Site visit inspection report on compliance with HTA minimum standards

Queen Elizabeth Hospital Birmingham

HTA licensing number 11100

Licensed for the

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

- **storage of the body of a deceased person or relevant material which has come from a human body for use for a scheduled purpose**

24, 25 April 2014

Summary of inspection findings

A site visit inspection of Queen Elizabeth Hospital Birmingham (the establishment) was carried out by the HTA on 24 and 25 April 2014. This routine inspection was coordinated as a joint inspection with an inspector from the Medicines and Healthcare products Regulatory Agency (MHRA). The establishment holds a licence with the MHRA for the processing of skin tissue that is classified as an advanced therapy medicinal product (ATMP).

Although the HTA found that the establishment had met the majority of the HTA standards, some shortfalls were found, particularly in relation to governance and quality systems. An interim Designated Individual is in place in the absence of a senior member of the team and former Designated Individual who is on extended leave. The continued absence of the former Designated Individual has placed resource constraints on the remaining members of the team involved in licensable activities. Whilst the day to day procurement, storage and distribution of tissues and cells is under good control, significant aspects of the quality management system are not being maintained as required. This has particularly impacted the systems that are in place to monitor and maintain quality standards such as internal audit, risk assessment and the periodic review of quality documents for clarity, accuracy and continued relevance.

Particular examples of 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 Paragraph 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 type	Procurement	Processing	Testing	Storage	Distribution	Import	Export
Keratinocytes	**E**		**E**				
Vessels			**E**	**E**	**E**		
PBSC	**E**						
Skin tissue	**E**		**E**	**E**			

(autologous)							
Purchased skin tissue (allogeneic)				**E**			

Background to the establishment and description of inspection activities undertaken

This inspection report covers licensable activities carried out at a number of departments at Queen Elizabeth Hospital (QEH), Birmingham (the establishment) under the oversight of QEH Tissue Services.

This routine inspection, covering all licensable activities, was the third inspection under this licence and was carried out as required under the Human Tissue (Quality and Safety for Human Application) Regulations 2007. The activities inspected included the procurement, testing and storage of skin samples for autologous use; the procurement of PBSCs; and the storage and distribution of skin, liver vessels and other tissues from the deceased for allogeneic use. During the inspection, the HTA team interviewed several members of staff, conducted a visual inspection of all areas of the establishment where activities are carried out under the licence, and reviewed documents relevant to the licensed activities. It was noted that the establishment had addressed the additional condition placed on the licence following the inspection in 2008, and that this condition would no longer have been applicable following the relocation to new premises. The establishment was also found to have acted on the advice and guidance which had been given during the previous inspection relating to improvements to practices.

The scope of inspection included a review of the test laboratories that are relied upon for conducting mandatory blood screening. The laboratories are CPA accredited. The last inspection was during 2012 with the next inspection expected to take place in 2015. The laboratories operate to a principle of only running samples on equipment that has been fully validated for specific analytical methods. Testing of samples is carried out using CE marked components. The laboratory routinely runs internal quality control samples and subscribes to national external quality assurance scheme (NEQAS).

This inspection was coordinated as a joint inspection with an inspector from the Medicines and Healthcare products Regulatory Agency (MHRA). The establishment holds a licence with the MHRA for the processing of skin tissue that is classified as an advanced therapy medicinal product (ATMP).

Licensable activities at the establishment relate to the following types of tissue:

The establishment undertakes various licensable activities with skin. This activity takes place in three different forms depending upon the injuries that the patient has sustained and the best treatment for a particular patient. Firstly, skin biopsies are procured in the operating theatres from patients who have suffered major burns and/or scalds. The activities of procurement and testing fall under the Human Tissue (Quality and Safety for Human Application) Regulations 2007 and are licensed and regulated by the HTA. The procured skin keratinocyte cells are processed to provide a material that can be used to treat the donor patient. The product that results from the cultured cells is classified as an advanced therapy medicinal product (ATMP) and is licensed and regulated by the Medicines and Healthcare products Regulatory Agency (MHRA). As the processing of skin cells to yield an ATMP is regulated under a licence from the MHRA, no processing is being undertaken under the HTA

licence. Donor blood samples undergo mandatory testing for markers of viral infection within the establishment's accredited testing laboratories.

Secondly, the establishment stores skin tissue that is procured from patients who have suffered burns or scalds. Procurement is undertaken in the operating theatre. This stored skin is used as an autologous treatment to assist the natural healing and repair process and can be held, pending use, for periods of up to two weeks. Donor blood samples undergo testing within the establishment's testing laboratories.

Thirdly, an allogeneic skin product which is obtained from deceased donors is purchased from another HTA-licensed facility which is responsible for procurement and for donor testing. These allogeneic tissue products are stored in freezers at the establishment and used as required during surgical procedures.

Operating theatres at the establishment receive liver vessels with liver organs that have been procured during the organ retrieval process. The liver and associated vessels may be procured within Queen Elizabeth Hospital, or at other hospitals. Serological testing of the donors is carried out as part of the retrieval and organ transplant process. If they are not used as part of the original organ transplant, the liver vessels are stored for up to 14 days at the establishment for potential use in Theatre and may also be distributed to local hospitals for use.

Peripheral blood stem cells (PBSCs) are procured in the level 6 Haematology Department. The cells are transported to another nearby HTA-licensed establishment which is responsible for processing, cryopreservation, and storage of the cells; this third party also conducts the mandatory donor serology testing on behalf of the establishment. The cells are returned to Queen Elizabeth Hospital for implantation. The establishment has not conducted any bone marrow transplants, as a means of stem cells procurement, since last HTA inspection.

The cardio thoracic team at the establishment have reason to store leg veins for less than 48 hours. As such, this activity is not licensable. However, as the team has used storage space within the fridge assigned for the storage of skin, this practice was reviewed from the point of view of risk to the licensable activities.

The establishment has a cryostore for the storage at ultra-low temperature of tissue / cells that are held, under the Human Tissue Act 2004 (HT Act) for the scheduled purpose of research.

During the inspection, various traceability audits were undertaken. The logs for the refrigerator used to store liver vessels located in the Transplant Room, and the refrigerator and freezer used to store skin located in Medication 2 Room (next to Theatre 16) were reviewed, as was the log of PBSCs located on Ward 621, procured by the establishment and transferred to another establishment for processing and storage.

Liver vessels from two patients were selected from the tissues stored in the refrigerator located in the Transplant Room. The vessels were recorded correctly in the storage log, using the unique organ donor number assigned to the tissue by the other licensed establishment responsible for retrieval to maintain traceability. The documentation for these vessels confirmed that consent had been taken by the other establishment responsible for retrieval, and that serological testing of the donors had been completed.

The clinical records for three burns patients from whom skin samples had been procured were reviewed. In one case a correctly completed and signed consent form was present in the record. The other two patients were unconscious when the skin was procured, and a signed form was present in each record confirming that the surgeon responsible had undertaken the procurement in the best interests of the patient. In such cases, the

establishment seeks confirmatory consent from the patient at a later date when the individual is capable of giving fully informed consent. Each record contained the results of serology tests carried out on the donors. A unique number assigned to each skin sample provided traceability in all cases.

During the audit of skin that was procured for autologous use, an example of a patient which had undergone a second procurement within six days of the initial procurement. Mandatory testing was only performed at the time of the initial procurement.

The audit also reviewed tissue logs and samples of stored tissue in each area which were chosen at random.

Overall, no anomalies were discovered during the traceability audit. There are good systems for daily verification of the records of tissue held versus visual checks of actual tissue retained in the various storage locations around the hospital.

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.		
a) There is a quality management system which ensures continuous and systematic improvement.	Significant aspects of the quality management system are not functioning as they should. Examples include but are not be limited to: • Internal non-conformance reports and subsequent investigations have not been reviewed and signed off by management; • A number of controlled documents have exceeded the required timeline for review. Consequently, the period of validity of these documents has lapsed; • Periodic risk assessments are not being conducted in accordance with a planned schedule (also referred to under GQ8b below); • The system of internal audits has not been maintained (also referred to under GQ2b below). **(Minor shortfall)**	**Major (cumulative)**
b) There is an internal audit system for all licensable activities.	The system of internal audits has not been maintained. No internal audits were conducted during 2013. There is no schedule of internal audits for 2014. This has been classified as a major shortfall as it is a component of the broader shortfall relating to operation of the overall quality management system (reference GQ2a above). **(Minor shortfall)**	
GQ8 Risk assessments of the establishment's practices and processes are completed regularly and are recorded and monitored appropriately.		

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.	Periodic risk assessments are not being conducted in accordance with a planned schedule. This has been classified as a major shortfall as it is a component of the broader shortfall relating to operation of the overall quality management system (reference GQ2a above). **(Minor shortfall)** A significant contributing factor to the above three minor shortfalls would appear to be a staffing issue whereby a senior member of the team and previous HTA Designated Individual responsible for licensable activities has been on a period of long term leave. The interim DI was not in post until February 2014 at which time she identified and raised the shortfalls with senior management and sought external support. At this time the issues were highlighted and all relevant people were informed, including key individuals from the outside authorities. Failure to properly assess risk, respond appropriately to non-conformances or to audit to ensure that any corrective and preventative actions following a non-conformance have been implemented may pose an indirect risk to the quality and safety of the tissues, the donor or the recipient. Given these indirect risks and that multiple aspects of the establishment's quality management system are not functioning as they should, a cumulative major shortfall has been placed against these standards.	
GQ4 There is a systematic and planned approach to the management of records.		
j) Records are kept of products and material coming into contact with the tissues and / or cells.	Within Haematology, collection run sheets do not record the batch numbers of reagents used during the stem cell procurement process. For example: the batch specific details of 0.9% sodium chloride and anticoagulant citrate dextrose solution A (ACD-A).	**Minor**

Advice

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

No.	Standard	Advice
1.	N/A	The inspection provided an opportunity to review the detailed content of the establishment's service level agreements (SLA) with partner organisations. The DI is advised to review service level agreement as follows: • The SLA with the Children's Hospital to include provision for supply of vessels as well as skin • The SLA with the Children's Hospital to include provision for receipt of skin biopsies • Expand the detail and definition of each party's obligations and responsibilities to minimise any ambiguity. • SLA spanning the period: 1 April 2014 to 31 March 2016, between the establishment and the provider of PBSC processing, cryopreservation and storage services, was in draft form, awaiting signature from authorised signatories for both parties.
2.	GQ5(b) GQ8	The DI is advised to conduct a formal risk assessment of the testing protocol whereby, under certain circumstances, the 90 day window for testing may be exceeded when a burns patient may require a delayed autologous transplant as part of their treatment regime. The DI is also advised to review the policy whereby a patient may undergo multiple procurements of skin with serological testing only being undertaken during the initial procurement. This only occurs when a patient is an inpatient; however, it is not in accordance with the testing requirements of the Regulations.
3.	GQ1(b)	The inspection provided an opportunity to review a number of policies and procedures relating to licensable activities. It was noted that, on occasions, the same process was referred to in more than one policy and/ or procedure without any apparent logic for this repetition. On further review and discussion it appeared that this was as a result of evolution of the document management system. Once the DI has re-established the prospective schedule of internal audits referred to under standard GQ2b above, the DI is advised to include examination audits covering establishment policies and standard operating procedures. The aim of these audits should be to inform the development of concise documents without unnecessary repetition.
4.	GQ5(b) GQ8	Liver vessels. The DI is advised to risk assess the fact that syphilis test results from the donor alert form are relied upon as it is not always possible to conduct the syphilis serology test at the establishment's testing laboratory. This is because blood samples are at times provided in orange top (EDTA) tube rather than a red top (serum) tube. The establishment's testing laboratory equipment is not validated to conduct the test using blood samples supplied in EDTA tubes. In addition to this assessment, the DI is advised to consider obtaining access to the electronic offering system (EOS) so that syphilis results from the organ donation donor tests can be reviewed once they become available. Although the syphilis test results are provided on the donor alert form which accompanies the organ and vessels, the test has not always been completed and the results can be recorded pending. Once the tests have been completed, EOS will be updated to show the results

5.	PFE2(c)	Within the area responsible for procurement of peripheral blood stem cells, the DI is advised to introduce a labelling system to reflect the cleaning status of the apheresis equipment. The DI may wish to consider the introduction of labels which can be placed onto the apheresis equipment following the cleaning which takes place after use. This way, staff wishing to use apheresis equipment have a clear indicator that the equipment has been appropriately cleaned after its last use.
6.	GQ4(j)	The DI is advised to update the PBSC collection run sheets to ensure that this standard proforma, which records reagents that come into contact with the patient, is approved by the clinician. This high level approval of the document by the prescribing clinician should remove the need for clinician initials or signature to be recorded on each individual run sheet.
7.	PFE2(c) PFE2(d)	The clogs available for access to theatres were in a poor state of cleanliness. The DI is advised to liaise with theatre staff and to put in place a process to help ensure that theatre clogs are cleaned at regular intervals.

Concluding comments

Although shortfalls have been identified during the inspection, good practice was also observed.

The daily inventory checks and checks on all of the establishment's storage locations helps to ensure that stock levels are as recorded and that all tissue use is being appropriately logged. In addition, inspections of the storage equipment and the areas where this is located helps to assure the DI that the premises remain appropriate for the storage of tissue.

There are a number of areas of practice that require improvement, including one major shortfall and one minor shortfall. The HTA has given advice to the Designated Individual with respect to governance and quality systems in addition to premises related standards.

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.

Report sent to DI for factual accuracy: 1 August 2014

Report returned from DI: 13 August 2014

Final report issued: ?? August 2014

Appendix 1: HTA standards

The HTA standards applicable to this establishment are shown below. Individual standards which are not applicable to this establishment are shown in grey text.

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.
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.

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.

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.

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
• Consent forms comply with the HTA's Code of Practice • Consent forms are in records and are made accessible to those using or releasing relevant material for a scheduled purpose • If the establishment obtains consent, a process is in place for acquiring consent in accordance with the requirements of the HT Act 2004 and the HTA's Codes of Practice • Where applicable, there are agreements with third parties to ensure that consent is obtained in accordance with the requirements of the HT Act 2004 and the HTA's Codes of Practice • Consent procedures have been ethically approved
C2 Information about the consent process is provided and in a variety of formats
• Standard operating procedures (SOPs) detail the procedure for providing information on consent • Agreements with third parties contain appropriate information • Independent interpreters are available when appropriate • Information is available in suitable formats, appropriate to the situation • Consent procedures have been ethically approved
C3 Staff involved in seeking consent receive training and support in the implications and essential requirements of taking consent
• Standard operating procedures (SOPs) detail the consent process • Evidence of suitable training of staff involved in seeking consent • Records demonstrate up-to-date staff training • Competency is assessed and maintained

Governance and quality system standards
GQ1 All aspects of the establishments work are supported by ratified documented policies and procedures as part of the overall governance process
• Policies and procedures in place are in place, covering all activities related to the storage of relevant material for research in connection with disorders, or the functioning, of the human body • Appropriate risk management systems are in place • Regular governance meetings are held; for example, health and safety and risk management committees, agendas and minutes • Complaints system

GQ2 There is a documented system of quality management and audit
• A document control system, covering all documented policies and standard operating procedures (SOPs). • Schedule of audits • Change control mechanisms for the implementation of new operational procedures
GQ3 Staff are appropriately qualified and trained in techniques relevant to their work and are continuously updating their skills
• Qualifications of staff and training are recorded, records showing attendance at training • Orientation and induction programmes • Documented training programme, (e.g. health and safety, fire, risk management, infection control), including developmental training • Training and reference manuals • Staff appraisal / review records and personal development plans are in place
GQ4 There is a systematic and planned approach to the management of records
• Documented procedures for the creation, amendment, retention and destruction of records • Regular audit of record content to check for completeness, legibility and accuracy • Back-up / recovery facility in the event of loss of records • Systems ensure data protection, confidentiality and public disclosure (whistle-blowing)
GQ5 There are documented procedures for distribution of body parts, tissues or cells
• A process is in place to review the release of relevant material to other organisations • An agreement is in place between the establishment and the organisation to whom relevant material is supplied regarding the tracking and use of material and eventual disposal or return
GQ6 A coding and records system facilitates traceability of bodies, body parts, tissues and cells, ensuring a robust audit trail
• There is an identification system which assigns a unique code to each donation and to each of the products associated with it • An audit trail is maintained, which includes details of when and where the relevant material was acquired, the consent obtained, the uses to which the material was put, when the material was transferred and to whom
GQ7 There are systems to ensure that all adverse events are investigated promptly
• Corrective and preventive actions are taken where necessary and improvements in practice are made • System to receive and distribute national and local information (e.g. HTA communications)

GQ8 Risk assessments of the establishment's practices and processes are completed regularly and are recorded and monitored appropriately

- Documented risk assessments for all practices and processes
- Risk assessments are reviewed when appropriate
- Staff can access risk assessments and are made aware of local hazards at training

Premises, facilities and equipment standards

PFE1 The premises are fit for purpose

- A risk assessment has been carried out of the premises to ensure that they are appropriate for the purpose
- Policies in place to review and maintain the safety of staff, authorised visitors and students
- The premises have sufficient space for procedures to be carried out safely and efficiently
- Policies are in place to ensure that the premises are secure and confidentiality is maintained

PFE 2 Environmental controls are in place to avoid potential contamination

- Documented cleaning and decontamination procedures
- Staff are provided with appropriate protective equipment and facilities that minimise risks from contamination
- Appropriate health and safety controls are in place

PFE3 There are appropriate facilities for the storage of bodies, body parts, tissues and cells, consumables and records.

- Relevant material, consumables and records are stored in suitable secure environments and precautions are taken to minimise risk of damage, theft or contamination
- Contingency plans are in place in case of failure in storage area
- Critical storage conditions are monitored and recorded
- System to deal with emergencies on 24 hour basis
- Records indicating where the material is stored in the premises

PFE 4 Systems are in place to protect the quality and integrity of bodies, body parts, tissues and cells during transport and delivery to a destination

- Documented policies and procedures for the appropriate transport of relevant material, including a risk assessment of transportation
- A system is in place to ensure that traceability of relevant material is maintained during transport
- Records of transportation and delivery
- Records are kept of any agreements with recipients of relevant material

- Records are kept of any agreements with courier or transport companies

PFE5 Equipment is appropriate for use, maintained, quality assured, validated and where appropriate monitored

- Records of calibration, validation and maintenance, including any agreements with maintenance companies
- Users have access to instructions for equipment and receive training in use and maintenance where appropriate
- Staff aware of how to report an equipment problem
- Contingency plan for equipment failure

Disposal Standards

D1 There is a clear and sensitive policy for disposing of human organs and tissue

- Documented disposal policy
- Policy is made available to the public
- Compliance with health and safety recommendations

D2 The reason for disposal and the methods used are carefully documented

- Standard operating procedures (SOPs) for tracking the disposal of relevant material detail the method and reason for disposal
- Where applicable, disposal arrangements reflect specified wishes

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.