

COMEN



P3/P6 **Temperature  
Control System**

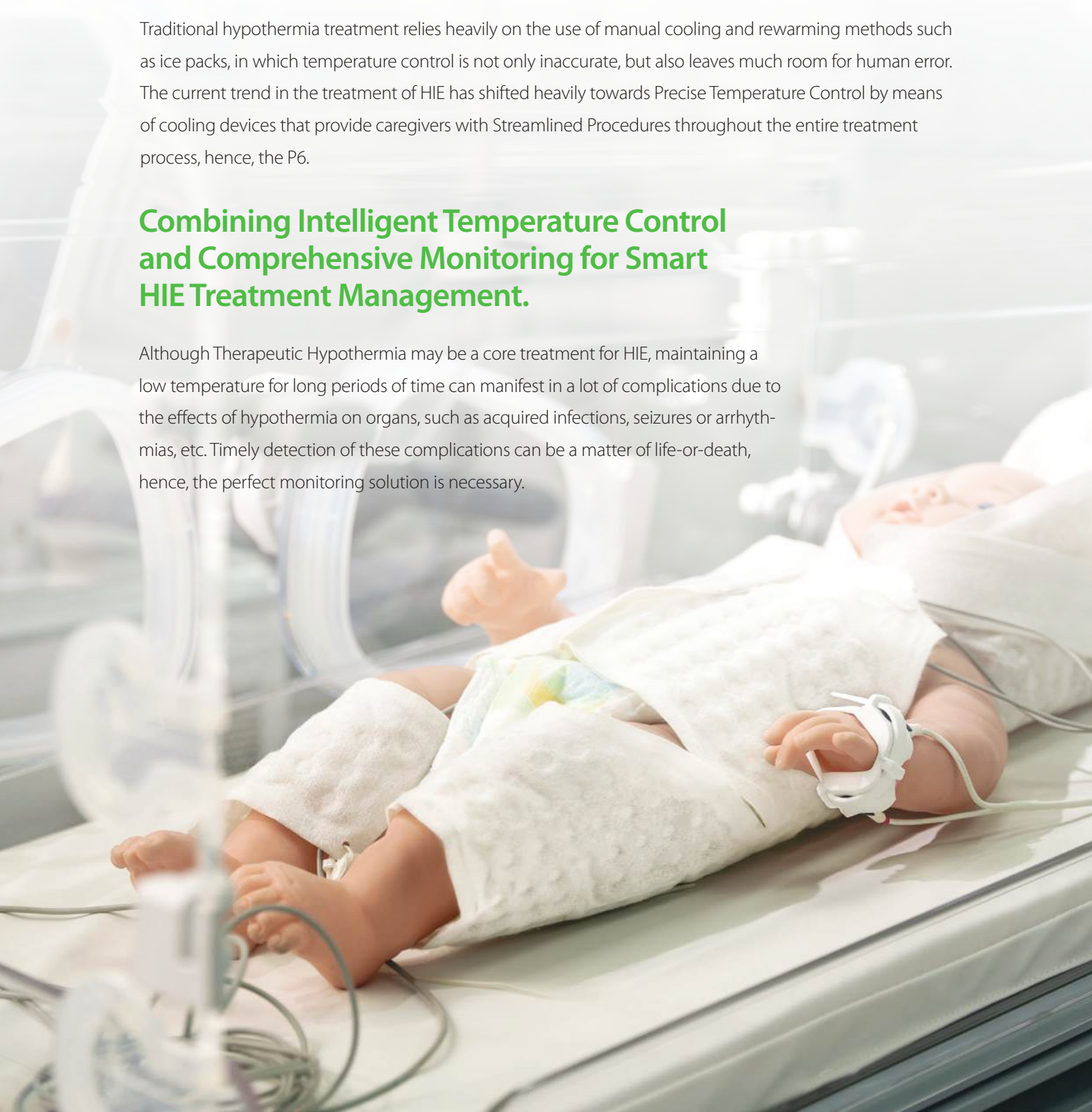
# Hypothermia for HIE

Neonatal hypoxic-ischemic encephalopathy (HIE) is a brain injury disease with a high mortality rate. Therapeutic Hypothermia is regarded as a core treatment for HIE as it helps by maintaining a lower core temperature in newborns for up to 72 hours, effectively lowering mortality by slowing down apoptotic processes and reducing oxygen dependence in the brain.

Traditional hypothermia treatment relies heavily on the use of manual cooling and rewarming methods such as ice packs, in which temperature control is not only inaccurate, but also leaves much room for human error. The current trend in the treatment of HIE has shifted heavily towards Precise Temperature Control by means of cooling devices that provide caregivers with Streamlined Procedures throughout the entire treatment process, hence, the P6.

## Combining Intelligent Temperature Control and Comprehensive Monitoring for Smart HIE Treatment Management.

Although Therapeutic Hypothermia may be a core treatment for HIE, maintaining a low temperature for long periods of time can manifest in a lot of complications due to the effects of hypothermia on organs, such as acquired infections, seizures or arrhythmias, etc. Timely detection of these complications can be a matter of life-or-death, hence, the perfect monitoring solution is necessary.



# State of the Art Comprehensive Temperature Control Solution



## More than just Cooling

### Induction<sup>①</sup>

Rapid cooling through the use of cooling blankets to reach a core body temperature of **33°C** to **34°C** within **2 hours**.

The P6 utilises innovative **Semiconductor Cooling Technology** to rapidly meet target temperatures.

### Maintenance<sup>①</sup>

Maintains newborns' core body temperature at **33.5°C** to **34°C** for **72 hours**.

Safety through **Real-Time Monitoring** to reduce the accidental occurrence of complications.

### Rewarming<sup>①</sup>

Recovers newborns core body temperature to **37°C** at **0.5°C/ 2 hours** with normothermia maintenance.

The P6's exceptional **Intelligent Gradient Warming System** accommodates most clinical settings to provide Comfort and Ease of Access.

①: Seetha Shankaran . Therapeutic Hypothermia for Neonatal Encephalopathy 2013 Dec 1. Curr Treat Options Neurol. 2012 Dec; 14(6): 608-619.

# Effortless Access

## i-Servo™ Temperature Control System

P3/P6's intelligent closed-loop temperature control system automatically adjusts water temperature based on the monitored patient's core temp. The monitoring of the patient (both skin & core), water temperature ensures the safety throughout treatment, rewarming and maintenance while also avoiding other complications caused by long-term hypothermia.

Quick access buttons on the side of the screen allows caregivers to easily switch between Hypothermia mode and Normothermia mode, tailored for versatility without the hassle when attending to patients' needs.

- Hypothermia Mode comes with an Intelligent Automatic Transition from Cooling-Maintenance treatment to Rewarming when Auto Mode is selected.
- Normothermia Mode is applicable during surgery to help patients maintain stable temperatures, tailored to best meet every unique surgical situation.



Hypothermia mode



Normothermia mode

## Seeing is Believing

Our large 12.1" capacitive touchscreen accommodates up to 3 clearly observable temperature trend graphs, granting caregivers better tools when assessing patient conditions.

Trend data can be recorded for 200 hours, and high-resolution data can be reviewed in 1 hour intervals for more in-depth analysis. Trend reviews aid medical staff in disease diagnosis, increasing diagnostic accuracy and work efficiency.



**Swivel Screen  
High mobility trolley**



**Power-On-Self-Test  
New user guide**



**Automated water filling  
through Electric Pump**



**Capacious data storage, Printing,  
Networking Connection**



# Constant Vigilance

## Round-the-clock Protection through Modular Monitoring

Unexpected complications in newborns receiving therapeutic hypothermia can be overwhelming and stressful due to the influence it has on their cardiopulmonary system, which is why, to lighten caregivers' load, we provide constant monitoring of vital signs to ensure that nothing goes unnoticed.

### NIBP

#### Convenience

Flexible auto/manual measurement.

#### Informative

Up to 2000 recordable logs for diagnostic analysis.

### SpO<sub>2</sub>

#### Reliability

Masimo SpO<sub>2</sub>. Reliable and accurate measurement for newborns even with very low perfusion and motion.

#### Accuracy

Nellcor's SatSeconds Smart Alarm detects SpO<sub>2</sub> changes in an accurate and timely manner.

### ECG

#### Stability

Smart lead detection automatically detects a loose lead and switches channels.

#### Visual Clarity

Gain and Filter options for clear and easily observable ECG waveforms.

#### Acuity

Constant monitoring coupled with our ECG and HR alarms provide caregivers with peace of mind during patient care.



### RESP

#### Security

#### Apnea Alarm

Allowing for more timely response from caregivers.

# Intimate Care

Our tried-and-tested water blanket plays a crucial role in temperature transmission during the 72-hour hypothermia treatment. With two types to choose from, they are a perfect complement to the P3/P6, providing a truly outstanding end-user experience for each and every neonate.

Able to withstand long-term hypothermia treatment, COMEN water blankets are made of polyurethane materials, which are anti-corrosive, durable, and superior resistance to low temperatures, ensuring stable treatment with all the safety and comfort a baby needs.

**Safe design:** Material safety and durability tested using strict Biocompatibility Testing standards.

**Error prevention:** Water supply tube interface comes with two common channels that act as both inlet and outlet, preventing any errors during tube connection.

**Practical use:** Large surface area accommodates the needs for neonates of all sizes.

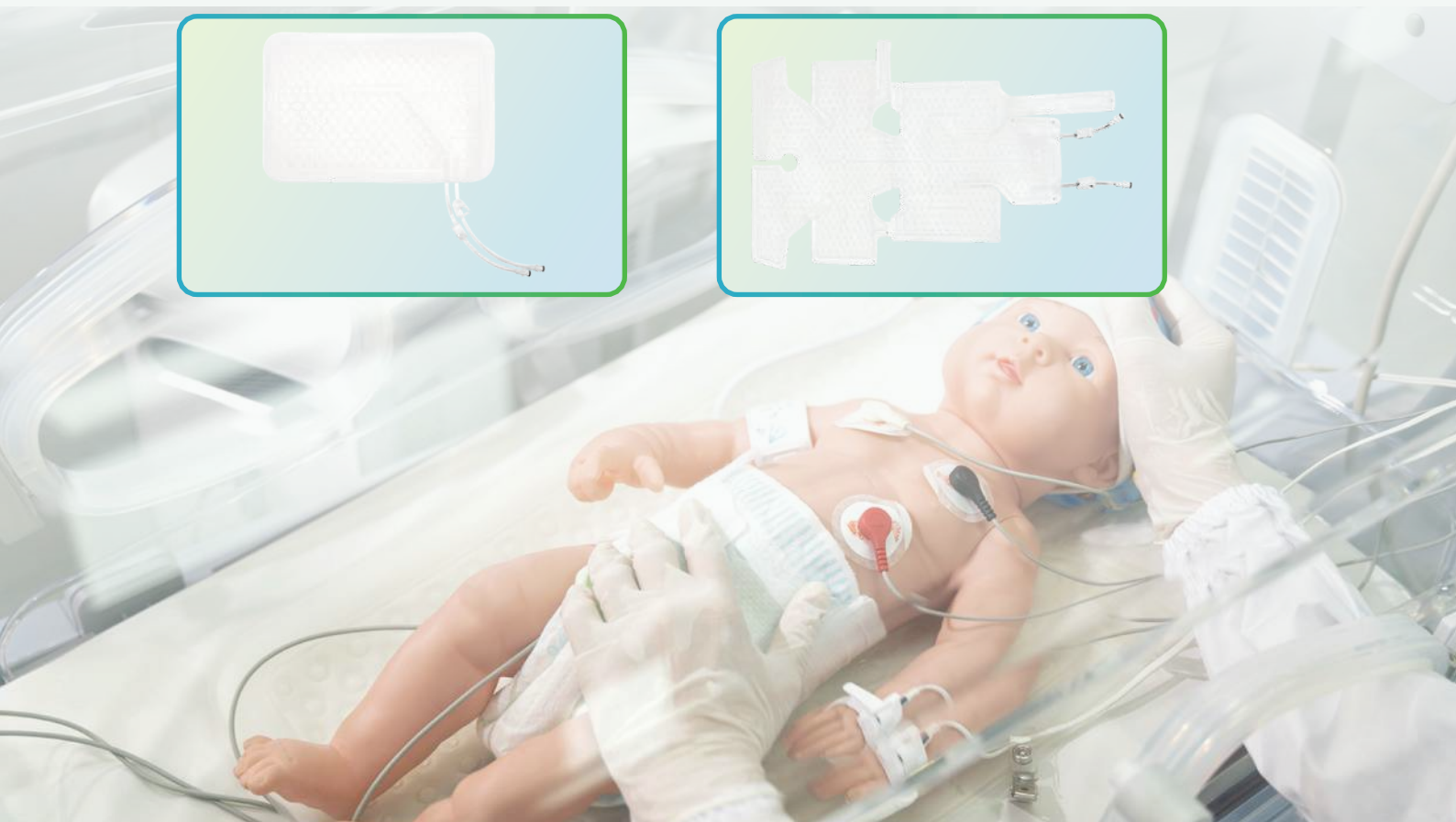
## Quality without Breaking the Bank

### Flat-type Water Blanket

- Cost-effective
- Durable and Reusable
- Flat design allows for easier disinfection.

### Full-body wrapping

- One-time-use greatly reduces cross-contamination
- Easier on the skin with our non-woven fabric wrap
- One-piece suit, up to 88% surface area coverage



**COMEN** Share with the World



Orange Medical Limited  
PO Box 2070  
Raumati Beach, Paraparaumu 5032  
Phone: 0800 990024  
Email: [sales@orangenz.co.nz](mailto:sales@orangenz.co.nz)  
[www.orangenz.co.nz](http://www.orangenz.co.nz)



**Shenzhen Comen Medical Instruments Co., Ltd.**

Add: Floor 10, Floor 11 and Section C of Floor 12 of Building 1A & Floor 1 to Floor 5  
of Building 2, FIYTA Timepiece Building, Nanhuan Avenue, Matian Sub-district,  
Guangming District, Shenzhen, Guangdong, 518106, P.R. China  
Tel:+86-755-2643 1236 Fax:+86-755-2643 1232 Website: [en.comen.com](http://en.comen.com) E-mail: [info@szcomen.com](mailto:info@szcomen.com)

P/N: EN-P6-8P-20211026-V1.1