

CTRNet Standard Operating Procedure Sample Retrieval				
SOP Number:	08.03.011	Version:	e2.0	
Supersedes:	8.3.011 e1.0	Category:	Material Handling and Documentation	

Approved By:	CTRNet Management Group (CMG)	01-June-2012
	Per: Brent Schacter	28-June-2012

1.0 PURPOSE

During the operation of a tumour bank it will be necessary to retrieve samples from freezers for distribution or processing. These procedures deal mainly with retrieval of frozen samples but many points may be applicable to samples stored in other conditions and in other equipment. The purpose of this standard operating procedure (SOP) is to outline procedures that will ensure that retrieval will be conducted under conditions designed to safeguard the quality and integrity of the sample.

2.0 SCOPE

This standard operating procedure (SOP) covers the procedures for sample retrieval and documentation. It outlines general factors that need to be considered during sample retrieval as well as specific steps that need to be followed to maintain the quality of the sample. These steps may be adopted as is, or modified by specific CTRNet member banks at their collection and storage sites to allow for the incorporation of site-specific details, conditions, requirements and features of their informatics and storage systems

3.0 REFERENCE TO OTHER CTRNET SOPS OR POLICIES

Note: When adopting this SOP for local use please reference CTRNet.

3.1 CTRNet Policy: POL 5 Records and Documentation

3.2 CTRNet Policy: POL 7 Material and Information Handling

4.0 ROLES AND RESPONSIBILITIES

The SOP applies to all qualified tumor biobank personnel and laboratory staff that are responsible for retrieving samples. This may include the following personnel:

Tumour Biobank Personnel	Responsibility/Role
Technician/Technologist or Pathology coordinator	Responsible for storing samples, entering data in the informatics system and retrieving samples.



5.0 MATERIALS, EQUIPMENT AND FORMS

The materials, equipment and forms listed in the following list are recommendations only and may be substituted by alternative/equivalent products more suitable for the site-specific task or procedure.

Materials and Equipment	Materials and Equipment (Site Specific)
Inventory Database	
Safety equipment for handling stored samples (such as face mask and thermal gloves for handling liquid nitrogen)	
Pens, markers etc	
Ice	
Dry ice	

6.0 DEFINITIONS

See the CTRNet Program Glossary: http://www.ctrnet.ca/glossary

7.0 PROCEDURES

Sample retrieval requires that the sample be removed from its stable storage environment. Any variation in storage conditions can have a serious effect on the viability of the specimen (if relevant) or cellular and molecular quality of the sample. This retrieval procedure is designed to ensure that the retrieval process maintains the molecular and cellular integrity of the sample. The anticipated use for the samples may determine the best practice to be observed.

7.1 Retrieval - Locating Specimens in Storage

- 7.1.1 Create a requisition for sample retrieval.
- 7.1.2 Before transmitting to the biobank check the requisition for accuracy.
- 7.1.3 Locate specimens to be retrieved on the inventory system.

7.2 Retrieval – Sample Retrieval

- 7.2.1 At the storage area of the biobank locate and pull specimens listed on the requisition.
- 7.2.2 Maintain proper temperature of the specimens according to specimen type; for example, some banks use pre-chilled metal racks on dry ice for sorting frozen vials that have been retrieved. Care must be taken to minimize exposure of the 'source' storage box or tower to ambient temperatures.
- 7.2.3 Confirm that specimens on the requisition are accounted for in the freezer or storage container.



- 7.2.4 If missing or incorrect, file a deviation report and attempt to find the samples.
- 7.2.5 Place retrieved samples in appropriate container or boxes and label appropriately as required for shipping or storage.

7.3 Retrieval - Documentation of Retrieval

- 7.3.1 Use a checklist to record all steps where appropriate.
- 7.3.2 Make changes to the inventory system where relevant. If material is released indicate where the sample was shipped (See SOP 09.004 Material Request and Release). If processed, indicate derivative generated.
- 7.3.3 If applicable, keep records on the number of times samples may have been thawed and refrozen.

8.0 APPLICABLE REFERENCES, REGULATIONS AND GUIDELINES

- **8.1** Declaration of Helsinki http://www.wma.net/en/30publications/10policies/b3/index.html
- 8.2 Tri-Council Policy Statement 2; Ethical Conduct for Research Involving Humans; Medical Research Council of Canada; Natural Sciences and Engineering Council of Canada; Social Sciences and Humanities Research Council of Canada, December 2010. http://www.pre.ethics.gc.ca/eng/policy-politique/initiatives/tcps2-eptc2/Default/
- 8.3 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
- **8.4** US National Biospecimen Network Blueprint http://biospecimens.cancer.gov/resources/publications/reports/nbn.asp
- 8.5 International Conference on Harmonisation (ICH) Good Clinical Practice (GCP) Guidelines, section 4.8.
 http://www.ich.org/products/quidelines.html
- 8.6 Health Canada Therapeutic Products Directorate Food and Drug Regulations for Clinical Trials. Division 5. Canada Gazette Part II, Vol. 135, No. 13, June 7, 2001 Section C.05.010 Sponsor Obligations
 - http://www.hc-sc.gc.ca/dhp-mps/compli-conform/clini-pract-prat/reg/1024-eng.php

9.0 APPENDICES

None



10.0 REVISION HISTORY

SOP Number	Date revised	Author	Summary of Revisions
SR001.001			
8.3.011 e1.1	June 2012	CMG	 Grammatical and formatting throughout Definitions removed Revision History moved to bottom Reference links updates Updated SOP references Deleted section 7.1 Section 7.3 – revised.