

## Standard Operating Procedure

### Collection and storage of tissue at BDN centres

SOP: PC004, version ^ 2

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**Authorisation:** This document is authorised and activated by its publication to the G: drive by the Head of Quality and Standards (HQS).

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#### Changes to previous version

Changed text is shown in red and deletions are shown as ^. Details of significant changes are shown under History, below.

^

#### Introduction and aim of the procedure

This standard operating procedure defines the collection and storage of tissue samples donated to onCore UK's tissue bank. Tissue samples will not be available from every donor; tissue will be available only when it has been taken for diagnostic or therapeutic purposes. Even if tissue has been removed from the patient it may not be available for banking since^ there may be insufficient tissue ^ to allow for banking or the surplus tissue may have been destroyed before ^ pathology ^ staff are made aware of the patient's wish to donate.

#### Applications and Restrictions

Tissue will be collected only from patients who have been enrolled as onCore UK donors according to SOP PC001 and when freely given and informed consent to donate tissue for banking has been obtained from the donor. Tissue will be collected only if it is surplus to diagnostic requirements; it is essential the tissue banking does not compromise patient welfare. onCore UK seeks only formalin fixed, paraffin embedded tissue at present.

Donors must be enrolled into the onCore UK database before beginning to process blood. Instruction on the use of the database are given in the CELL System Manual, SOP: IT001.

## Training

Training in health and safety procedures for working with human tissue is given and recorded according to local procedures. Additional training to cover the specific requirements of onCore UK is given according to SOP: TR001 using form PC004.01.  
^ A list of trained, competent staff ^ may be maintained on form PC004.02 if that is useful to the hospital.

## Associated procedures and supporting documents

SOP: PC001	Donor consent
Form: PC004.01	Training form - Collection and storage of tissue at BDN centres
Form: PC004.02	Record of competence - Collection and storage of tissue at BDN centres
SOP: ST001	Dispatch of samples from BDN centres to onCore UK repository
SOP: QS001	Deviations from standard operating procedures
SOP: TR001	General training procedure for onCore UK activities
IT001	CELL system manual

## Definitions

H+E Haematoxylin and eosin stain

## Health and Safety

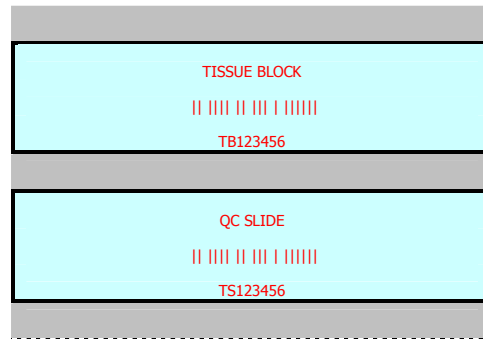
All human biological material must be considered a biohazard and handled using universal precautions according to local H+S rules.

## The procedure

- 1 Potential donors will be identified and consent to donate sought according to local procedures.^
- 2 The Pathology Department will receive a copy of the consent form according to local procedures.^ This will be at different stages of tissue processing in different hospitals. It may be possible to :
  - a. Take extra blocks from resected tissue, specifically for tissue banking at onCore UK, if the form is received whilst tissue is available
  - b. Provide blocks taken for diagnostic purposes once their routine examination is completed if the form is received after tissue has been used up or destroyed.
- ^ 3 Whenever tissue is available, ask the Consultant Pathologist to use their local standard operating procedures ^ to prepare up to four formalin-fixed, paraffin embedded blocks (blocks), up to three from the tumour and one of unaffected tissue. It may not be possible to obtain all of these since tissues may not be of sufficient size and there may not be sufficient material. Each block should be about 1x1x0.5cm in size or as near to this as is possible.
- ^ 4 Label and process blocks according to local procedures.
- 5 Prepare a QC control slide from each block, stain with H+E and apply coverslip according to local procedures.
- 6 Match the blocks intended for onCore UK with their associated QC slides. Use the labels provided by onCore UK to attach a barcode to the blocks and slides; note that the labels come in pairs as shown in diagram 1 below and be

careful to attach a matching pair to the block and associated slide. These barcodes become the samples' unique identifiers; they are used for sample tracking and to link the block with its associated QC slide.

Diagram 1: Pair of matched barcode labels, one for the tissue block and the other for the associated QC slide. Note that the barcode numbers are identical but the prefix is either TB (for blocks) or TS (for slides).



- 7 Log on to the onCore UK CELL system. Ensure that the donor is registered in the database; if not enrol the donor as described in the CELL System Manual and SOP: PC003. From the "Sample" screen, select "Add Tissue Samples". Select the correct patient using the search tool and insert the total number of blocks and slides that have been prepared for onCore UK. If for example there are two blocks and two associated slides, enter 4. Press "Next". A new screen will open showing one line for each block and each slide. Use the dropdown lists to select the appropriate sample type (Affected FFPE, Affected QC slide, Unaffected FFPE or Unaffected QC slide). Enter the original histopathology identifier and scan the linear barcode into the appropriate fields. ^ Press "Save" and when successful operation is confirmed, press "Return to list" to enter the next donor's samples. ^
- 8 ^ Once all samples are registered, select "Sample storage" in the CELL database, choose "non-frozen to store", select the relevant blocks and slides, and press "Store samples". Select the local room temperature storage unit using the lookup tool, highlight the samples to store and press "autofile". Once the samples appear in green at the bottom of the list of items in that storage location, press "Save". Once complete, log off as shown in the CELL System Manual (IT001).
- ^ 9 Store blocks and slides at room temperature in designated box/cupboard ^ whilst awaiting transport to the onCore UK repository according to SOP: ST001, Dispatch of samples from BDN centres to the onCore UK repository.
- 10 Any deviations from this procedure shall be recorded and investigated according to SOP: QS001.

