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ASIA EDITION

There are over 650 cell and gene therapy clinical trials underway in APAC region

March 31, 2025 | Opinion | By Dr Manbeena Chawla

Catering to pharma companies globally and ensuring seamless transportation of critical healthcare products, World Courier, a global specialty logistics provider and a part of US-based company Cencora, has recently appointed Michael Culme-Seymour as its new Regional Vice President for Asia Pacific (APAC). To understand more about the latest trends and challenges facing the pharma logistics sector in the APAC region, and how World Courier is addressing those, BioSpectrum Asia has a detailed conversation with Michael Culme-Seymour.



What are the company's major plans in store for 2025, particularly for the APAC region?

The pharmaceutical sector in the APAC region continues to experience tremendous growth. Over the last decade, the percentage of clinical trials that have started in Asia has significantly increased. China, in particular, accounts for a much larger share of total clinical trial starts than it did 10 years ago, jumping from 8 per cent in 2013 to 29 per cent in 2023. Research suggests this trend will continue, as the Asia Pacific region is expected to experience the fastest annual growth in the clinical trial market between 2025 and 2030.

As more companies establish clinical trials or require storage and transport solutions to support the delivery of commercial products throughout the region, we continue to expand and strengthen our capabilities to meet the growing demand for premium specialty logistics services, specifically suited to the clinical trial supply chain.

As we look ahead, we anticipate the continued growth and emergence of high-value, highly complex biopharmaceutical products, like cell and gene therapies. In fact, there are more than 650 cell and gene therapy (CGT) clinical trials underway in

the Asia Pacific region, including 200-plus in phase II or III studies. We're able to leverage our network of GxP-compliant depots and portfolio of solutions, including temperature-controlled packaging, to support the unique requirements of these products, delivering them safely and efficiently to their destinations. As these studies continue to evolve into commercialisation, the requirement for specialty logistics to allow access for patients to CGT therapy is crucial, not only domestically in the country, but internationally.

Are you planning any new investments in new technology developments?

As part of our commitment to deliver high-quality, exceptional customer service, we're continually focused on investing in and launching new technology solutions that would enable us to deliver enhanced support. One area, in particular, we view as critical is real-time monitoring, which continues to evolve.

Our clients trust us to deliver highly sensitive and complex products, including life-saving medicines urgently needed by patients. There is no room for error. Real-time monitoring provides increased visibility across the shipment journey, for our operations team and our customers, minimising risk, improving the customer experience and, most importantly, helping to ensure shipments reach their destination on time and in the right condition. We've made significant investments in real-time monitoring solutions in recent years, including adding location monitoring on our multi-use packaging assets, and plan to continue to broaden our capabilities.

Separately, we continue to invest in digital platforms and technologies to further streamline our operations and improve communication across the supply chain. For example, we use digital twin technology to optimise packaging placement, depot operations and overall supply chain efficiency.

Lastly, but most importantly, we are committed to ensuring that we can provide sustainable logistics solutions, including the increasing investment of e-vehicles and green packaging. In Singapore, our depot and logistics centre is now 90 per cent energy self-sufficient via solar panels that have been installed on the roof of the building.

Are you considering opening new facilities within the APAC region this year or beyond?

As the biopharmaceutical market in APAC grows, we continue to invest in infrastructure to support the increasing demand for clinical supply support and commercial drug storage and distribution. We recently opened a clinical depot in Beijing, China, which, at nearly three times larger than the previous facility, enables us to offer increased storage capacity as well as high-quality, customisable solutions to support our customers' evolving needs.

In addition to the Beijing depot, we operate GxP-compliant depots in Australia, India, and Japan and have more than 25 facilities across the region. With increased demand for the expansion of clinical trials into new territories, particularly emerging markets such as Indonesia and Vietnam, we are continuously evaluating client needs and will ensure that our network is sufficiently ready to support their needs.

In fact, we moved to larger facilities in Hyderabad, India, and Kuala Lumpur, Malaysia, further expanding our capacity and capabilities in the region. We plan to open a new facility in Adelaide, Australia, this year.

What are the current challenges facing the pharma logistics space in the APAC region?

While it's certainly not unique to the APAC region, the innovative products being developed today, like CGTs, introduce unique challenges and require specialised logistics support. These therapies often remain viable only within narrow ranges of temperature and time. For example, fresh cells have a shelf-life between 12 and 96 hours before they begin to degrade.

Cryogenic logistics, a specialised process designed to safely store and transport materials that require extremely low temperatures, typically below -150°C, can enable long-term storage and preserve product integrity and viability across long-distance shipments. However, certain markets, including more remote locations, may not have the specialist facilities needed to support cryogenic storage. In a survey of leaders at companies developing CGTs, respondents predicted a 34 per cent growth in the need for cryogenic storage and transportation related to clinical trials in China over a three-year period, ending in 2024.

Robust cryogenic logistics infrastructure is critical to support the scalability of and enable access to certain products, including allogenic cell therapies. World Courier, which delivers more than 12,000 cryogenic shipments around the world annually, has continued to expand its cryogenic storage capacity and network of liquid nitrogen charging centres and stations globally.

Could you please highlight new trends shaping the pharma logistics space in the years to come?

As specialty pharmaceuticals account for a growing percentage of the products being developed today, the demand for temperature-controlled storage and transport will continue to increase. For example, APAC is predicted to have the fastest growing market for pharmaceutical cold chain packaging, growing at a 17 per cent CAGR through 2034.

Successful cold chain logistics requires highly choreographed shipping schedules, cold chain infrastructure, temperature-controlled packaging, tracking technology and adherence to strict regulatory guidelines. Continued investments in cold chain storage infrastructure, packaging solutions and advanced technologies, including real-time monitoring capabilities, are critical to protect product integrity and quality throughout transport. For example, World Courier leveraged its passive packaging solution, Cocoon, to deliver an urgent shipment of vaccines from Bangkok, Thailand to Singapore, ensuring the products remained within the specified temperature range despite the heat in Thailand.

Aside from the physical logistical challenges in this region, we also work closely with the regulatory environment of each country to ensure that we can provide the most up-to-date professional advice and guidance to our clients to ensure the smooth delivery of clinical trial logistics.

How do you plan to strengthen your position as a logistics provider globally?

Our reputation as a premier specialty logistics provider is rooted in our unwavering commitment to quality, reliability and patient safety. Our clients trust us to provide the logistics expertise and solutions to ensure their products, including life-saving medicines, can reach their destinations safely and efficiently.

Through continued investments in infrastructure and innovative solutions, we'll continue to deliver high-quality, specialised logistics services to support our customers' evolving needs and heightened expectations and ensure their products can reach the patients who need them, no matter where they are.

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