Labeling and Tracking of Materials

Category:	**Materials Handling and Documentation**		
SOP number:	04.001	Version	1.0
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1.0 PURPOSE

The purpose of this SOP is to establish standardized procedures for the labeling and tracking of materials within Nourah's Tissue Biobank. Accurate labeling and tracking are essential for ensuring the integrity, traceability, and proper management of all materials handled within the biobank.

2.0 SCOPE

This SOP applies to all personnel involved in the handling, labeling, and tracking of materials within Nourah's Tissue Biobank, including tissue samples, reagents, containers, and any other items stored or used in the biobank.

3.0 ROLES AND RESPONSIBILITIES

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

Biobank Personnel	Responsibility
Biobank Manger	Responsible for overseeing the implementation of this SOP, ensuring compliance, and conducting regular audits.
Laboratory Technicians	Responsible for reviewing and approving labels, conducting audits, and managing error correction processes.
Quality Assurance (QA) Officer	Responsible for reviewing and approving labels, conducting audits, and managing error correction processes.
Data Entry Personnel	Responsible for updating and maintaining the tracking system with accurate information.

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
Label printer and labels	
Barcode or QR code scanner	
Tracking software/database (LIMS)	
Transfer logs/forms.	
Permanent markers (for emergency labeling)	

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

This part of the SOP explains the methodology step by step to ensure that the goal of the SOP is achieved with minimal risk and minimal mistakes to provide the optimal results

6.1 LABEL CREATION

1. Assign a Unique Identifier:
    a. Use Nourah's Tissue Biobank LIMS system to generate an identifier.
    b. The ID generated must include sample type, date and sequential number
2. Label Content:
    a. ID
    b. Sample Type
    c. Date of Collection
    d. Storage Condition
    e. Barcode or QR code.
3. Label Format
    a. Labels must be durable and resistant to the storage condition i.e. (-80 Freezer, Liquid Nitrogen)
    b. Usage of a standardized fonts and sizes for consistency

6.2 LABEL APPLICATION

1. Ensure that all human biological samples are stored in appropriate container.
    a. Ensure and verify all containers and vials are suitable for storage
    b. Ensure that all container and vials are suitable for labeling
2. Application of label.
    a. Label all levels of containers and vials containing biological samples from smallest to largest.
    b. Ensure that the label is securely adhered and are not affected by different storing conditions.
3. Verify Label Accuracy.
    a. Cross-check the label against the material's documentation to confirm accuracy
    b. Ensure that all required data (ID, Sample Type, Date of Collection, storage condition and Barcode) are all printed and are easily read.

c. Ensure that the labels are resistant against all common laboratory solvents and water (e.g., use a cryomarker, cold-resistant label, waterproof/solvent-proof pen, thermal-transfer printer).

6.3 DATA ENTRY & TRACKING

1. Assigned ID are logged into the LIMS system
2. Link the same identifier to all associated clinical and scientific data for the sample.
3. Update the tracking system with any changes in material status, location, or condition constantly.
4. The system must record all changes to material data, including who made the change and the reason.

7.0 REFERENCES

1. ISO 20387:2018
2. CTRnet SOPs "08.01.001 Labeling and Tracking Materials"
3. Declaration of Helsinki. http://www.wma.net/en/30publications/10policies/b3/index.html
4. Human Tissue and Biological Samples for use in Research. Operational and Ethical Guidelines. Medical Research Council Ethics http://www.mrc.ac.uk/Utilities/Documentrecord/index.htm?d=MRC002420
5. Best Practices for Repositories I. Collection, Storage and Retrieval of Human Biological Materials for Research. International Society for Biological and Environmental Repositories (ISBER). http://www.isber.org/Search/search.asp?zoom_query=best+practices+for+repositories
6. National Bioethics Advisory Commission: Research involving human biological materials: Ethical issues and policy guidance, Vol. I: Report and recommendations of the National Bioethics Advisory Committee. August 1999. http://bioethics.georgetown.edu/nbac/hbm.pdf
7. US National Biospecimen Network Blueprint http://biospecimens.cancer.gov/resources/publications/reports/nbn.asp

8.0 REVISION HISTORY

SOP No.	Date Revised	Author	Summary

9.0 APPENDICES