville, FL and Michael Stahl, M.S., Assurance Biosense, Gainesville, FL. (Abstract # 23).

About Assurance Biosense:

Assurance Biosense, a wholly owned subsidiary of Xhale, Inc., is committed to providing clinicians with easy to use, cost effective diagnostic solutions that improve patient safety and reduce false alarms. Its Assurance[®] line of PPG/oximetry sensors monitors central blood flow to the brain through placement on the nasal ala, a region rich in vasculature, fed by the external and internal carotid arteries. The unique physiology of the site provides a much stronger signal than that from a fingertip or extremity, delivering more robust pulse oximetry signals while simultaneously enabling monitoring of a range of critical physiologic parameters which cannot be monitored via conventional pulse oximetry.

About Xhale:

Xhale is a medical technology innovator, developing products that transform healthcare and save lives. The company is a world leader in the use of sensors that analyze vapor and exhaled breath and is focused on novel patient-centric monitoring solutions. Its two current product lines under development include SMART[®], the world’s only definitive medication adherence monitoring system, and Assurance[®], a single-point-of-contact sensor that will monitor multiple patient parameters more comfortably and conveniently than finger-based pulse oximetry with fewer false alarms.

(Note: Certain applications described above have not been reviewed by the FDA, and are therefore labeled for investigational use only).

For more information, please visit www.Xhale.com or contact Investor Relations at the company at IR@xhale.com or 352-371-8488.
