Site visit inspection report on compliance with HTA minimum standards

John Goldman Centre for Cellular Therapy

HTA licensing number 11118

Licensed for the

- **procurement, processing, testing, storage, distribution, import and export 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**

2-4 February 2016

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.

The John Goldman Centre for Cellular Therapy (the establishment) was found to have met all applicable HTA 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, Licence Holder, premises and practices are suitable.

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

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

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

'E*' = Establishment is licensed to carry out this activity but is not currently carrying it out.

Tissue type	Procurement	Processing	Testing	Storage	Distribution	Import	Export
PBSCs	**E**	**E**	**E**	**E**	**E**	**E***	**E***
Bone Marrow	**E**	**E**	**E**	**E**	**E**	**E***	**E***
Cells for DLIs	**E**	**E**	**E**	**E**	**E**	**E***	**E***
Umbilical cord blood				**E**	**E**	**E**	**E***
Mesenchymal stromal cells	**E**		**E**				

Background to the establishment and description of inspection activities undertaken

The John Goldman Centre for Cellular Therapy (JGCCT; the establishment) sits within the Clinical Haematology Service at Imperial College Healthcare NHS Trust and has been licensed by the HTA since August 2006. It was re-licensed in 2007, when the Quality and Safety for Human Application Regulations 2007 came into force. The establishment is licensed for procurement, donor testing, processing, storage, distribution, import and export of tissues and cells for human application. The establishment is also licensed for storage of relevant material from a human body for use for a scheduled purpose.

The DI is the Head of Operations and Regulatory Affairs; Imperial College Healthcare NHS Trust is the Licence Holder and the Corporate Licence Holder contact is Chair of the Department of Haematology.

The establishment is accredited by the Joint Accreditation Committee ISCT & EBMT (JACIE) for adult clinical services, collection, and processing of stem cells. The establishment has an Investigational Medicinal Product Manufacturer's licence and Specials licence issued by the Medicines and Healthcare products Regulatory Agency (MHRA). Licensable activities take place at the Catherine Lewis Centre at Hammersmith Hospital (hub site) and two satellite sites (Charing Cross Hospital and St Mary's Hospital). Procurement of peripheral blood stem cells (PBSCs) and bone marrow from adults (related or unrelated donors) takes place at the hub site. The establishment is in the process of implementing a proprietary database which has been customised for use by laboratories which process stem cells.

The clinical laboratory at the hub site undertakes processing and cryopreservation of bone marrow, PBSCs and donor lymphocytes for adoptive lymphocyte immunotherapy (DLI). Products can be infused fresh or after cryopreservation and storage. Stem cells from unrelated donors are received via registries and directed cord blood is received from a hospital outside the EEA which has FACT/NETCORD accreditation. These products are sampled in order to assess their quality and then transported to the wards for end use. The establishment also expands mesenchymal stromal cells from bone marrow aspirates for use in a clinical trial. CD34+ selection of stem cell harvests is carried out as required.

Procurement of bone marrow from paediatric donors takes place at the satellite site located at the Department of Paediatrics, St Mary's Hospital. Donor testing and sterility testing of the cell products is undertaken at the second satellite site; the analytical laboratories within the Division of Infection and Immunity at Charing Cross Hospital. Donor serology testing is carried out using CE marked assays and the laboratory has Clinical Pathology Accreditation (CPA) UK accreditation.

Experienced Transplant co-ordinators engage with donors and manage the patient pathway from donation of stem cells through to infusion. Interpreters are available if required. Clinicians involve both parents in discussions when seeking consent for donation of stem cells from paediatric donors. Children under 16 years of age are encouraged to be actively involved in these discussions if they have a reasonable understanding of the procedure and related risks. The JGCCT assembles and provides bone marrow procurement kits to the theatres. The establishment routinely procures back-up bone marrow harvests from patients for storage and re-infusion in the event that engraftment does not take place, following infusion of stem cells from allogeneic donors. Procured cells are transported to and from JGCCT by nursing staff, Transplant co-ordinators or staff based at the JGCCT.

The JGCCT has two independent clean room suites each consisting of primary and secondary staff changing rooms, a grade C preparation room and grade B rooms. Each grade B room contains a grade A cabinet and a laminar flow area in which stem cell separators or cell sorting machines are placed when in use. Stem cells are cryopreserved after addition of prepared cryopreservative, double bagged and then subjected to controlled rate freezing.

The temperature, non-viable particles, oxygen levels, and air pressures in the clean room suites and grade A cabinets are continuously monitored using a proprietary environmental monitoring system. This monitoring system also monitors the temperature within the liquid nitrogen storage tanks, fridges and freezers used by the JGCCT. Regular maintenance of the monitoring system takes place together with calibration of probes. A text message is sent to staff who are on call after hours if any of the parameters are out of specification. Viable particles are monitored using settle plates and active air sampling which is undertaken by the Pharmacy Department at Imperial College Trust. Stem cell harvests and samples taken during processing are incubated for 14 days under aerobic and anaerobic conditions in order to detect any microbial contamination.

The establishment has 24 liquid nitrogen storage tanks located in two secure rooms. Products are stored in the vapour phase of liquid nitrogen. There is a quarantine tank for storing cells, pending donor virology and sterility test results. There is a dedicated tank for storing cells from known virology positive donors. Each week the dry shippers located in the room are charged with liquid nitrogen, so they are ready for use at short notice. A small collection of research samples, obtained with consent from living donors, is stored in a -80^{0}C freezer located in a secure area.

The DI and Head of Quality are responsible for authorising the release of stem cells and DLI for infusion. Staff from the JGCCT accompany the dry shipper to the ward; a temperature logger is used to monitor the temperature of the cells.

This was the fifth routine site visit inspection of the establishment and included visual inspections of the hub and satellite sites. Discussions were held with the DI, Quality Manager, Head of Quality, Consultant Paediatric Haematologists and staff responsible for Apheresis.

A document review was carried out. Documents reviewed included the Quality Manual, the Trust's consent policy and standard operating procedures (SOPs) relating to bone marrow harvests, allogeneic stem cell donor assessment, cryopreservation, clean room and environmental monitoring. The, audit calendar, management reviews and minutes of meetings were also reviewed. Discussions were held which covered processes which received authorisation by the HTA – Preparation Process Dossier (PPD for CD34+ selection and filtration of bone marrow harvests.

Audit trails relating to four products were traced; allogeneic harvest received via a registry; PBSCs procurement and infusion; directed cord blood received from outside the UK, and DLI. Records relating to, as appropriate, consent forms, mandatory donor tests, procurement, collection and delivery logs, processing, consumables used, environmental monitoring, cryopreservation, sterility test results, operator finger dabs, storage location, transport, and disposal were reviewed. Consent forms relating to one research sample which was selected from the collection stored in the -80^{0}C freezer was also reviewed. There were no discrepancies.

Staff training including induction training for new staff, on-going competency assessments for gowning, broth simulations and hatch transfer of materials were reviewed. Active air sampling results, results from manned and un-manned settle plates [tryptone soya agar media and sabouraud dextrose agar (SAB) media] and environmental monitoring data were also reviewed.

Inspection findings

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

Compliance with HTA standards

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.	C1d and C2a	The DI is advised to consider including specific consent for mandatory virology testing within the consent form used for adult donors of stem cells for allogeneic use. Staff who seek consent provide information as noted in the consent pathway. They should also consider outlining the steps which will be taken, such as counselling and treatment in the event that the potential donor tests positive.
2.	GQ1b	The DI is advised to review SOPs which cover the transfer of items from the tray in the grade B area into the grade A cabinet as the documented procedure does not accurately reflect current practice. The DI is advised to refer to HTA Directions 003/2010 and the HTA's Guide to Quality and Safety Assurance for Human Tissues and Cells for Patient Treatment – (revised June 2015), when the JGCCT Quality Manual is next reviewed. The HTA Guide clarifies the standards which apply in the human application sector and HTA Directions 003/2010 revoke Directions 001/2006, 002/2007 and 004/2007.
3.	GQ7a	The DI attends formal meetings with staff based in the testing laboratory at Charing Cross Hospital. The DI is advised to ensure that these members of staff are aware of the requirement to inform the DI of Serious Adverse Events and Adverse Reactions which could impact on the results relating to donor testing and sterility testing. The establishment harvests stem cells for allogeneic use from donors who originate from outside the UK. The DI is advised to consider informing the donor's GP in their country of origin, that they must report any clinical observations noted post donation, which may have implications for the recipient of the stem cells.
4.	PFE2b	The system of monitoring viable particles includes the use of SAB plates to detect fungal contamination. The DI is advised to risk assess the current procedure in order to be satisfied that the current system of monitoring addresses any identified risks. SAB plates are only exposed in the change rooms, the grade C rooms and the transfer hatches when the clean rooms are unmanned and not in the areas where processing takes place or when the clean rooms are manned.
5.	PFE2c	The proprietary environmental monitoring system sends a text message when a reading is outside specific limits. A member of staff on the on-call rota receives and responds to the text message. The system does not trigger a cascade of text messages, and relies on the member of staff responding to the message. The DI is advised to risk assess this procedure in order to satisfy herself that this out of hours system is sufficiently robust and will deal with any occurrences out of hours or during weekends and public holidays. The risk assessment should take into account risks such as loss or damage to mobile phones, loss of power to phone (insufficient charge) etc., and consider whether providing switchboard staff with a list of laboratory staff who can be alerted would help mitigate any identified risks.

Concluding comments

The establishment has met all applicable HTA licensing standards. There are effective governance arrangements in place; there are good systems of communication between the DI, clinicians, JGCCT clinical laboratory staff and staff who work in the donor testing

laboratory. The DI is actively engaged with all activities relating to the stem cell laboratory and signs off on cells before they are released. Detailed care pathways and forms are used which cover donor assessment, seeking consent and procurement of stem cells from adult and paediatric donors. Forms are checked by a second person who confirms that the records are complete. There is a robust system of traceability of cells from donor to recipient.

Paediatric donors are included in consent discussions and encouraged to sign consent forms if they are judged to have sufficient understanding of the procedure and any inherent risks. Parents of pre-pubertal donors who may undergo chemotherapy are offered services including storage of ovarian or testicular tissue. Clinicians treat high risk donors who offer to donate stem cells for allogeneic use with sensitivity and, if appropriate, take steps to reduce potential risks in order to ensure that the donation is safe for the recipient.

Comprehensive induction training is provided and staff undertake on-going competency assessments; gowning validation, hatch transfer technique and broth simulations. A traffic light system is in use to identify consumables; consumables which should not be used, are currently being evaluated and those which can be used, are identified using red, amber and green stickers respectively.

Consent forms also cover the use of tissue for generic research and sets out a time frame for disposal of stem cells which are no longer required for clinical use; the time stated is usually five years from the date of procurement.

Following the previous inspection in 2014, staff monitor and record non-viable particles in the grade A environment during processing and monitor the storage temperature of consumables in order to ensure that they are within defined temperature limits.

The HTA has given advice to the Designated Individual with respect to reviewing and updating documents, consent forms, increasing links between staff in the testing laboratories with respect to reporting of SAEARs, and risk assessing the procedure for using SAB plates to monitor fungi in the environment and the current procedure to alert staff out of hours when a parameter monitored by the environmental monitoring system is out of specification.

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

Report sent to DI for factual accuracy: 3 March 2016

Report returned from DI: 29 March 2016

Final report issued: 29 March 2016

Appendix 1: HTA standards

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

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

Consent

Standard
C1 Consent is obtained in accordance with the requirements of the HT Act 2004, the Human Tissue (Quality and Safety for Human Application) Regulations 2007 and as set out in the HTA's Codes of Practice.
a) If the establishment acts as a procurer of tissues and / or cells, there is an established process for acquiring donor consent which meets the requirements of the HT Act 2004 the Human Tissue (Quality and Safety for Human Application) Regulations 2007 (Q&S Regulations) and the HTA's Codes of Practice
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.
c) Information is available in suitable formats and there is access to independent interpreters when required.
d) There are procedures to ensure that information is provided to the donor or donor's family by trained personnel.
C3 Staff involved in seeking consent receive training and support in the implications and essential requirements of taking consent.
a) Staff involved in obtaining consent are provided with training on how to take informed consent in accordance with the requirements of the HT Act 2004 and Code of Practice on Consent.
b) Training records are kept demonstrating attendance at training on consent.

Governance and Quality

Standard
GQ1 All aspects of the establishment's work are supported by ratified documented policies and procedures as part of the overall governance process.
a) There is an organisational chart clearly defining the lines of accountability and reporting relationships.

b) There are procedures for all licensable activities that ensure integrity of tissue and / or cells and minimise the risk of contamination.
c) There are regular governance meetings, for example health and safety, risk management and clinical governance committees, which are recorded by agendas and minutes.
d) There is a document control system to ensure that changes to documents are reviewed, approved, dated and documented by an authorised person and only current documents are in use.
e) There are procedures for tissue and / or cell procurement, which ensure the safety of living donors.
g) There are procedures to ensure that an authorised person verifies that tissues and / or cells received by the establishment meet required specifications.
h) There are procedures for the management and quarantine of non-conforming consignments or those with incomplete test results, to ensure no risk of cross contamination.
i) There are procedures to ensure tissues and / or cells are not released from quarantine until verification has been completed and recorded.
j) There are procedures detailing the critical materials and reagents used and where applicable, materials and reagents meet the standards laid down by the European directives on medical devices and in vitro diagnostic medical devices.
k) There is a procedure for handling returned products.
l) There are procedures to ensure that in the event of termination of activities for whatever reason, stored tissues and / or cells are transferred to another licensed establishment or establishments.
m) The criteria for allocating tissues and / or cells to patients and health care institutions are documented and made available to these parties on request.
n) The establishment ensures imports from non EEA states meet the standards of quality and safety set out in Directions 003/2010.
o) There is a complaints system in place.
p) There are written agreements with third parties whenever an activity takes place that has the potential to influence the quality and safety of human tissues and / or cells.
q) There is a record of agreements established with third parties.
r) Third party agreements specify the responsibilities of the third party and meet the requirements set out in Directions 003/2010.
s) Third party agreements specify that the third party will inform the establishment in the event of a serious adverse reaction or event.
t) There are procedures for the re-provision of service in an emergency.
GQ2 There is a documented system of quality management and audit.
a) There is a quality management system which ensures continuous and systematic improvement.
b) There is an internal audit system for all licensable activities.
c) An audit is conducted in an independent manner at least every two years to verify compliance with

protocols and HTA standards, and any findings and corrective actions are documented.
d) Processes affecting the quality and safety of tissues and / or cells are validated and undergo regular evaluation to ensure they continue to achieve the intended results.
GQ3 Staff are appropriately qualified and trained in techniques relevant to their work and are continuously updating their skills.
a) There are clearly documented job descriptions for all staff.
b) There are orientation and induction programmes for new staff.
c) There are continuous professional development (CPD) plans for staff and attendance at training is recorded.
d) There is annual documented mandatory training (e.g. health and safety and fire).
e) Personnel are trained in all tasks relevant to their work and their competence is recorded.
f) There is a documented training programme that ensures that staff have adequate knowledge of the scientific and ethical principles relevant to their work, and the regulatory context.
g) There is a documented training programme that ensures that staff understand the organisational structure and the quality systems used within the establishment.
h) There is a system of staff appraisal.
i) Where appropriate, staff are registered with a professional or statutory body.
j) There are training and reference manuals available.
k) The establishment is sufficiently staffed to carry out its activities.
GQ4 There is a systematic and planned approach to the management of records.
a) There are procedures for the creation, identification, maintenance, access, amendment, retention and destruction of records.
b) There is a system for the regular audit of records and their content to check for completeness, legibility and accuracy and to resolve any discrepancies found.
c) Written records are legible and indelible. Records kept in other formats such as computerised records are stored on a validated system.
d) There is a system for back-up / recovery in the event of loss of computerised records.
e) The establishment keeps a register of the types and quantities of tissues and / or cells that are procured, tested, preserved, processed, stored and distributed or otherwise disposed of, and on the origin and destination of tissues and cells intended for human application.
f) There are procedures to ensure that donor documentation, as specified by Directions 003/2010, is collected and maintained.
g) There is a system to ensure records are secure and that donor confidentiality is maintained in accordance with Directions 003/2010.
h) Raw data which are critical to the safety and quality of tissues and cells are kept for 10 years after

the use, expiry date or disposal of tissues and / or cells.
i) The minimum data to ensure traceability from donor to recipient as required by Directions 003/2010 are kept for 30 years after the use, expiry or disposal of tissues and / or cells.
j) Records are kept of products and material coming into contact with the tissues and / or cells.
k) There are documented agreements with end users to ensure they record and store the data required by Directions 003/2010.
l) The establishment records the acceptance or rejection of tissue and / or cells that it receives and in the case of rejection why this rejection occurred.
m) In the event of termination of activities of the establishment a contingency plan to ensure records of traceability are maintained for 10 or 30 years as required.
GQ5 There are documented procedures for donor selection and exclusion, including donor criteria.
a) Donors are selected either by the establishment or the third party acting on its behalf in accordance with the criteria required by Directions 003/2010.
b) The testing of donors by the establishment or a third party on behalf of the establishment is carried out in accordance with the requirements of Directions 003/2010.
c) In cases other than autologous donors, donor selection is carried out by authorised personnel and signed and reviewed by a qualified health professional.
d) There is a system in place either at the establishment or at a third party acting on its behalf to record results of donor selection and associated tests.
e) Testing of donor samples is carried out using CE marked diagnostic tests.
f) Samples taken for donor testing are clearly labelled with the time and place the sample was taken and a unique donor identification code.
GQ6 A coding and records system facilitates traceability of tissues and / or cells, ensuring a robust audit trail.
a) There is a donor identification system which assigns a unique code to each donation and to each of the products associated with it.
b) An audit trail is maintained, which includes details of when the tissues and / or cells were acquired and from where, the uses to which the tissues and / or cells were put, when the tissues and / or cells were transferred elsewhere and to whom.
c) The establishment has procedures to ensure that tissues and / or cells imported, procured, processed, stored, distributed and exported are traceable from donor to recipient and vice versa.
GQ7 There are systems to ensure that all adverse events, reactions and/or incidents are investigated promptly.
a) There are procedures for the identification, reporting, investigation and recording of adverse events and reactions, including documentation of any corrective or preventative actions.
b) There is a system to receive and distribute national and local information (e.g. HTA regulatory alerts) and notify the HTA and other establishments as necessary of serious adverse events or reactions.

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

Premises, Facilities and Equipment

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

Premises, facilities and equipment standards

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

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

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

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

1. **Critical shortfall:**

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

   Or

   A number of 'major' shortfalls, none of which is critical on its own, but viewed cumulatively represent a systemic failure and therefore are considered 'critical'.

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

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

   (2) Some or all of the licensable activity at the establishment ceasing with immediate effect until a corrective action plan is developed, agreed by the HTA and implemented.

   (3) A notice of suspension of licensable activities

   (4) Additional conditions being proposed

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

2. **Major shortfall:**

   A non-critical shortfall.

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

   or

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

   or

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

   or

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

   or

   A combination of several 'minor' shortfalls, none of which is major on its own, but which,

viewed cumulatively, could constitute a major shortfall by adversely affecting the quality and safety of the tissues and cells.

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

3. **Minor shortfall:**

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

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

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

Follow up actions

A template corrective and preventative action plan will be sent as a separate Word document with both the draft and final inspection report. You must complete this template and return it to the HTA within 14 days of the issue of the final report.

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

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

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