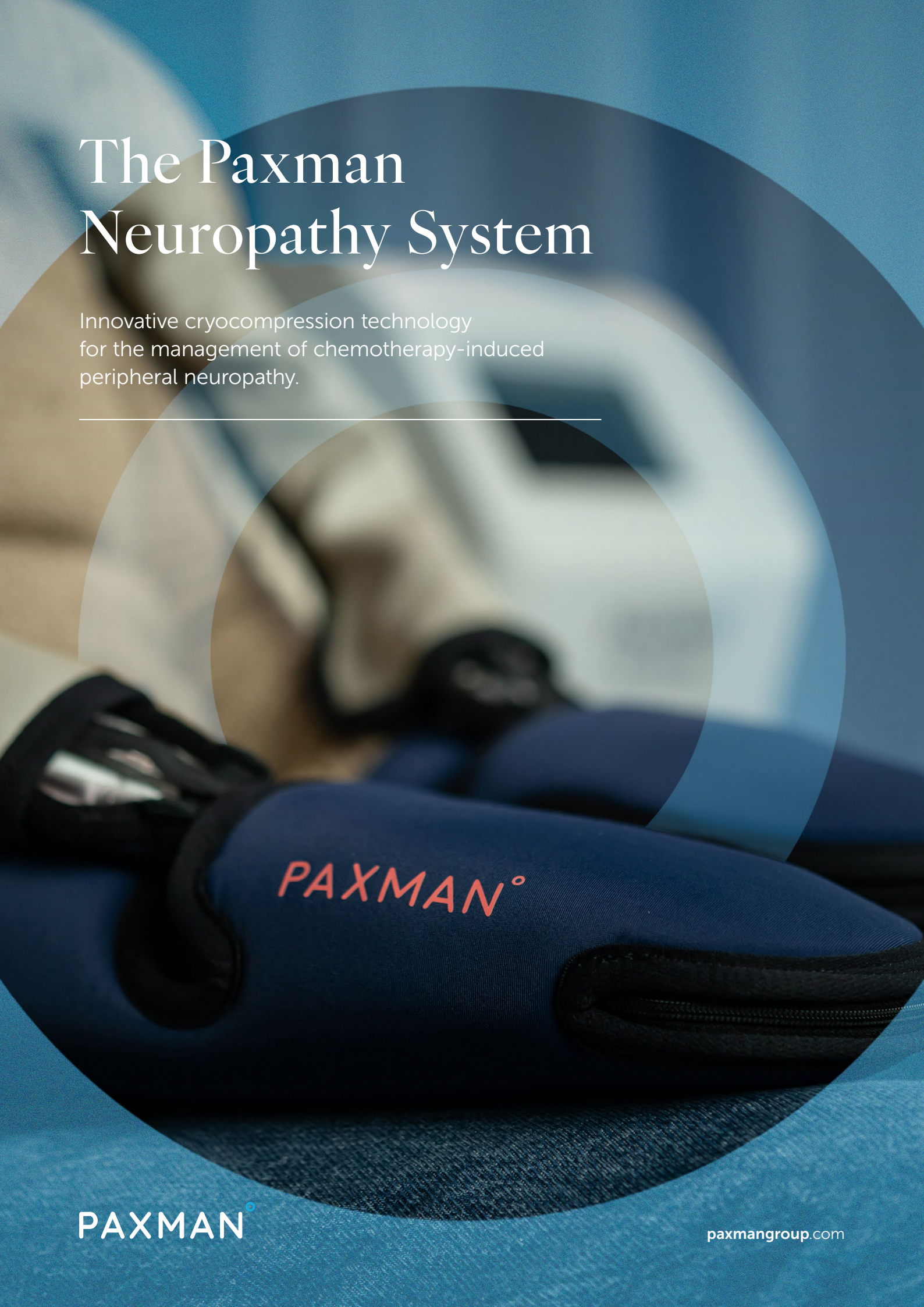
The Paxman Neuropathy System

Innovative cryocompression technology for the management of chemotherapy-induced peripheral neuropathy.



PAXMAN

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Chemotherapy-induced peripheral neuropathy affects an estimated 3 million cancer patients annually worldwide.*

*Estimate derived from global chemotherapy incidence and published CIPN rates.[1,2]

Chemotherapy-induced peripheral neuropathy (CIPN) is one of the most common debilitating side effects of systemic chemotherapy. Until now, reliable prevention of the condition has been a large and unmet clinical need.



Sensory nerve damage in the hands and feet caused by CIPN can significantly affect daily life. While symptom severity varies between individuals, some patients experience long-term or permanent difficulties with mobility, balance, dexterity, and other routine activities.

Certain treatments, including taxanes and platinum-based therapies, are particularly associated with a higher incidence of CIPN, with risk increasing over cumulative treatment exposure.[3]

Symptoms can range from mild to severe debilitating neuropathic pain, and may include:

Numbness	Cold sensitivity	Weakness
Pins and needles	Altered temperature perception	Loss of dexterity
Tingling	Mechanical/thermal allodynia	Balance impairment
Burning pain	Reduced sense of vibrations	Gait instability
Electric shock-like sensations		



2 IN 5 PATIENTS WITH CIPN WILL SUFFER FROM PAINFUL CHRONIC SYMPTOMS FOR LONGER THAN THREE MONTHS, AND POTENTIALLY FOR LIFE.[4]

The lasting impact of chemotherapy-induced peripheral neuropathy

CIPN exerts a complex, multi-faceted burden, with physical, psychological, occupational, and clinical consequences that are closely intertwined.

PATIENTS[5]

A debilitating and life-changing condition

- Detrimental effect on physical and psychological wellbeing.
- Impaired motor or sensory skills can affect performance of job roles.
- Risk of facing reduced hours, job changes, or loss of employment.
- Dramatic changes to daily life and livelihood.
- Patients who develop CIPN are approximately 3 times more likely to fall and suffer from fall related injuries.[6]

3x more likely to fall and suffer from fall related injuries

HEALTHCARE[7]

Increased healthcare burdens

- Average healthcare costs are over $17,000 higher for patients with peripheral neuropathy.
- Uninsured patients are likely to have a significantly worse experience.
- Patients with CIPN average 12 more outpatient visits after chemotherapy compared to those without CIPN.
- Leads to higher productivity loss.
- Operationally and financially, resources could be better allocated if a reliable prevention method was introduced.
- Incurs a higher overall cost to both healthcare providers and insurance payers.

12x more outpatient visits following chemotherapy

CLINICIANS

Dose modification and treatment adherence

- CIPN presents oncologists with a difficult choice:
  - Risk less effective chemotherapy treatment to reduce CIPN.
  - Reduce a patient's quality of life by allowing CIPN to progress.
- Patients themselves were also found to be nearly 30 times more likely to alter chemotherapy if they believed their current CIPN symptoms would be permanent vs temporary.[4]

~30x more likely that patients would prefer to discontinue chemotherapy[8]

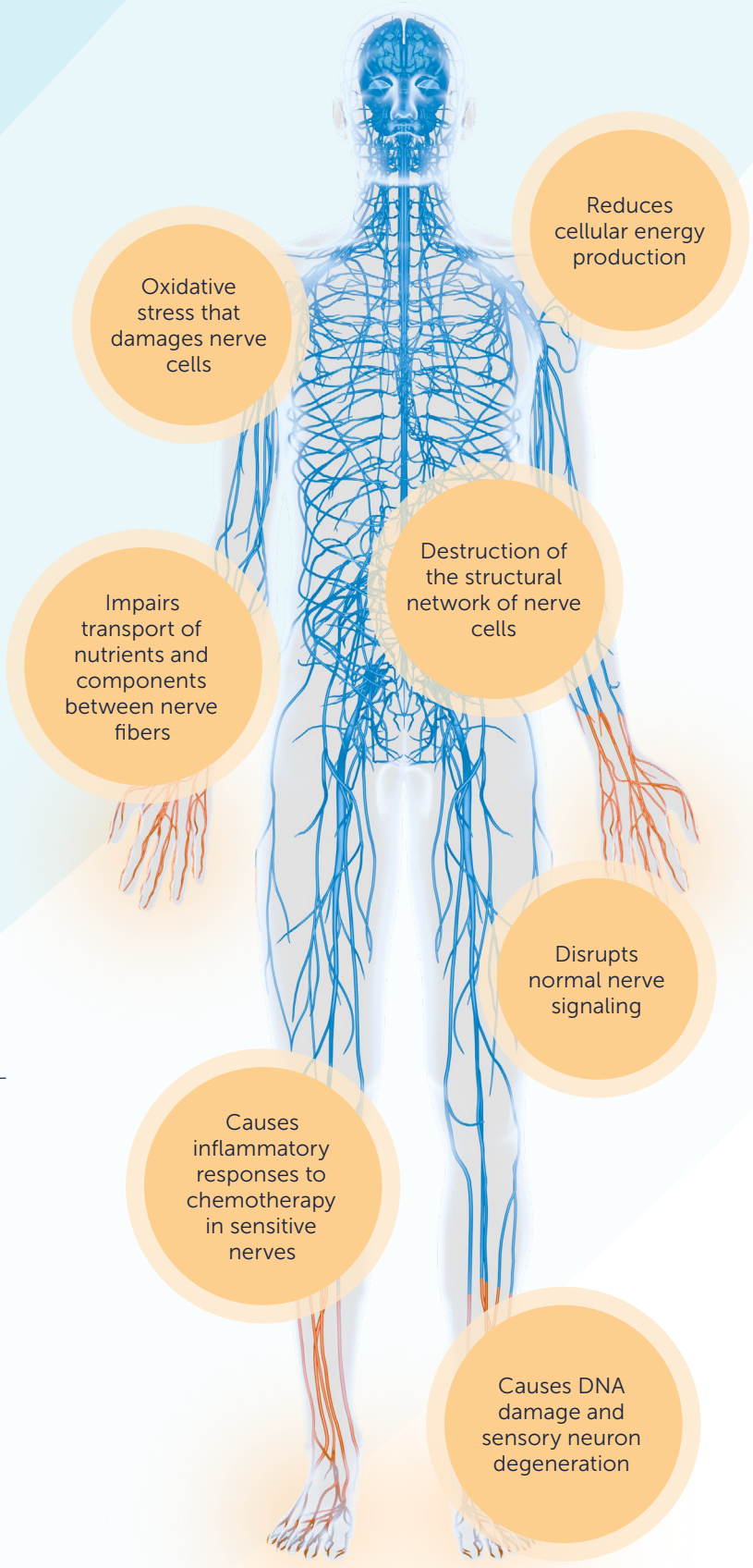
With increasing cancer survival rates and expanding use of neurotoxic therapies, CIPN represents a growing long-term survivorship issue.



47% of women still reported CIPN symptoms after an average of 6 years post-chemotherapy.[9]

How chemotherapy causes peripheral neuropathy

CIPN is biologically complex – it does not arise from a single mechanism and is strongly associated with cumulative chemotherapy exposure. Biological research led by Paxman has started to provide evidence on how different chemotherapy drug classes initiate distinct 'insults' that cause damage through interconnected cellular, metabolic, inflammatory, vascular and electrophysical processes. These mechanisms can lead to severe CIPN and chronic pain or symptoms.



Managing CIPN with cryocompression

Reducing the devastating impact of a major unmet clinical need.

Until now, the management of CIPN has relied on uncontrolled cooling or compression interventions with inconsistent results.

Paxman has taken a different approach by combining both cooling and compression within a controlled medical device. We are pioneering research to confirm that controlled cooling could efficiently rescue human neuronal cells from the damage caused by different classes of chemotherapy drugs.[11]

Manual cooling and compression

Frozen or compression gloves and socks

- ✗ Lack of protocols and increases nursing burden
- ✗ Poor tolerability
- ✗ Inconsistent temperature delivery (risk of frostbite or insufficient cooling)

Continuous flow cooling

- ✓ A safer method to deliver cooling
- ✓ Controlled, consistent and reproducible
- ✗ Moderate tolerability

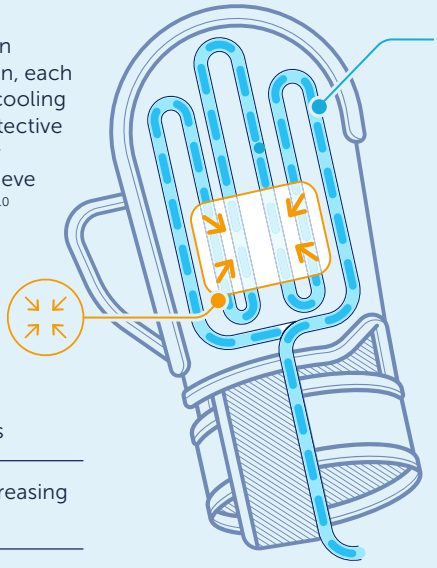
Cryocompression

- ✓ Safe, controlled, consistent and reproducible
- ✓ More tolerable than other methods due to compression
- ✓ Achieves lower temperatures than cooling alone

COOLING FOR PROTECTION. COMPRESSION FOR COMFORT.

Helping reduce neuropathy before it changes lives.

The innovation of cryocompression combines cooling and compression, each providing their own benefits. The cooling element is believed to activate protective biological responses at the cellular level while compression helps achieve comfortable and efficient cooling.[10]



Compression

Patient Tolerability

Distraction / counter-pain stimulus

Improves cooling efficiency by increasing contact with the cooling surface

Cooling

Biological Protection

Induces vasoconstriction, to reduce local chemotherapy delivery

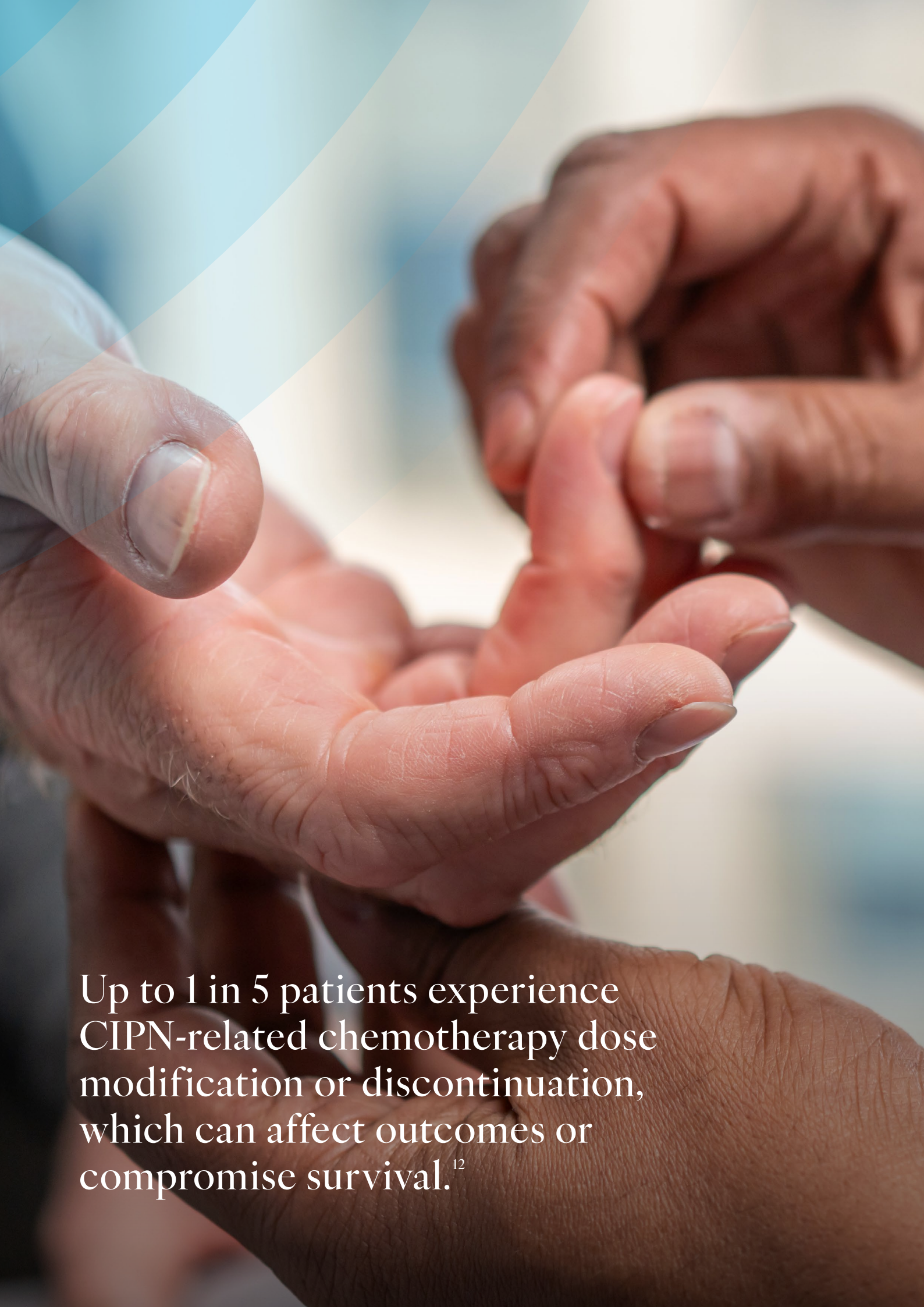
Reduces cellular oxidative stress

Protects the structural network of human neuronal cells

Maintains nerve cell signalling

Supports cell viability and functional resilience

For more information, see the accompanying Clinical Efficacy Brochure.



Up to 1 in 5 patients experience CIPN-related chemotherapy dose modification or discontinuation, which can affect outcomes or compromise survival.[12]

Introducing the Paxman Neuropathy System, a new standard for CIPN management

The only clinically validated solution that combines cooling and compression.

The Paxman Neuropathy administers controlled cryocompression to the hands and feet during **chemotherapy resulting in a 95% relative risk reduction of dose-limiting CIPN incidence (Grade 2 and above)** when compared to untreated historical controls.[13]



The System

The compact refrigeration unit responsible for maintaining the cool temperatures of the Paxman Gloves and Boots and providing cyclic compression. One unit will reliably and simultaneously cool a patient's hands and feet.

Cooling Accessories

The Paxman Gloves and Boots – worn by the patient and connected to the coolant lines – are lined with an inner cooling layer that contain channels for coolant delivery. The accessory covers are made from an insulating material, which protects from high ambient room temperature and condensation, in addition to supporting a secure fit.

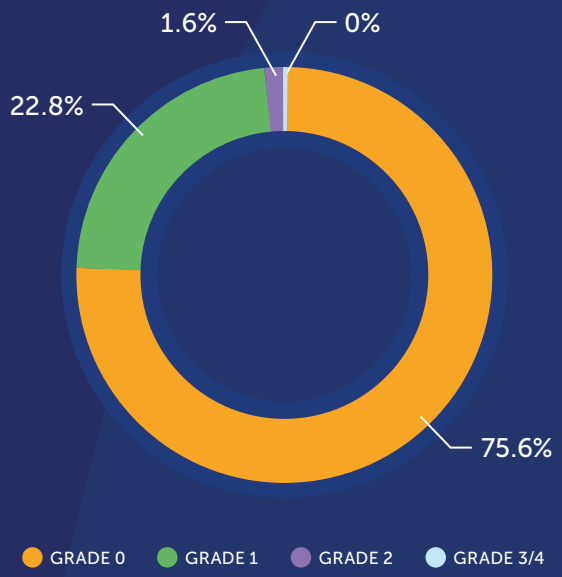
Coolant

The unique cooling agent that continually circulates along coolant lines between the system and the cooling accessories. It extracts heat from both hands and both feet, maintaining the optimal cooling temperature for peripheral nerve protection.

Compression Modules

Air pockets on the Paxman Gloves and Boots inflate and deflate to provide gentle cyclic pressure. This increases skin contact with the cooling surface to provide effective cooling while ensuring both patient comfort and tolerability.

Designed for seamless integration into busy oncology settings, the system is simple to set up, easy to operate and requires minimal staff intervention.



PERCENTAGE OF PATIENTS WITH GRADE 0-4 CIPN

Clinically validated CIPN reduction

An efficacious, safe, and tolerable intervention.

In a single-arm phase II study of 150 patients by Wong et al. (2026)[13], the Paxman Neuropathy System showed significant results in reducing the incidence of taxane-based CIPN compared to historical untreated control data. The Paxman Neuropathy System is safe, well-tolerated, and can be safely administered with scalp cooling therapy.

95%

relative reduction in risk of CTCAE Grade ≥2 CIPN versus historical untreated control data[13]

70%

relative reduction in the incidence of any-grade CIPN

84%

tolerability with no incidences of high grade, cold-related adverse events*

No more difficult choices.

CIPN can force clinicians to balance treatment efficacy against long-term quality of life.

The Paxman Neuropathy helps reduce the risk of neuropathy progression while supporting patients to remain on treatment.

In the trial, only 5.7% of patients required taxane dose reduction due to CIPN, helping take this difficult decision off the table.

For further details of this study and a comprehensive clinical overview, please refer to the Paxman Neuropathy Clinical Evidence Brochure.

*Aside from redness of the skin, reversible a few minutes after cessation of cooling/removal of Paxman Gloves and Paxman Boots.



Revolutionising the management of chemotherapy-induced peripheral neuropathy

The System

Compact. User-friendly.
Built for busy oncology clinics.



Smart, innovative cryocompression technology

- **Designed to provide targeted cooling and compression** of the hands and feet, supporting delivery of a biologically informed cooling range of 20-24°C/68-75°F at the time of infusion.
- Miniaturised, state-of-the-art vapour compression technology provides powerful, precise and **consistent temperature control.**
- **Continual cooling capabilities** ensure immediate treatment readiness when patient is connected, following a short 30-minute refrigeration period at the start of each day.
- An angled, ergonomic display with clear on-screen guidance supports **easy use and simplifies nurse intervention.** Available in multiple languages.
- Smart and reactive, it can deliver **real-time monitoring during treatment,** such as coolant flow and temperature.

Designed for real-world oncology care

- **User-friendly controls** and automated cryocompression programmes make treatment easy to administer, **reducing nursing burden and minimising hands-on intervention.**
- **Bathroom break timer** feature and alerts, allowing patients to simply and temporarily disconnect for up to 10 minutes.
- Practical design ensures the device is **transportable and mobile.**
- An accompanying trolley with lockable castors and recessed feet **ensure stability while allowing for mobility** within the clinic.
- **Flexible and durable coolant lines** allow the patient to be positioned comfortably without affecting coolant circulation.
- Adjustable support arms to suspend or guide coolant lines during treatment, **preventing twisting, tripping hazards, and infection risk.** Coolant lines can be wrapped up for **safe, easy storage.**

Always with patient safety in mind

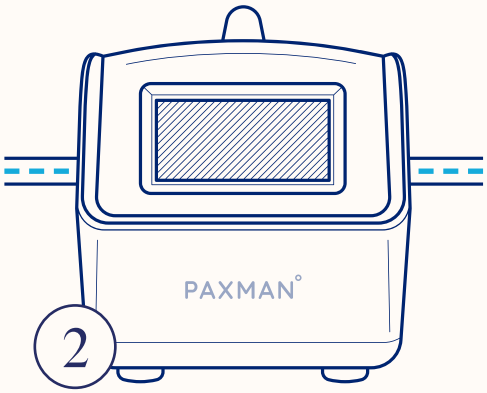
- Precise, temperature-controlled design, **prevents under or overcooling.**
- **Visual and audible alerts** for restricted or lack of coolant flow.
- **Clean, clutter-free setup** thanks to smart coolant line management for maximum comfort and safety.

Save space in your oncology clinic

A compact, miniaturised design allows **two systems to be used at once** on the accompanying trolley - a Paxman Scalp Cooling System or another Paxman Neuropathy device. Ideal for infusion sites where space is at a premium.

The Coolant

A uniquely engineered coolant designed to achieve low temperatures.



Reliable, continuous cooling

- A uniquely engineered coolant, **designed to stay fluid at low temperatures and maintain a consistent flow rate.**
- Continuous coolant flow with **ultra-efficient heat transfer properties,** extracts heat from the hands and feet to be re-cooled via the system, **maintaining the target temperature for optimal results.**
- Automatic temperature monitoring cuts down on manual checks and **saves nursing time.**

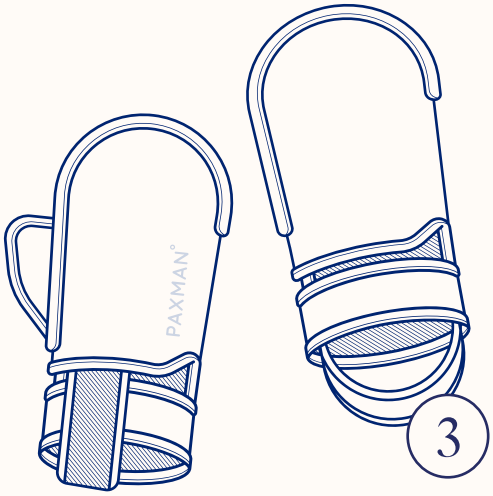
Optimised for oncology workflows

- As a closed system, the coolant is not exposed to the air, reducing evaporation and **reducing top-up frequency.**
- **Optimised for infection control,** the coolant protects the system from corrosion and biological fouling.



The Cooling Accessories

The Paxman Gloves and Boots are where cooling meets compression for optimal performance.



Enhanced design for reliable heat extraction

- Strategically engineered **coolant channels follow the contours of the hands and feet,** using a thin, flexible inner cooling layer to maximise contact and deliver effective, non-invasive heat extraction.
- A precise channel layout ensures uniform cooling, **preventing heat redistribution and maintaining consistent thermal performance** throughout treatment.
- Large, continuous cooling channels support superior coolant flow and accommodate higher skin temperatures, while maintaining uninterrupted circulation even during movement - **allowing patients greater freedom without compromising performance.**

Ensuring patient tolerability during treatment

- A positive treatment experience is crucial. Cyclic pressure delivered via an air compression pouch produces a therapeutic massaging sensation supporting **tolerable delivery of lower temperatures compared to cooling alone.**[10]
- **Compression technology enhances contour fit,** while the insulated outer cover prevents condensation and shields against ambient room temperature to maintain optimal cooling.
- Composed from materials which help achieve the **balance between adequate cooling and usability.**
- Inner linings of the cooling accessories prevent direct contact with the inner cooling layer to further improve tolerability for the patient.

Practicality in mind

- **Easy to fit and remove** - simply position on to the hands and feet, fasten, and secure.
- Flow indicators built into the accessory cuffs allows fast, **effortless monitoring of the coolant.**
- **Quick release couplings** allow for a simple connection or disconnection from the system when required.
- Strategically placed coolant line connectors for ease of access.
- **Cooling accessories can be easily cleaned and disinfected.**

9 out of 10 patients found cooling tolerable[13]



Patient comfort at its core

- Designed from years of ergonomic studies, optimised for both comfort and fit for the natural curve of the hands and feet in a wide range of patients.
- Cooling accessories available in two sizes, small and large, with compressive, stretchy material and Velcro loop adjustments for the optimal fit.

A more sustainable choice

Materials within the Paxman Gloves and Boots are **highly recyclable,** reducing the environmental footprint of the treatment.



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