

CASE STUDY

FIGHTING CHANCE OF SURVIVAL FOR PREMATURE BABIES

MARKEN'S READY-NOW NETWORK MEETS 24-HOUR TURNAROUND, TRANSPORTING INFANT SUPPLEMENTS TO REGIONAL HOSPITALS SAME DAY

The Therapeutic Goods Administration (TGA) approved a human milk-based supplement for premature babies in the Australian market, which aids in the digestion and growth for underdeveloped infants. The supplement must be stored at -20°C with a stable temperature of -80°C on dry ice throughout transport. Due to the urgent nature of resupply requests for newborns, access, retrieval and delivery must occur within 24-hours.

Typically, we receive 24 hours' notice for collection and overnight distribution. However, Marken was contacted by the client moments before a holiday weekend to be the precision logistics partner for expedited same-day delivery to metro hospitals in Sydney, Australia. Tasked with the challenge of developing a robust supply chain solution to ensure critical supplements reach premies at hospitals on time when every second counts, we knew we had to deliver.



OBJECTIVE

Design and implement an integrated logistics strategy for the complex storage and distribution of vital supplements for premature babies with same-day collection and delivery to local hospitals in less than 24-hours. It was vital for our Marken AU team to maintain the time and temperature integrity in transit and in storage while providing hospital staff with tracking and visibility capabilities to monitor these lifesaving shipments in real time.

CHALLENGE

Managing the unpredictable variables of these supplements for infant patient outcomes is critical, as any delay or supply chain disruption can be life-threatening. The myriad of challenges included the varying demand, order size and frequency of product while safeguarding temperature integrity to ensure on-time delivery within 24 hours.

- **Rapid Response:** Same day deliveries were required at irregular intervals, in unknown quantities and with fluctuating demands, necessitating immediate response times to ensure that products are readily accessible to hospital staff upon arrival
- **Temperature Integrity:** Maintaining a continuous local supply at -20°C and guaranteeing infallible product integrity during transit at -80°C , while providing live visibility of shipment journey to all stakeholders

SOLUTION

Marken adopted a forward-thinking, proactive approach to streamline operations and integrate risk management strategies, effectively minimizing potential disruptions and ensuring seamless logistics. Our dedicated team implemented a 24/7 rapid response system, ensuring that critical products stored in -20°C freezers at our local GMP-depot in Sydney, along with appropriate packaging materials, were ready for expedited 24-hour delivery.

To enhance transparency and visibility, we leveraged our bespoke Maestro™ shipment management software, allowing hospital personnel to track products in real-time. This system provided automated collection and delivery notifications to both nurses and the client, confirming Proof of Delivery (POD) and ensuring the integrity of the cold chain.

An integral component of our solution strategy was the use of our innovative packaging and storage capabilities. We utilized specialized, state-of-the-art packaging solutions, including the unique practice of packing dry ice in bags instead of placing it directly on the products. This method allowed nurses to easily remove the dry ice and place the products directly into freezers, maintaining temperature requirements in storage and during transit.

OUTCOME

Marken's ability to maintain a resilient cold chain service has been vital in supporting healthcare initiatives aimed at improving survival rates among premature infants. Over the past eight months, Marken has completed dozens of shipments, demonstrating exceptional reliability and meeting rapid turnaround times. This success has led to growing recognition among hospital peers, resulting in significant expansion with onboarding of additional interstate hospitals planned for 2024.

NOTABLE IMPACT

A particularly impactful example of the project's success involves a critical delivery of a supplement to a baby born in the 23rd week of pregnancy, weighing just 462 grams (1.02 pounds). Feedback from the client highlighted the vital role that timely delivery played in the baby's care, underscoring the life-saving potential of Marken's clinical logistics solutions and the direct influence on patient outcomes.

ABOUT MARKEN

Marken is the clinical precision logistics and advanced therapy subsidiary of UPS Healthcare. The UPS Healthcare network consists of 200+ locations worldwide. Marken offers a state-of-the-art GMP-compliant depot network and logistic hubs for clinical drug product storage and distribution in 46 locations worldwide, while maintaining the leading position for cell and gene therapy services, direct-to-patient and home healthcare services, biological sample shipments and biological kit production. Marken's dedicated 2,500+ staff members manage 200,000 drug product and biological sample shipments every month at all temperature ranges in more than 220 countries and territories and have orchestrated 17,500+ home healthcare visits. Additional services such as ancillary material sourcing, storage and distribution, shipment lane verification and qualifications, as well as GDP, regulatory and compliance consultancy add to Marken's unique position in the pharma and logistics industry.

Delivering What Matters From Clinical to Commercial.