Nanotherapeutics Controlled Temperature Solution Body Management Vest

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Heat stress can be a problem, even in the cool environment of the operating theater. When physical and mental exertion are combined with the heat retention of sterile barrier overgarments, togas, headgear and lead aprons, the body works significantly harder to maintain thermal homeostasis. Worse yet, as the body attempts to cool itself by sweating, the barrier garments trap the resulting warm, humid air creating a growing microclimate that further reduces the body's ability to attain thermal regulation. The body diverts valuable metabolic resources away from the physical and mental tasks of caring for your patient.

"I didn't think it would make that much difference in terms of my concentration, but it does make you feel fresh. You have so much more energy and I'm not crabby at the end of the day."

Dr. Stephen Makk, Louisville Bone and Joint

The Nanotherapeutics Body Management Vest defeats heat stress by absorbing excess body heat and locking it away from the torso. Instrumented studies performed by the U.S. Air Force in high heat and high metabolic load environments have shown that using the exothermic-type vest safely increases both stamina and mental acuity, resulting roughly in a 22% increase in work tolerance time with no change in body vitals.

FOR THE SURGICAL CENTER:

- To save on energy costs, more hospitals are increasing and maintaining the operating theater temperature to 70°F. ***
- Higher room temperature helps mitigate the risk of malpractice liability due to accidental patient hypothermia.
- This vest alleviates the increased thermal burden of working with non-breathable surgical apparel allowing the surgical staff to work comfortably unencumbered with no hoses or bulky equipment.
- Far less expensive than water-circulating or forced air vest garments to relieve heat stress.

FOR THE SURGICAL STAFF:

- Personal body cooling combats the negative effects of heat stress, keeping you alert.
- Maintains the metabolic resources that would otherwise be forfeited.
- The vest's anatomic, low profile design moves with the body.
- No ice, ice-water or frozen gel. The self-regulating nature of this vest maintains a comfortably cool micro-climate under your surgical gown.
- No hoses, electric cords and wires to get in your way.
- No pre-cooling required. The vest charges and re-charges in any room temperature below 78°F making it easy to use and reuse.
- The name bar ensures no identity confusion among staff members.

*** According to the AORN 2008 Perioperative Standards and Recommended Practices, "Temperature should be maintained between 68°F and 73°F."

HOW IT WORKS:

By fully surrounding the body's engine, the body management vest acts as a heat sink by continually absorbing excess body heat. As more and more heat is absorbed into the vest, the blood cools and concomitant body vital activity greatly slows so far less energy is required to maintain regulation. As the body heat is expelled into the vest, the need for sweating wanes and far fewer electrolytes are forfeited, leaving more energy and stamina for the entire day.