

Nottingham University Hospitals City Campus

HTA licensing number 11073

Licensed under the Human Tissue (Quality and Safety for Human Application) Regulations 2007 (as amended) and

Licensed under the Human Tissue Act 2004

Licensable activities carried out by the establishment

Licensed activities – Human Tissue (Quality and Safety for Human Application) Regulations 2007 (as amended)

'E' = Establishment is licensed to carry out this activity and is currently carrying it out.

Site	Procurement	Processing	Testing	Storage	Distribution	Import	Export
Nottingham University Hospitals City	E	E	E	Е	E		E
Campus							

Tissue types authorised for licensed activities

Authorised = Establishment is authorised to carry out this activity and is currently carrying it out.

Tissue Category;	Procurement	Processing	Testing	Storage	Distribution	Import	Export
Tissue Type		3	3	333			
Progenitor Cell, Haematopoietic, PBSC; PBSC	Authorised	Authorised	Authorised	Authorised	Authorised		
Progenitor Cell, Hematopoietic, Bone Marrow; Bone Marrow	Authorised	Authorised	Authorised	Authorised	Authorised		
Mature Cell, MNC; DLI	Authorised	Authorised	Authorised	Authorised	Authorised		
Mature Cell, MNC; PBMC	Authorised	Authorised	Authorised	Authorised			Authorised
Progenitor Cell, Hematopoietic, Cord Blood; Cord Blood				Authorised			

ATMP – Advanced therapy medicinal product

PBSC – Peripheral blood stem cell

PBMC – Peripheral blood mononuclear cell

DLI – Donor lymphocyte infusion

Licensed activities - Human Tissue Act 2004

The establishment is licensed for the storage of relevant material which has come from a human body for use for a scheduled purpose. This activity was not reviewed during the inspection.

Summary of inspection findings

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

Although the HTA found that Nottingham University Hospitals City Campus (the establishment) had met the majority of the HTA's standards that were assessed during the inspection, two major shortfalls and one minor shortfall were found against standards for Governance and Quality, Premises and Facilities and Equipment. Following the inspection and prior to the finalisation of the report, the establishment submitted evidence to demonstrate that one of the major shortfalls and the minor shortfall had been addressed.

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.

Compliance with HTA standards Human Tissue (Quality and Safety for Human Application) Regulations 2007 (as amended) standards Major shortfalls

Standard	Inspection findings	Level of shortfall		
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 001/2021.	The establishment's donor selection questionnaire does not fully reflect the wording of Directions 001/2021. The exclusion criteria relating to "ingestion of, or exposure to, a substance (such as cyanide, lead, mercury, gold) that may be transmitted to recipients in a dose that could endanger their health" is reflected in the questionnaire as a question about exposure to cyanide, lead, mercury or gold, specifically. As a result, the establishment's procedure does not assess whether the potential donor may have been exposed to other substances that may, if transmitted, endanger a recipient's health. (See advice item 2)	Major		
	The establishment submitted sufficient evidence to address this shortfall before the report was finalised.	Fully met		
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 establishment currently has four on-site vapour phase liquid nitrogen storage tanks with a fifth tank stored at an off-site HTA-licensed facility. Of the four tanks based at the establishment, two are reaching the end of their	Major		

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.

usable life and are no longer able to be repaired in the event of a breakdown. However, a maintenance company does continue to review these tanks during site visits for other equipment to help assure that they are operating as expected.

In addition to the two older tanks, space in all five of the establishment's storage tanks is limited and at times, critically low. As a temporary measure, cells may be stored in stand-alone dewars prior to being transferred to one of the main tanks when space becomes available. While stored in the dewars, bags are partially in the liquid phase with samples from different donors being co-stored. This liquid phase co-storage has not been risk assessed by the establishment.

The establishment is monitoring these storage issues closely. The age and capacity of the existing tanks are recorded on the Trust's risk register and there are contingency plans in place for equipment failure with a separate HTA-licensed storage organisation. Staff are attending site regularly during holiday periods to top up liquid nitrogen levels and a member of staff is reviewing patient records and cells in storage to identify samples that are no longer suitable for use or needed and which can be disposed of. In addition, the establishment has purchased and receipted five new storage tanks which are awaiting installation. However, even with these control measures in place, the space constraints, contingency storage in dewars and the age/condition of the existing tanks pose a significant risk to the appropriate storage of cells and will continue to do so until the newly purchased tanks are operational. (See advice item 4)

Minor Shortfalls

Standard	Inspection findings	Level of shortfall			
GQ5 There are documented procedure	GQ5 There are documented procedures for donor selection and exclusion, including donor criteria.				
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 001/2021.	There is a small sub-group of autologous donors who are referred to the establishment from outside the area which undergo initial virology serological testing at their local hospital and potentially do not undergo testing at the establishment's own laboratory. Although all of the donors reviewed during the inspection had also been additionally tested by the establishment's laboratory, the establishment's procedures do not include checks on whether or not a donor has undergone mandatory serology testing at a laboratory that is licensed under the Regulations.	Minor			
	The establishment submitted sufficient evidence to address this shortfall before the report was finalised.	Fully Met			

The HTA requires the DI to submit a completed corrective and preventative action (CAPA) plan setting out how the shortfalls will be addressed, 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.

AdviceThe HTA advises the DI to consider the following to further improve practice:

Number	Standard	Advice
1.	GQ1(b)	Staff make decisions about how to deal with a mid-cycle controlled-rate freezer failure based on the temperature that has been reached by the cells at that point. However, this decision making process is not fully reflected in the establishment's standard operating procedure (SOP).
		The DI is advised to add further detail to the SOP which outlines actions to take in the event of a controlled-rate freezer failure mid-freezing cycle. This will help to ensure that staff are aware of the correct procedure to be following in such situations.
2.	GQ5(a)	In addressing the shortfall relating to donor selection criteria, the DI may wish to consider mirroring the wording of the donor exclusion criteria as set out in Directions 001/2021. This will help to ensure that donors are selected in accordance with regulatory requirements.
3.	GQ8(a)	The establishment has a range of risk assessments looking at risks associated with the quality and safety of cells. The DI is advised to create some further risk assessments to cover broader, high level risks such as the risk of selecting an inappropriate donor or risks relating to inappropriate storage.
4.	PFE1(a) PFE1(b)	As the establishment continues to work towards the installation of the new liquid nitrogen storage tanks, the DI is advised to undertake a risk assessment to help assure themselves that the proposed location for the new tanks is suitable. In carrying out the risk assessment, the DI is advised to consider factors such as the supply of liquid nitrogen to the tanks and whether the floor and structure of the building is rated sufficiently for the expected weight of the new tanks once installed. The DI is also advised to risk assess moving refilling dewars in the passenger lift and any weight limitations of the lift for as long as storage tanks are filled manually.

		In undertaking this risk assessment, the DI is advised to seek guidance from appropriate experts within the Trust and the building's owners.
5.	PFE3(b)	During the inspection an example was identified where the establishment's temperature excursion alarm system's upper limit had been set at the maximum temperature defined by a reagent's manufacturer.
		The DI is advised to review the temperature alarm system's upper and lower limits to include a buffer so that the alarm would be activated prior to the reagent or consumable's maximum storage temperature being reached. This would help ensure that appropriate action is taken before reagents or consumables are subject to temperature excursions that might necessitate the disposal of the products.

Background

The establishment procures and receives cells from autologous and allogeneic donors for use in patient treatment. These cells include PBSCs, bone marrow and DLIs. In addition, PBMCs are also procured by the establishment as starting material for ATMP manufacture which is undertaken by different organisations. The establishment also undertakes donor testing, storage of cells, distribution of cells and export of ATMP starting materials under its licence.

The establishment has been licensed by the HTA since June 2007. This was the establishment's eighth inspection; the last inspection took place in April 2023.

Since the last inspection, the establishment has commenced procuring PBMCs which are used as a starting material for ATMP manufacture.

Description of inspection activities undertaken

The HTA's regulatory requirements are set out in Appendix 1. The following areas were covered during the inspection:

Review of governance documentation

Various governance documents and related items were reviewed during the inspection. These included: the establishment's SOPs relating to controlled-rate freezer failure and recalls; apheresis staff training records; laboratory staff training records; maintenance records for laboratory and procurement equipment, including an apheresis machine; and temperature monitoring records. One internal audit report was reviewed, including outcomes and corrective actions. Independent audit arrangements were also discussed and the establishment indicated that it was on course to complete the range of independent audits within the required two year timeframe. Finally, investigations undertaken in response to eight incidents that had been recorded in the establishment's internal governance system were reviewed and included a review of root causes and any corrective and preventative actions identified.

Visual inspection

A visual inspection was undertaken of the areas where the establishment procures, receives, processes and stores PBSCs, DLIs, bone marrow and PBMCs, including where related consumables and reagents are stored.

Audit of records

During the inspection, records relating to three donor cell procurements were reviewed. These consisted an allogeneic PBSC procurement which was given to the patient as a fresh infusion, an autologous PBSC procurement which was cryopreserved before being returned to the patient and one PBMC donation which was sent for manufacture as fresh cells. The review of the donations included records relating to procurement, donor consent, donor serological testing, medical assessment of the donor, processing, controlled-rate freezing, and environmental monitoring.

Meetings with establishment staff

Meetings with various establishment staff, including the DI, took place throughout the inspection.

The establishment is also licensed for the storage of relevant material for use in a Scheduled Purpose. This activity was not reviewed as part of this inspection.

Report sent to DI for factual accuracy: 5 June 2025

Report returned from DI: 18 June 2025

Final report issued: 20 June 2025

Appendix 1: The HTA's regulatory requirements

The HTA must assure itself that the DI, Licence Holder, premises and practices are suitable.

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

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

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

Appendix 2: Classification of the level of shortfall

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

The action an establishment will be required to make following the identification of a shortfall is based on the HTA's assessment of risk of harm and/or a breach of the Human Tissue Act 2004, Human Tissue (Quality and Safety for Human Application) Regulations 2007 (as amended), 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:

- A notice of proposal being issued to revoke the licence
- 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.
- A notice of suspension of licensable activities
- Additional conditions being proposed
- 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 (as amended) 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 on-site 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 the final inspection report. Establishments 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 inspection
- a request for information that shows completion of actions
- monitoring of the action plan completion
- follow up at next routine inspection.

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

Appendix 3: 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 (as amended) Consent

Standard

C1 Consent is obtained in accordance with the requirements of the Human Tissue Act 2004 (HT Act), the Human Tissue (Quality and Safety for Human Application) Regulations 2007 (as amended) 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 (as amended) 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 001/2021 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 Medical Devices Regulation 2002 (SI 2002 618, as amended) (UK MDR 2002) and United Kingdom Conformity Assessed (UKCA).
- k) There is a procedure for handling returned products.
- 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 001/2021.
- 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 001/2021, is collected and maintained.
- g) There is a system to ensure records are secure and that donor confidentiality is maintained in accordance with Directions 001/2021.
- 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 001/2021 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 001/2021.
- I) 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 is in place to ensure raw data and records of traceability are maintained for 10 or 30 years respectively, 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 001/2021.
- 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 001/2021.
- 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 UKCA or CE marked diagnostic tests, in line with the requirements set out in Directions 001/2021.
- 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 001/2021.
- 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 001/2021.
- 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 001/2021
- j) Shipping packaging containing tissues and / or cells is labelled with the information required by Directions 001/2021.

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.