Site visit inspection report on compliance with HTA minimum standards

Royal Gwent Hospital

HTA licensing number 11130

Licensed for the

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

4-5 February 2019

Summary of inspection findings

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

Although the HTA found that the Royal Gwent Hospital (the establishment) had met the majority of the HTA standards, one major and 11 minor shortfalls were found in relation to Consent, Governance and Quality Systems, and Premises, Facilities and Equipment standards. The major shortfall was related to the lack of oversight of the activities associated with the receipt of the microbiological samples at the testing laboratory after femoral head procurement. The minor shortfalls were related to the completion of consent documentation, document control and management, absence of a requirement for reporting of serious adverse events or reactions (SAEARs) within 24 hours in third party and end user agreements, local incident management, the absence of a requirement for retention of traceability records for 30 years in accordance with Directions 002/2018, scope of risk assessments, the monitoring of consumable storage areas, traceability records of consumables, internal audit system, and the application of the Single European Code (SEC).

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.

'TPA' = Third party agreement; the establishment is licensed for this activity but another establishment (unlicensed) carries out the activity on their behalf.

Tissue Category; Tissue Type	Procurement	Processing	Testing	Storage	Distribution	Import	Export
Musculoskeletal, Bone; Bone	**E / TPA**		**E / TPA**	**E**	**E**		

Background to the establishment and description of inspection activities undertaken

The Bone Bank at the Royal Gwent Hospital has been operational since 1998 and has been licensed by the HTA since 2007. The HTA licence covers the procurement of femoral heads at the Royal Gwent Hospital as well as procurement at two other hospitals, St Woolos Hospital and St Joseph's Hospital, under third party agreements (TPA). The Royal Gwent Hospital is also licensed for the storage and distribution of femoral heads and for the carrying out of donor serology testing. The licensable activities take place within the Orthopaedic and Microbiology departments at Royal Gwent Hospital under the supervision of a Designated Individual (DI) who is an orthopaedic surgeon and the Medical Director for the Bone Bank.

Pre-operative assessment nurses, who have been trained to seek consent, will identify and approach patients scheduled for a hip operation to enquire whether they are interested in

femoral head donation. These nurses provide information to patients and take their medical and social history in order to select suitable donors; consent is then sought from patients deemed as suitable donors. On the day of the hip replacement surgery, a blood sample is taken for the mandatory serology testing. A swab of the outer surface of the femoral head and two bone 'nibbles' from the cut surface of the bone are taken for microbiology testing to detect any infection in the donor and to monitor the procedure used during procurement. The femoral head is then packed in a sterile pot, which is, in turn, placed in a larger sterile pot. The donor's addressograph label is affixed to the outer pot and the name of the surgeon, date and time and side from which the femoral head was taken are recorded on the outer pot. Both the inner and outer pot have a barcode batch label to facilitate traceability.

The pot containing the femoral head is transferred to the Bone Bank storage area at Royal Gwent Hospital using a courier if procured from St Woolos Hospital or St Joseph's Hospital. The establishment supplies sterile pots and transport containers to both St Woolos Hospital and St Joseph's Hospital, prior to each procurement. The establishment uses the British Association for Tissue Banking guidelines to set the maximum four-hour transit time from procurement to transfer to a -80°C freezer labelled as 'F1'. The donor information is entered into the ledger for the F1 freezer. After the receipt of the donor consent form, the Bone Bank coordinator will open a new patient file on the Bone Bank database and a unique Bone Bank identification number is generated. The donor's addressograph label is subsequently removed, and a new label with the unique identification number is applied onto the outer pot by the Bone Bank coordinator who also dates and initials the entry. The double pot is then placed in a plastic bag and transferred to a second -80°C freezer ('F3') and the ledger for this freezer is updated. If the microbiology or serology results are positive, then the femoral head is discarded. Otherwise, the femoral heads remain in quarantine in freezer F3 until the 180-day repeat serology tests are performed. The results of the 180-day serological tests are entered onto the database. The Medical Director then assesses the donor's medical history form and the microbiology and serology test results.

If the donation criteria are met, the femoral head is released from quarantine. The top copy (white) of the patient donor form is retained in a masterfile alongside the donor's medical history form and test results. Two other copies (pink and yellow) of the patient donor form and defrosting instructions are placed in the plastic bag containing the released from quarantine femoral head. The pots are transferred to a third -80°C freezer ('F2') and the ledger linked to this freezer is completed. Femoral heads may be stored for up to five years. The establishment also determines the Rhesus status of all donors. For any Rhesus positive donors, the status is recorded in the donor's notes and the pots are labelled accordingly. In cases where the recipient is a woman of childbearing age, the establishment matches the Rhesus status, but in the event of status not being known only Rhesus negative femoral heads are released for use.

The microbiology, and most of the serology testing, is undertaken in the UKAS-accredited laboratory at the Royal Gwent Hospital. Another HTA-licensed establishment undertakes HTLV-1 testing under the terms of a TPA. Serology tests are repeated after 180 days. Patients are reminded to attend for the repeat serology testing by up to three request letters; if the donor fails to return for the repeat serology tests then the femoral head will be discarded.

This was the sixth routine inspection of the establishment. The site visit included a visual inspection of the theatres, freezer storage area and testing laboratory at Royal Gwent Hospital. At St Joseph's Hospital, the theatres, consumables storage area and admissions area were inspected. A review of the establishment's documentation and discussions of the licensable activities were carried out with the theatre staff at St Joseph's Hospital, the testing laboratory and Bone Bank staff, and the DI at Royal Gwent Hospital. St Woolos Hospital was not inspected on this occasion.

The traceability audit undertaken during the inspection included consent forms for procurement, testing results and records relating to the subsequent use of the femoral heads. This included a review of seven sets of patient notes (three donor and four recipient). Minor inconsistencies were found with completion of the consent forms and with the receipt of copies of the donor consent documentation by the Bone Bank. In several cases it was noted that while a patient provided consent for donation, the procurement did not occur, and the reason was not recorded in either the patient's notes or electronic database. The details for one femoral head procured from St Joseph's Hospital were reviewed in the freezer ledgers, Bone Bank database and patient's notes, and the physical storage location in the quarantine freezer was confirmed. Five femoral heads from F1 and F3 quarantine freezers (two and three respectively) and two femoral heads in the F2 release freezer were checked. No discrepancies were found.

A traceability audit was also undertaken at the microbiology testing laboratory. This included reviewing sample receipt dates and reviewing testing results on the database for three donors. No discrepancies were found.

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

Consent

Standard	Inspection findings	Level of shortfall
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.		
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.	A review of the establishment's consent documents revealed several instances where consent forms had not been fully completed by the staff. For one of the donor medical questionnaires audited, the second page was not completed which led to the rejection of the procurement of the femoral head. It was noted on four of the audited donor consent records that the date field next to the patient's signature had not been completed, although the nurse taking consent had signed and dated the form. It was found that the pink copy of the patient donor consent form was missing in two sets of the patient records.	**Minor**

Governance and Quality

Standard	Inspection findings	Level of shortfall
GQ1 All aspects of the establishment's work are supported by ratified documented policies and procedures as part of the overall governance process.		
b) There are procedures for all licensable activities that ensure integrity of tissue and / or cells and minimise the risk of contamination.	The establishment's procedures state that microbiological samples are taken at the time of procurement and sent to the testing laboratory as soon as possible. This is documented in Section 4 of Appendix 5 in the 'Bone Bank procedures for bone donation and specimens'. A review of the records provided by the testing laboratory from the past year revealed that a number of samples were not recorded as received in the testing laboratory on the day of procurement but instead were recorded as received on subsequent days, up to five days after procurement. In these cases, the establishment was unable to confirm where the samples had been stored, or under what conditions, prior to their analysis. Section 5.0 of the standard operating procedure (SOP) that deals with 'Specimen transport and storage' (MICR00519) states that: "*Specimens should be transported and processed as soon as possible…Delays of over 24 hours in receipt of the specimen will trigger a reflex report comment: "The receipt/processing of this specimen in the laboratory was delayed by more than 24 hours. This is likely to have caused deterioration in specimen quality, and therefore less reliable results.""* The microbiological samples identified during the inspection that were not received into the laboratory within one day of procurement did not trigger this response. This issue had not been identified or appropriately investigated by the establishment, and the establishment was unable to demonstrate that it had not impacted on the reliability of the results.	**Major**
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.	Several of the establishment's SOPs do not reflect current processes and/or have not been updated to reflect current information. This includes, but is not limited to:	**Minor**

	i) SOP 15 references the use of commercial suppliers/bone. The establishment does not currently purchase commercial bone. ii) In the Bone Bank manual, there are several incorrect references to "*Human Tissue Authority Code of Practice for Tissue Banks*", rather than "The HTA Guide to Quality and Safety Assurance for Human Tissues and Cells for Patient Treatment". These references were found in the quality assurance statement on page five, and responsibilities of personnel on pages nine and 10. iii) During the documentation review, it was noted that there were different versions of TPAs with individual members of staff at St Woolos Hospital. In Section 7.0 for SAEARs reporting, some TPAs stated that SAEARs will be reported *"without delay"* and some TPAs stated *"within 24 hours"* to the Bone Bank coordinator. In addition to this, the TPAs were not document controlled. The forms used to record the femoral head procurement date and time, time of placement in the freezer, and forms for release of bones from the freezer were not document or version controlled.	
r) Third party agreements specify the responsibilities of the third party and meet the requirements set out in Directions 002/2018. s) Third party agreements specify that the third party will inform the establishment in the event of a serious adverse reaction or event.	The TPA with the HTLV-1 testing laboratory does not include the requirements for SAEARs reporting as set out in the "Guide to Quality and Safety Assurance for Human Tissues and Cells for Patient Treatment" which forms the Annex to Directions 002/2018.	**Minor**
GQ2 There is a documented system of quality management and audit.		
b) There is an internal audit system for all licensable activities.	During a review of the establishment's internal audit system, it was noted that there was no documented procedure detailing how audits will be undertaken and how frequently, and the scope did not cover the activities at the testing laboratory.	**Minor**

	When the establishment was asked to provide evidence for the audits, this was found in the governance meeting minutes. The audits were inadequately documented; there was insufficient evidence to demonstrate how the audits were undertaken, what the findings were, and if the findings were followed up to provide continuous improvement of the quality management system.	
GQ4 There is a systematic and planned approach to the management of records.		
i) The minimum data to ensure traceability from donor to recipient as required by Directions 002/2018 are kept for 30 years after the use, expiry or disposal of tissues and / or cells. 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.	The establishment's SOP does not clearly state that the traceability records are kept for 30 years as required by Directions 002/2018. The SOP for data storage 'SOP 11' states that: "*In the event that the Royal Gwent Bone Bank ceases to function, the traceability records will be maintained for a period of 10 years in a secure environment by the management of Aneurin Bevan Health Board.*"	**Minor**
j) Records are kept of products and material coming into contact with the tissues and / or cells.	The lot number and expiry date of the sterile pots used to store the femoral heads are recorded on receipt of delivery; however, this information is not linked unequivocally with specific femoral heads. At the time of procurement, the lot number sticker is removed from the outer packaging and affixed to the pots before storage in the freezers. However, once the femoral head has been used, the pot is discarded and the lot number information is lost.	**Minor**
GQ6 A coding and records system facilitates traceability of bodies, body parts, tissues and cells, ensuring a robust audit trail.		
d) The requirements of the Single European Code are adhered to as set out in Directions 002/2018.	The establishment does not currently have procedures in place to ensure that the SEC-DI is applied after femoral head procurement, or that the full SEC is applied prior to the release of femoral heads to St Woolos Hospital and St Joseph's Hospital. Although St Woolos Hospital is part of the same Trust as Royal Gwent Hospital, the current licensing arrangement which stipulates that St Woolos Hospital and St Joseph's Hospital are third parties under this licence means that the SEC must be applied.	**Minor**

GQ7 There are systems to ensure that all adverse events 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.	Although there are procedures for dealing with incidents, the establishment could not demonstrate that examples of local incidents found during the inspection had been reported, documented, investigated and actioned appropriately, for example: i) Femoral heads were occasionally delivered to the testing laboratory instead of the Bone Bank – there were no records of these incidents in the log book. ii) Staff also reported that femoral heads procured by the other establishments under the terms of a TPA were occasionally delivered to the theatres rather than the Bone Bank. These femoral heads may be stored in the theatres but would have subsequently been discarded by the Bone Bank staff. There were no records of these incidents either. iii) The incident log book has a record dated 29th March 2017 when the courier thought that part of the femoral head shipment was lost during transit as he was transporting it without a transport box. There was no record of investigation or resolution.	**Minor**
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.	The end user agreement with St Joseph's Hospital does not include the requirements for SAEARs reporting as set out in the "Guide to Quality and Safety Assurance for Human Tissues and Cells for Patient Treatment" which forms the Annex to Directions 002/2018.	**Minor**
GQ8 Risk assessments of the establishment's practices and processes are completed regularly and are recorded and monitored appropriately.		
a) There are documented risk assessments for all practices and processes.	The risk assessments do not cover all of the licensable activities. Risks that have not been assessed include, but are not limited to:	**Minor**

	i) Risks associated with the testing activities where the transport of microbiological samples and serological blood samples are sent to the testing laboratory on the day of procurement. ii) Risks associated with unsuitable storage conditions or loss of microbiological and serological samples.	

Premises, Facilities and Equipment

Standard	Inspection findings	Level of shortfall
PFE3 There are appropriate facilities for the storage of bodies, body parts, tissues, cells, consumables and records.		
a) Tissues, cells, consumables and records are stored in secure environments and precautions are taken to minimise risk of damage, theft or contamination.	The sterile pots used for the storage of the femoral heads and the sterile swabs used for microbiological testing have specified temperature and humidity ranges (10-35ºC, 20-80%; and 5-25ºC, respectively). The theatre storage locations at both St Joseph's Hospital and Royal Gwent Hospital were not monitored to provide assurance that the storage conditions have not deviated outside the required ranges for the consumables. The Bone Bank freezer room is also used to store sterile pots; however, there was no calibrated temperature/humidity monitor within the room.	**Minor**

Advice

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

No.	Standard	Advice
1.	GQ1c	Although the DI and Bone Bank staff meet regularly for governance meetings, the DI is advised to include members of staff from the testing laboratory so that all licensable activities can be covered within the scope of these meetings.
2.	GQ1d	There is a reference in the quality assurance statement on page five of the Bone Bank manual which states that *"External Audits (Accreditation) will be carried out by the H.T.A. at prescribed intervals."* The DI is advised to amend this statement as the HTA do not provide accreditation for establishments and

		to clarify that HTA inspections do not remove the requirement for carrying out independent audits.
3.	GQ1d	It was noted in the TPA with St Joseph's Hospital that the current DI's name is mentioned on page one, however the previous DI's name is mentioned on page four. This TPA was signed by the DI in February 2017 and subsequently by St Joseph's Hospital staff in January 2018. The DI is advised to ensure that TPAs are reviewed and signed in a timely manner.
4.	GQ1d	It was noted in SOP 15 that: "*If the bacteriological specimens are received "out of hours", they are placed in an appropriate refrigerator for processing on the next working day."* However, staff confirmed that this practice does not happen as the testing laboratory is open 24 hours a day and Bone Bank samples are analysed as soon as possible on receipt. The DI is advised to review the contingency arrangements for the storage of the samples in the fridge prior to analysis.
5.	GQ1d	Although there was a TPA with the courier which specified the requirements for SAEARs reporting, there also appeared to be an end user agreement with the courier that did not meet the requirements for SAEARs reporting. The DI is advised to ensure that agreements are appropriate for the activities being conducted and archive documents that are out of date.
6.	GQ2b	Although there was an internal audit schedule for 2018-2019, only one out of eight audits had been carried out in December 2018. The DI is advised to document how the internal audits will be undertaken and provide provisional dates of when these will be completed.
7.	GQ2a, d	The DI and Bone Bank co-ordinator confirmed that approximately 31% of femoral heads had to be disposed of due to issues relating to missing consent documentation or the samples not being stored in the freezer within four hours. The DI is advised to critically review processes to determine if this loss rate can be reduced and document any findings to ensure continuous and systematic improvement of the quality management system.
8.	GQ4e	The establishment keeps a ledger/register of the stored material, expiry dates, procurement date and time, time it is placed into storage and copies of all documents required for the release of bone. The DI is advised to keep a back-up scan/photocopy of this tissue ledger in case of loss or destruction of these paper records.
9.	GQ5b GQ6b	Samples are sent to another laboratory for HTLV-1 serological testing. Staff were unable to confirm if confirmatory testing was carried out at the other establishment or sent to another reference laboratory. The DI is advised to review the HTLV-1 testing laboratory's procedure to determine if samples for confirmatory testing are sent elsewhere.
10.	GQ6b	After testing for possible contamination, bone 'nibbles' are retained in the microbiology laboratory for retesting if required. The material is initially stored in racks in the 4ºC fridge prior to transfer to -20ºC freezers for long term storage up to six months. The DI is advised to develop an inventory of these samples to ensure full traceability.

Concluding comments

There were a number of strengths observed during this inspection. The DI is supported by

experienced Bone Bank staff who maintain a good line of communication with the theatre staff at the third party sites. The staff are clearly committed to working at the Bone Bank despite this being supplementary to their main jobs. The use of three distinct freezers facilitates good control of quarantine and traceability of the femoral heads.

There are a number of areas of practice that require improvement, including one major shortfall and 11 minor shortfalls which were found in relation to Consent, Governance and Quality Systems, and Premises, Facilities and Equipment standards. The major shortfall was related to the lack of oversight of the activities associated with the receipt of the microbiological samples at the testing laboratory post femoral head procurement. The minor shortfalls were related to the completion of consent documentation, document control and management, absence of a requirement for reporting of serious adverse events or reactions (SAEARs) within 24 hours in third party and end user agreements, local incident management, the absence of a requirement for retention of traceability records for 30 years in accordance with Directions 002/2018, scope of risk assessments, the monitoring of consumable storage areas, traceability records of consumables, internal audit system, and the application of the Single European Code (SEC).

The HTA has given advice to the Designated Individual with respect to governance meetings, document control, back up of documents with critical information, traceability, and improvements to the quality management system.

The HTA requires that the Designated Individual addresses the shortfalls by submitting a completed corrective and preventative action (CAPA) plan within 14 days of receipt of the final report (refer to Appendix 2 for recommended timeframes within which to complete actions). The HTA will then inform the establishment of the evidence required to demonstrate that the actions agreed in the plan have been completed.

The HTA has assessed the establishment as suitable to be licensed for the activities specified subject to corrective and preventative actions being implemented to meet the shortfalls identified during the inspection.

Report sent to DI for factual accuracy: 05 March 2019

Report returned from DI: 19 March 2019

Final report issued: 09 April 2019

Completion of corrective and preventative actions (CAPA) plan

Based on information provided, the HTA is satisfied that the establishment has completed the agreed actions in the CAPA plan and in doing so has taken sufficient action to correct all shortfalls addressed in the Inspection Report.

Date: 26 February 2020

Appendix 1: HTA standards

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

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

Consent

Standard
C1 Consent is obtained in accordance with the requirements of the HT Act 2004, the Human Tissue (Quality and Safety for Human Application) Regulations 2007 and as set out in the HTA's Codes of Practice.
a) If the establishment acts as a procurer of tissues and / or cells, there is an established process for acquiring donor consent which meets the requirements of the HT Act 2004 the Human Tissue (Quality and Safety for Human Application) Regulations 2007 (Q&S Regulations) and the HTA's Codes of Practice
b) If there is a third party procuring tissues and / or cells on behalf of the establishment the third party agreement ensures that consent is obtained in accordance with the requirements of the HT Act 2004, the Q&S Regulations and the HTA's Codes of Practice.
c) The establishment or the third party's procedure on obtaining donor consent includes how potential donors are identified and who is able to take consent.
d) Consent forms comply with the HTA Codes of Practice.
e) Completed consent forms are included in records and are made accessible to those using or releasing tissue and / or cells for a Scheduled Purpose.
C2 Information about the consent process is provided and in a variety of formats.
a) The procedure on obtaining consent details what information will be provided to donors. As a minimum, the information specified by Directions 002/2018 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 002/2018 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.
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 002/2018.
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 002/2018, is collected and maintained.

g) There is a system to ensure records are secure and that donor confidentiality is maintained in accordance with Directions 002/2018.
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 002/2018 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 002/2018.
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 002/2018.
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 002/2018.
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.
d) The requirements of the Single European Code are adhered to as set out in Directions 002/2018.

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.
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.

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 002/2018.
b) There are procedures for the transport of tissues and / or cells which reflect identified risks associated with transport.
c) There is a system to ensure that traceability of tissues and / or cells is maintained during transport.
d) Records are kept of transportation and delivery.
e) Tissues and / or cells are packaged and transported in a manner and under conditions that minimise the risk of contamination and ensure their safety and quality.
f) There are third party agreements with courier or transport companies to ensure that any specific transport conditions required are maintained.
g) Critical transport conditions required to maintain the properties of tissue and / or cells are defined and documented.
h) Packaging and containers used for transportation are validated to ensure they are fit for purpose.
i) Primary packaging containing tissues and / or cells is labelled with the information required by Directions.
j) Shipping packaging containing tissues and / or cells is labelled with the information required by Directions.
PFE5 Equipment is appropriate for use, maintained, quality assured, validated and where appropriate monitored.
a) Critical equipment and technical devices are identified, validated, regularly inspected and records are maintained.
b) Critical equipment is maintained and serviced in accordance with the manufacturer’s instructions.

c) Equipment affecting critical processes and storage parameters is identified and monitored to detect malfunctions and defects and procedures are in place to take any corrective actions.
d) New and repaired equipment is validated before use and this is documented.
e) There are documented agreements with maintenance companies.
f) Cleaning, disinfection and sanitation of critical equipment is performed regularly and this is recorded.
g) Instruments and devices used for procurement are sterile, validated and regularly maintained.
h) Users have access to instructions for equipment and receive training in the use of equipment and maintenance where appropriate.
i) Staff are aware of how to report an equipment problem.
j) For each critical process, the materials, equipment and personnel are identified and documented.
k) There are contingency plans for equipment failure.

Disposal

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

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

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

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

1. **Critical shortfall:**

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

Or

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

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

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

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

(3) A notice of suspension of licensable activities

(4) Additional conditions being proposed

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

2. Major shortfall:

A non-critical shortfall.

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

or

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

or

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

or

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

or

A combination of several 'minor' shortfalls, none of which is major on its own, but which, viewed cumulatively, could constitute a major shortfall by adversely affecting the quality and safety of the tissues and cells.

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

3. Minor shortfall:

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

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

next inspection.

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

Follow up actions

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

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

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

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