

# ANCILLARY MANAGEMENT: KEEP YOUR CLINICAL TRIAL ON TRACK

HOW TO ACHIEVE SUCCESS RUNNING GLOBAL TRIALS WITH MULTIPLE ANCILLARY PRODUCTS

# patheon



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# The expanding scope of today's clinical trials

Recent decades have seen a rapid escalation in the complexity of clinical trials. Regulatory demands for greater safety and efficacy data have required latestage (Phase III) trials involve significantly higher patient enrollment. Additionally, many late-stage drug development programs consist of multiple large-scale trials, assessing the drug candidate in different patient populations across a wider geography.

Each of these trials typically requires a broad range of ancillary materials (e.g. equipment, instruments, and consumables) in addition to the Investigational Medicinal Product (IMP). Investigator sites are not typically equipped to locally source and store these materials without support from the trial sponsor. At the same time, managing the procurement, storage and distribution of these ancillary materials for large, multi-country trials can result in an administrative burden that is beyond the sponsor's capacity.

This eBook analyzes the effect of the current industry trends on the clinical ancillary market. Suggestions for effectively planning an ancillary supply strategy and tips on execution techniques will help to ensure that your company's current workload is minimized without derailing your critical research. Key industry challenges that clinical trial team's face when managing ancillaries will be reviewed and pragmatic solutions presented.

#### **Key Topics:**

- Industry trends that are driving increased focus on a successful ancillary strategy
- Clinical supply challenges impacting the procurement and distribution of clinical ancillaries to investigator sites
- Important considerations to develop a comprehensive ancillary supply strategy
- Best practices to minimize risks in the ancillary supply chain

## Industry trends impacting clinical ancillary materials

Today's drug pipeline has been steadily shifting away from small molecule drugs. In 2017 biologics represented 37.8% of the drug development pipeline, and the rate of growth continues to accelerate.<sup>1</sup>

Biologics introduce additional complexity to the clinical supply chain. To begin with, they are delivered via infusion or injection which requires more items in support of the therapy. Infusion pumps, syringes or auto- injectors, alcohol swabs, sharps disposal containers—all are required to successfully administer the biologic. Where electrical equipment is required, compatible voltage and plug type become a mandatory consideration for sourcing. Things get complicated very quickly.

The expansion of later phase trials to include larger patient populations across multiple countries has enlisted many new investigator sites. In some regions these sites are less advanced than others. They may not have access to the required materials, or might not have the internal infrastructure to effectively manage the ancillaries.

These sites tend to require greater support and detailed oversight to ensure the required materials are on site and available to meet their patient's needs.

Increased regulatory requirements combined with internal pressures for transparency in overall clinical trial spend are requiring improved visibility to ancillary materials and their associated costs. Where in the past they were often overlooked or forgotten about, identifying the required ancillaries, defining a sourcing strategy and managing the distribution of same is required as part of the initial planning process.

This is especially true given that some countries mandate minimum expiry dates for items used in trials, a consideration that extends beyond the IMP itself. From a financial transparency perspective, costs for ancillaries need to be clearly identified and reported. Having this information buried within fees invoiced by a CRO is no longer meeting the reporting needs of trial sponsors. elesequas et apero conse volore labor moluptas sed quae quiscium, cum aliquo isit optaeri tempore cuptaep elendanisque il iusam eum arum comnis miliquas min rereperum quiscillat.



## Identifying the clinical supply challenges

It is essential to establish a plan for ancillary materials well in advance of the first patient visit. Two areas that require close examination are the complexity of the study itself, and the global scope of a trial.

#### STUDY COMPLEXITY

### As complexity increases, so do lead times and costs.

#### **DRUG ADMINISTRATION**

How is the IMP going to be administered? Injections and infusions require a greater level of support than tablets. The list of ancillary materials will be longer and potentially more complicated, as with electrical equipment or instruments. If a study involves the use of comparators, blinding will likely be a requirement that must be addressed.

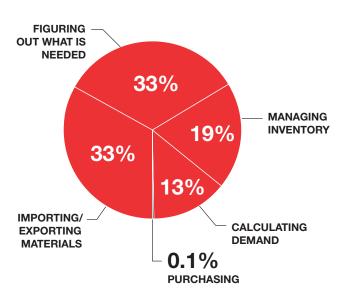
#### STORAGE CONDITIONS

Is there a cold chain requirement? While managing the delivery of the drug to an investigator site might be easily addressed, there are other considerations. Is the investigator site equipped with sufficient storage space to hold the supply? If the patient is responsible for dosing, how will the site ensure the stability and integrity of the product once it leaves their facility?

#### PATIENT-CENTRICITY

How will the patient manage this? Keeping patients enrolled in a study and ensuring compliance is critical, so it needs to be as simple as possible. How will they take materials home? If the drug requires refrigeration, will the patient be supplied with an insulated tote or cooler for transport? Do they have the required, compliant storage capacity at home or will a small refrigerator or freezer need to be supplied as part of the study? If the drug is injectable, how will you ensure they safely discard materials such as syringes?

# What is the biggest challenge you face with ancillaries?<sup>2</sup>



Poll of industry participants. Refer to webinar.

Identifying the clinical supply challenges (continued)

#### **GLOBAL SCOPE**

# Unique regulatory environments and import/export challenges can introduce unexpected delays.

#### **PARTICIPATING COUNTRIES**

Each country has a regulatory process that must be fully understood and complied with. In some cases there are minimum expiry guidelines that can impact country selection. The documentation required in support of import/export of products is extensive and complicated. Who will act as the Importer of Record? In many situations trials are being conducted in countries where both local CRO and the sponsor are unfamiliar with the requirements.

#### SOURCING STRATEGY

Will it be more efficient to source materials centrally and then distribute? Or would a local sourcing strategy streamline the process because it eliminates the import/export requirement? Does a blend of both approaches make the most sense? In all situations, who is responsible for sourcing, storing and distributing the materials just in time for patient visits?

#### SUPPORTED LANGUAGES

Every item in support of a trial requires labels and instructions in local languages. If sourcing centrally, how are multiple languages supported? Are instructions in booklet form, or will each item need to be specifically sourced in the required language?



Outsourced providers with large geographic footprints can help sponsors navigate these challenges to mitigate risk and minimize patient impact.

# Developing a comprehensive ancillary supplies strategy

Each clinical trial has a detailed plan for producing and distributing the IMP. The ancillary materials will outnumber the IMP and require an equally detailed execution plan.



The trial protocol is typically centered on the drug product. Examine that documentation and look for key words such as refrigeration, assembly, samples.



If 'refrigeration' is mentioned then end-to-end temperature management is probably required.



If samples are being taken, centrifuges may be a requirement.



If there are needles it should trigger the need for associated products such as syringes, alcohol swabs and disposal containers.



If a drug is to be mixed it may require sterile water be supplied.

Organizations that support many trials across a full range of therapeutic areas often have useful 'checklists' that provide a starting point for this process.



#### **Calculate Demand**

Ancillaries present a unique challenge—while the IMP might be packaged as individual patient units, ancillaries may be in packs of 5, 100 or 1,000. Sourcing approaches (central vs. regional), how sites are receiving materials, and how the product is being used will all impact the calculated demand.

#### **MATERIAL FOR SITE**

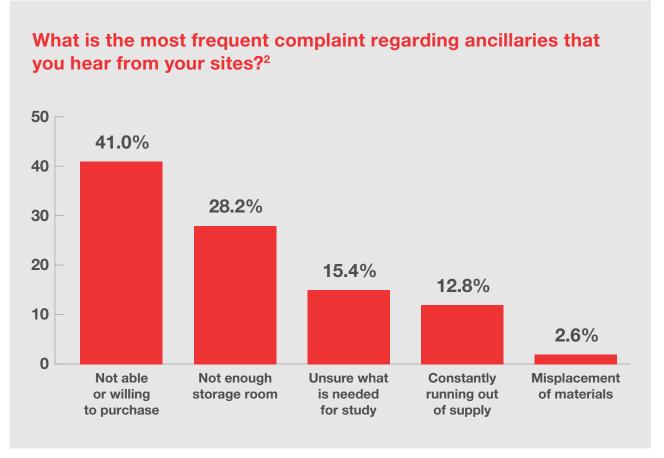
How is material going to be provided to site? If the site administers all doses they might be able to accept larger packs for use across multiple patients. However, if the patient is self-administering their doses, 'kits' may need to be pre-assembled with ancillaries that match their dosing schedule. This important consideration impacts how you supply and how you track.

#### **REGION-SPECIFIC MATERIALS**

Is this something that will be sourced centrally and distributed, or will it be sourced in multiple locations. Using a single source is convenient when it comes to calculating demand and ordering. Decentralized sourcing can be less flexible and more challenging, but in some situations is required.

#### **OVERAGE**

How is the item packaged, how are sites receiving, and how is the product being used? Each of these criteria impact calculating overage requirements which must be addressed as part of calculating demand.



## **Creating the Supply Chain**

To ensure ancillaries are always available when and where they are needed requires a well-planned and well-executed supply chain. Several factors can influence that design.







#### **SOURCE OF MATERIALS**

Will you purchase ancillaries through a central source, or will they be acquired regionally, closer to your patient populations? If you are supporting a global trial but are sourcing materials centrally, there are complexities associated with export/import of supplies into the various regions. If supplies need to be packaged into kits for use by investigator sites and patients, you may also need access to a network of GMP-compliant facilities that can store and distribute materials within the country and region.

#### **DELIVERY CADENCE**

Most investigator sites have limited storage capacity, so materials typically need to be available just in time for patient visits. Each item has its own lead time for sourcing, there may be time required for kitting, and also time required for delivery to site and/or patient. The greater the number of supplies, the greater the complexities.

#### STUDY TIMELINE

Your IMP has an expiry date, and the same will be true of some of the required ancillaries. Understanding the overall timeline for the trial is essential to defining the supporting order and delivery schedule.

# Best practices to minimize risks in the ancillary supply chain

Effective management of clinical ancillary materials is an essential component of every clinical trial. Items that are missing, or materials that arrive too late for a patient visit have a direct impact on the success of a study. Patient compliance is compromised or, worse yet, patients might drop out of a trial. Experience gained over the course of thousands of trials have taught us these valuable lessons:



#### **START EARLY**

Ancillaries are often an afterthought. Try to work at least 6 months in advance of site initiation/ first patient in.

#### **PLAN IN PARALLEL**

As you develop the ancillary strategy you can begin incorporating changes that come up in protocol. You will be further ahead modifying an existing plan rather than waiting until everything is finalized before beginning the process.

#### **STANDARDIZE**

Study managers often are so focused on the protocol they aren't paying close attention to ancillaries and how changes in the protocol might impact that. Standardizing products across multiple studies reduces the amount of time required for planning. Standardizing the approach and establishing a list of qualified suppliers will drive down time, minimize the risk that items are overlooked, and eliminates gaps in supply chain.



Collaboration between the clinical supplies and operations teams is essential. From the investigator site's point of view, these are required materials to perform their duties. Without collaboration, the sites usually suffer. Where CRO's are involved, they can provide valuable input regarding country selection and patient enrollment rates. The ancillary material suppliers are also a source of valuable information. All four groups need to share information to create an actionable plan that makes study run smoother, resulting in happier investigator sites and better patient outcomes.



