



## **Studies at Major Anesthesia Conference Profile the Importance of Monitoring Minute Ventilation**

*Five presentations at Anesthesiology 2014 and SASM demonstrate utility of company's ventilation monitoring technology*

**Waltham, Mass. (Oct. 9, 2014) – Respiratory Motion, Inc.** – Research to be presented at Anesthesiology 2014 and the Society of Anesthesia and Sleep Medicine (SASM) 4th Annual Meeting suggests that innovative technology from Respiratory Motion, Inc., can help clinicians understand changes in respiratory status as the healthcare industry increases focus on improved patient safety and satisfaction. Study findings will be presented during five sessions over the coming week in New Orleans, where the American Society of Anesthesiologists is holding its annual Anesthesiology conference and the Society of Anesthesia and Sleep Medicine (SASM) is also meeting. Presentations will show that Respiratory Motion's technology, called the ExSpiron™ Patient Monitor, is more sensitive than capnography and pulse oximetry, and can identify subtle changes in a patient's respiratory status.

The innovative ExSpiron Monitor is the only device that monitors respiratory volume non-invasively. "Evidence is growing that the ExSpiron Monitor is more sensitive and reliable indicator of a patient's respiration," said Dr. Jenny E. Freeman, Respiratory Motion's founder and CEO. "The sensitivity means our monitor can detect subtle ventilation changes –long before a patient actually enters respiratory depression.

Findings from studies of the ExSpiron Monitor, will fuel five sessions at the New Orleans meetings:

- A SASM workshop, "Postoperative Monitoring and Non-Invasive Ventilation," will compare various respiratory monitoring options, highlighting the finding that minute ventilation, or the tracking of a patient's respiratory volume in a one minute, is more precise than other technologies.
- A SASM presentation, "Minute Ventilation Formulas in Obese Surgical Patients," will show that respiratory volume monitoring more precisely measures the ventilation of non-intubated patients and may identify changes in ventilation much earlier than other monitoring technology.
- An Anesthesiology 2014 presentation, "Defining Minute Ventilation in Obese Surgical Patients," will show that respiratory volume monitoring can identify ventilation changes more quickly and precisely than alternative technology.
- An Anesthesiology 2014 poster presentation, "The relationship between minute ventilation and etCO<sub>2</sub> in intubated and spontaneously breathing patients," shows that respiratory volume monitoring may be more sensitive than capnography in patients who are awake and breathing spontaneously.

In the hospital, changes in breathing status often precede deterioration towards respiratory depression and cardiac arrest. In-hospital cardiopulmonary arrests are estimated to be as high as 750,000 a year and may lead to 50,000 deaths annually.<sup>1</sup> The most common events preceding these cardiopulmonary arrests are respiratory.<sup>2</sup>

Respiratory depression can occur partly in response to medications, such as narcotic painkillers and sedatives commonly administered after surgery. Because the strength of these medications and each patient's response is unique, respiratory depression can strike when least expected. Averting respiratory failure through early detection can reduce catastrophic events, improve patient care and outcomes, decrease healthcare costs and save lives.<sup>3,4</sup>

The U.S. Department of Health & Human Services' Agency for Healthcare Research and Quality finds the annual costs of respiratory insufficiency, arrest and failure was \$7.8 billion in 2007, making respiratory issues the third most rapidly increasing hospital inpatient cost in the United States:

<http://www.hcupus.ahrq.gov/reports/statbriefs/sb91.jsp>

In 2012, Respiratory Motion received U.S. Food and Drug Administration clearance for the ExSpiron™, the only monitor to provide continuous, non-invasive Minute Ventilation in non-intubated patients.

#### **About Respiratory Motion, Inc.**

Respiratory Motion, Inc. is the global leader in innovative Minute Ventilation Monitoring useful across patient populations and environments. Our mission is to improve patient safety and reduce the cost of care in providing non-invasive respiratory monitoring wherever care is delivered. "Never Miss a Breath – with the *ExSpiron*"™

To learn more, visit [www.respiratorymotion.com](http://www.respiratorymotion.com)

## References

1. Overdyk, F. (2010). Postoperative Respiratory Depression and Opioids. *Initiatives in Safe Patient Care* pp. 1-7.
2. American Heart Association. (2006) Management of respiratory distress and failure. In: Ralsten M., Hazinski M.F., Zaritsky, A.L., Schexnayder, S.M., Kleinman, M.E., editors. *Pediatric Advanced Life Support*. Texas: AHA, pp. 45–60.
3. Quach JL, Downey AW, Haase M, Haase-Fielitz A, Jones D, Bellomo R. Characteristics and outcomes of patients receiving a medical emergency team review for respiratory distress or hypotension. *J Crit Care*.
4. Dimick JB, Chen SL, Taheri PA, Henderson WG, Khuri SF, Campbell DA Jr. Hospital costs associated with surgical complications: a report from the private-sector National Surgical Quality Improvement Program. *J Am Coll Surg*. 2004;199(4):531-537.2008;23(3):325-331.