York and Scarborough Teaching Hospitals NHS Foundation Trust R&D Unit
Standard Operating Procedure
Pharm/S47

Storage of Clinical Trials Materials and Investigational Medicinal Products

IT IS THE RESPONSIBILITY OF ALL USERS OF THIS SOP TO ENSURE THAT THE CORRECT VERSION IS BEING USED

All staff should regularly check the R&D Unit's website and/or Q-Pulse for information relating to the implementation of new or revised versions. Staff must ensure that they are adequately trained in the new procedure and must make sure that all copies of superseded versions are promptly withdrawn from use unless notified otherwise by the SOP Controller.

The definitive versions of all R&D Unit SOPs appear online. If you are reading this in printed form check that the version number and date below is the most recent one as shown on the R&D Unit website: www.research.yorkhospitals.nhs.uk/sops-and-guidance-/ and/or Q-Pulse

SOP Reference:	Pharm/S47
Version Number:	5.0
Author:	Abigail Rowbotham
Implementation date of current version:	22nd April 2019

Approved by:	Name/Position:	Poppy Cottrell-Howe, Pharmacy Clinical Trials Manager
	Signature:	Signed copy held by R&D Unit
	Date:	1st April 2019
	Name/Position:	Sarah Sheath, SOP Controller
	Signature:	Signed copy held by R&D Unit
	Date:	1st April 2019

This SOP will normally be reviewed every 3 years unless changes to the legislation require otherwise

Version History Log

This area should detail the version history for this document. It should detail the key elements of the changes to the versions.

Version	Date Implemented	Details of significant changes
1.0	1st January 2010	
2.0	2nd July 2012	Storage of non-IMPs, storage of IMPs outside of Pharmacy, and locations of temperature monitoring. Removal of North and East Yorkshire R&D Alliance references. Change of SOP Controller.
3.0	24th October 2013	Incorporated Scarborough Hospital as a site working to this SOP. Removed out of date references to storage areas within Pharmacy at York. Added references to new SOP – Pharm/S76 – Storage and Dispensing the IMP outside Pharmacy.
4.0	19th January 2016	Small amendments to the SOP changing reference to York R&D Unit rather than R&D Manager, removing reference to Pharm/T25 as it will imminently be replaced and clarifying location of quarantine area in Pharmacy cold room.
5.0	22nd April 2019	Removed references to Scarborough Hospital storage which is no longer in use. Incorporated further information on freezer storage and new storage locations at York Hospital.

Contents

1 Introduction, Background and Purpose

Clinical Trial materials and Investigational Medicinal Products (IMP) must be stored in accordance with current Clinical Trials legislation (The Clinical Trials Directive 2001/20/EC transposed into UK law through The Medicines for Human Use (Clinical Trials) Regulations 2004 (Statutory Instrument 2004 No.1031), Good Clinical Practice (GCP) and the Trust's Medicines Code. This requires storage arrangements and clear accountability records to ensure:

- adherence to any requirements set out in the protocol for the clinical trial
- adherence to the requirements of the Investigator's Brochure or Summary of Product Characteristics
- products are not supplied after their expiry date
- the quality of products has not been compromised prior to their expiry

The purpose of this SOP is to specify a suitable storage area for clinical trial stock, whilst ensuring all IMPs are separated from normal hospital stock.

2 Who Should Use This SOP

This procedure should be followed by all staff who handles clinical trial materials and IMP within the Pharmacy Department at York and Scarborough Teaching Hospitals NHS Foundation Trust.

3 When this SOP Should be Used

This SOP should be used whenever Clinical Trial materials and IMP are being stored within York and Scarborough Teaching Hospitals NHS Foundation Trust.

4 Procedure(s)

IMP must be stored in a secure area not accessible to unauthorised persons.

This area should be temperature monitored and all IMP should be segregated from normal hospital stock and clearly marked.

The IMP for each clinical trial should be individually segregated using appropriate containers labelled with the study name, drug, EudraCT number (if applicable), Sponsor, Principal Investigator (PI) and method of ordering.

4.1 Storage of Investigational Medicinal Products within Pharmacy

1. During the process of Pharmacy Assessment the required storage conditions for the IMP should be ascertained by reference to:
   - The Investigator's Brochure or Summary of Product Characteristics
   - The Protocol or Pharmacy Manual provided by the Sponsor

If there is any doubt as to how the product should be stored contact the Sponsor.

2. During the process of completing the pharmacy related SOPs for the study the storage conditions of the IMP should be documented.

3. An area for the IMP to be stored in pharmacy should be allocated as part of the trial set up process; the storage container/location housing the IMP should be clearly marked with the study details. The allocation should be made in accordance with the required storage conditions and the areas available for storage as detailed below:

   - Ambient or Room temperature storage (15ºC to 25ºC)
     - IMP will be stored in the Clinical Trials Dispensary.
   - Refrigerated storage (2ºC to 8ºC)
     - IMP will be stored in the Clinical Trials Refrigerators CTF1, CTF2 and CTF3 all located in the Clinical Trials Dispensary
     - There is also additional refrigerated storage in the main Pharmacy Cold room.
   - Frozen storage – arrangements should be discussed with the trial Sponsor when considering the Pharmacy Assessment of the study. It may be possible to request a freezer from the Sponsor. Otherwise arrangements may have to be made to use a freezer within Main Pharmacy (e.g. Bond Room Freezer) or within the Research and Development department. It is important to consider the temperature requirements of the IMP to allocate appropriate temperature storage, for example whether an ultra-low temperature freezer is needed (-80 ºC).

4. There are quarantine storage areas for IMP/Clinical Trials materials. A clearly marked area of the Pharmacy cold room (2ºC to 8ºC) and a lockable cupboard in the Clinical Trials Dispensary (15ºC to 25ºC) are in use. These should be used to store IMP if the product has expired, is awaiting QP certificate of release, or has been subject to a temperature excursion. Quarantine documentation should be completed when IMP is stored in these areas. The procedure for this is detailed in Pharm/S59. If a study requires frozen storage of IMP, appropriate quarantine storage should be arranged (E.g. a sealable box within the freezer).

5. At the York site, any supplies returned by the patient or Research Nurse after use must be stored in the Clinical Trials Dispensary in the green boxes above the dispensing bench, boxes should be labelled with the name of the trial if not already done so.

   Once they have been reconciled and logged in the relevant Pharmacy study site file, they will be stored in the bay marked ‘returns’ in the Clinical Trials Dispensary, separated from all other stock in sealable/lidded boxes marked with the study name. At the Scarborough site, any supplies returned by the patient or research nurse are stored in a designated, segregated area of the Scarborough pharmacy in a box labelled ‘Clinical Trials Returns’. On a regular basis returns will be sent on transport to the centralised pharmacy location at the York site and will be processed and stored as mentioned above for the York site returns.

6. A record of storage temperature conditions should be maintained for each of the locations where current supplies of IMP are stored (see section 3 and 4 above). If the Sponsor provides a specific form for recording the storage conditions for the trial, ask if we can use our standard computer printout generated by the monitoring arrangements described below. Temperature monitoring arrangements will be described during the production of the Pharmacy Trial Instructions.

7. Temperatures will be monitored electronically using a validated temperature monitoring system or device for recording ambient and refrigerated conditions (and frozen storage conditions if applicable).

   Temperatures of the IMP storage areas within Pharmacy are also recorded manually each working day (Monday to Friday, except Bank Holidays).

   The process for doing this can be found in Pharm/S48 (Temperature monitoring).

8. Any study specific SOPs regarding specific storage instructions should be adhered to. This may involve storing IMPs under frozen conditions, or storing IMPs outside of the Pharmacy department (see section 4.3 also). The responsibilities of the research team and Pharmacy clinical trials team should be defined and understood by all those involved in these circumstances and these should be documented in a study specific SOP or documentation. If IMP stored outside Pharmacy is going to be dispensed by persons other than the Pharmacy clinical trials team, this study specific SOP should document the dispensing process they are going to follow. In addition, training of relevant research team members (in the study specific SOP) should be documented using Pharm/F61 – Pharmacy training record. See Pharm/S76 – Storage and Dispensing the IMP outside of Pharmacy for more detailed guidance on this subject.

4.2 Storage of non-Investigational Medicinal Products within Pharmacy

Non-IMPs should be stored following the same procedures for IMPs; therefore the product will be stored in a secure area not accessible to unauthorised persons. This area should also be temperature monitored and products will usually be segregated from normal hospital stock and clearly marked for this purpose. Trial-specific SOPs created by the Sponsor should also be followed when provided (see the Pharmacy Trial Instructions for each individual trial).

4.3 Storage of Investigational Medicinal Products outside Pharmacy

It is acceptable for the IMP to be managed by the Investigator. For example, in some trials it may be necessary to store clinical trial supplies or IMP on the ward or another location in the Trust where they can be accessed in an emergency by the Principal Investigator or Research Nurse responsible. Clinical trial supplies or IMP may also need to be stored outside of the Pharmacy if a patient is attending a clinic appointment that will require medication and this occurs outside the normal opening hours of the Pharmacy (8.45 am to 5.15 pm). There may also be other circumstances where Pharmacy cannot provide the service in relation to the trial (e.g. patient

attendance at an off-site unit e.g. GUM Clinic) however this can be provided by the Principal Investigator/Research Team.

If this is necessary, each storage area will need to be assessed by the Pharmacy clinical trials team to ensure that it is safe, secure and has the correct environmental conditions for the relevant IMP (and can be temperature monitored) before it is agreed that the supplies can be stored in this location. A Room Assessment form (Pharm/F89) should be used for this purpose. Arrangements must be made and documented regarding a secure system of drug accountability, expiry date checks and for appropriate storage records to be maintained as well as clearly defined roles and documentation regarding prescribing and dispensing of the IMP.

Procedures will need to be documented within the Pharmacy Trial Instructions to ensure that supplies stored outside the Pharmacy department are stored and accounted for as indicated in the protocol.

In addition to this, as mentioned in section 4.1 (part 8), in all cases where IMP is being stored outside Pharmacy and elements of the IMP control process are being shared by Pharmacy staff and other staff (for example Research Nurses), the arrangements made must be documented in a Study-Specific Standard Operating Procedure in accordance with R&D/S26.

4.4 Transporting and storing of Dispensed Investigational Medicinal Products to Scarborough Hospital.

Scarborough clinical trials may require dispensed IMP to be sent on transport to Scarborough Hospital Pharmacy to await collection by a research nurse or patient. IMP awaiting collection must be stored in the segregated, designated area of the Scarborough Hospital Pharmacy (in a lockable secure room) which is maintained at room/ambient temperature of 15ºC to 25ºC. The IMP must be placed in a box clearly marked for Clinical Trials collection. Temperatures are monitored and recorded manually each working day (Monday to Friday, except Bank Holidays) remotely at the centralised pharmacy location at the York sire using an electronic validated temperature monitoring system.

Within the pharmacy site file for each Scarborough clinical trial there will be directions of how the IMP for the study is to be transported and stored, including the use of validated temperature monitoring devices and transport bags/containers.

If studies are requiring IMP to be transported/stored with different temperature requirement to 15ºC to 25ºC then assessments and validation must take place prior to sending the IMP on transport to the Scarborough site.

Approval should be obtained from the sponsor before transporting IMP between sites.

5 Related SOPs and Documents

PHARM/S55	Returning Clinical Trials materials and IMP from Pharmacy Stores to the Trial Sponsor
PHARM/S48	Temperature Monitoring (Clinical Trials)

R&D/S26	Preparation, review and approval of Standard Operating Procedures for Research
Pharm/S76	Storage and Dispensing of Investigational Medicinal Products outside of Pharmacy
Pharm/F89	Assessing an area for Investigational Medicinal Product storage outside of Pharmacy