Site visit inspection report on compliance with HTA minimum standards

Royal Victoria Infirmary

HTA licensing number 11122

Licensed for the

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

29-30 November & 1 December 2017

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 The Royal Victoria Infirmary (the establishment) had met the majority of the HTA standards, five minor shortfalls were found in relation to Governance and Quality Systems as well as Premises, Facilities and Equipment. These were related to the scope of internal and independent audits; the limited scope of the establishment's risk assessments; the testing of vessels, and the storage of reagents at the appropriate temperature.

Particular examples of strengths and good practice are included in the concluding comments section of the report.

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.

Tissue category; tissue type	Procurement	Processing	Testing	Storage	Distribution
Musculoskeletal, Bone; Bone				E	E
Musculoskeletal, Tendon & Ligament; Tendon				E	E
Progenitor Cell, Hematopoietic, PBSC; PBSC	E	E	E	E	E
Progenitor Cell, Hematopoietic, Bone Marrow;	E	E	E	E	E
Mature Cell, T Cell (DLI); DLI	E	E	E	E	E

Progenitor Cell, Hematopoietic, Cord Blood; Cord Blood	E	E	E	E	E
Cardiovascular, valves				E	E
Cardiovascular, vessels				E	E
Ocular		E	E		
Membrane, Amniotic				E	

Background to the establishment and description of inspection activities undertaken

The Royal Victoria Infirmary ('the establishment') is licensed under the Human Tissue (Quality and Safety for Human Application) Regulations 2007 ('the Quality and Safety Regulations 2007') for the procurement, processing, storage, donor serology testing and distribution of tissues and cells for human application. The Royal Victoria Infirmary (RVI) is also licensed under the HT Act for the storage of relevant material for use for scheduled purposes. Licensable activities take place at The Royal Victoria Infirmary ('the hub') and two satellite sites (the Freeman Hospital and the Newcastle Bio-Manufacturing Facility).

The establishment undertakes the following activities:

- Procurement of hematopoietic stem cells (HSC)

(i) Peripheral Blood Stem Cells (PBSC) for paediatric patients are procured at the RVI and procurement of adult PBSC and Donor Lymphocyte Infusions (DLI) is undertaken at the Freeman Hospital.

(ii) Procurement of adult bone marrow occurs infrequently and is undertaken at the RVI.

(iii) Procurement, at the Freeman Hospital, of directed umbilical cord blood towards a named patient undergoing treatment at Newcastle upon Tyne Hospitals NHS Foundation Trust for haematological or immunological disease. On occasion, the unit may be stored for potential use by future affected family members. Previously, cord blood procurement also took place under this licence at two other hospitals but this is now restricted to the RVI. In the past years, two cord units were procured.

Samples procured under this licence are transported to the RVI for processing and storage in the Haematology Transplant Laboratory (HTL). When staff at the HTL receive a request for stem cell products, the HTL staff identify the correct units, calculate cell doses and volumes for infusion as necessary, release the units from storage and arrange transport to the required destination. All critical steps in this process are verified by a second member of staff. Cryopreserved units are distributed, when required, in a dry shipper. For cryopreserved products required at the RVI or the Freeman Hospital, HTL staff accompany the cryoshipper to the required destination. If fresh transplant material or DLI is required, HTL staff undertake the same checks described previously but the unit is placed in a validated transport container and accompanied to the RVI or the Freeman; or transported via a courier to the requesting establishment.

- Procurement of autologous limbal cells for clinical trials, leading to advanced therapy medicinal products (ATMPs), also takes place at the RVI. The limbal stem cell transplantation programme ended in 2015 however, the RVI has since received further funding to conduct ten more transplantations. Only procurement and testing are considered licensable activities under this HTA licence. All other activities are regulated by the Medicines and Healthcare products Regulatory Agency (MHRA).

- Storage and distribution of bone (femoral heads and struts) for end use. The products are supplied to the Freeman Hospital by another licensed establishment.

- Storage and distribution of heart valves for end use. The products are supplied to the Freeman Hospital by another licensed establishment.

- Storage, testing and distribution of iliac vessels which are initially received for solid organ transplant at the Freeman Hospital. If the vessels are not used with the organ, the vessels may be stored for up to 14 days and used for another recipient. At the time of the inspection, no iliac vessels were being stored nor any vessels used in the last 12 months.

- Storage of amniotic membrane, from another licensed establishment, for use in the processing of limbal stem cells for culture into autologous limbal stem cells for transplantation (ATMP).

- Storage of human embryonic stem cells (hESCs) for therapeutic use. This activity takes place at the Newcastle Bio-Manufacturing Facility. Since the last inspection no further fresh hESC have been stored at this satellite site. To date, the Newcastle Bio-Manufacturing Facility has deposited one stem cell line with the UK Stem Cell Bank which is also licensed by the HTA.

Since the last inspection, the establishment requested the removal of the activity of procurement and processing of autologous pancreata for pancreatic islet transplantation. The establishment intends to resume this programme in the near future and at that point will review and submit the re-validated processing procedure to the HTA.

The establishment has been licensed by the HTA since April 2006 and five previous site visits have taken place. This report describes the sixth, routine, inspection of the establishment. The inspection included a visual inspection of the apheresis unit at both the RVI and the Freeman Hospital; the processing laboratory and the cryostore at the RVI; visits to the satellite sites where tissue and cells were stored; a review of the establishment's documentation and roundtable discussions with the apheresis and bone marrow team.

Traceability records were audited for:

- two autologous limbal stem cell transplants;
- three cardiac valves in storage;
- three adult stem cell transplants;
- two paediatric stem cell transplants;

- three femoral heads in storage.

No discrepancies were found in any of the records.

During the inspection the establishment confirmed that no tissue is being stored for use for a scheduled purpose under the Human Tissue Act 2004 under the Human Application licence 11222.

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

Governance and Quality

GQ2 There is a documented system of quality management and audit.		
b) There is an internal audit system for all licensable activities.	Internal audits are conducted for some of the activities undertaken by the establishment. For activities such as storage of heart valves or bone there is an inventory check, however, this is not documented and no further audits are conducted.	**Minor**
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.	The independent audits for some activities are limited to a desk based audit assessment. This does not fulfil the requirements of this standard since not all the relevant standards applicable to this licence have been assessed.	**Minor**

GQ5 There are documented procedures for donor selection and exclusion, including donor criteria.		
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.	Serology testing of cadaveric liver donors is carried out under the licensing framework of The Quality and Safety of Organs Intended for Transplantation Regulations 2012, and test results are uploaded to NHSBT's Electronic Offering System (EOS). Vessels that are procured with the liver may be used in the patient who received that liver or could, potentially, be used for another recipient. Where vessels are being stored for more than 48 hours for use in a patient other than the recipient of the associated liver, donor serology testing of the donor's blood sample must be performed in accordance with the requirements of the Human Tissue (Quality and Safety for Human Application) Regulations 2007 (the Regulations). Although the establishment undertakes testing of a donor blood sample this does not include the full panel of tests in accordance with the requirements of Direction 003/2010.	**Minor**
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.	The establishment has in place risk assessments; however, these were limited in scope and do not fully capture all the risks associated with activities that may affect the quality and safety of tissues and cells.	**Minor**

Premises, Facilities and Equipment

PFE3 There are appropriate facilities for the storage of bodies, body parts, tissues, 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.	The anticoagulant ACD-A is stored in a locked room, alongside a substantial amount of other consumables. The temperature of the room is monitored and in the event of a temperature excursion an alarm will ring locally. The room is accessible to a large number of staff who may not be familiar with the procedure of dealing with temperature alarms. It is possible that staff accessing this room may silence the alarm and in doing so inadvertently delete all the recorded temperature monitoring data. Data may also be deleted in the event of a power-cut. In addition, during the inspection it was found that following the departure of the Quality Manager, none of the temperature monitoring data had been downloaded.	**Minor**

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 the standard operating procedures (SOPs) to add more detail or clarify what should be done. For example: (i) On rare occasions a PBSC collection may overrun. The units are stored overnight in the blood laboratory fridge. This is not captured in the Acceptance criteria SOP. This SOP also states that any units with a high white blood cell count must be diluted prior to storage. There was no detail of who or how this was achieved. (ii) Patients may be referred for PBSC or bone marrow collection from outside the Trust. The establishment will repeat all the serology tests for this group of patients. This is not documented in an SOP. (iii) When units are being released for infusion, staff will review the mandatory serology test results for autologous units but not for allogeneic units. The DI is advised to review the SOP “Release and transport of stem cell products for infusion” or consider risk assessing this procedure. (iv) The perfusion fluid surrounding the iliac vessels is sent for microbial testing. If staff at the establishment do not hear from the laboratory after 48h, the vessels are transferred from the ‘quarantine shelf’ to the ‘in use’ shelf. The DI is advised to have a mechanism in place to ensure that in the event the testing laboratory cannot meet the turnaround times, or there are issues with the testing kits, that vessels are not

		assumed to have no contamination and can be moved out of quarantine. (See *Advice* item 7). (v) The establishment has worked with suppliers to determine acceptable temperature excursion temperatures for consumables being stored and have a plan of what should be moved if these temperatures are exceeded. The DI is advised to document this procedure so that staff are aware of what and where susceptible reagents should be moved.
2.	C1(d)	The establishment's testing procedure includes all mandatory serology tests, including HTLV-1. However, the patient consent form for PBSC procurement does not list this test. The DI is advised to amend this list to ensure that the form is aligned with the tests performed.
3.	GQ1(s)	The DI is advised to amend the third party agreement with the courier company to ensure that any SAEAR is reported within 24 hours of discovery.
4.	GQ2(c)	The DI is advised to enhance the competency assessment for the Heart Valve storage to include the SOPs that should have been read, and records that need to be completed.
5.	GQ3(e)	The establishment requires that processing must be undertaken by two trained members of staff. During the visual inspection, it was noted that one member of staff undertaking processing was still being trained. The DI is advised to review this practice and ensure that an additional trained member of staff is present.
6.	PFE1(a)	The establishment plans to replace all their liquid nitrogen storage tanks in the near future. The flooring in the cryostore area is cracked. The DI is advised to consider replacing the flooring as part of the upgrade programme.
7.	N/A	The DI is advised to appoint a Person Designated (PD) in the testing laboratory for the reporting and investigation of serious adverse events and adverse reactions (SAEARs).
8.	N/A	The DI is advised to revoke the licence held for storage under the HT Act from their portfolio of HTA licences as this licence is not being used.

Concluding comments

There were a number of strengths and areas of good practice observed during the inspection some examples of which are included below:

- The establishment has a detailed procedure for dealing with any out of specification processing deviations.
- There is a good level of quality management within the HTL, with evidence of procedures being improved as a result of incidents, for example the controlled rate freezer now has a documented ten minute check to ensure freezing has begun as expected.
- The establishment has access to translators which are used in the apheresis unit as necessary as patients start and complete their apheresis procedure. In addition the adult apheresis unit has also developed a list of written questions that can be posed to patients during the procedure in the translator's absence, questions include "how the

patient feels" and, "if they require anything" and "please get the translator". These questions written in the patient's own language help to facilitate communication between the apheresis nurses and the patients.

There are a number of areas of practice that require improvement, including five minor shortfalls. The HTA has given advice to the Designated Individual with respect to reviewing documents including the consent form and SOPs, reviewing the TPA with the courier company with regards to SAEARS reporting, upgrading the floor in the cryostore area and appointing a PD in the testing laboratory.

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 / subject to compliance with the additional conditions applied to the licence.

Report sent to DI for factual accuracy: 02 January 2018

Report returned from DI: 03 January 2018

Final report issued: 08 January 2018

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: 3 August 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 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
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.
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.
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 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, 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
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 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.
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.

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 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 failure to carry out satisfactory procedures for the release of tissues and 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 cells.

   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.