EXERGEN
TemporalScanner™

Made in USA

Temporal Artery Thermometry

Three good reasons for hospital wide use

1. Lowest Cost System

Probe covers not required - available if needed

- Reduce thermometry cost by 90%
- Reduce associated waste by 90%
- Lifetime Warranty

2. Highest Accuracy

Accuracy supported by more than 40 peer reviewed published studies

3. Most Liked by Patients

- Most comfortable thermometer
- Least invasive thermometer
- Home models available at retailers

Virtual Classroom Training

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Accuracy and Benefits of Using Exergen Temporal Artery Thermometry

Frequently Asked Questions at Products and Value Analysis Committee Meetings

1. **Settled Science:** It is accurate to report that Exergen Temporal Artery Thermometers have never been proven inaccurate when compared to the true Gold Standards of pulmonary artery catheters, esophageal probes, rectal temperature on a stable patient, and outcome. When temperature is rapidly changing, however, rectal temperature is well known to lag behind arterial temperature on adults, the scientific evidence for which dates back to the late 1960's with the invention of the PA catheter, and, most recently, rectal lag has been identified in infants (19).[1]

2. **What are the benefits for our hospital in changing to Exergen TA Thermometry?**
   The significant clinical and fiscal benefits of the Exergen temporal artery thermometers have been confirmed by about 60% of the hospitals throughout the United States:
   a. Clinically, the TA thermometers are as accurate as the most invasive methods.
   b. Fiscally, the method is 90% less expensive than any other method of thermometry, and provides a payback in approximately 8 months, with near zero expenditure from that point forward.

3. **How do the results compare to rectal temps, oral temps, and ear temps?**
   a. Several peer reviewed published studies conducted in major university hospitals on newborn infants through geriatric patients have demonstrated the temperatures measured by the Exergen Temporal Artery Thermometer to be: significantly more accurate than ear thermometers (6,10,14,15,16,18,21,23,24,25,26,28,30,39); as accurate as rectal temperature (1,2,4,7,8,10,11,12,15,18,19,27,31,40,42,44), core temperature as measured with an esophageal probe, pulmonary artery catheter, or brain thermistor (1,2,3,6,9,11,12,22,23,25,26,30), and outcome (5,19,25,28,32,38,41,43).

4. **At what age is the method validated?**
   a. Newborns 0-3mo (7,8,11.13,18,19,20,27,38,40,41,42), infants and children (1,2,4,7,8,9,18,19,22,31,38,40,41,42,44), adults through geriatric patients (3,5,6,9,12,14,15,16,17,23,24,25,26,28,30,37).

5. **Below the age group the thermometer is validated, what equipment will we use and how will that equipment be supported?**
   a. Age is not a factor as the TA thermometer has been demonstrated to be accurate for use on all ages.
   b. Nonetheless, when the patient is under a radiant warmer or in an isolette, the TAT should be allowed to equilibrate ~20 minutes before use. If not possible, Exergen recommends using the Exergen LXN Instant infrared axillary thermometer, an instrument successfully used for many years, mainly in Neonatal Intensive Care Units. Studies available from Exergen.

6. **What is the evidence that we will not spread disease with this device)?**
   a. The TA thermometer features a silver ion antimicrobial head, unique in thermometry, but widely used clinically in such items as catheters, stents, wound dressings, spinal implants, IV flow valves, in which the silver ions protects by naturally and continuously resisting the growth of microbes.
   b. Laboratory tests demonstrate the controlled release of silver ions from the sensor head provides continuous antimicrobial protection for more than five years. The antimicrobial compound works proactively against a broad spectrum of bacteria, fungi and other microbes. In laboratory studies, this has been proven to reduce bacteria on the treated product by as much as 99.999%, or 5-log reduction. Studies available from Exergen.
   c. The TA thermometer is used by ~60% of the hospitals in the US. Of these, ~92% have approved wiping the sensorhead between patients with an alcohol swab, or with whatever has been approved in their facility for wiping the stethoscope diaphragm between patients.
   d. Resposable caps and sheaths that enclose the entire instrument are available for use where preferred.

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[1] Numbered references in parenthesis refer to attached list of "Peer-Reviewed Papers and Abstracts on Exergen Temporal Artery Thermometers." Additional clinical information can be found at Exergen's Clinical Website at www.TAThermometry.org.

Peer-Reviewed Published Papers, Abstracts, Letters on Exergen Temporal Artery Thermometry

1.	Al-Mukhaizeem F, Allen U, Komar L, et al (University of Toronto/Hospital for Sick Children). Validation of the temporal artery thermometry by its comparison with the esophageal method in children. Pediatric Academic Societies Annual Meeting, May 3-6, 2003, Seattle, WA
2.	Al-Mukhaizeem F, Allen U, Komar L, et al (University of Toronto/Hospital for Sick Children). Comparison of temporal artery, rectal and esophageal core temperatures in children: Results of a pilot study. *Journal of Pediatric and Child Health*, Vol 9, No 7, pp 461-465, 2004
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12.	Carroll D, Finn C, Gill S, et al (Massachusetts General Hospital). A comparison of measurements from a temporal artery thermometer and a pulmonary artery catheter thermometer. *Am J Crit Care*. 2004;13:258.
13.	Chiu SH, Anderson GC, Burkhammer MD (University of Akron/Case Western Reserve University). Newborn temperature during skin-to-skin breastfeeding in couples having breastfeeding difficulties. *Birth*. 2005 Jun;32(2):115-21.
14.	Dybwik K, Nielsen EW. Infrared temporal temperature measurement. *Journal of the Norwegian Medical Association* 2003; 123: 3025-6.
15.	Espenhein A (County Hospital in Herlev, Denmark). Temporal temperature measurement. *Sygeplejersken* 2006;(17):50-2.
16.	Fetzer SJ, Lawrence A (Southern New Hampshire Medical Center). Tympanic membrane versus temporal artery temperatures of adult perianesthesia patients. *J Perianesth Nurs.* 2008 Aug;23(4):230-6.
17.	Foy S, McGillicuddy D, Pompei F, Sanchez L (Beth Israel Medical Center, Boston MA). Body Temperature Surveillance and Reporting in the Emergency Department: A Practical Sentinel for Pandemics and Bioterrorism. Presented at Society for Academic Emergency Medicine Annual Meeting, Phoenix AZ , June 3-6, 2010.
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