

Clinical supply chain logistics are constantly changing as new technologies and developments are adapted. While multiple factors are responsible for reshaping the clinical trials logistics landscape, the explosive evolution of biologics is one of the key drivers. In order to preserve the integrity of biologics and other highly sensitive medicinal products, and to maintain the validity of trial results, cold chain solutions are essential.



Cold Chain Integrity



Cold chain logistics involves the safe transport of temperature-sensitive products along the clinical trial supply chain to the investigator site. This important segment of the industry is predicted to be worth \$16.6 billion by 2021. Maintaining the investigational medicinal product's (IMP) integrity across the entire supply chain, from packaging to storage to distribution is a rigorous process that requires cold chain and logistics expertise. Bay Area Research Logistics has the resources in place to take care of your sensitive biologics and satisfy any of your temperature needs. From our extensive experience with cold chain logistics, the key requirements associated with executing cold chain distribution in the clinical trial industry are discussed below.



Planning and Risk Mitigation



Poor planning and neglecting the importance of identifying vulnerabilities of cold chain logistics can result in lost sales, productivity, and opportunity to improve patient lives. When working with a cold chain provider it is extremely important to take the time to identify a means of addressing issues should they arise. Furthermore, planning and selecting the correct cold chain strategy, given the unique composition of the product and its destination, is necessary for ensuring that the clinical product does not become compromised. Delays and unforeseen temperature fluctuations that have not been discussed, accounted for, or have a clear contingency plan in place, can potentially place millions of future revenue dollars at risk. At Bay Area Research Logistics, we take the time to work with you to develop detailed plans and risk mitigation strategies to ensure that your study is not compromised as a result of mishandled shipments.



Packaging and Delivery



Optimized shipping strategies and effective thermal packaging are critical for the delivery of temperature sensitive products. The biggest challenge associated with cold chain is maintaining the required temperature range throughout the delivery cycle; it should be noted that some biologics require storage in a much colder environment. There are several variables that should be considered in order to ensure that a product is delivered without any variations in its composition, this includes identifying the correct size and type of package, temperature needs, the best route to the site, and the most effective temperature-control mechanism. At Bay Area Research Logistics, we use a prequalified container that are not only reusable and environmentally friendly, but also capable of protecting and transporting valuable temperature-sensitive material with a full range of temperature requirements.



Monitoring



When shipping temperature-sensitive products, it is essential to have a monitoring system in place to allow for increased visibility and ensure that the products' integrity is maintained throughout. Without this, control of the product is lost as it moves up the supply chain. Furthermore, if the product's temperature does not remain within the required range, it could result in clinical trial delays and extra expenses. Sensor technologies, smart technologies, and recordable devices such as RFID tags are solutions that enable the monitoring and management of cold chain logistics from point A to point B. At Bay Area Research Logistics, monitoring your high-value products at every step is of utmost importance; our practices ensure that your IMP arrives at the investigation site, and ultimately to the patient, safely.

As the clinical supply chain continues to advance and expand in complexity, Bay Area Research Logistics will continue to invest in new cold chain technologies and enhance capabilities. Our objective is to meet your cold chain needs by successfully shipping, handling and maintaining the integrity of new, and potentially lifesaving, products.

[Contact us with any questions!](#)