

Strengthening drug supply chain management, strategic sourcing & supplier collaborations



Dr Matt Szap, senior technical communications manager at **Spectrum Chemical**, explores supply chain optimisation, sourcing strategies and supplier selection in a post-pandemic world

Supply constraints continue to affect drug manufacturers worldwide. At the same time, demands for materials that meet higher quality standards, especially in the biopharmaceutical manufacturing sector, compound the problem. Figure 1 shows the extent and complexity of the issue.

In addition to raw materials procurement issues, multi-site international drug manufacturers deal with the challenges of ever-evolving regulatory requirements of the FDA, EMA and other regulatory agencies. They also must address supply chain disruptions and complicated cross-site cGMP inconsistencies, due to the differences in mature and emerging markets, varying best practices

interpretations, and differing approaches to quality, safety and risk.

Strategic supply chain management is an essential part of risk management. A robust supply chain includes an established global network of multiple distributors. Strong supplier relationships provide reliability, transparency and flexibility. The right supplier provides scientists, researchers and procurement professionals with a robust global supply chain network, greater agility and resilience, and a proven track record.

Optimising the supply chain

Dynamic supply chain management establishes supply flow that ensures the right product of the right quality

and purity is securely delivered to the right party at the right place and at the right time. Protecting and optimising the global supply chain is a joint effort.

To be effective there must be strategic, dependable and trustworthy collaborations among manufacturers, suppliers, distributors, and partners throughout the entire supply chain process. Logistics play a key role in efficient supply chain management. Agility and risk mitigation planning are required to deal with supply chain disruptions responsively and effectively.

Logistical challenges include the bottlenecks caused by international shipping issues, unpredictable global weather, geopolitical and



macroeconomic events, and material and labour shortages. For example, global labour shortages have led to truck drivers not being available to pick up drug product deliveries from ports or factories on time, if at all. Additionally, the complexities of handling and moving hazardous materials are particularly challenging both for the availability and expediency of receiving and shipping high quality raw materials.

Proactive sourcing strategies

In the post-pandemic ecosystem, even greater emphasis in drug delivery and development is now placed on sourcing strategies and supplier selection. Global consulting firm

McKinsey & Company has surveyed supply chain leaders annually since the beginning of the COVID-19 pandemic. McKinsey’s third survey in 2022 revealed that many companies reported changes to their supply networks by implementing dual or multiple sourcing strategies for critical materials.¹

Dual-sourcing refers to the supply chain management practice of using two suppliers for raw materials, specific components, products or services. In the past, pharmaceutical and biopharmaceutical manufacturers often limited themselves to one preferred primary supplier.

With the supply constraints of COVID-19 they started seeking alternative suppliers for raw materials and other critical components. However, those alternative suppliers were viewed merely as a back-up if the primary supplier was not able to come through. Now, proactive manufacturers minimise risk by designating two primary suppliers, dual sources, or even more than two multi-sources.

A dual-sourcing strategy does a much better job of keeping both primary suppliers equally engaged throughout a project. If there is an issue with one supplier, the other can respond more quickly. The dual-primary supplier is certainly more strategic. It lowers risk as well as addressing the challenge of raw material variability.

With multiple sourcing or multi-sourcing, the procurement strategy of obtaining products or services from several suppliers, there are considerable benefits, including more flexibility, reduced costs, better protection from material shortages and supply disruptions, and potential competitive advantage over single-sourcing competitors.

Just in case vs. Just in time

‘Just in case’ and ‘Just in time’ are two different inventory management strategies that impact supply chain optimisation. Both should be taken into consideration when planning inventory levels. Having the right amount of raw materials and supplies for production, at the right time, for the right order is always the goal.

In this context, Spectrum Chemical has a highly diversified supply base that enables us to act early to forestall or mitigate problems. The company partners with customers and ensures that needed high-quality raw material is readily available. It also stores additional inventory for specific crucial products and works with multiple suppliers in stocking critical materials.

Conclusion

There will be ongoing improvements and innovations in global supply chain management as well as the transformations that artificial intelligence and digitalisation will make. At the same time, global supply chain operations will experience disruptions due to a variety of circumstances. Supplier selection and collaborations will become more important.

Drug manufacturers should seek to partner with well-established suppliers who have well-secured supply operations and are able to act quickly in dealing with supply chain challenges. Both pharmaceutical and biopharmaceutical manufacturers demand consistency and timeliness in being supplied with the highest quality raw materials, products and supplies that support drug discovery development and can help speed time to market. ●

Reference:
 1: K. Aliche, E. Barribal, T. Foster, J. Mauhourat & V. Trautwein, Taking the pulse of shifting supply chains, McKinsey & Company, 26 August 2022: <https://www.mckinsey.com/capabilities/operations/our-insights/taking-the-pulse-of-shifting-supply-chains>



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