# TGXP Is Precisely the Right Choice

Parameters	Surface Cooling	ZOLL TGXP
Target Temperature Maintained (± 0.2°C)	Poor: 55% of time in range <sup>3</sup>	Superior: 97% of time in range³
Time to Target Temperature	Slow: 190 minutes <sup>4</sup>	Rapid: 64 minutes⁵
Shivering	High rate of shivering (85%); may require higher doses of paralytics	Low rate of shivering (4%); <sup>2</sup> may require less sedation and lower doses of paralytics
Nursing Time	Extensive: requires management of temperature overshoot/undershoot, <sup>12</sup> pads, and shivering	Minimal: প্ৰৰ্ধ and device auto adjusts to desired temperature. Enables more focus on other aspects of patient care.
Patient Eligibility Patients with spinal injuries Patients with skin issues Patients on multiple vasopressors Conscious patients	No <sup>11</sup> No <sup>11</sup> No <sup>11</sup>	Yes Yes Yes
Patient Access	Limited: 40%-70% of patient covered with pads and tubing	Unhindered
Adverse Events	Potential for skin injuries <sup>13,14,15</sup>	Risk of DVT is no greater than a standard CVC <sup>2</sup>
Central Venous Catheter (CVC) Requirement	Additional: Separate CVC required	Integrated: CVC integral to ZOLL catheter design

- <sup>1</sup> Mayer SA, et al. *Critical Care Medicine*. 2004;(3)212:2508-2515.
- <sup>2</sup> Diringer MN, et al. *Critical Care Medicine*. 2004;(32)2:559-564.
- <sup>3</sup> Hoedemaekers CW, et al. *Critical Care*. 2007;11:R91.
- <sup>4</sup> Heard KJ, et al. Resuscitation. 2010;81:9-14.
- <sup>5</sup> Horn CM, et al. Journal of Neurointerventional Surgery. 2014 Mar;6(2):91-95.
- 6 Knapik P, et al. *Kardiologia Polska*. 2011;69[11]:11*57*-1163.
- $^{7}\,$  Tomte O, et al. Critical Care Medicine. 2011;39(3):443-449.
- <sup>8</sup> Carhuapoma JR, et al. Journal of Neurosurgical Anesthesiology. 2003;15(4):313-318.
- ° COOL-ARREST JP: An Evaluation of Therapeutic Hypothermia by Means of Intravascular Cooling (Intravascular Temperature Management; IVTM) in Patients who Have Undergone Endogenous Cardiac Arrest and Return of Circulation – a Joint, Multicenter, Single-Arm, Prospective Interventional Study Trial.
- $^{\rm 10}$  Lemons N. AACN Abstract, Region 6 Meeting. 2004 Sept 27.
- $^{11}\,$  Medivance Arctic Sun\* Energy Transfer PadTM Instructions for Use.
- $^{\rm 12}$  Merchant RM, et al. Critical Care Medicine. 2006;34:S490-S494.
- <sup>13</sup> Varon J, et al. *Resuscitation*. 2008;78:248-249.
- 14 Wang H, et al. Therapeutic Hypothermia and Temperature Management. 2013;3(3):147-150.
- 15 Liu YM, et al. Journal of Burn Care & Research. 2014;35(3):e184-186.







# **ZOLL**。 IVTM System Thermogard XP®

#### Streamlining Your Workflow

Because it cools from the inside out, TGXP offers unrestricted patient access. And thanks to intelligent design, it integrates seamlessly into your workflow.

- TGXP reduces nursing workload by 43% compared with surface cooling methods.<sup>10</sup>
- Unlike surface methods, there are no pad leaks or soiled pads to change.
- No other catheter is needed. To maximize efficiency and optimize
  patient care, the TGXP system has a triple-lumen catheter. Use the
  same catheter for temperature management, medication delivery,
  blood draws, and venous pressure monitoring.

### Uncovering the Limitations of Surface Cooling

With surface cooling, temperature management efficacy depends on covering at least 40% of the surface area" and requires routine skin integrity and hygiene checks. In addition, surface cooling may not be suitable for patients with diabetes and other underlying conditions that make them more susceptible to skin damage." With TGXP, poor tissue perfusion and skin integrity issues can be avoided.

Because TGXP offers clinicians efficient, reliable temperature management, they now have more time to focus on the other key aspects of patient treatment and care.<sup>10</sup>

## Integrating TGXP into Your Hospital

From customer-specific training to clinical and technical support, we ensure the success of your temperature management program. If you're in the process of initiating a program, specialists are available to help you develop a protocol to meet the demands of your institution.







#### INTEGRATION GUIDANCE

With our extensive experience in temperature management, we can offer guidance in the development of a protocol that is best suited for your program. Our specialists can guide you as you formulate a protocol customized for your hospital.



#### **ONSITE TRAINING**

With every installation, we offer exclusive onsite product training to help establish your program. We also provide post-training support to answer questions and assist with data collection and download.

