

Sample Storage Verification				
Category:	Quality Management			
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Approved by:	Dr. Alaa Abdullah AlMasud	Effective Date:		

1.0 PURPOSE

The purpose of this SOP is to establish procedures for verifying that the physical storage location and conditions of samples at Nourah's Tissue Biobank match the records in the Laboratory Information Management System (LIMS). This verification process ensures accurate tracking and appropriate storage conditions for all samples within the biobank.

2.0 SCOPE

This SOP applies to all samples stored in the biobank facilities, including tissue and blood samples, and covers both physical storage checks and LIMS data verification.

3.0 ROLES AND RESPONSIBILITIES

This SOP applies to all personnel of Nourah's Tissue Biobank members

Biobank Personnel	Responsibility	
Biobank Manager	Oversees the storage verification process and reviews documentation for accuracy and compliance.	
Lab Technologist	Assists in storage verification and ensures proper handling and placement of samples.	

4.0 MATERIALS, EQUIPMENT, AND FORMS

Listing of the materials, equipment, and forms being used to achieve the goals of the SOP, this list will mainly contain necessary materials and, or recommendations that may be substituted by alternative or equivalent materials more suitable at the time of testing.



Material to be used	Site	

5.0 POTENTIAL HAZARDS

In this part of the SOP, we explain the potential hazards from chemicals and methodologies used in this procedure. It will also contain information on how to handle these chemicals and the level of biosafety

Material	Safety and handling	

6.0 PROCEDURES

6.1 STORAGE VERIFICATION PROCESS

- Conduct storage verification monthly to ensure consistency between physical storage and LIMS
 records
- 2. Perform additional verification if there is a system upgrade, relocation of samples, or any incident that could affect data accuracy.
- 3. Generate a sample location report from LIMS, detailing each sample's storage location, box or rack ID, and storage conditions (e.g., temperature).
- 4. Ensure access to the physical storage facilities, including freezers, refrigerators, and room-temperature storage as needed.
- 5. Retrieve samples from their recorded storage locations based on LIMS data.
- 6. Confirm that each sample's physical location (e.g., freezer, shelf, box) matches the LIMS record.
- 7. Verify that storage conditions for each sample align with LIMS records (e.g., stored at -80°C, -20°C, or room temperature).
- 8. Record any discrepancies or issues encountered during the physical check.
- 9. Access LIMS to check that sample data accurately reflects the physical location and storage condition.
- 10. Verify that all data fields, including sample ID, storage unit, and conditions, are correctly recorded in LIMS.
- 11. Document any inconsistencies found between the physical storage and LIMS records.
- 12. For any mismatches or inconsistencies identified, update the LIMS record to reflect the correct physical location or adjust the physical storage if an error is detected in handling.
- 13. Document any corrective actions taken in the Sample Storage Verification Log (Appendix A).

6.2 STORAGE CONDITION VERIFICATION



- 1. Check that temperature monitoring devices (e.g., thermometers, data loggers) are functioning correctly in all storage units.
- 2. Ensure that storage units maintain stable temperatures as specified in LIMS records for each sample type.
- 3. Record temperature data daily, weekly, or as required to ensure stability in storage conditions.
- 4. If storage conditions deviate from specified ranges, report the issue to the Biobank Manager immediately.
- 5. Follow corrective action procedures to bring storage conditions back within acceptable ranges and prevent sample degradation.

6.3 DOCUMENTATION AND REPORTING

- 1. Record details of each verification session, including sample ID, LIMS location, physical location, storage condition, and any discrepancies found.
- 2. Document corrective actions taken to resolve mismatches or storage condition deviations.
- 3. Maintain records of any corrective actions taken to address discrepancies, including updates to LIMS data or changes in physical storage.
- 4. The Biobank Manager reviews the Sample Storage Verification Log monthly to ensure all storage verification processes are completed accurately and in a timely manner.

7.0 REFERENCES

1. ISO 20387:2018 – General requirements for biobanking.



2. Internal policies of Princess Nourah bint Abdulrahman University.

8.0 REVISION HISTORY

SOP No.	Date Revised	Author	Summary

9.0 APPENDICES

Appendix A – Sample Storage Location & Condition Verification Form

Appendix B - Sample Storage Location & Condition Verification Log