

Site visit inspection report on compliance with HTA minimum standards

NHSBT Bristol

HTA licensing number 22518

Licensed for the

- **procurement, processing, storage, distribution and export of human tissues and cells for human application under the Human Tissue (Quality and Safety for Human Application) Regulations 2007 (as amended); and**
- **storage of relevant material which has come from a human body for use for a scheduled purpose**

25 - 27 June 2019

Summary of inspection findings

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

Although the HTA found that NHSBT Bristol (the establishment) had met the majority of the HTA standards, four minor shortfalls were found in relation to the HTA's governance and quality standards and premises facilities and equipment standards. The shortfalls related to microbial monitoring validation, the application of the Single European Code (SEC), risk assessments following changes to monitoring procedures and transport procedures. The HTA has also given advice to the Designated Individual with respect to procedural documentation, service level agreements, audits, donor testing, environmental monitoring and temperature monitoring.

The shortfall relating to the SEC is the same as the one identified during the inspection of an NHSBT SCI unit, Southampton (licence number 11053) and is being addressed nationally within the SCI network. As a result, although the shortfall is included in this report, the corrective and preventative action (CAPA) to address the shortfall will be monitored through the CAPA process for SCI Southampton.

The HTA's regulatory requirements

The HTA must assure itself that the Designated Individual, Licence Holder, premises and practices are suitable.

The statutory duties of the Designated Individual are set down in Section 18 of the Human Tissue Act 2004. They are to secure that:

- the other persons to whom the licence applies are suitable persons to participate in the carrying-on of the licensed activity;
- suitable practices are used in the course of carrying on that activity; and
- the conditions of the licence are complied with.

The HTA developed its licensing standards with input from its stakeholders. They are designed to ensure the safe and ethical use of human tissue and the dignified and respectful treatment of the deceased. The HTA inspects the establishments it licences against four groups of standards:

- consent
- governance and quality systems
- premises facilities and equipment
- disposal.

This is an exception-based report: only those standards that have been assessed as not met are included. Where the HTA determines that a standard is not met, the level of the shortfall is classified as 'Critical', 'Major' or 'Minor' (see Appendix 2: Classification of the level of shortfall). Where HTA standards are fully met, but the HTA has identified an area of practice that could be further improved, advice is given to the DI.

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

Licensable activities carried out by the establishment

'E' = Establishment is licensed to carry out this activity.

'TPA' = Third party agreement; the establishment is licensed for this activity but another establishment (unlicensed) carries out the activity on their behalf.

Tissue Category; Tissue Type	Procurement	Processing	Testing	Storage	Distribution	Import	Export
Progenitor Cell, Hematopoietic, Bone Marrow; Bone Marrow	E	E		E	E/TPA		E
Progenitor Cell, Hematopoietic, PBSC; PBSC	E	E		E	E/TPA		E
Progenitor Cell, Hematopoietic, Cord Blood; Cord Blood	TPA	E		E	E/TPA		E
Progenitor Cell, Hematopoietic,	E	E		E	E/TPA		E

Unspecified Mature Cell, T Cell; PBMC							
Ocular; Cornea	E	E		E	E/TPA		

Background to the establishment and description of inspection activities undertaken

The establishment is licensed for the procurement, processing, storage, distribution and export of human tissues and cells for human application under the Human Tissue (Quality and Safety for Human Application) Regulations 2007 (as amended) (the Regulations). The establishment is also licensed for the storage of relevant material for use in a scheduled purpose under the Human Tissue Act 2004 (HT Act).

The establishment has been licensed by the HTA since September 2008 and this report relates to the sixth routine site visit inspection to assess whether or not the establishment continues to meet the HTA's standards. Annual activity data, pre-inspection discussions with the DI, pre-inspection discussions with the DI's representative and the previous inspection report were used to inform the timetable that was developed for this inspection.

The establishment consists of an ocular tissue bank, an apheresis service located at satellite premises, an adult peripheral blood and bone marrow stem cell processing facility, a cord blood processing facility, part of the national cord blood bank and the British Bone Marrow Registry (BBMR). During this inspection, the activity of the BBMR was not reviewed.

The ocular tissue bank receives donated eyes which have been procured under a separate HTA licence. Donor selection and serological testing takes place under the other HTA licence. However, results of these tests are entered onto a database used at the establishment and are available to establishment staff. Eyes are processed in an appropriately monitored clean room facility. Initial assessments and processing of the tissue takes place in a Grade C air quality environment within a Grade C background with secondary assessment and processing taking place in a Grade A air quality environment within a Grade B background. Authorisation for release of tissue is a multi-step process including a medical sign-off of the donor's suitability and sign-off by the tissue bank manager following review of the tissue assessments, including slit lamp and microscope examination, environmental monitoring and microbiological testing data. The database storing data relating to grafts does not allow progression to the next step during the authorisation and release process until the appropriate checks/assessments have been undertaken and signed off.

The therapeutic apheresis service (TAS) for adult donors is located at satellite premises. Peripheral blood stem cells (PBSCs) and peripheral blood mononuclear cells (PBMCs) are procured at the TAS. The facility consists of a storage room and an apheresis collection area with five beds and four apheresis machines. The establishment can loan and borrow additional apheresis machines from other licences within its network as necessary. During the visit to the TAS, cleaning and maintenance records relating to the apheresis machines were reviewed. In addition, training records, example audits, risk assessments and temperature monitoring records of the consumables and reagent storage areas were reviewed.

The procured PBSCs and PBMCs from the TAS are received at the establishment's stem cell processing facility. The facility also receives cells from donor registries. Cells are processed using a closed processing system. The establishment has recently re-commissioned its clean room facility within the stem cell processing area. Prior to this, pre-filled syringes with cryoprotectant were prepared within another HTA-licensed premises' clean room and shipped to the establishment for use with its closed processing system. At the time of the inspection, the establishment had recently started to prepare its own cryoprotectant within the newly commissioned clean room facility. Procured cells may be issued fresh or can be

cryopreserved and stored for future use. In some cases donor lymphocyte infusions (DLIs) may also be prepared from procured cells. The establishment may also undertake red cell depletion of procured cells, again using a closed system. PBMCs procured as the starting material for an advanced therapeutic medicinal product (ATMP) are cryopreserved in the same way as PBSCs before being sent for manufacture into the end product. Cryopreserved cells being stored for future use are kept within the establishment's liquid nitrogen storage facility. Consumables and reagent receipt and acceptance procedures, temperature monitoring records relating to stored cells and consumables/reagents, procedural documentation and environmental monitoring data were all reviewed during the inspection. Donor serological testing takes place under other HTA licences.

The establishment's cord blood bank receives umbilical cord blood (UCB) procured at collection centres around London under the authority of a third party agreement. UCB collections arrive at the establishment after having had their cell count assessed at another HTA-licensed establishment. Donor serological testing also takes place under the assessing establishment's licence. UCB units undergo red cell and plasma reduction before cryoprotectant is added, the cells frozen and then stored for future use within the establishment's liquid nitrogen storage facility. The cord blood bank has an automated sample deposit and retrieval system on its liquid nitrogen storage tanks. This automated system is also used to provide a suitable freezing profile for cryopreserving cells. Processing of cells is performed using a closed system. Temperature monitoring records relating to stored cells and consumables/reagents and records of processing were reviewed during the inspection.

During the inspection, discussions were held with staff regarding how ocular and cord blood units that are not suitable for clinical use may be used for research. The discussions included how such tissues are identified, checks regarding donor consent for use in research and storage locations of tissues.

Reviews of the establishment's governance and quality systems were also undertaken during the inspection. Examples of internal and independent audits were reviewed, in addition to a detailed review of incidents that had been recorded including investigation, corrective actions and follow up.

Audits

During the inspection, audits of records relating to tissues and cells were reviewed. These reviews included records of retrieval (as appropriate), receipt, processing including environmental monitoring, donor testing, storage and distribution (as appropriate).

Records relating to ocular tissue from four donors, procurement records of two PBSC donors, processing records for two autologous PBSC donors and one allogeneic PBSC donor and processing records relating to one cord blood donation were reviewed.

Inspection findings

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

Compliance with HTA standards

Human Tissue (Quality and Safety for Human Application) Regulations 2007 Standards

Governance and Quality

Standard	Inspection findings	Level of shortfall
GQ2 There is a documented system of quality management and audit.		
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.	<p>The establishment's ocular tissue bank undertakes microbiological testing at different stages of tissue processing. One of these tests occurs following an antibiotic decontamination step.</p> <p>The establishment does not have any validation data to demonstrate that the microbiological contaminant assay remains effective at detecting microbial contamination in the presence of antibiotics in the assay's inoculant.</p>	Minor
GQ6 A coding and records system facilitates traceability of bodies, body parts, tissues and cells, ensuring a robust audit trail.		
d) The requirements of the Single European Code are adhered to as set out in Directions 002/2018.	<p>A shortfall was identified with regards to the receipt and recording of the donation identification sequence and the application of the full Single European Code to the processed cells.</p> <p>As the shortfall identified is being addressed nationally because it relates to all units within the SCI network, the establishment will not need to submit a corrective and preventative action (CAPA) plan to the HTA for this shortfall. Instead, the CAPA to address the shortfall will be monitored through the CAPA process for SCI Southampton (licence number 11053).</p>	Minor

GQ8 Risk assessments of the establishment's practices and processes are completed regularly and are recorded and monitored appropriately.		
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.	<p>Following a finding by another regulator, the establishment has changed the incubation temperature used for environmental monitoring plates.</p> <p>Although the change was managed through the establishment's change control processes, the establishment did not undertake a risk assessment of the cells already stored prior to the introduction of this change to help assure itself that they remain suitable for use.</p>	Minor

Premises, Facilities and Equipment

Standard	Inspection findings	Level of shortfall
PFE4 Systems are in place to protect the quality and integrity of bodies, body parts, tissues and cells during transport and delivery to a destination.		
b) There are procedures for the transport of tissues and / or cells which reflect identified risks associated with transport.	The establishment's procedure for the transport of fresh cells does not adequately define the required conditions for the transport of cells and any time constraints between packaging the cells for transport and infusion commencing.	Minor
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.	For example, the transport procedure only refers to transit time and does not account for the time between packing the cells in the transport box and collection by the courier. The time between delivery to the end user and infusion commencing is also not defined.	
g) Critical transport conditions required to maintain the properties of tissue and / or cells are defined and documented.	<p>In addition, although stating that a temperature logger must be used for transit times greater than two hours, it does not define the temperature at which cells must be maintained.</p> <p>Finally, the procedure does not describe the conditioning of the cool packs used during transport, specifically the time and temperature that they should be stored prior to their use.</p>	

Advice

The HTA advises the DI to consider the following to further improve practices:

No.	Standard	Advice
1.	GQ1(b)	The DI is advised to review and update the establishment's procedure relating to the receipt of eyes prior to processing (SOP5382) so that it describes the step where the condition of the ice in the transport box is reviewed and recorded within the processing paperwork.
2.	GQ1(b)	During the review of the establishment's standard operating procedures (SOPs), examples were found where references to associated forms did not accurately reflect the form's identification number. The DI is advised to review the establishment's SOPs and form titles to assure himself that they are aligned and accurately reflected.
3.	GQ1(b)	Staff at the establishment's TAS unit stated that should the temperature of the storage area used for reagents/consumables suffer a prolonged excursion, reagents such as saline and anticoagulant would be transferred to the hospital's pharmacy department for storage. The DI is advised to update the TAS unit's SOP to reflect this procedure.
4.	GQ1(r)	Pre-collection donor blood samples taken up to 30 days prior to cell procurement can be analysed at the hospital where the establishment's TAS unit is located under the authority of another HTA licence. The DI is advised to update and review the service level agreement between the licensed establishment undertaking the analysis of the blood sample taken up to 30 days prior to cell procurement and NHSBT Bristol so that it reflects the responsibility of each licensed establishment and includes detail of which licence a pre-collection sample is tested under and under which licence a time of procurement sample is tested.
5.	GQ2(b)	During a review of the temperature monitoring records within the establishment's TAS unit, examples where the temperature had exceeded the defined upper limit were identified. Although the establishment has assured itself that the integrity of the stored reagents was unaffected, the establishment requires such deviations to be reported as incidents; however, this had not happened. The DI is advised to undertake periodic audits of such temperature records to both assure himself that the temperature of such areas remains within the required range and where any deviations occur, that incident/deviation reports are generated as expected. Such incident/deviation reports may help the DI to trend any temperature excursions and to put in place measures to mitigate against them in the future if necessary.
6.	GQ2(b)	The establishment's quality team undertake monthly internal audits of records relating to stem cell processing and storage both in the SCI unit and the cord blood bank. The DI is advised to expand the scope of these audits to also include the processing records within the establishment's eye bank to supplement the local audit activity taking place in that area.
7.	GQ5(b)	During the review of donor and processing records relating to an autologous PBSC donation, an example where a pre-collection blood sample taken 30 days prior to cell procurement which had been received by the establishment and had

		<p>not been spun down ready for testing until four days following its receipt, was identified. This delay in centrifuging the blood sample was not in accordance with the establishment's, or the testing laboratory's, procedure. A second sample received from the time of procurement means that a valid test result was obtained in accordance with the requirements of Directions 002/2018.</p> <p>The DI is advised to review the procedures for receiving blood samples for donor serology testing and update them in order to assure himself that samples are processed and sent to the testing laboratory within the expected timeframes.</p>
8.	PFE2(b)	<p>The DI is advised to consider implementing a procedure to monitor for contamination within the establishment's processing facilities in:</p> <ul style="list-style-type: none"> • hard to reach areas, such as the corners of the transfer hatches, which cannot be reached using contact plates; and • areas, and on equipment, frequently used by multiple operators such as any keyboards, hatch latches and switches.
9.	PFE3(a)	<p>The establishment's eye bank laboratory is used to store various reagents and consumables, some of which have storage temperature ranges defined by their manufacturer. The establishment has temperature-mapped the laboratory area and monitors its temperature. The establishment's procedure states that it will re-map the temperature in the laboratory in November 2021.</p> <p>The DI is advised to consider undertaking the temperature mapping exercise during the summer months which may help to assure him that the laboratory's ambient temperature is not adversely affected by the higher external temperatures during the warmer months of the year.</p>

Concluding comments

There are a number of areas of practice that require improvement, including four minor shortfalls. The HTA has given advice to the Designated Individual with respect to procedural documentation, service level agreements, audits, donor testing, environmental monitoring and temperature monitoring.

The HTA requires that the Designated Individual addresses the shortfalls by submitting a completed corrective and preventative action (CAPA) plan within 14 days of receipt of the final report (refer to Appendix 2 for recommended timeframes within which to complete actions). The HTA will then inform the establishment of the evidence required to demonstrate that the actions agreed in the plan have been completed.

The HTA has assessed the establishment as suitable to be licensed for the activities specified subject to corrective and preventative actions being implemented to meet the shortfalls identified during the inspection.

Report sent to DI for factual accuracy: 25 July 2019

Report returned from DI: 6 August 2019

Final report issued: 22 August 2019

Completion of corrective and preventative actions (CAPA) plan

Based on information provided, the HTA is satisfied that the establishment has completed the agreed actions in the CAPA plan and in doing so has taken sufficient action to correct all shortfalls addressed in the Inspection Report.

Date: 11 March 2020

Appendix 1: HTA standards

The HTA standards applicable to this establishment are shown below; those not assessed during the inspection are shown in grey text. Individual standards which are not applicable to this establishment have been excluded.

Human Tissue (Quality and Safety for Human Application) Regulations 2007 Standards

Consent

Standard
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 002/2018 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 002/2018 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
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.
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.

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 002/2018.
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.
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 002/2018, is collected and maintained.
g) There is a system to ensure records are secure and that donor confidentiality is maintained in accordance with Directions 002/2018.
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 002/2018 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 002/2018.
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 002/2018.
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 002/2018.
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.
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, processed, stored, distributed and exported are traceable from donor to recipient and vice versa.
d) The requirements of the Single European Code are adhered to as set out in Directions 002/2018.
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
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.
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 002/2018.
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 002/2018.
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.
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
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.

Human Tissue Act 2004 Standards

Consent standards

C1 Consent is obtained in accordance with the requirements of the Human Tissue Act 2004 (HT Act) and as set out in the code of practice

a) Consent procedures are documented and these, along with any associated documents, comply with the HT Act and the HTA's Codes of Practice.

b) Consent forms are available to those using or releasing relevant material for a scheduled purpose.

c) Where applicable, there are agreements with other parties to ensure that consent is obtained in accordance with the requirements of the HT Act and the HTA's Codes of Practice.

d) Written information is provided to those from whom consent is sought, which reflects the requirements of the HT Act and the HTA's Codes of Practice.

e) Language translations are available when appropriate.

f) Information is available in formats appropriate to the situation.

C2 Staff involved in seeking consent receive training and support in the essential requirements of taking consent

a) There is suitable training and support of staff involved in seeking consent, which addresses the requirements of the HT Act and the HTA's Codes of Practice.

b) Records demonstrate up-to-date staff training.

c) Competency is assessed and maintained.

Governance and quality system standards

GQ1 All aspects of the establishments work are governed by documented policies and procedures as part of the overall governance process

a) Ratified, documented and up-to-date policies and procedures are in place, covering all licensable activities.

b) There is a document control system.

c) There are change control mechanisms for the implementation of new operational procedures.

d) Matters relating to HTA-licensed activities are discussed at regular governance meetings, involving establishment staff.

e) There is a system for managing complaints.

GQ2 There is a documented system of audit
<ul style="list-style-type: none"> a) There is a documented schedule of audits covering licensable activities. b) Audit findings include who is responsible for follow-up actions and the timeframes for completing these.
GQ3 Staff are appropriately qualified and trained in techniques relevant to their work and are continuously updating their skills
<ul style="list-style-type: none"> a) Qualifications of staff and all training are recorded, records showing attendance at training. b) There are documented induction training programmes for new staff. c) Training provisions include those for visiting staff. d) Staff have appraisals and personal development plans.
GQ4 There is a systematic and planned approach to the management of records
<ul style="list-style-type: none"> a) There are suitable systems for the creation, review, amendment, retention and destruction of records. b) There are provisions for back-up / recovery in the event of loss of records. c) Systems ensure data protection, confidentiality and public disclosure (whistleblowing).
GQ5 There are systems to ensure that all adverse events are investigated promptly
<ul style="list-style-type: none"> a) Staff are instructed in how to use incident reporting systems. b) Effective corrective and preventive actions are taken where necessary and improvements in practice are made.
GQ6 Risk assessments of the establishment's practices and processes are completed regularly, recorded and monitored
<ul style="list-style-type: none"> a) There are documented risk assessments for all practices and processes requiring compliance with the HT Act and the HTA's Codes of Practice. b) Risk assessments are reviewed regularly. c) Staff can access risk assessments and are made aware of risks during training.
Traceability standards
T1 A coding and records system facilitates the traceability of bodies and human tissue, ensuring a robust audit trail
<ul style="list-style-type: none"> a) There is an identification system which assigns a unique code to each donation and to each of the products associated with it. b) A register of donated material, and the associated products where relevant, is maintained. c) An audit trail is maintained, which includes details of: when and where the bodies or tissue were acquired and received; the consent obtained; all sample storage locations; the uses to which any material was put; when and where the material was transferred, and to whom.

- d) A system is in place to ensure that traceability of relevant material is maintained during transport.
- e) Records of transportation and delivery are kept.
- f) Records of any agreements with courier or transport companies are kept.
- g) Records of any agreements with recipients of relevant material are kept.

T2 Bodies and human tissue are disposed of in an appropriate manner

- a) Disposal is carried out in accordance with the HTA's Codes of Practice.
- b) The date, reason for disposal and the method used are documented.

Premises, facilities and equipment standards

PFE1 The premises are secure and fit for purpose

- a) An assessment of the premises has been carried out to ensure that they are appropriate for the purpose.
- b) Arrangements are in place to ensure that the premises are secure and confidentiality is maintained.
- c) There are documented cleaning and decontamination procedures.

PFE2 There are appropriate facilities for the storage of bodies and human tissue

- a) There is sufficient storage capacity.
- b) Where relevant, storage arrangements ensure the dignity of the deceased.
- c) Storage conditions are monitored, recorded and acted on when required.
- d) There are documented contingency plans in place in case of failure in storage area.

PFE3 Equipment is appropriate for use, maintained, validated and where appropriate monitored

- a) Equipment is subject to recommended calibration, validation, maintenance, monitoring, and records are kept.
- b) Users have access to instructions for equipment and are aware of how to report an equipment problem.
- c) Staff are provided with suitable personal protective equipment.

Appendix 2: Classification of the level of shortfall (HA)

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. Critical shortfall:

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

Or

A shortfall which poses a significant risk to human safety and/or dignity or is a breach of the Human Tissue Act 2004 (HT Act) or associated Directions,

Or

A number of 'major' shortfalls, none of which is critical on its own, 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 licensable activity at the establishment ceasing with immediate 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 breach in the relevant Codes of Practices, the HT Act and other relevant professional and statutory guidelines;

or

A shortfall which indicates a failure to carry out satisfactory procedures 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.

In response to a major shortfall, an establishment is expected to implement corrective and preventative actions within 1-2 months of the issue of the final inspection report. Major shortfalls pose a higher level of risk and therefore a shorter deadline is given, compared to

minor shortfalls, to ensure the level of risk is reduced in an appropriate timeframe.

3. Minor 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 either by desk based review or at the time of the next inspection.

In response to a minor shortfall, an establishment is expected to implement corrective and preventative actions within 3-4 months of the issue of the final inspection report.

Follow up actions

A template corrective and preventative action plan will be sent as a separate Word document with both the draft and final inspection report. 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.