Site visit inspection report on compliance with HTA licensing standards
Inspection date: **05 and 06 September 2019**

Future Health Technologies Ltd

HTA licensing number 22503

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
'E' = Establishment is licensed to carry out this activity and is currently carrying it out.
'TPA' = Third party agreement; the establishment is licensed for this activity but another establishment (not licensed by the HTA) carries out the activity on their behalf.

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

Site	Procurement	Processing	Testing	Storage	Distribution	Import	Export
Future Health Technologies Ltd	TPA	E	E/TPA	E	E	E	E

Tissue types authorised for licensed activities – Human Tissue (Quality and Safety for Human Application) Regulations 2007 (as amended)

Tissue Category; Tissue Type	Procurement	Processing	Testing	Storage	Distribution	Import	Export
Progenitor Cell, Haematopoeitic, Cord Blood; Cord Blood	Authorised	Authorised	Authorised	Authorised	Authorised	Authorised	Authorised
Other; Dental Pulp	Authorised	Authorised	Authorised	Authorised	Authorised	Authorised	Authorised
Other; Cord Tissue	Authorised	Authorised	Authorised	Authorised	Authorised	Authorised	Authorised

Progenitor Cell, Haematopoietic, PBSC; PBSC				Authorised			
Progenitor Cell, Haematopoietic, Bone Marrow; Bone Marrow				Authorised			
Mature Cell, T Cell (DLI); DLI				Authorised			

Licensed activities – Human Tissue Act 2004

Area	Storage of relevant material which has come from a human body for use for a scheduled purpose
Future Health Technologies Ltd	Licensed

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 Future Health Technologies Ltd (the establishment) had met many of the HTA's standards, three major and seven minor shortfalls were found against standards for Governance and Quality and Premises, Facilities and Equipment.

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 Standards

Major shortfalls

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.		
g) There are procedures to ensure that an authorised person verifies that tissues and / or cells received by the establishment meet required specifications.	The establishment's authorised Preparation Process Dossiers (PPDs) set out that tissues/cells will be transported within specified temperature ranges and time periods. A review of transit data from February 2019 onwards identified a significant number of records indicating that samples may not have been transported in line with these requirements. These potential non-conformances had not been identified by the establishment. A subsequent review of records indicated that the majority of the excursions may have resulted from the receipt and unpacking of samples. However, records also confirmed that a number of samples had not been transported in accordance with specified requirements. It was also noted that the temperature of the tissues/cells during transit had not been recorded on a number of occasions. As a result, it is not possible to determine if these samples had been transported under appropriate conditions to maintain their quality and safety. These deviations had not been identified or investigated by the establishment. A number of cases were also identified where following processing, the tissues/cells had not met the establishment's acceptance criteria and were disposed. These cases included samples that had either been transported outside of the pre-defined shipping conditions or lacked temperature monitoring data related to the shipping. These cases were not reported to the HTA as potential serious adverse events, and the current documented processes at the establishment are insufficient to allow their routine identification and follow-up.	**Major**
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.		

GQ7 There are systems to ensure that all adverse events are investigated promptly.		
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.	The establishment's authorised PPDs set out that samples received outside of the validated ranges for time and temperature in transit would be subjected to additional quality control checks, including the ability of the cells to differentiate into certain lineages. At the time of the inspection, there was no evidence that such assessments have been undertaken for any of the samples that were transported outside of the validated parameters.	**Major**
PFE4 Systems are in place to protect the quality and integrity of bodies, body parts, tissues and cells during transport and delivery to a destination.		
h) Packaging and containers used for transportation are validated to ensure they are fit for purpose.	The establishment's authorised PPD for dental pulp (DP) specified the use of a particular type of transport container. At the time of the inspection, the establishment was not using this container but was instead using an unvalidated transport container. The use of an unvalidated transport container for the shipping of samples was identified as a shortfall at the last inspection.	**Major**

Minor Shortfalls

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 documented procedures did not adequately detail processes required for the routine execution of licensable activities. For example, during the visual inspection it was noted that an operator's outer protective clothing had become contaminated with blood from the cells that were being processed in the clean room at that time. A review of the procedural documents relating to sample processing identified that they did not include details of what an operator should do in this, or similar, situations.	**Minor**
GQ2 There is a documented system of quality management and audit.		
b) There is an internal audit system for all licensable activities.	While many processes undergo audit and assessment, the internal audit system does not cover all licensable activities. For example, there is currently no audit of: - compliance with pre-defined and validated shipping/transit criteria; - retention of shipping/transit data; - completion of Medical Director review of medical history; or - ongoing procedures against those described in HTA-authorised PPDs	**Minor**

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.	While the establishment has plans to implement a six monthly evaluation of cryopreserved tissue, these plans have not yet been finalised. At the time of inspection, no regular evaluation work was being performed.	**Minor**
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.	The donor selection questionnaire does not ask about the possible ingestion of, or exposure to, a substance (such as cyanide, lead, mercury) that may be transmitted to recipients in a dose that could endanger their health, as set out in Annex A of the HTA's Guide to Quality and Safety Assurance for Human Tissues and Cells for Patient Treatment. ***Prior to the draft report being issued the DI submitted evidence of the actions taken in relation to this shortfall. The HTA has assessed this evidence as satisfactory and considers this standard to be now met.***	**Minor**
GQ8 Risk assessments of the establishment's practices and processes are completed regularly and are recorded and monitored appropriately.		
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.	There was no evidence of risk assessments being 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. For example, the establishment has implemented a new, validated, process for shipping tissues/cells from the procurement location to the establishment. There has been no risk assessment undertaken to decide the fate of tissues/cells received, processed, and stored prior to implementation of the new process.	**Minor**

PFE1 The premises are fit for purpose.		
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.	The Medical Director reviews the mother's medical history questionnaire and related tissue/cell documentation to ensure that the standards laid down by Directions 003/2010 have been met, and to authorise the final product as suitable for eventual release. A review of the product database identified significant numbers of samples from January 2018 onwards that had not been reviewed in line with establishment procedures.	**Minor**
PFE3 There are appropriate facilities for the storage of bodies, body parts, tissues, cells, consumables and records.		
d) There is a documented, specified maximum storage period for tissues and / or cells.	The establishment currently stores tissues/cells for a maximum 20 or 25 years before discussing their continued storage with the donor. However, these maximum storage periods, and the evidence supporting their use, are not adequately captured in the establishment's governance documentation.	**Minor**

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.

Advice

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

Number	Standard	Advice
1.	GQ1b	In addressing the shortfall against the HTA standard GQ1b the DI is advised to undertake a review of establishment SOPs, and associated documents, to provide an assurance that they accurately and adequately cover current activities.
2.	GQ2b	The establishment's quality assurance staff review all donor records and records relating to the processing of tissues/cells to provide an assurance that documents have been completed correctly and completely. The

		DI is advised to formally recognise these record checks as a form of internal audit since any discrepancies identified will be investigated and followed up appropriately.
3.	GQ3e	All new staff are trained in the procedures relevant to their job role, and competency is assessed and documented. The DI is advised to consider implementing a system to formally document staff competency on an ongoing basis to provide an assurance that staff remain competent over time.
4.	GQ4d	The establishment is currently reviewing its systems for the back-up of electronic data. Backed-up data is currently held physically on–site. The DI is advised to continue with the review of the back-up process and to include consideration of where backed-up data is stored to help assure themselves that the system which is implemented is appropriate.
5.	PFE1a	During the visual inspection it was noted that consumables in the clean room are stored in receptacles on the clean room floor immediately adjacent to clinical waste bins. The DI is advised to risk assess and review the placement of the storage containers to help identify any potential risk that consumables may be contaminated during the use of the clinical waste bins.
6.	PFE2b	The establishment undertakes environmental monitoring of the clean room areas using both settle and contact plates. The DI is advised to consider amending the current process to include swabbing of areas where settle and contact plate may not be appropriate, such as the corners of the transfer hatches and equipment surfaces.
7.	PFE4d	The DI is advised to review procedures for recording the receipt of released product at end user establishments, to ensure traceability.

Background

Future Health Technologies Ltd has been licensed by the HTA since 2006. This was the ninth site visit inspection of the establishment; the most recent previous inspection took place in September 2017.

The establishment procures tissues and cells at hospitals in the UK under third party agreements. Tissues and cells are also imported from outside the UK, which have been procured by individuals trained in the establishment’s procurement and shipping procedures.

Since the previous inspection, Future Health Technologies Ltd has added the licensable activity of storage to their licence for peripheral blood stem cells (PBSC), bone marrow (BM) and product for donor lymphocyte infusion (DLI). This activity was authorised in March 2019 and the establishment is currently storing tissues/cells under a service level agreement (SLA) with another HTA-licensed establishment.

Description of inspection activities undertaken

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

Standards assessed against during inspection

The establishment is licensed for the 'Storage of relevant material which has come from a human body for use for a scheduled purpose' under the Human Tissue Act 2004 (HT Act). As the establishment was not storing material under the HT Act at the time of the inspection and had not previously done so, the 47 standards for this activity were not assessed.

There are 121 standards in the Human Application sector of which 118 were assessed.
Standards GQ1(f), and PFE1(d) and were not applicable to the establishment, and standard C1(c) was not assessed.

Review of governance documentation

The inspection team undertook a review of documentation relevant to the establishment's licensable activities. Documentation reviewed included policies and procedural documents relating to licensed activities, donor information sheets, medical history questionnaires, consent documentation, agreements with third parties, shipping and receipt records, donor-related records including records of procurement and donor testing, contracts relating to equipment servicing and servicing records, environmental monitoring records, temperature monitoring records relating to tissue, cell and consumables storage, minutes of governance meetings, incident logs, adverse events, audits, risk assessments, and training records for establishment staff.

Visual inspection

The inspection team undertook a visual inspection of all areas where licensable activity is undertaken. This included the area where tissues/cells are received, checked, logged into the establishment's computer system, and labelled with a unique identifier. The inspection team also conducted a visual inspection the areas where tissues/cells are processed, cryopreserved and stored, the serological, nucleic acid and flow cytometry testing facilities, and the storage areas where consumables are stored.

Audit of records

Data relating to the transport of tissues/cells were reviewed for all products received since the date of the last inspection. A review of the database recording the Medical Director's review of all products since January 2018 was also undertaken. All relevant documentation relating to two dental pulp donations, three cord blood donations, and three cord tissue donations was reviewed. This included reviews of all processing records; including records of consumables used, environmental monitoring, records of donor consent, donor testing results, data relating to transport, establishment review, authorisation and sign-off records (including the Medical Director review), records of final product acceptance criteria and patient notification, and cryopreservation records. In addition, training records for the staff involved in processing were also reviewed. Some anomalies were identified and are described in the shortfalls above.

Meetings with establishment staff

Discussions were held with the DI and round table discussions were held with:

- staff involved with product receipt, processing, cryopreservation and storage;
- staff involved with mandatory testing and flow cytometry analysis of processed tissue;
- staff undertaking direct customer/client contact, responding to enquiries and complaints, providing information verbally, providing information through the provision of information sheets and communication with agents and third parties outside of the UK; and
- Staff involved with quality management.

Report sent to DI for factual accuracy: 17 October 2019

Report returned from DI: 24 October 2019

Final report issued: 20 December 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: 25 August 2023

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 (HA)

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

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

   Or

   A number of ‘major’ shortfalls, none of which are 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 or the HTA Directions;

or

A shortfall which indicates a breach in the relevant Codes of Practice, 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. 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 site-visit inspection
- a request for information that shows completion of actions
- monitoring of the action plan completion
- follow up at next routine site-visit inspection.

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