**Site visit inspection report on performance against HTA quality standards**
**NHSBT Bristol**
**HTA licensing number 22518**

**Licensed for the**

- **procurement, processing, storage, distribution and import/export of human tissues and cells for human application under the Human Tissue (Quality and Safety for Human Application) Regulations 2007, and the**

- **storage of relevant material which has come from a human body for use for a scheduled purpose other than transplantation under the Human Tissue Act 2004**

**12 and 13 April 2011**


**Executive Summary**

A site visit inspection of NHSBT Bristol (the establishment) was carried out by the HTA on 12, 13 April 2011.

The establishment was found to meet the majority of the HTA standards across the four areas of: consent; governance and quality; premises, facilities and equipment; and disposal. Two minor shortfalls were found, in relation to premises, facilities and equipment. Examples of strengths or good practice are included in the concluding comments section of the report.

The HTA found the Designated Individual, the Licence Holder, the premises and the practices to be suitable in accordance with the requirements of the legislation.

All reports of HTA inspections carried out from 1 November 2010 are published on the HTA's website.

**Background to the establishment and description of inspection activities undertaken**

NHSBT Bristol (HTA Licensing Number 22518) covers the licensable activities undertaken at the Bristol Blood Centre in Filton by the Stem Cell and Immunotherapies (SCI) function, the Cord Blood Bank (CBB) and the British Bone Marrow Registry (BBMR). The NHSBT Bristol licence also covers procurement of peripheral blood stem cells which takes place at the satellite site, NHSBT Bristol Donor Centre, situated at Southmead Hospital.

The Stem Cell and Immunotherapies (SCI) function provides stem cell products for the purpose of stem cell transplantation. Peripheral blood stem cells, bone marrow and donor lymphocyte infusions (DLI) are processed and stored on site. Processing, which may include volume reduction, red cell depletion and stem cell isolation takes place in a clean room. Addition of cryoprotectant takes place in a grade A laminar flow cabinet which resides in the clean room. Processed material that requires storage is held in vapour phase nitrogen tanks. Donor serology testing for peripheral blood stem cell and bone marrow donors is carried out in accordance with Annex II Directive 2006/17/EC at NHSBT Manchester (which is a satellite site under HTA Licensing Number 11018). An agreement is in place with a courier company to provide distribution of products when released for clinical use.

The Cord Blood Bank (CBB) is a public bank and receives cord blood samples procured under the NHSBT Colindale licence (HTA Licensing Number 22600). Samples are collected from five hospitals, with which appropriate agreements are in place, and transported to NHSBT Colindale where an initial evaluation takes place. Samples that are suitable for banking are received at NHSBT Bristol where they are processed, stored and distributed under the NHSBT Bristol Licence (HTA Licensing Number 22518). Processing includes volume reduction, cell separation and cryopreservation and is carried out maintaining a closed processing system. Cells are stored in a BioArchive system in liquid Nitrogen. All bags containing processed cells are placed in a Teflon overwrap bag and sealed to provide quarantine. The sealer is regularly serviced and the seals it produces are appropriately validated. Stored samples that pre-date the acquisition of the BioArchive system are held in a number of vapour phase nitrogen tanks. The cord blood bank currently holds approximately 17,000 samples. Maternal donor serology testing is also carried out at NHSBT Manchester (satellite under HTA licensing number 11018) but this is carried out under the NHSBT Colindale Licence.

Bacteriology is carried out on the final product for peripheral blood stem cells, bone marrow, donor lymphocytes and cord blood units. These samples are sent to NHSBT Colindale where testing takes place.

The British Bone Marrow Register (BBMR) provides a service for transplant centres or consultant haematologists searching for an unrelated stem cell (bone marrow or peripheral blood stem cell) donor for patients requiring a stem cell transplant. The registry has over 300,000 HLA typed donors. The BBMR carry out search requests, organise confirmatory typing samples and recruitment of donors, which includes counselling, medical assessment and consent. The BBMR organise the procurement of stem cells from a suitable donor and are responsible for distribution of those cells from the collection site to the transplant centre. The BBMR has Service Level Agreements in place with HTA licensed establishments for the collection of stem cells from BBMR registered donors. A third party agreement with a UK courier company is in place to cover the transport. When stem cell harvests are required for a patient outside the UK, the receiving transplant centre provides transport for those cells. The cells will be packaged and identified by labels provided by the BBMR and a courier will be provided by the receiving transplant centre. BBMR are responsible for the export of those cells when they are exported to countries outside of the EEA.

The scope of licensable activities at NHSBT Bristol (HTA Licensing Number 22518) also includes the storage of material for research purposes. This is held within the department of Bristol Institute of Transfusion Sciences.

The inspection of NHSBT Bristol also included a visit to the satellite site, NHSBT Bristol Donor Centre, at Southmead Hospital. The establishment is an NHSBT Specialist Therapies Services (STS) Facility. The STS undertakes procurement of peripheral blood stem cells from autologous and allogeneic donors. Hospital staff are responsible for donor consent and are trained in accordance with HTA codes of practice.

NHSBT Bristol was previously inspected by the HTA in June 2009 as part of a routine inspection, required under the Human Tissue (Quality and Safety for Human Application) Regulations 2007. The HTA also carried out a routine inspection of SCI Bristol at Southmead Hospital in June 2009. Since this time, the activities under SCI Bristol (HTA Licensing Number 11039) are now included as the satellite of NHSBT Bristol and called the NHSBT Bristol Donor Centre. The satellite application was assessed and approved by HTA in June 2010. The Cord Blood Bank (CBB) was transferred to NHSBT Bristol from its previous location at Edgware. A routine inspection of the Cord Blood Bank was carried out in April 2009 at Edgware, under HTA licensing number 11007 – (NHS London Cord Blood Bank (SCI CBB Edgware)), this licence was revoked in May 2010 following transfer of the CCB to NHSBT Bristol.

An audit trail was conducted during the inspection for a number of samples.

Two donor records were selected from the BBMR and reviewed. These records included: signed donor consent, aphaeresis collection forms and product transit details. The unique identification numbers were used to locate the processing records for each of the donations using an electronic software system. No anomalies were noted.

Two PBSC donations were taken at random from a location in the gaseous nitrogen storage tanks. Their location in the tank was confirmed using an electronic spreadsheet. Records associated with these samples were reviewed and included; consent, harvest evaluation form, virology serology results, processing and cryopreservation worksheets, environmental monitoring, SCI delivery note (dry shipper temperature log), summary of products issued for transplant form and release of non-standard component form (where applicable). No anomalies were noted.

The location of two cord blood units in the BioArchive was confirmed using the unique bar code scanned from paper records. Processing and freezing records were reviewed for these samples. No anomalies were noted.

An audit trail was also carried out at the Bristol Donor Centre for three PBSC donations, one of whom was a BBMR donor. Procurement records were reviewed at the Bristol Donor Centre and no anomalies were found. Processing of these samples took place at Bristol SCI, Filton and the processing records were also reviewed. No anomalies were noted.

### Meeting the HTA's licensing standards

The HTA developed its licensing standards with input from its stakeholders, in order to ensure the safe and ethical use of human tissue. The HTA expects licensed establishments to meet these standards.

This is an exception-based report: only those standards that have been assessed as not met are included. Where the HTA determines that a licensing standard is not met, the level of the shortfall will be classified as 'Critical', 'Major' or 'Minor' (see Appendix 3: Classification of the level of shortfall).

**Unless otherwise advised, the establishment is required to inform the HTA within 14 days of the receipt of the final report of the corrective and preventative actions that will be taken to ensure that the improvements are addressed.** A template for this purpose is provided as a separate Word document.

Please see Appendix 2: Human Application standards, to view all human application standards. Standards which do not apply to this licence are highlighted in Appendix 2.

## HTA standards not met

### Premises, Facilities and Equipment

| Standard | Inspection findings | Level of shortfall |
|---|---|---|
| PFE2 Environmental controls are in place to avoid potential contamination. | | |
| b) Where processing of tissues and / or cells involves exposure to the environment, it occurs in an appropriate, monitored environment as required by Directions 003/2010. | Processing of peripheral blood stem cells, bone marrow and donor lymphocyte infusions takes place in a grade A laminar flow cabinet in a clean room environment. Environmental monitoring of the Grade A laminar flow hoods and the Grade B background environment is undertaken for each process using settle plates, contact plates and finger dabs.<br><br>The requirements of the European Guide to Good Maufacturing Practice (GMP), Annex 1, referenced in Directions 003/2010, are that clean rooms and clean air devices should be routinely monitored in operation and for grade A zones and 'particle monitoring should be undertaken for the full duration of critical processing'.<br><br>At present, in-process particle counts are carried out for the duration of processing in approximately two out of three cases, rather than in every case. | **Minor** |
| PFE5 Equipment is appropriate for use, maintained, quality assured, validated and where appropriate monitored. | | |
| c) Equipment affecting critical processes and storage parameters is identified and monitored to detect malfunctions and defects and procedures are in place to take any corrective actions. | The DI is advised to ensure that small areas of corrosion identified on the frame of the grade A laminar flow hood are treated and removed. This will prevent potential shedding of material into the grade A environment which may compromise the quality and safety of tissues during processing. The DI is also advised to ensure regular monitoring of laminar flow cabinets and frames takes place to identify and prevent a recurrence of this problem. | **Minor** |

**Advice**

Below are matters which the HTA advises the DI to consider.

| No. | Standard | Advice |
|---|---|---|
| 1. | GQ7 | The DI is advised to update policies and procedures that pertain to the reporting of serious adverse events / reactions to the HTA to include the requirement to do this within 24 hours of discovery. |
| 2. | PFE4 f | The DI is advised to ensure that future reviews of the agreements in place between the transport companies and the Cord Blood Bank / Stem Cell and Immunotherapies function under the licence revise the terminology to third party agreements rather than service level agreements. This will then reflect the differences in requirements between these two types of agreement. |
| 3. | PFE4 h | The DI is advised to ensure that the addition of temperature data loggers to transport boxes containing PBSCs from BBMR donors during distribution is implemented as planned. This will provide assurance that cells have not been exposed to any deviations in temperature during transport. |
| 4. | N/A | The DI is advised to review the Service Level Agreements in place between the BBMR and hospitals involved in PBSC procurement. Especially agreements that pre-date the Quality and Safety Regulations 2007, in order to ensure that they conform to the requirements of the HTA Guide to Quality and Safety Assurance for Human Tissues and Cells for Patient Treatment. |
| 5. | N/A | The DI is advised to consider the amount of equipment that is permanently held in the clean room. The clean room is a grade B environment and currently there are additional tables which provide increased horizontal surfaces that could present a risk for maintaining grade B air quality. |

**Concluding comments**

NHSBT Bristol is a purpose built, modern facility providing a pleasant working environment. The inspectors were impressed with the governance structure in place and the clearly defined responsibilities of persons working under the HTA licence. The quality management system is well developed and embedded. A robust traceability system is in place, evidenced by the audit trail carried out during the inspection, which utilises the Hematos computer software program and paper records. The inspection team also considered the verification procedures in place for release and disposal of products to be good practice.

NHSBT Bristol carries out a high level of activity under the Human Tissue (Quality and Safety for Human Application) Regulations 2007. The inspectors were particularly impressed with the commitment of staff working under the licence to adhere to the HTA Quality and Safety standards.

**Report sent to DI for factual accuracy: 11 May 2011**

**Report returned from DI: 17 May 2011**

**Final report issued: 1 June 2011**

## Appendices

## Appendix 1: HTA inspection process

The Human Tissue Authority (HTA) regulates the removal, storage, and use of human bodies, body parts, organs and tissue for activities such as research, transplantation, and education and training. The legal requirements for establishments which carry out such activities are set out in the Human Tissue Act 2004 and The Human Tissue Act 2004 (Ethical Approval, Exceptions from Licensing and Supply of Information about Transplants) Regulations 2006.

The HTA is also the designated Competent Authority for the purposes of the European Union Tissue and Cells Directives (the Directives) so far as they relate to tissues and cells for use in human application (using tissues and cells for patient treatment). On 5 July 2007 the Human Tissue (Quality and Safety for Human Application) Regulations 2007 (the Regulations) came into force. The Regulations formally transposed the Directives into UK law. Under the Regulations the HTA regulates and licences the procurement, testing, processing, storage, distribution, import or export of tissues or cells intended for human application. The HTA has produced detailed Directions to complement the implementation of the Directives.

As part of the regulatory framework, the HTA licenses establishments and undertakes inspections to assess compliance with expected standards.

**Inspections**

We use the term 'inspection' to describe when we:

- visit an establishment to meet with staff, view premises and facilities, and review policies and procedures (a site-visit inspection); or
- assess written information we have requested from an establishment (a desk-based assessment / inspection).

We carry out inspections to assess if the Designated Individual (DI) is suitable to supervise the activity covered by the licence, as it is their responsibility to ensure that:

- other staff working under the licence are suitable;
- suitable practices are used when carrying out the activity;
- the conditions of the licence are met;
- the conditions of third party agreements are met; and
- the information and confidentiality requirements set down in the Regulations are complied with.

We also need to be satisfied that the licence applicant or holder, the establishment's premises, and the practices relating to licensed activities, are suitable.

To help us reach our decisions, we have developed standards under four headings: Consent; Governance and Quality; Premises, Facilities and Equipment; and Disposal.

After every site visit inspection, we write a report documenting our findings. Where we find a particular standard is not fully met, we will describe the level of the shortfall as 'Critical', 'Major' or 'Minor'. In most cases, it will be the responsibility of the DI to seek the HTA's agreement on how they will address the identified shortfalls. More information about the classification of shortfalls can be found in Appendix 3.

The majority of our site-visit inspections are announced. If we have concerns about an establishment, we can also undertake an unannounced site visit inspection.

You can find reports for site visit inspections which took place after 1 November 2010 on our website.

## Appendix 2: HTA Standards

Standards which are not applicable to this establishment have been highlighted.

**Consent**

| **Standard** |
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| C1 Consent is obtained in accordance with the requirements of the HT Act 2004, the Human Tissue (Quality and Safety for Human Application) Regulations 2007 and as set out in the HTA's Codes of Practice. |
| a) If the establishment acts as a procurer of tissues and / or cells, there is an established process for acquiring donor consent which meets the requirements of the HT Act 2004 the Human Tissue (Quality and Safety for Human Application) Regulations 2007 (Q&S Regulations) and the HTA's Codes of Practice |
| b) If there is a third party procuring tissues and / or cells on behalf of the establishment the third party agreement ensures that consent is obtained in accordance with the requirements of the HT Act 2004, the Q&S Regulations and the HTA's Codes of Practice. |
| c) The establishment or the third party's procedure on obtaining donor consent includes how potential donors are identified and who is able to take consent. |
| d) Consent forms comply with the HTA Codes of Practice. |
| e) Completed consent forms are included in records and are made accessible to those using or releasing tissue and / or cells for a Scheduled Purpose. |
| C2 Information about the consent process is provided and in a variety of formats. |
| a) The procedure on obtaining consent details what information will be provided to donors. As a minimum, the information specified by Directions 003/2010 is included. |
| b) If third parties act as procurers of tissues and / or cells, the third party agreement details what information will be provided to donors. As a minimum, the information specified by Directions 003/2010 is included. |
| c) Information is available in suitable formats and there is access to independent interpreters when required. |
| d) There are procedures to ensure that information is provided to the donor or donor's family by trained personnel. |
| C3 Staff involved in seeking consent receive training and support in the implications and essential requirements of taking consent. |
| a) Staff involved in obtaining consent are provided with training on how to take informed consent in accordance with the requirements of the HT Act 2004 and Code of Practice on Consent. |
| b) Training records are kept demonstrating attendance at training on consent. |

**Governance and Quality**

| **Standard** |
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| GQ1 All aspects of the establishment's work are supported by ratified documented policies and procedures as part of the overall governance process. |
| a) There is an organisational chart clearly defining the lines of accountability and reporting relationships. |
| b) There are procedures for all licensable activities that ensure integrity of tissue and / or cells and minimise the risk of contamination. |
| c) There are regular governance meetings, for example health and safety, risk management and clinical governance committees, which are recorded by agendas and minutes. |
| d) There is a document control system to ensure that changes to documents are reviewed, approved, dated and documented by an authorised person and only current documents are in use. |
| e) There are procedures for tissue and / or cell procurement, which ensure the safety of living donors. |
| f) There are procedures for tissue and / or cell procurement, which ensure the dignity of deceased donors. |
| g) There are procedures to ensure that an authorised person verifies that tissues and / or cells received by the establishment meet required specifications. |
| h) There are procedures for the management and quarantine of non-conforming consignments or those with incomplete test results, to ensure no risk of cross contamination. |
| i) There are procedures to ensure tissues and / or cells are not released from quarantine until verification has been completed and recorded. |
| j) There are procedures detailing the critical materials and reagents used and where applicable, materials and reagents meet the standards laid down by the European directives on medical devices and in vitro diagnostic medical devices. |
| k) There is a procedure for handling returned products. |
| l) There are procedures to ensure that in the event of termination of activities for whatever reason, stored tissues and / or cells are transferred to another licensed establishment or establishments. |
| m) The criteria for allocating tissues and / or cells to patients and health care institutions are documented and made available to these parties on request. |
| n) The establishment ensures imports from non EEA states meet the standards of quality and safety set out in Directions 003/2010. |
| o) There is a complaints system in place. |
| p) There are written agreements with third parties whenever an activity takes place that has the potential to influence the quality and safety of human tissues and / or cells. |
| q) There is a record of agreements established with third parties. |
| r) Third party agreements specify the responsibilities of the third party and meet the requirements set out in Directions 003/2010. |

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| s) Third party agreements specify that the third party will inform the establishment in the event of a serious adverse reaction or event. |
| t) There are procedures for the re-provision of service in an emergency. |
| GQ2 There is a documented system of quality management and audit. |
| a) There is a quality management system which ensures continuous and systematic improvement. |
| b) There is an internal audit system for all licensable activities. |
| c) An audit is conducted in an independent manner at least every two years to verify compliance with protocols and HTA standards, and any findings and corrective actions are documented. |
| d) Processes affecting the quality and safety of tissues and / or cells are validated and undergo regular evaluation to ensure they continue to achieve the intended results. |
| GQ3 Staff are appropriately qualified and trained in techniques relevant to their work and are continuously updating their skills. |
| a) There are clearly documented job descriptions for all staff. |
| b) There are orientation and induction programmes for new staff. |
| c) There are continuous professional development (CPD) plans for staff and attendance at training is recorded. |
| d) There is annual documented mandatory training (e.g. health and safety and fire). |
| e) Personnel are trained in all tasks relevant to their work and their competence is recorded. |
| f) There is a documented training programme that ensures that staff have adequate knowledge of the scientific and ethical principles relevant to their work, and the regulatory context. |
| g) There is a documented training programme that ensures that staff understand the organisational structure and the quality systems used within the establishment. |
| h) There is a system of staff appraisal. |
| i) Where appropriate, staff are registered with a professional or statutory body. |
| j) There are training and reference manuals available. |
| k) The establishment is sufficiently staffed to carry out its activities. |
| GQ4 There is a systematic and planned approach to the management of records. |
| a) There are procedures for the creation, identification, maintenance, access, amendment, retention and destruction of records. |
| b) There is a system for the regular audit of records and their content to check for completeness, legibility and accuracy and to resolve any discrepancies found. |
| c) Written records are legible and indelible. Records kept in other formats such as computerised records are stored on a validated system. |
| d) There is a system for back-up / recovery in the event of loss of computerised records. |

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| e) The establishment keeps a register of the types and quantities of tissues and / or cells that are procured, tested, preserved, processed, stored and distributed or otherwise disposed of, and on the origin and destination of tissues and cells intended for human application. |
| f) There are procedures to ensure that donor documentation, as specified by Directions 003/2010, is collected and maintained. |
| g) There is a system to ensure records are secure and that donor confidentiality is maintained in accordance with Directions 003/2010. |
| h) Raw data which are critical to the safety and quality of tissues and cells are kept for 10 years after the use, expiry date or disposal of tissues and / or cells. |
| i) The minimum data to ensure traceability from donor to recipient as required by Directions 003/2010 are kept for 30 years after the use, expiry or disposal of tissues and / or cells. |
| j) Records are kept of products and material coming into contact with the tissues and / or cells. |
| k) There are documented agreements with end users to ensure they record and store the data required by Directions 003/2010. |
| l) The establishment records the acceptance or rejection of tissue and / or cells that it receives and in the case of rejection why this rejection occurred. |
| m) In the event of termination of activities of the establishment a contingency plan to ensure records of traceability are maintained for 10 or 30 years as required. |
| GQ5 There are documented procedures for donor selection and exclusion, including donor criteria. |
| a) Donors are selected either by the establishment or the third party acting on its behalf in accordance with the criteria required by Directions 003/2010. |
| b) The testing of donors by the establishment or a third party on behalf of the establishment is carried out in accordance with the requirements of Directions 003/2010. |
| c) In cases other than autologous donors, donor selection is carried out by authorised personnel and signed and reviewed by a qualified health professional. |
| d) There is a system in place either at the establishment or at a third party acting on its behalf to record results of donor selection and associated tests. |
| e) Testing of donor samples is carried out using CE marked diagnostic tests. |
| f) Samples taken for donor testing are clearly labelled with the time and place the sample was taken and a unique donor identification code. |
| GQ6 A coding and records system facilitates traceability of tissues and / or cells, ensuring a robust audit trail. |
| a) There is a donor identification system which assigns a unique code to each donation and to each of the products associated with it. |
| b) An audit trail is maintained, which includes details of when the tissues and / or cells were acquired and from where, the uses to which the tissues and / or cells were put, when the tissues and / or cells were transferred elsewhere and to whom. |
| c) The establishment has procedures to ensure that tissues and / or cells imported, procured, |

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| processed, stored, distributed and exported are traceable from donor to recipient and vice versa. |
| GQ7 There are systems to ensure that all adverse events, reactions and/or incidents are investigated promptly. |
| a) There are procedures for the identification, reporting, investigation and recording of adverse events and reactions, including documentation of any corrective or preventative actions. |
| b) There is a system to receive and distribute national and local information (e.g. HTA regulatory alerts) and notify the HTA and other establishments as necessary of serious adverse events or reactions. |
| c) The responsibilities of personnel investigating adverse events and reactions are clearly defined. |
| d) There are procedures to identify and decide the fate of tissues and / or cells affected by an adverse event, reaction or deviation from the required quality and safety standards. |
| e) In the event of a recall, there are personnel authorised within the establishment to assess the need for a recall and if appropriate initiate and coordinate a recall. |
| f) There is an effective, documented recall procedure which includes a description of responsibilities and actions to be taken in the event of a recall including notification of the HTA and pre-defined times in which actions must be taken. |
| g) Establishments distributing tissue and / or cells provide information to end users on how to report a serious adverse event or reaction and have agreements with them specifying that they will report these events or reactions. |
| h) Establishments distributing tissues and / or cells have systems to receive notifications of serious adverse events and reactions from end users and notify the HTA. |
| GQ8 Risk assessments of the establishment's practices and processes are completed regularly and are recorded and monitored appropriately. |
| a) There are documented risk assessments for all practices and processes. |
| b) Risk assessments are reviewed regularly, as a minimum annually or when any changes are made that may affect the quality and safety of tissues and cells. |
| c) Staff can access risk assessments and are made aware of local hazards at training. |
| d) A documented risk assessment is carried out to decide the fate of any tissue and / or cells stored prior to the introduction of a new donor selection criteria or a new processing step, which enhances the quality and safety of tissue and / or cells. |

**Premises, Facilities and Equipment**

| **Standard** |
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| PFE1 The premises are fit for purpose. |
| a) A risk assessment has been carried out of the premises to ensure that they are fit for purpose. |
| b) There are procedures to review and maintain the safety of staff, visitors and patients. |
| c) The premises have sufficient space for procedures to be carried out safely and efficiently. |

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| d) Where appropriate, there are procedures to ensure that the premises are of a standard that ensures the dignity of deceased persons. |
| e) There are procedures to ensure that the premises are secure and confidentiality is maintained. |
| f) There is access to a nominated, registered medical practitioner and / or a scientific advisor to provide advice and oversee the establishment's medical and scientific activities. |
| PFE2 Environmental controls are in place to avoid potential contamination. |
| a) Tissues and / or cells stored in quarantine are stored separately from tissue and / or cells that have been released from quarantine. |
| b) Where processing of tissues and / or cells involves exposure to the environment, it occurs in an appropriate, monitored environment as required by Directions 003/2010. |
| c) There are procedures for cleaning and decontamination. |
| d) Staff are provided with appropriate protective clothing and equipment that minimise the risk of contamination of tissue and / or cells and the risk of infection to themselves. |
| PFE3 There are appropriate facilities for the storage of tissues and / or cells, consumables and records. |
| a) Tissues, cells, consumables and records are stored in secure environments and precautions are taken to minimise risk of damage, theft or contamination. |
| b) There are systems to deal with emergencies on a 24 hour basis. |
| c) Tissues and / or cells are stored in controlled, monitored and recorded conditions that maintain tissue and / or cell integrity. |
| d) There is a documented, specified maximum storage period for tissues and / or cells. |
| PFE4 Systems are in place to protect the quality and integrity of tissues and / or cells during transport and delivery to its destination. |
| a) There is a system to ensure tissue and / or cells are not distributed until they meet the standards laid down by Directions 003/2010. |
| b) There are procedures for the transport of tissues and / or cells which reflect identified risks associated with transport. |
| c) There is a system to ensure that traceability of tissues and / or cells is maintained during transport. |
| d) Records are kept of transportation and delivery. |
| e) Tissues and / or cells are packaged and transported in a manner and under conditions that minimise the risk of contamination and ensure their safety and quality. |
| f) There are third party agreements with courier or transport companies to ensure that any specific transport conditions required are maintained. |
| g) Critical transport conditions required to maintain the properties of tissue and / or cells are defined and documented. |
| h) Packaging and containers used for transportation are validated to ensure they are fit for purpose. |

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| i) Primary packaging containing tissues and / or cells is labelled with the information required by Directions. |
| j) Shipping packaging containing tissues and / or cells is labelled with the information required by Directions. |
| PFE5 Equipment is appropriate for use, maintained, quality assured, validated and where appropriate monitored. |
| a) Critical equipment and technical devices are identified, validated, regularly inspected and records are maintained. |
| b) Critical equipment is maintained and serviced in accordance with the manufacturer's instructions. |
| c) Equipment affecting critical processes and storage parameters is identified and monitored to detect malfunctions and defects and procedures are in place to take any corrective actions. |
| d) New and repaired equipment is validated before use and this is documented. |
| e) There are documented agreements with maintenance companies. |
| f) Cleaning, disinfection and sanitation of critical equipment is performed regularly and this is recorded. |
| g) Instruments and devices used for procurement are sterile, validated and regularly maintained. |
| h) Users have access to instructions for equipment and receive training in the use of equipment and maintenance where appropriate. |
| i) Staff are aware of how to report an equipment problem. |
| j) For each critical process, the materials, equipment and personnel are identified and documented. |
| k) There are contingency plans for equipment failure. |

**Disposal**

| **Standard** |
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| D1 There is a clear and sensitive policy for disposing of tissues and / or cells. |
| a) The disposal policy complies with HTA's Codes of Practice. |
| b) The disposal procedure complies with Health and Safety recommendations. |
| c) There is a documented procedure on disposal which ensures that there is no cross contamination. |
| D2 The reasons for disposal and the methods used are carefully documented. |
| a) There is a procedure for tracking the disposal of tissue and / or cells that details the method and reason for disposal. |
| b) Disposal arrangements reflect (where applicable) the consent given for disposal. |

## Appendix 3: Classification of the level of shortfall

Where the HTA determines that a licensing standard is not met, the improvements required will be stated and the level of the shortfall will be classified as 'Critical', 'Major' or 'Minor'. Where the HTA is not presented with evidence that an establishment meets the requirements of an expected standard, it works on the premise that a lack of evidence indicates a shortfall.

The action an establishment will be required to make following the identification of a shortfall is based on the HTA's assessment of risk of harm and/or a breach of the HT Act or associated Directions.

**1. C ritical shortfall:**

A shortfall which poses a significant direct risk of causing harm to a recipient patient or to a living donor,

*or*

A number of 'major' shortfalls, which individually do not pose a direct risk of harm to a recipient or living donor, but viewed cumulatively represent a systemic failure and therefore are considered 'critical'.

A critical shortfall may result in one or more of the following:

(1) A notice of proposal being issued to revoke the licence

(2) Some or all of the licen sable activity at the establishment c easing with imm ediate effect until a corrective action plan is developed, agreed by the HTA and implemented.

(3) A notice of suspension of licensable activities

(4) Additional conditions being proposed

(5) Directions being issued requiring specific action to be taken straightaway

**2. Major shortfall:**

A non-critical shortfall:

A shortfall in the carrying out of licensable activities which poses an indirect risk to the safety of a donor or a recipient

*or*

A shortfall in the establishment's quality and safety procedures which poses an indirect risk to the safety of a donor or a recipient;

*or*

A shortfall which indicates a major deviation from the **Human Tissue (Quality and Safety for Human Application) Regulations 2007** or the **HTA Directions**;

*or*

A shortfall which indicates a failure to carry out satisfactory procedures for the release of tissues or cells or a failure on the part of the designated individual to fulfil his or her legal duties;

*or*

A combination of several 'minor' shortfalls, none of which is major on its own, but which, viewed cumulatively, could constitute a major shortfall by adversely affecting the quality and

safety of the tissues and/or cells.

**3. Min or shortfall:**

A shortfall which cannot be classified as either critical or major and, which can be addressed by further development by the establishment.

This category of shortfall requires the development of a corrective action plan, the results of which will usually be assessed by the HTA at the time of the next inspection.

## Follow up actions

A template corrective and preventative action plan is available as a separate Word document. You must complete this template and return it to the HTA within 14 days of the issue of the final report.

Based on the level of the shortfall, the HTA will consider the most suitable type of follow-up of the completion of the corrective and preventative action plan. This may include a combination of

- a follow-up site-visit inspection
- a request for information that shows completion of actions
- monitoring of the action plan completion
- follow up at next desk-based or site-visit inspection.

After an assessment of your proposed action plan you will be notified of the follow-up approach the HTA will take.