New Study Finds Exergen Temporal Artery Thermometry Accurate for Surgical Patients

WATERTOWN, Mass., Dec. 8, 2010 /PRNewswire/ -- Temperatures taken orally or by temporal artery thermometry "are an accurate means of temperature assessment for adult patients undergoing colorectal or gynecology surgery,"(1) according to analysis published by the Journal of PeriAnesthesia Nursing. Accurate temperature readings are necessary to determine when to intervene for patients at all stages of their hospitalizations but especially during and immediately after surgical procedures to avoid post-operative complications.

The study was designed to determine the difference, if any, between core temperature as measured by an esophageal thermometer and temperatures measured by oral and temporal artery methods in the two types of surgery patients. During surgery core temperatures are monitored with the pulmonary artery catheter, an esophageal temperature probe that may be inserted with the endotracheal tube (ET) or a bladder temperature device. After leaving the operating room, the ET tube is usually discontinued and nurses in the post anesthesia care unit usually assess patient temperature by oral, tympanic or temporal approaches. But a recent systematic review has shown inaccuracies in tympanic (ear) temperature readings and recommended oral thermometry as the most accurate means of temperature assessment in adult, acutely ill patients. Taking oral readings poses challenges, however, when dealing with patients intubated or receiving oxygen.

All data for the study was collected during the intraoperative period of hospitalization over a two-week period in August 2008 by one experienced postanesthesia recovery nurse. Temporal artery temperatures were taken using the TAT 5000 from Exergen. A repeated-measures design was used with a sample of 23 patients undergoing colorectal or gynecology surgery.

"We developed this technology in response to healthcare providers' need for an accurate and noninvasive method of thermometry that was suitable for all phases of care," said Francesco Pompei, Ph.D., CEO of Exergen Corporation. "This research shows Exergen's TemporalScanner is a reliable tool for PACU staff at this critical point in hospitalization. Exergen's TemporalScanner, now with 35 published studies attesting to its accuracy across all ages and clinical settings, has become the standard for thermometry in thousands of healthcare facilities and millions of homes."

The study authors are not affiliated with Exergen and neither the authors nor the institution received compensation from the company for conducting the research.

Exergen Corporation is recognized worldwide as an innovator and leading manufacturer of patented infrared thermometers, scanners, sensors and controls. Its products are used in a wide variety of industrial and medical applications for both professionals and consumers. For additional information, visit www.exergen.com.