



MOVING SCIENCE FORWARD IN 2025

Emerging trends in the life science logistics industry



Stream A: Clinical Trial Supply Logistics and Operations

Speaker: Marcel Walraven, Clinical Trial Supply Chain Specialist, Biocair

NETWORK
MEMBER OF



Biocair, the specialist courier of choice for the life sciences industry

Life sciences logistics

Offering personalized and proven services for the pharmaceutical, medical and biotechnology sectors.



Global network

Ensuring life sciences supply chains are controlled and efficient via a global network of experts.



Cold chain

Staying up-to-date with the latest in cold chain, GDP compliant technology so your company doesn't have to.



Regulatory compliance

Managing every step in a shipments process with care and precision to prevent delays and mistakes.



Life sciences outlook in 2025



Digital
Transformation



Cutting Edge
Medicines



Sustainability



Regulatory
Compliance



Flexibility



Competition
and
Collaboration

Industry recognised trends

Percentage of respondents who identified trend as having a significant impact

Digital transformation

Accelerated digital transformation

36%

Competitive pressure

Pricing and access to drugs and medical devices

47%

Business volatility

Regulatory changes in the United States

33%

Evolving customer needs

Evolving customer engagement needs and preferences

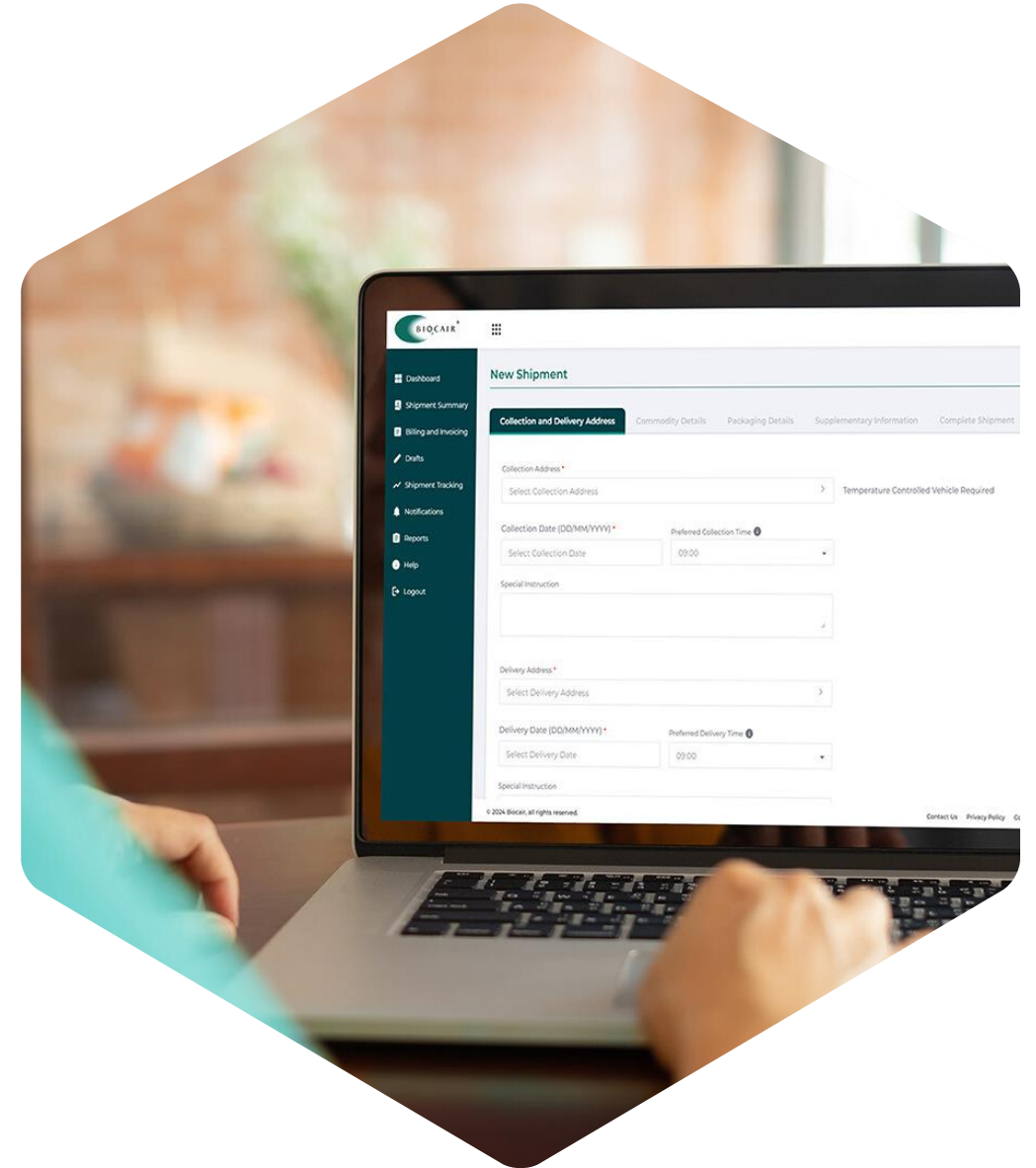
27%

1. <https://www2.deloitte.com/us/en/insights/industry/health-care/life-sciences-and-health-care-industry-outlooks/2025-life-sciences-executive-outlook.html>

Digital transformation

- Accelerated digital transformation
- Evolving needs of customers – enhanced digital tools
- Real-time location and temperature tracking
- Important for CGTs
- Increasing risk of cyber attacks¹

1. <https://www.weforum.org/stories/2025/02/biggest-cybersecurity-threats-2025/>



Cutting edge medicines



FDA approved
50 new
therapeutics in
2024¹, 7 Cell and
gene therapies²

New modalities

Novel
bioprocessing
techniques

- Innovative manufacturing technologies
- Increasing demand for transfer of sensitive materials

- Different regulatory and customs requirements
- The post-Brexit CGT challenge

1. <https://www.nature.com/articles/d41573-025-00001-5>

2. <https://www.isctglobal.org/telegraphthub/blogs/ken-ip1/2025/01/16/cell-gene-therapy-approvals-in-2024>

Surges in demand

- Rapid surges in demand for specific drug types (GLP-1 inhibitors, vaccines etc.)
- Challenges in implementing supply chains
- Collaborate to meet these challenges



Seven-steps for risk mitigation

1. **Collaborate** with a specialist third-party logistics partner to identify risks across the supply chain to gain all-round knowledge
2. Factor in time for a **full risk assessment** for the complete supply chain from manufacturer to customer
3. Work with the logistics partner to gain a **detailed understanding** of the specific risks and challenges
4. Ensure risks are assessed at **every stage** of the shipment's journey
5. Create a job-specific lane risk assessment that adheres to all **regional regulatory guidance**
6. Complete customs and compliance **paperwork in advance**
7. Understand and adhere to the latest regional **duty and tax liabilities**



Competition and collaboration

Competition driven by

- Pricing and access to drugs
- Pressure from generics and biosimilars
- Restricted funding landscape
- Inflation and economic recession risks

Competition and collaboration

Collaboration can unlock:

- New resources
- International markets
- Specialized expertise

Peter Canning, Air Freight Manager for Aramex Ireland, said:

“By combining Biocair's expertise with our own, we're able to create tailored solutions for customers... The partnership offers an end-to-end solution for Biocair's customers, integrating services seamlessly between the two companies. This comprehensive approach ensures that customers receive exceptional service and tailored solutions.”



Sustainability

“Reaching ambitious sustainability targets will only be possible for the life sciences industry with the support of all stages of the supply chain.”

While maintaining the quality of the products must remain a priority, the use of new technologies can help to facilitate a high quality, sustainable supply chain.”

Stephen Cawley

Chief Compliance Officer (CCO)



Sustainability

Sustainability throughout the supply chain

- Broad adoption of sustainability targets
- Pressure on supply chains (scope 3 targets)
- Can't compromise on patient safety
- Need for sustainable packaging solutions – certification of quality
 - Often reusable isn't possible
- Think of other options
 - Fleet efficiency
 - Error reduction
 - Minimize waste



Regulatory compliance

Regulatory compliance vital for patient safety

- Advanced Therapy Medicinal Products
- Cell and gene therapies
- Personalized medicine

Sensitive and critical life science materials delivered with the highest of care!



Australian Government
Department of Health and Aged Care
Therapeutic Goods Administration



NATIONAL MEDICAL PRODUCTS ADMINISTRATION
国家药品监督管理局



Flexibility & agility

- Rapidly moving industry
 - New medicines
 - New regulations
 - New technologies
 - Unexpected challenges (pandemics, wars, geopolitical uncertainty, climate)



Life science logistics in 2025 and beyond

- One of the most innovative and exciting industries = evolving challenges
- Important to assess potential risks and mitigate where possible
- Digital transformation key to efficiency, regulatory compliance, building patient focused supply chains and overcoming global challenges
- Partner with an expert to stay ahead

What challenges are you facing as you plan for 2025 and beyond?



 @biocair

 @biocair

 @biocairofficial

 @biocair.logistics

www.biocair.com