



Direct-to-Participant Shipping

Introduction

Some DCTs involve shipping a research product (e.g., drug, investigational medicinal product (IMP), diagnostic, device, or sensor), directly to the trial participant. There are a variety of considerations for the IRB/EC regarding direct-to-participant shipping, including country, state and local laws, regulations, and considerations specific to the product, including its route of administration, stability, safety, and accountability for the product. In addition, whether the research product is shipped by the investigator, sponsor, or third party will impact the IRB/IEC review, given that participants' personal information will be collected. All this information is generally included in the protocol document reviewed by the IRB/EC. IRBs/ECs evaluating protocols involving Direct-to-Participant² shipping should consider the following questions for each item being shipped.

Questions for IRB/ECs to Consider

- What is the item being shipped?
 - Is there a description of the device, sensor, drug, or IMP being shipped, including technical specifications and safety data sheets, included in the protocol or attached materials?
 - Have any unique shipment considerations such as temperature sensitivity, fragility status, protection from light, safety during shipment and receipt been considered?

- For an investigational medicinal product (IMP):
- If an IMP is being shipped, are the requirements of Good Manufacturing Practice (GMP) and Good Distribution Practice (GDP) for the IMP fulfilled?
 - Are reconstitution fluids and procedures and/or devices for product infusion or administration included, if applicable?
 - Are appropriate measures to maintain blinding of the trial in place, if applicable?
- Where will the IMP be shipped, and what interstate or international laws and regulations must be adhered to?
- What storage conditions at the home of the trial participant are required?
- Who is accountable for IMP and responsible documentation? If the participant is accountable, what education, assistance, and oversight will be provided? Consider:
 - Shipment receipt
 - IMP storage
 - IMP distribution

² As used in this document, the term “participant” includes an appropriate designee, such as a parent, guardian, legally authorized representative, caregiver, or local professional care provider.



- IMP return or alternative disposition of the unused product
- How will the participant be adequately informed of the purpose of the IMP, its risks, and proper use?
 - Who will administer IMP to the participant?
 - Does a healthcare practitioner need to assist with training or the initial administration(s)?
 - Is a healthcare practitioner necessary to mitigate risks of acute significant adverse events?
 - Who will monitor participant use?
 - How will adverse events be identified, reported, and treated?
 - Are mechanisms that permit rapid identification of the IMP in the event of a medical emergency in place, accessible, and communicated?
 - How is compliance monitored?
- What are the participant safety concerns, including receipt, handling, storage, administration, and adverse events of IMP?
- For devices or sensors
 - What training is required for the participant to use the device or sensor appropriately?
 - What further cost or burden will the participant bear (e.g., WIFI, data)?
 - Except in rare circumstances, there should be no penalties for damage or loss.
- How will items be labeled and shipped?
 - Have shipping procedures and the proposed delivery plan been optimized for conditions specific to the item being shipped (e.g., device, sensor, drug)? For example, shipping of temperature-sensitive drugs should include means (1) to monitor temperature, (2) to determine if the temperature threshold is exceeded, and (3) to ensure someone is present to receive and adequately store shipment at the destination when delivered.
 - Does the protocol describe how to label boxes? Does the labeling allow participants to identify the shipment quickly as part of the trial while also balancing privacy concerns? Are necessary measures in place to ensure that participants' personal data are protected from unauthorized or accidental disclosure?
 - Are there instructions for the shipper, such as not to leave the package with neighbors?
- What is the plan to verify arrival?
 - Does the protocol include plans to verify delivery to the correct participant?
 - If a shipping error occurs, is there a contingency plan in place to replace IMP, device, or sensor quickly? This plan is essential for IMPs and time- or temperature-sensitive drugs
- Is participant training required to use the item being shipped? How will assistance be given, if needed?



- Will the trial participant be given appropriate information and agree to share the personal data necessary for the item to be processed, shipped, received, and used?
- Does the trial participant need instruction in advance about the correct storage and use of the shipped item? If training is required, is a training plan and methods to ensure comprehension included in the protocol?
- Has the burden on participants been minimized for direct-to-participant shipping?
 - Is the burden different than anticipated were the IMP distributed at the research site?
 - Are there additional participant risks by direct-to-participant shipping compared with traditional trials?
- Do participants need 24/7 access to either assistance about the item being shipped or the protocol? If not, will lack of aid possibly cause significant risks to patient safety or data quality?
- Do participants have contact information for either technical or protocol-specific assistance?
- Will the plan for direct-to-participant shipping be a barrier for specific participant populations or participants in certain locations?
 - Are hybrid solutions possible (e.g., direct-to-participant shipping, shipping to a local healthcare facility or pharmacy, etc.)?
 - Optimally, participants can choose how they wish to receive the IMP. If direct-to-participant shipping is necessary, then informed consent should explain that shipment to their personal address is required.