Site visit inspection report on compliance with HTA minimum standards

SCI Birmingham

HTA licensing number 11041

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**

20 April 2017

Summary of inspection findings

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

The HTA found that SCI Birmingham (the establishment) had met all the relevant 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 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.

'SLA' = Service Level Agreement; the establishment is licensed for this activity but another establishment (licensed) carries out the activity on their behalf.

'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
PBSC*	**SLA**	**E**		**E**	**E**		
Bone marrow	**SLA**	**E**		**E**	**E**		
Donor lymphocyte infusions	**SLA**	**E**		**E**	**E**		
Umbilical cord blood/tissue	**TPA**	**E**		**E**	**E**		

*PBSC: peripheral blood stem cells

Background to the establishment and description of inspection activities undertaken

Stem Cell and Immunotherapies Services at Birmingham (SCI Birmingham) is one of several national services managed by NHSBT, a Strategic Health Authority under the Department of Health. The HTA Designated Individual (DI) is the Director of Quality and the corporate licence holder contact is the Chief Executive Officer of NHSBT.

SCI Birmingham is located at the Vincent Drive site of the National Blood Service in Edgbaston, Birmingham. The establishment provides services to several hospitals in the West Midlands area and processes stem cell harvests as required by donor registries. Receipt, processing and storage of stem cells takes place in a single story building which shares facilities and estate management services with the other services located on site.

The establishment has appropriate service level agreements and third party agreements with organisations which procure bone marrow, PBSC, cord blood or cord tissue. The agreements cover consent for donation of tissues and cells, procurement of tissues and cells and the provision of samples for donor testing. Procured cells are for autologous or

allogenic use and include cells for directed donations and matched unrelated donors who are identified by registries. PBSC are procured at six hospitals from around the local region. Procurement of cord blood is undertaken by a phlebotomy company under a third party agreement. Procured cells are transported in validated containers to the establishment and processed and cryopreserved, as appropriate, within 24 hours of procurement. Regular meetings, including planning meetings are held with clinical staff at hospitals where procurement takes place.

The Advanced Therapies Unit, which is located on site, holds an Medicines and Healthcare products Regulatory Agency (MHRA) licence for the manufacture of investigational medicinal products. The Unit uses umbilical cord tissue obtained from NHSBT Cord Blood Bank to extract mesenchymal stem cells as part of the manufacture of investigational medicinal products.

The SCI facility consists of a product receipt area, testing laboratory, clean room suite for routine stem cell processing and a cryostore. The establishment handles around 14 donations each week. A full blood count is undertaken on each stem collection immediately after it arrives. Collections arriving late in the day may be stored overnight in a fridge (which is temperature monitored) and then processed the following day. Collections with a white blood cell count greater than 200 x 10^6/ml are diluted using plasma from the donor or human albumin solution before they are placed in the fridge for overnight storage.

Staff receive stem cells, check labels and other paperwork before details are entered into the establishment's laboratory information management system. Samples for donor testing are transported to NHSBT Manchester where mandatory donor testing takes place. NHSBT Manchester is licensed for testing as a satellite site of HTA licence 11018.

A closed processing system which uses sterile connection device technology is located in an area within the product receipt laboratory. This system is used to process PBSC and cells for donor lymphocyte infusions. Procedures such as cord blood processing, manual washing/dilution of cord blood and processing of bone marrow which could include steps where the cells are exposed to the environment, take place in a Grade A/B environment within the clean room.

The testing laboratory has flow cytometers which are used to analyse stem cell harvests and products (CD34, CD3, CD45). Equipment for colony forming unit (CFU) assays, including a dedicated Class II cabinet and incubator, are also located in the laboratory. CFU assays are routinely undertaken on stem cell products which have been in storage for more than five years before they are released for human application.

Staff place contact plates, settle plates (trypticase soy agar and sabourand agar plates), monitor non-viable particulates at rest and during processing and take glove prints after each processing session. If colonies are detected, the National Bacteriology Laboratory identifies the microbes and antibiotic sensitivity of the microbes and informs the establishment. Staff undertake gowning validation, aseptic process (media fill) validation and hatch transfer validation every six months.

The cryostore has 21 liquid nitrogen storage tanks where frozen stem cells are stored in vapour phase of liquid nitrogen. There are two quarantine tanks in use; one for donations from known virology positive donors and one for donations where all of the mandatory test results have not yet been received. Four controlled-rate freezers are located in the cryostore.

Support services on site include oversight of the proprietary temperature monitoring system used to continuously monitor and record the temperature of the liquid nitrogen storage tanks, fridges, freezers and room temperature. Staff are immediately alerted should the temperature deviate from the set upper and lower threshold values. Consumables are received, checked and stored in a dedicated storage area, if the receipt checks are met.

An external contractor undertakes annual particle counts, airflow measurements, filter integrity tests and checking of pressure differentials in the clean room. The contractor is also responsible for routine servicing the Class II microbiology safety cabinets in use in the clean room.

Staff report untoward events relating to licensable activities as occurrences using the occurrence and incident module within the establishment's IT system. Occurrences are reviewed and classified as incidents following a risk assessment. Incidents are assigned to senior members of staff who investigate incidents and implement preventive actions.

Requests for changes to the IT system, such as administrative change requests, are signed by the relevant departmental Head. Non-standard changes such as configuration changes are discussed during specialist IT operational team meetings to understand the need for the change, urgency and the impact on current IT functionality. Once the request is accepted, the new IT script is checked by NHSBT's national assurance team. There are several rounds of formal user acceptance testing before the change is rolled out and training is cascaded to relevant members of staff.

This was the fifth HTA inspection of SCI Birmingham. The HTA team undertook a visual inspection of the premises and held discussions with the DI, Head and Deputy Head of SCI Birmingham, Lead Translational Therapy Scientist, the Regional QA Manager and the Centre QA Manager. A telephone discussion was held with the Secondary Systems IT Manager, Specialist Services. The team also observed processing of an apheresis stem cell harvest using the closed processing system during the inspection.

A document review was undertaken. Documents reviewed included standard operating procedures (SOPs), minutes of meetings, cleaning records, risk assessments, Birmingham site internal audits of records, third party agreements, environmental monitoring data and temperature monitoring records.

Several audits were undertaken. Records relating to a bone marrow harvest filtered in the clean room before issue and one apheresis collection arranged by a registry were reviewed. The PBSC harvest was issued fresh and DLIs were processed using the closed processing system and stored in the cryostore. Records reviewed as appropriate included consent, donor testing (within 30 days of donation and on the day of donation), collection reports, processing records, consumables and reagents used, environmental monitoring, freezing profiles and storage records. There were no discrepancies found during the audits.

The HTA team reviewed the procedure for reporting and investigating incidents and records relating to several internal incidents which were investigated and closed. The HTA team noted that in one case, there was a delay in informing the clinical team when a recipient was infused with a contaminated bone marrow product. The incident was closed on the basis that occasional contamination of bone marrow was not unexpected. It is a known risk that contamination with skin flora could occur during the harvesting process. However the investigation did not address communication delays which included late reporting of the contamination by the National Bacteriology Laboratory and a delay in informing the clinician after the establishment was informed about the contamination. Several items of advice relating to this investigation are offered in the Advice section of this report.

The HTA inspection team was informed that no relevant material was stored on site for the purpose of research.

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.	GQ1a	The DI is advised to consider reviewing MPD626/3 and add appropriate timelines for action to be taken when an allogeneic donor tests positive following mandatory testing. The timelines should cover communication with the requesting clinician so that they can counsel the donor and withdraw of products as appropriate.
2.	GQ1b	The DI is advised to review the system of communication between the National Bacteriology Laboratory and staff at SCI Birmingham to ensure that information about microbiology positive products is sent to a key member(s) of staff and are received in an appropriate timeframe. The current system is that the National Bacteriology Laboratory sends emails regarding contaminated products to a group inbox and it is not clear if individual members of SCI staff are also alerted. The DI is also advised to ensure that information about microbiology positive products which have been infused into recipients is conveyed to the treating clinician as soon as practicable to ensure that patient care is not compromised and effective action can be taken by clinical staff. A robust system should be implemented which covers weekends and public holidays.
3.	GQ2b	The DI is advised to ensure that following internal audits, all forms used to record audit findings are complete and legible so that subsequent reviewers can read and assess audit findings and ensure that suitable actions, if required, have been undertaken.
4.	GQ7d	Bone marrow harvests received at the establishment are tested for contamination. The DI should consider feeding back data relating to contamination to the respective procurement centres so that they can take preventative actions as appropriate. Whilst contamination of bone marrow harvests is not uncommon additional training and improved skin decontamination prior to bone marrow harvesting could potentially reduce the frequency of contamination.
5.	GQ7d	The establishment has a comprehensive list of product specifications and relevant actions to be taken when these are not met; Datasheet DAT2084/5 ‘Summary of Action to be taken when product fails to meet HPC and TC specification’. The DI is advised to consider adding timelines, as appropriate, for actions which should be taken.

Concluding comments

There are effective systems of communication within staff on site and regular meetings are held with clinical staff based at sites where procurement takes place. There is low staff turnover which means that staff responsible for key activities have considerable experience and expertise. Staff are committed to continuous improvement as demonstrated by their engagement with lean management tools which have led to improved practices.

Display boards are used to remind individual members of staff of training needs and assessments including regular validation of staff who work in the clean room to ensure that they remain competent. Consumables are checked and ordered so that they are used

on a first in- first-out basis and remain within the expiry date. Consumables for each processing session using the closed processing system are grouped together in a picking box to make it easier for staff to prepare for processing sessions.

A member of staff is responsible for overseeing activities in the cryostore where the controlled-rate freezer is in use and checks that the freezer has reached the desired temperature fifteen minutes after the freezing cycle has been started. A label is attached to cryoshippers when they have been charged with liquid nitrogen so that staff know that they are ready for use.

Staff attend regular quality meetings with staff at other NHSBT SCI Laboratories to review the quality of products and transplant outcomes, including engraftment data, with a view to improving practices.

The HTA has given advice to the Designated Individual with respect to reviewing systems of communication between the product testing laboratory, staff on site and Clinicians; reviewing documentation to include timelines for actions to be taken when specifications are not met and an allogeneic donor tests positive following mandatory donor testing.

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

Report sent to DI for factual accuracy: 17 May 2017

Report returned from DI: 26 May 2017

Final report issued: 30 May 2017

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.
o) There is a complaints system in place.
p) There are written agreements with third parties whenever an activity takes place that has the potential to influence the quality and safety of human tissues and / or cells.
q) There is a record of agreements established with third parties.
r) Third party agreements specify the responsibilities of the third party and meet the requirements set out in Directions 003/2010.
s) Third party agreements specify that the third party will inform the establishment in the event of a serious adverse reaction or event.
t) There are procedures for the re-provision of service in an emergency.
GQ2 There is a documented system of quality management and audit.
a) There is a quality management system which ensures continuous and systematic improvement.
b) There is an internal audit system for all licensable activities.
c) An audit is conducted in an independent manner at least every two years to verify compliance with protocols and HTA standards, and any findings and corrective actions are documented.
d) Processes affecting the quality and safety of tissues and / or cells are validated and undergo regular evaluation to ensure they continue to achieve the intended results.

GQ3 Staff are appropriately qualified and trained in techniques relevant to their work and are continuously updating their skills.
a) There are clearly documented job descriptions for all staff.
b) There are orientation and induction programmes for new staff.
c) There are continuous professional development (CPD) plans for staff and attendance at training is recorded.
d) There is annual documented mandatory training (e.g. health and safety and fire).
e) Personnel are trained in all tasks relevant to their work and their competence is recorded.
f) There is a documented training programme that ensures that staff have adequate knowledge of the scientific and ethical principles relevant to their work, and the regulatory context.
g) There is a documented training programme that ensures that staff understand the organisational structure and the quality systems used within the establishment.
h) There is a system of staff appraisal.
i) Where appropriate, staff are registered with a professional or statutory body.
j) There are training and reference manuals available.
k) The establishment is sufficiently staffed to carry out its activities.
GQ4 There is a systematic and planned approach to the management of records.
a) There are procedures for the creation, identification, maintenance, access, amendment, retention and destruction of records.
b) There is a system for the regular audit of records and their content to check for completeness, legibility and accuracy and to resolve any discrepancies found.
c) Written records are legible and indelible. Records kept in other formats such as computerised records are stored on a validated system.
d) There is a system for back-up / recovery in the event of loss of computerised records.
e) The establishment keeps a register of the types and quantities of tissues and / or cells that are procured, tested, preserved, processed, stored and distributed or otherwise disposed of, and on the origin and destination of tissues and cells intended for human application.
f) There are procedures to ensure that donor documentation, as specified by Directions 003/2010, is collected and maintained.
g) There is a system to ensure records are secure and that donor confidentiality is maintained in accordance with Directions 003/2010.
h) Raw data which are critical to the safety and quality of tissues and cells are kept for 10 years after the use, expiry date or disposal of tissues and / or cells.
i) The minimum data to ensure traceability from donor to recipient as required by Directions 003/2010 are kept for 30 years after the use, expiry or disposal of tissues and / or cells.
j) Records are kept of products and material coming into contact with the tissues and / or cells.
k) There are documented agreements with end users to ensure they record and store the data required by Directions 003/2010.

l) The establishment records the acceptance or rejection of tissue and / or cells that it receives and in the case of rejection why this rejection occurred.
m) In the event of termination of activities of the establishment a contingency plan to ensure records of traceability are maintained for 10 or 30 years as required.
GQ5 There are documented procedures for donor selection and exclusion, including donor criteria.
a) Donors are selected either by the establishment or the third party acting on its behalf in accordance with the criteria required by Directions 003/2010.
b) The testing of donors by the establishment or a third party on behalf of the establishment is carried out in accordance with the requirements of Directions 003/2010.
c) In cases other than autologous donors, donor selection is carried out by authorised personnel and signed and reviewed by a qualified health professional.
d) There is a system in place either at the establishment or at a third party acting on its behalf to record results of donor selection and associated tests.
e) Testing of donor samples is carried out using CE marked diagnostic tests.
f) Samples taken for donor testing are clearly labelled with the time and place the sample was taken and a unique donor identification code.
GQ6 A coding and records system facilitates traceability of tissues and / or cells, ensuring a robust audit trail.
a) There is a donor identification system which assigns a unique code to each donation and to each of the products associated with it.
b) An audit trail is maintained, which includes details of when the tissues and / or cells were acquired and from where, the uses to which the tissues and / or cells were put, when the tissues and / or cells were transferred elsewhere and to whom.
c) The establishment has procedures to ensure that tissues and / or cells imported, procured, processed, stored, distributed and exported are traceable from donor to recipient and vice versa.
GQ7 There are systems to ensure that all adverse events, reactions and/or incidents are investigated promptly.
a) There are procedures for the identification, reporting, investigation and recording of adverse events and reactions, including documentation of any corrective or preventative actions.
b) There is a system to receive and distribute national and local information (e.g. HTA regulatory alerts) and notify the HTA and other establishments as necessary of serious adverse events or reactions.
c) The responsibilities of personnel investigating adverse events and reactions are clearly defined.
d) There are procedures to identify and decide the fate of tissues and / or cells affected by an adverse event, reaction or deviation from the required quality and safety standards.
e) In the event of a recall, there are personnel authorised within the establishment to assess the need for a recall and if appropriate initiate and coordinate a recall.
f) There is an effective, documented recall procedure which includes a description of responsibilities and actions to be taken in the event of a recall including notification of the HTA and pre-defined times in which actions must be taken.
g) Establishments distributing tissue and / or cells provide information to end users on how to report a

serious adverse event or reaction and have agreements with them specifying that they will report these events or reactions.
h) Establishments distributing tissues and / or cells have systems to receive notifications of serious adverse events and reactions from end users and notify the HTA.
GQ8 Risk assessments of the establishment's practices and processes are completed regularly and are recorded and monitored appropriately.
a) There are documented risk assessments for all practices and processes.
b) Risk assessments are reviewed regularly, as a minimum annually or when any changes are made that may affect the quality and safety of tissues and cells.
c) Staff can access risk assessments and are made aware of local hazards at training.
d) A documented risk assessment is carried out to decide the fate of any tissue and / or cells stored prior to the introduction of a new donor selection criteria or a new processing step, which enhances the quality and safety of tissue and / or cells.

Premises, Facilities and Equipment

Standard
PFE1 The premises are fit for purpose.
a) A risk assessment has been carried out of the premises to ensure that they are fit for purpose.
b) There are procedures to review and maintain the safety of staff, visitors and patients.
c) The premises have sufficient space for procedures to be carried out safely and efficiently.
e) There are procedures to ensure that the premises are secure and confidentiality is maintained.
f) There is access to a nominated, registered medical practitioner and / or a scientific advisor to provide advice and oversee the establishment's medical and scientific activities.
PFE2 Environmental controls are in place to avoid potential contamination.
a) Tissues and / or cells stored in quarantine are stored separately from tissue and / or cells that have been released from quarantine.
b) Where processing of tissues and / or cells involves exposure to the environment, it occurs in an appropriate, monitored environment as required by Directions 003/2010.
c) There are procedures for cleaning and decontamination.
d) Staff are provided with appropriate protective clothing and equipment that minimise the risk of contamination of tissue and / or cells and the risk of infection to themselves.
PFE3 There are appropriate facilities for the storage of tissues and / or cells, consumables and records.
a) Tissues, cells, consumables and records are stored in secure environments and precautions are taken to minimise risk of damage, theft or contamination.
b) There are systems to deal with emergencies on a 24 hour basis.
c) Tissues and / or cells are stored in controlled, monitored and recorded conditions that maintain tissue and / or cell integrity.

d) There is a documented, specified maximum storage period for tissues and / or cells.
PFE4 Systems are in place to protect the quality and integrity of tissues and / or cells during transport and delivery to its destination.
a) There is a system to ensure tissue and / or cells are not distributed until they meet the standards laid down by Directions 003/2010.
b) There are procedures for the transport of tissues and / or cells which reflect identified risks associated with transport.
c) There is a system to ensure that traceability of tissues and / or cells is maintained during transport.
d) Records are kept of transportation and delivery.
e) Tissues and / or cells are packaged and transported in a manner and under conditions that minimise the risk of contamination and ensure their safety and quality.
f) There are third party agreements with courier or transport companies to ensure that any specific transport conditions required are maintained.
g) Critical transport conditions required to maintain the properties of tissue and / or cells are defined and documented.
h) Packaging and containers used for transportation are validated to ensure they are fit for purpose.
i) Primary packaging containing tissues and / or cells is labelled with the information required by Directions.
j) Shipping packaging containing tissues and / or cells is labelled with the information required by Directions.
PFE5 Equipment is appropriate for use, maintained, quality assured, validated and where appropriate monitored.
a) Critical equipment and technical devices are identified, validated, regularly inspected and records are maintained.
b) Critical equipment is maintained and serviced in accordance with the manufacturer’s instructions.
c) Equipment affecting critical processes and storage parameters is identified and monitored to detect malfunctions and defects and procedures are in place to take any corrective actions.
d) New and repaired equipment is validated before use and this is documented.
e) There are documented agreements with maintenance companies.
f) Cleaning, disinfection and sanitation of critical equipment is performed regularly and this is recorded.
g) Instruments and devices used for procurement are sterile, validated and regularly maintained.
h) Users have access to instructions for equipment and receive training in the use of equipment and maintenance where appropriate.
i) Staff are aware of how to report an equipment problem.
j) For each critical process, the materials, equipment and personnel are identified and documented.
k) There are contingency plans for equipment failure.

Disposal

Standard
D1 There is a clear and sensitive policy for disposing of tissues and / or cells.
a) The disposal policy complies with HTA's Codes of Practice.
b) The disposal procedure complies with Health and Safety recommendations.
c) There is a documented procedure on disposal which ensures that there is no cross contamination.
D2 The reasons for disposal and the methods used are carefully documented.
a) There is a procedure for tracking the disposal of tissue and / or cells that details the method and reason for disposal.
b) Disposal arrangements reflect (where applicable) the consent given for disposal.

HTA licensing standards: Research sector
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 HTA's Codes of Practice
a) Consent procedures are documented and these, along with any associated documents, comply with the HT Act and the HTA's Codes of Practice. b) Consent forms are available to those using or releasing relevant material for a scheduled purpose. c) Where applicable, there are agreements with other parties to ensure that consent is obtained in accordance with the requirements of the HT Act and the HTA's Codes of Practice. d) Written information is provided to those from whom consent is sought, which reflects the requirements of the HT Act and the HTA's Codes of Practice. e) Language translations are available when appropriate. f) Information is available in formats appropriate to the situation.
C2 Staff involved in seeking consent receive training and support in the essential requirements of taking consent
a) There is suitable training and support of staff involved in seeking consent, which addresses the requirements of the HT Act and the HTA's Codes of Practice. b) Records demonstrate up-to-date staff training. c) Competency is assessed and maintained.

Governance and quality system standards
GQ1 All aspects of the establishments work are governed by documented policies and procedures as part of the overall governance process
a) Ratified, documented and up-to-date policies and procedures are in place, covering all licensable activities b) There is a document control system. c) There are change control mechanisms for the implementation of new operational procedures. d) Matters relating to HTA-licensed activities are discussed at regular governance meetings, involving establishment staff. e) There is a system for managing complaints.
GQ2 There is a documented system of audit
a) There is a documented schedule of audits covering licensable activities b) Audit findings include who is responsible for follow-up actions and the timeframes for completing these
GQ3 Staff are appropriately qualified and trained in techniques relevant to their work and are continuously updating their skills
a) Qualifications of staff and all training are recorded, records showing attendance at training. b) There are documented induction training programmes for new staff. c) Training provisions include those for visiting staff. d) Staff have appraisals and personal development plans.
GQ4 There is a systematic and planned approach to the management of records
a) There are suitable systems for the creation, review, amendment, retention and destruction of records. b) There are provisions for back-up / recovery in the event of loss of records. c) Systems ensure data protection, confidentiality and public disclosure (whistle-blowing).
GQ5 There are systems to ensure that all adverse events are investigated promptly
a) Staff are instructed in how to use incident reporting systems b) Effective corrective and preventive actions are taken where necessary and improvements in practice are made.
GQ6 Risk assessments of the establishment's practices and processes are completed regularly, recorded and monitored
a) There are documented risk assessments for all practices and processes requiring compliance

with the HT Act and the HTA's Codes of Practice.

b) Risk assessments are reviewed regularly.

c) Staff can access risk assessments and are made aware of risks during training.

Traceability
T1 A coding and records system facilitates the traceability of bodies and human tissue, ensuring a robust audit trail
a) There is an identification system which assigns a unique code to each donation and to each of the products associated with it. b) A register of donated material, and the associated products where relevant, is maintained. c) An audit trail is maintained, which includes details of: when and where the bodies or tissue were acquired and received; the consent obtained; all sample storage locations; the uses to which any material was put; when and where the material was transferred, and to whom. d) A system is in place to ensure that traceability of relevant material is maintained during transport e) Records of transportation and delivery are kept. f) Records of any agreements with courier or transport companies are kept. g) Records of any agreements with recipients of relevant material are kept.
T2 Bodies and human tissue are disposed of in an appropriate manner
a) Disposal is carried out in accordance with the HTA's Codes of Practice. b) The date, reason for disposal and the method used are documented.

Premises, facilities and equipment standards
PFE1 The premises are secure and fit for purpose
a) An assessment of the premises has been carried out to ensure that they are appropriate for the purpose. b) Arrangements are in place to ensure that the premises are secure and confidentiality is maintained c) There are documented cleaning and decontamination procedures

PFE2 There are appropriate facilities for the storage of bodies and human tissue
a) There is sufficient storage capacity. b) Where relevant, storage arrangements ensure the dignity of the deceased. c) Storage conditions are monitored, recorded and acted on when required. d) There are documented contingency plans in place in case of failure in storage area.
PFE3 Equipment is appropriate for use, maintained, validated and where appropriate monitored
a) Equipment is subject to recommended calibration, validation, maintenance, monitoring, and records are kept. b) Users have access to instructions for equipment and are aware of how to report an equipment problem. c) Staff are provided with suitable personal protective equipment.

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

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

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

1. **Critical shortfall:**

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

   Or

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

   Or

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

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

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

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

   (3) A notice of suspension of licensable activities

   (4) Additional conditions being proposed

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

2. **Major shortfall:**

   A non-critical shortfall.

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

   or

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

   or

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

   or

   A shortfall which indicates a breach in the relevant Codes of Practices, the HT Act and other relevant professional and statutory guidelines;

   or

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

or

A combination of several 'minor' shortfalls, none of which is major on its own, but which, viewed cumulatively, could constitute a major shortfall.

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

3. **Minor shortfall:**

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

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

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

Follow up actions

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

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

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

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