Site visit inspection report on compliance with HTA minimum standards

SCI Oxford

HTA licensing number 11042

Licensed for the

- **procurement, processing, 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 relevant material which has come from a human body for use for a scheduled purpose**

2 April 2015

Summary of inspection findings

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

SCI Oxford (the establishment) was found to have met all of the HTA standards. Advice has been given relating to the Consent (C), Governance and Quality Systems (GQS) and Premises, Facilities and Equipment (PFE) standards.

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 (DI), Licence Holder (LH), premises and practices are suitable.

The statutory duties of the DI 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 licenses 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
BM	**-**	**E**	**-**	**E**	**TPA**	**-**	**-**
DLI	**E**	**E**	**-**	**E**	**TPA**	**-**	**-**
PBSC	**E**	**E**	**-**	**E**	**TPA**	**-**	**-**
UCB	**TPA**	**E**	**-**	**E**	**TPA**	**-**	**-**

BM = Cells derived from Bone Marrow; DLI = Cells for Donor Lymphocyte Infusion; PBSC = Peripheral Blood Stem Cells; UCB = Umbilical Cord Blood.

Background to the establishment and description of inspection activities undertaken

NHS Blood and Transplant (NHSBT) is a Special Health Authority operating as part of the UK National Health Service (NHS). Within NHSBT there are six Therapeutic Apheresis Service

(TAS) units, which form part of the Patient Services Directorate of NHSBT. There are also seven centres which form the Stem Cell and Immunotherapy Services (SCI) function within NHSBT. This report refers to the activities carried out by SCI Oxford (the establishment). This was the fourth HTA site visit inspection of the establishment since it was issued an HTA licence in August 2006 (the last inspection was in April 2013). It was a routine inspection to assess whether the establishment is continuing to meet the HTA's standards.

The establishment currently has a 'stand-alone' licence and licensable activities occur within the Oxford Blood Centre (at the Oxford University Hospitals NHS Trust (OUH) – John Radcliffe Hospital), within the John Radcliffe Hospital (JRH) itself (at the JRH Children's Hospital – not inspected on this occasion) and under a service level agreement (SLA) with the Oxford Cancer and Haematology Centre at the OUH – Churchill Hospital (CH; not inspected on this occasion). The Oxford Blood Centre contains both the TAS and SCI unit.

SCI Oxford also has SLAs with other licensed sites to perform specific activities on their behalf. These activities are referred to below.

The establishment deals with haematopoietic stem cells (HPC) for human application. The HPCs are: cells derived from Bone Marrow (BM); Peripheral Blood Stem Cells (PBSC); and, Umbilical Cord Blood (UCB). The establishment also deals with cells for Donor Lymphocyte Infusion (DLI). Donations are for both autologous and allogeneic (including directed) infusion.

Donor selection, consent and procurement

Donor selection and initial consent for DLI and PBSC occurs at OUH – CH or at one of three adjacent referring Trusts. Confirmatory consent and procurement occurs in the TAS.

In advance of referral, the treatment plans for the TAS patients are discussed at multi-disciplinary team meetings involving staff from the establishment and from OUH – CH and each referring Trust. The TAS consultant haematologist reviews clinical details of the patient to decide whether they are suitable for treatment and, when this is confirmed, the treatment timetable is planned so that mobilisation therapy and apheresis may be carried out.

Samples for pre-donation (day –30) serology testing are taken by trained staff at OUH – CH and at each referring Trust. Consent for mobilisation and serological testing is sought by trained staff on each of the sites. There is an agreement in place with each referring hospital for these activities.

Upon arrival of the patient at the TAS, consent is sought by trained staff for the apheresis procedure in a private consenting room. Further serology samples are also taken for testing (the 'donation (day 0) sample'). All serology samples are sent directly to the SCI unit. Apheresis is performed in the TAS using one of four machines. Reagents for procurement are stored at room temperature in a temperature monitored room (*see Advice item 4, below*).

For adolescent and paediatric patients the process is the same except that the serology sampling, consent-seeking and apheresis procedures take place in the Haematology and Oncology Ward of JRH Children's Hospital.

Sample receipt at SCI and distribution from SCI

The SCI unit comprises a cleanroom suite, cell culture laboratories, offices and liquid nitrogen storage facilities.

All samples received from outside the unit are transported by courier under a Third Party Agreement (TPA) with the establishment. Samples distributed from the unit are also under a similar agreement.

Samples distributed to end users are covered by end user agreements.

DLI and PBSC samples. Samples from the adjacent TAS, JRH Children's Hospital and OUH – CH are received along with a chain of custody form. PBSC and DLI samples for processing and storage are also received from one other licensed procurement site (under an SLA). Imported samples are received via a donor registry under the registry's HTA licence. There is an SLA in place with the donor registry.

BM samples. BM samples are received from OUH – CH under an SLA.

UCB samples. UCB samples are received from JRH Women's Centre and from several other national private hospitals and NHS Trusts. UCB is collected at those hospitals by midwifery or phlebotomy staff acting under TPAs.

Sample traceability. Traceability is maintained by a combination of patient name, date of birth, hospital or NHS number and a sample identification number. Upon receipt at SCI patient details and sample identification are entered onto the electronic 'Hematos' tracking database. Each procurement is allocated a unique ISBT 128 number and this is linked to the patient details and identifier held on the Hematos database. The unique procurement number then follows the cells through processing to storage and eventually to end use.

Serology samples. Upon arrival of the samples, patient details and sample identification are entered onto the Hematos tracking database and are linked though the database to the unique procurement number. Serology samples for BM, PBSC and DLI collections are sent to NHSBT Manchester (HTA licensing number: 11018 – Satellite) and those accompanying UCB collections to the National Transfusion Microbiology Reference Laboratory (NTMRL) at NHSBT Colindale (HTA licensing number: 22600). Both serological antibody testing and molecular nucleic acid amplification technique (NAT) testing are carried for HIV, HBV and HCV on the pre-donation and donation sample. Serological antibody testing is carried out for HTLV-1 and 2 on the pre-donation and donation sample (*see Advice item 3, below*).

Processing

DLI and PBSC samples are processed in a closed system using a sterile docker. BM and UCB samples are processed in a cleanroom facility (where volume reduction takes place before processing). The cleanroom facility contains two cleanrooms; one of these is dedicated as a containment facility for research and development projects using relevant material and the other for BM and UCB processing. Environmental monitoring of the facility is performed in accordance with the Human Tissue (Quality and Safety for Human Application) Regulations 2007. Agreements are in place between the establishment and an organisation for the regular maintenance of the cleanroom suite and an organisation for the provision of cleanroom garments.

Bacteriology samples taken both before and after the processing steps are sent to the Department of Microbiology within OUH for analysis. There is an SLA with this Department.

Samples before and after processing are analysed for cell counts, viability and immunophenotype (in a flow cytometer) within the SCI unit. Other analysis of the blood samples is performed in the OUH Department of Haematology and Transfusion under SLA.

Biological function of cellular product after processing and after storage is performed in the SCI cell culture facility using colony forming unit (CFU) assays. The establishment also provides this biological function assay to other SCI units as a service.

Cryopreservation and storage

Cryopreservation of products and pilot tubes is performed using one of two controlled rate freezers.

Cells are stored in the vapour phase in one of 20 liquid nitrogen tanks. The liquid nitrogen tanks are monitored and maximum and minimum temperatures are recorded on a daily basis. The tanks are linked to a data-logged, continuous temperature monitoring facility which feeds into a wireless callout system. Temperature excursions outside the set ranges trigger both audible alarms and the wireless callout system. The liquid nitrogen storage area contains oxygen depletion monitors and portable monitors. There is an automatic cryofilling system for the tanks. Power failure to the storage facilities and failure of the cryofilling system also trigger the audible alarms and the wireless callout system.

Only those cells meeting well-defined release criteria are released for clinical use.

There is provision for storage within three quarantine liquid nitrogen tanks for samples awaiting the results of mandatory testing. Any samples for which there are positive virology results are considered by the clinician and are used or discarded, as appropriate.

A SLA is in place with an HTA-licensed establishment for the contingency storage of cells.

Research

The establishment is also involved in research and development projects and stores relevant material for the purpose of research. Most, but not all, of the research work is the subject of recognised research ethics committee (REC) approval and therefore storage of the material is exempted from HTA licensing. The establishment's systems relating to the receipt, storage and distribution of such material were not assessed during this current inspection as they have been inspected in detail in a previous HTA site visit inspection (April 2011). There is an effective inventory which includes projects that are subject to recognised research ethics committee approval and identifies the respective expiry dates of ethics approval.

The present site visit inspection of the establishment included a visual inspection of the TAS and SCI unit, discussions and interviews with key staff and a review of governance and record documentation. Meetings were held with the DI (Associate Director of Quality), the Deputy Head of the SCI unit, the Lead Nurse (TAS), the Lead Nurse (Care Quality and Regulation), the Regional Quality Assurance Manager and the Quality Assurance Manager. An audit of traceability was carried out:

- In the TAS, three patient files were reviewed for the presence of consent documentation, the results of mandatory testing and procurement documentation and this was tracked onto the Hematos database at SCI.
- Three donations were selected from the liquid nitrogen storage tanks. Information from the paper records and the Hematos database for each donation confirmed the number of bags stored and the correct storage location of the samples. Bags of cells intended for autologous transfusion were correctly labelled 'For Autologous Use Only'.
- The SCI records for these three donations, including consent documentation, results of mandatory testing and processing documentation, were reviewed.

No discrepancies were found.

Inspection findings

The HTA found the DI and the (Corporate) LH (CLH) to be suitable in accordance with the requirements of the legislation.

Compliance with HTA standards

All applicable HTA standards have been assessed as fully met.

Advice

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

No.	Standard	Advice
1.	C1(d), GQ2(b)	The establishment stated that it is currently reviewing the consent forms used by TAS. The DI is advised to conduct an audit of the completion of consent forms soon after the introduction of the new form. This may help to highlight any problems with the introduction of the new form.
2.	GQ1(c)	There is a regular forum where staff working under the licence can discuss regulatory issues. The DI is advised to include the person responsible for the research collection (Head of Research and Development) in those meetings.
3.	PFE3(a)	There is no repeat (180 day) HTLV-1 or 2 serological testing for any of the stored samples. To ensure that the risk of cross-contamination is minimal the DI is advised to ensure that all cells are double bagged before being placed in the vapour phase.
4.	PFE3(c)	The establishment stores reagents used for the procurement of HPCs at room temperature in a dedicated store room. The store room is temperature monitored and there is a central alarm in the event that the temperature increases above 25°C. As a number of critical reagents are indicated to be required to be stored below 25°C, the DI is advised to consider reducing the temperature at which the alarm triggers in order to alert to an increase in temperature before the maximum recommended storage temperature for these reagents is exceeded.

Concluding comments

During the site visit inspection of the establishment several areas of strength and good practice were noted:

- The consenting process is robust, with donors giving separate informed consent for each element of the process.
- Staff demonstrated a very positive approach to the quality systems in place and the HTA was made aware of their view that the quality processes are critical to the safety of the processed product.
- NHSBT quality staff carry out a programme of rolling audits in an independent manner and evidence was seen of robust corrective action procedures following audit or root cause analysis.
- Staff undertake comprehensive induction and competency training and this includes external on-line consent training, as well as internal courses.
- There is good use of chain of custody documentation to maintain traceability of samples during transfer.

The HTA has given advice to the DI with respect to the Consent, Governance and Quality Systems and Premises, Facilities and Equipment standards.

The HTA has assessed the establishment as suitable to be licensed for the activities specified.

Report sent to DI for factual accuracy: 1 May 2015

Report returned from DI: 12 May 2015

Final report issued: 7 June 2015

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 marked as 'N/A'.

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 Systems

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. N/A
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. N/A
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. N/A
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. N/A
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 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 Human Tissue (Quality and Safety for Human Application) Regulations 2007 or the HTA Directions.

1. **Critical shortfall:**

   A shortfall which poses a significant risk to 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 represents a systemic failure and therefore is 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 straight away.

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 the proposed action plan the establishment will be notified of the follow-up approach the HTA will take.