



Contact: Andrew Cothrel, President
Location: Indianapolis, IN
Email: acothrel@sonarmed.com
Tel: 317-850-0442
Website: www.sonarmed.com



Company Profile

Industry Sector: Medical Devices, Class II, Respiratory Care / Airway Management

Company Overview: SonarMed was founded in 2005 to commercialize exclusively licensed IP from Purdue University (patents are issued). This technology is used to monitor artificial airways (endotracheal tubes) of intubated patients. Use of artificial airways is associated with adverse events that can be prevented by improved monitoring of the artificial airway. With \$5.5MM invested to date, including grants of \$3.1MM from the National Institutes of Health and \$1.5MM from the Indiana Economic Development Corporation, the Company is currently completing human data collection and preparation for a 3Q09 510(k) submission to the FDA. SonarMed is raising \$2.5MM in 2009 to commercialize our first product, the SonarMed Airway Monitoring System.

Target Market(s): The primary market for our first product will be the adult intensive care units of hospitals. We expect additional hospital sales for specific applications in the operating room and in the emergency department.

Management

Leadership:

Chairman: David Wortman, experienced tech executive/entrepreneur
President: Andrew Cothrel, 20 years in the medical device/diagnostics industry
CTO: Jeff Mansfield, Ph.D., Co-inventor of SonarMed core technology. Former Senior Research Scientist and Systems Engineer at Cardiac Science
VP Clinical/Quality/Regulatory: Laura Lyons, deep industry experience & FDA expert, also a former respiratory therapist with previous commercial experience
Advisor: George Wodicka, Ph.D., Professor & Chair, Purdue University School of Biomedical Engineering; Co-inventor of SonarMed core technology

Scientific Advisory Board:

Andranik Ovassapian, MD, Professor of Anesthesia and Director of Airway Training Center, Univ. of Chicago. Founding President, Society for Airway Mgmt.
Elizabeth Behringer, MD, Anesthesiologist-Intensivist, Cedars-Sinai Medical Center, and President-elect, Society for Airway Management.

Key Value Drivers

Technology*: A small speaker in a disposable adapter generates an acoustic signal, which is propagated down the endotracheal tube and into the patient's airway. The echoes from that signal are captured and transmitted to a monitor. The proprietary algorithm in the monitor analyzes the signal to provide information on tube tip movement, obstructions in the tube, and size of passageway surrounding the tube tip.

Competitive Advantage: SonarMed's technology can be used to **prevent adverse events** such as unplanned extubation. No available technologies provide direct physical monitoring of the endotracheal tube. Other technologies, such as pulse oximetry and capnography, provide only indirect information about endotracheal tube status, and in addition only after the condition has occurred and the patient is in physiologic distress.

Plan & Strategy: Complete our first product development and launch into the adult ICU market in collaboration with strategic partners.

*Technology funded by the National Heart, Lung, & Blood Institute and being commercialized under the NIH-CAP.

Product Pipeline

SonarMed's first product will focus on the adult ICU with additional sales into specific OR applications and the ER.

A second generation hospital product is planned; this unit will be designed as a peripheral unit compatible with multi-parameter monitoring systems.

Future products may include a field unit designed for use in emergent medical and military field applications, a unit designed for use in the neo-natal ICU, and a low-cost unit targeted for general surgical use in the OR.

Additional features are being researched to enhance patient and economic outcomes in airway management, as well as applications into other fields of use (we are unable to disclose details at this time).

