Site visit inspection report on compliance with HTA minimum standards

The Christie NHS Foundation Trust Hospital

HTA licensing number 30004

Licensed under the Human Tissue Act 2004 for the

- **storage of relevant material which has come from a human body for use for a scheduled purpose**

26-27 May 2015

Summary of inspection findings

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

Although the HTA found that The Christie NHS Foundation Trust Hospital ('the establishment') had met the majority of the HTA standards, one minor shortfall was found in relation to the establishment's risk assessments of licensed activities (HTA standard GQ8).

Particular examples of strengths and good practice are included in the concluding comments section of the report.

The HTA's regulatory requirements

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

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

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

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

- consent
- governance and quality systems
- premises facilities and equipment
- disposal.

This is an exception-based report: only those standards that have been assessed as not met are included. Where the HTA determines that a standard is not met, the level of the shortfall is classified as 'Critical', 'Major' or 'Minor' (see Appendix 2: Classification of the level of shortfall). Where HTA standards are fully met, but the HTA has identified an area of practice that could be further improved, advice is given to the DI.

Reports of HTA inspections carried out from 1 November 2010 are published on the HTA's website.

Background to the establishment and description of inspection activities undertaken

The Christie NHS Foundation Trust Hospital ('the establishment') has been licensed by the HTA under the Human Tissue Act 2004 ('the HT Act') since June 2007, for the storage of relevant material for use for scheduled purposes. This licence applies to the premises at the Cancer Research UK Manchester Institute, Paterson Building.

The establishment stores human tissue samples for use in research. There are nine collections of human samples stored at the establishment under the authority of the HTA licence. These collections include the Manchester Cancer Research Centre (MCRC) biobank, and collections stored by individual research groups.

Samples are stored in a variety of locations over four floors of the Paterson Building. All -80 ºC freezers are continually temperature-monitored; temperature probes are maintained and calibrated and there is an alarm with a robust call-out notification procedure in the event of a deviation from the set acceptable ranges. One -20 ^{0}C freezer is used to store samples before they are transferred to a -80 ^{0}C freezer. This freezer is not temperature-monitored or connected to a temperature alarm (see advice item 10). The biobank liquid nitrogen tanks are connected to autofill systems with over- and under-fill alarms. The liquid nitrogen tanks used by most of the research groups are filled manually (see advice item 10). The establishment has contingency arrangements for storage in the event of equipment failure.

The DI and Persons Designated (PDs) form the establishment's 'Human Tissue Governance Team' and are responsible for the overall governance of the storage and use of human tissue samples under the HTA licence. The establishment also stores human samples for use in projects which have received approval from a recognised research ethics committee (REC), thereby exempting storage of these samples from the HT Act licensing requirements. The Human Tissue Governance team also maintains oversight of project-specific REC approvals involving the storage of human samples to ensure that where approval expires, or samples are stored outside the terms of the approval, relevant material is stored under the HTA licence.

The establishment disposes of human samples by incineration. Records of disposal are made by each group, including the date, method and reason for disposal. The researchers are required to receive authorisation from the Human Tissue Governance Team to dispose of samples, and this team keeps centralised records of disposal.

The MCRC biobank has received REC approval to function as a research tissue bank, effectively conferring ethical approval for projects receiving material from the tissue bank for research use. The MCRC biobank stores more than 100,000 samples from cancer patients and healthy volunteers. These samples include frozen tissues, formalin fixed and paraffin embedded (FFPE) tissue blocks and slides, blood and urine samples. The biobank also includes samples collected from the diagnostic archive of the Christie NHS Foundation Trust Hospital and partner Trusts, which is stored in the Paterson Building.

Consent is sought by biobank technicians who have received training in the requirements of the HT Act and have been assessed as competent to seek consent. Consent forms and participant information leaflets are tailored to each project and provide options to the patient to consent for genetic analysis and the use of samples in research involving animals, commercial companies and the use of anonymised medical records. Informed generic consent is obtained for the collection, storage and use of samples, prior to or during the patient's pre-admission assessment and samples are collected on the day of surgery.

All samples are de-identified and assigned a unique sample number and barcode. The biobank uses an electronic database to provide traceability of samples, including of repeat samples from same patient and for providing an anonymised link to clinical data. Sample

traceability is managed by a dedicated team of staff at the establishment, who update the electronic traceability records and conduct regular audits of stored samples.

Samples may be released from the biobank to researchers, who apply to receive samples for use in research. Applications to receive samples from the biobank are reviewed by specialist reviewers and an access sub-committee.

Eight research groups store human tissue samples under the HTA licence. The majority of samples stored by these research groups originated from projects for which project-specific REC approval has expired. A small fraction of samples were obtained prior to the HT Act and are therefore 'existing holdings'. These sample collections are managed by individual research groups and handled according to laboratory standard operating procedures (SOPs) and the establishment's overarching human tissue SOPs. All human samples are anonymised and the establishment does not store any patient identifiable information. The research groups use a number of electronic databases and paper-based records to provide traceability of samples (see advice item 6).

Researchers are required to complete the establishment's training programme in the requirements of the HT Act, including refresher training. Researchers are also required to receive approval from the DI or PDs to store samples under the HTA licence. The approval process includes checks on the documentation or agreements with third party organisations supplying the samples in order to provide assurances that consent has been sought in accordance with the regulatory requirements. This approval process is documented and the Human Tissue Governance Team maintains a centralised record for all collections of samples stored under the HTA licence.

This report describes the first site visit inspection of the establishment since it was issued an HTA licence in June 2007. This was a routine site visit inspection to assess whether the establishment is meeting the HTA's standards. The site visit inspection included a visual inspection of the areas where relevant material is stored under the licence, a review of documentation and meetings with establishment staff.

An audit of traceability records was conducted for collections stored by seven of the eight research groups and the biobank; this audit included 15 frozen tissue samples, twelve slides, and six FFPE tissue blocks. These audits revealed no anomalies in the storage locations or sample identifiers recorded on the electronic databases or paper records. An audit of legibility and completeness of consent forms was also conducted for two consent forms for biobank samples and four samples stored by the research groups; no inconsistencies were found. At the time of the inspection, three collections of imported samples were stored at the establishment under the HTA licence. There were material transfer agreements for two of these collections and other documentation for the third collection to provide assurance that appropriate consent is in place for the use of these samples for research.

Inspection findings

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

Compliance with HTA standards

Governance and Quality

Standard	Inspection findings	Level of shortfall
GQ8 Risk assessments of the establishment's practices and processes are completed regularly and are recorded and monitored appropriately.	The establishment has a limited scope of documented risk assessments for the storage of human tissue samples by the research groups, all of which relate only to health and safety risks. There are no documented risks assessments of the regulatory risks associated with the storage of human tissues by these research groups. (*See advice item 8*)	**Minor**

Advice

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

No.	Standard	Advice
1.	NA	All the human tissue samples stored at the establishment under the authority of the HTA licence are stored at MCRC Biobank, Paterson Building. Further to the discussions held during the inspection, the establishment is advised to amend the name and address details on the licence to reflect the correct location of licensed premises.
2.	C3	The DI is advised to ensure that that all staff seeking consent receive periodic refresher training and that records of refresher training are maintained.
3.	GQ1	The DI is advised to review the quality manual and human tissue SOPs to ensure that these reflect current practices under the licence and the requirements of the HT Act. For example: • the Quality Manual should be reviewed to reflect that this HTA licence is for the storage of relevant material for use in scheduled purposes; • SOP HT001 should be reviewed to include the consent requirements of the HT Act cover relevant material from living; and • SOP HT008 should be updated to reflect the current practice of keeping records of transfer of relevant material. This is not an exhaustive list of the amendments to the establishment's documents, and the DI is advised to review all documents relating to the HTA licence, seeking guidance from the HTA if necessary.

4.	GQ2	The establishment is advised to audit processes following implementation of new procedures; for example, use of a new database to record sample traceability. This will ensure that any deviations from SOPs or unexpected adverse effects are identified and corrective actions completed in a timely manner.
5.	GQ4	Research groups at the establishment are responsible for maintaining records of the traceability of samples that they store under the HTA licence. The DI is advised to ensure all traceability records are regularly backed up to ensure that sample traceability is maintained.
6.	GQ5	The DI is advised to ensure that all staff working under the HTA licence are aware of the establishment's procedure for accepting/importing samples. In particular, the DI should remind staff of the establishment's procedures and requirements for: prior approval from the DI or PDs; a documented agreement with the distributing organisation prior to importing samples; a submission of documented risk assessment of transport; and, records of transport.
7.	GQ6	Some research groups record the use of relevant material in lab books. The DI is advised to consider introducing a standard template electronic database to standardise the records of human tissue maintained by each research group. This will help to ensure that records of sample traceability are complete, and may also facilitate audits of sample traceability.
8.	GQ8	The DI should review the establishment's risk assessments to ensure that they include sufficient details of procedures and the associated risks. For each research group, the DI should document risk assessments for the risks associated with the storage of human tissues and non-compliance with the HT Act. These risks may include, for example: • storage and use of relevant material without valid consent; • loss of traceability of relevant material; • failure of storage facilities; and, • accidental or inappropriate disposal of relevant material. In relation to the biobank risk assessments, the DI is advised to review the risk assessment for sample transport to include details of the arrangements for the transport of samples. The DI is advised to ensure that risk assessments are reviewed regularly and that all staff undertaking licensable activities are aware of these risk assessments.
9.	PFE2	There was inconsistency in the personal protective equipment provided to staff accessing stored samples.The establishment is advised to ensure that appropriate personal protective equipment is available for each storage location within the establishment.

10.	PFE3	The DI is advised to ensure that all freezers and liquid nitrogen tanks used to store human samples are labelled as containing samples stored under the HTA licence. These labels could also, for example, include details of the samples stored within the unit, the appropriate storage temperatures and contact details of staff responsible for the samples. Where storage units are also used to store non-human tissues the DI is advised to also include details of the dedicated shelves or boxes used for the storage of human samples. This will help to ensure that human and non-human samples are stored separately in order to address sensitivities that some donors may have around the storage of their samples with non-human tissues.
11.	PFE3	The DI is advised to ensure that freezer temperatures and liquid nitrogen levels without automated temperature alarms are checked and recorded on a regular basis. The DI is advised to ensure that these checks are documented. The establishment may wish to consider storing these temperature records near to the storage units so that staff are aware of when these checks have been performed.
12.	D2	The DI is advised to ensure that only the current version of disposal form is in use. To facilitate the document control of this form, the DI is advised to include a version number on the printed form.

Concluding comments

This report outlines the first HTA site visit inspection of The Christie NHS Foundation Trust Hospital. There were a number of areas of good practice observed during the inspection. The DI and PDs maintain good oversight of the collections of human tissue stored under the HTA licence. There is a good communication between the Human Tissue Governance team and research groups.

The establishment has developed a comprehensive training package covering the requirements of the HT Act, including refresher training, that all staff are required to complete. In addition, a training programme is provided to researchers transferring material to the establishment for use in research. There are good procedures for obtaining consent for the use of samples for research. An index of biobank consent forms and participant information leaflets has been developed to help the biobank technicians select the correct documentation to use when seeking consent for any given project. The biobank sample coding system is well-considered and the biobank has a robust approach to traceability and keeps detailed records of human samples from receipt through to disposal.

There are some areas of practice that require improvement, as indicated by the minor shortfall in relation to the documentation of risk assessments. The HTA has given advice to the DI with respect to consent, governance and quality arrangements and the premises, facilities and equipment and disposal.

The HTA requires that the Designated Individual addresses the shortfall 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 / subject to compliance with the additional conditions applied to

the licence.

Report sent to DI for factual accuracy: 19 June 2015

Report returned from DI: 2 July 2015

Final report issued: 10 July 2015

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: 15 November 2015

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.

Consent standards
C1 Consent is obtained in accordance with the requirements of the Human Tissue Act 2004 (HT Act) and as set out in the code of practice
• Consent forms comply with the HTA's Code of Practice • Consent forms are in records and are made accessible to those using or releasing relevant material for a scheduled purpose • If the establishment obtains consent, a process is in place for acquiring consent in accordance with the requirements of the HT Act 2004 and the HTA's Codes of Practice • Where applicable, there are agreements with third parties to ensure that consent is obtained in accordance with the requirements of the HT Act 2004 and the HTA's Codes of Practice • Consent procedures have been ethically approved
C2 Information about the consent process is provided and in a variety of formats
• Standard operating procedures (SOPs) detail the procedure for providing information on consent • Agreements with third parties contain appropriate information • Independent interpreters are available when appropriate • Information is available in suitable formats, appropriate to the situation • Consent procedures have been ethically approved
C3 Staff involved in seeking consent receive training and support in the implications and essential requirements of taking consent
• Standard operating procedures (SOPs) detail the consent process • Evidence of suitable training of staff involved in seeking consent • Records demonstrate up-to-date staff training • Competency is assessed and maintained

Governance and quality system standards
GQ1 All aspects of the establishments work are supported by ratified documented policies and procedures as part of the overall governance process
• Policies and procedures are in place, covering all activities related to the storage of relevant material for research in connection with disorders, or the functioning, of the human body • Appropriate risk management systems are in place • Regular governance meetings are held; for example, health and safety and risk management

committees, agendas and minutes

- Complaints system

GQ2 There is a documented system of quality management and audit

- A document control system, covering all documented policies and standard operating procedures (SOPs).
- Schedule of audits
- Change control mechanisms for the implementation of new operational procedures

GQ3 Staff are appropriately qualified and trained in techniques relevant to their work and are continuously updating their skills

- Qualifications of staff and training are recorded, records showing attendance at training
- Orientation and induction programmes
- Documented training programme, (e.g. health and safety, fire, risk management, infection control), including developmental training
- Training and reference manuals
- Staff appraisal / review records and personal development plans are in place

GQ4 There is a systematic and planned approach to the management of records

- Documented procedures for the creation, amendment, retention and destruction of records
- Regular audit of record content to check for completeness, legibility and accuracy
- Back-up / recovery facility in the event of loss of records
- Systems ensure data protection, confidentiality and public disclosure (whistle-blowing)

GQ5 There are documented procedures for distribution of body parts, tissues or cells

- A process is in place to review the release of relevant material to other organisations
- An agreement is in place between the establishment and the organisation to whom relevant material is supplied regarding the tracking and use of material and eventual disposal or return

GQ6 A coding and records system facilitates traceability of bodies, body parts, tissues and cells, ensuring a robust audit trail

- There is an identification system which assigns a unique code to each donation and to each of the products associated with it
- An audit trail is maintained, which includes details of when and where the relevant material was acquired, the consent obtained, the uses to which the material was put, when the material was transferred and to whom

GQ7 There are systems to ensure that all adverse events are investigated promptly

- Corrective and preventive actions are taken where necessary and improvements in practice are made
- System to receive and distribute national and local information (e.g. HTA communications)

GQ8 Risk assessments of the establishment's practices and processes are completed regularly and are recorded and monitored appropriately

- Documented risk assessments for all practices and processes
- Risk assessments are reviewed when appropriate
- Staff can access risk assessments and are made aware of local hazards at training

Premises, facilities and equipment standards

PFE1 The premises are fit for purpose

- A risk assessment has been carried out of the premises to ensure that they are appropriate for the purpose
- Policies in place to review and maintain the safety of staff, authorised visitors and students
- The premises have sufficient space for procedures to be carried out safely and efficiently
- Policies are in place to ensure that the premises are secure and confidentiality is maintained

PFE 2 Environmental controls are in place to avoid potential contamination

- Documented cleaning and decontamination procedures
- Staff are provided with appropriate protective equipment and facilities that minimise risks from contamination
- Appropriate health and safety controls are in place

PFE3 There are appropriate facilities for the storage of bodies, body parts, tissues and cells, consumables and records.

- Relevant material, consumables and records are stored in suitable secure environments and precautions are taken to minimise risk of damage, theft or contamination
- Contingency plans are in place in case of failure in storage area
- Critical storage conditions are monitored and recorded
- System to deal with emergencies on 24 hour basis
- Records indicating where the material is stored in the premises

PFE 4 Systems are in place to protect the quality and integrity of bodies, body parts, tissues and cells during transport and delivery to a destination

- Documented policies and procedures for the appropriate transport of relevant material, including a risk assessment of transportation
- A system is in place to ensure that traceability of relevant material is maintained during transport
- Records of transportation and delivery
- Records are kept of any agreements with recipients of relevant material
- Records are kept of any agreements with courier or transport companies

PFE5 Equipment is appropriate for use, maintained, quality assured, validated and where appropriate monitored

- Records of calibration, validation and maintenance, including any agreements with maintenance companies
- Users have access to instructions for equipment and receive training in use and maintenance where appropriate
- Staff aware of how to report an equipment problem
- Contingency plan for equipment failure

Disposal Standards

D1 There is a clear and sensitive policy for disposing of human organs and tissue

- Documented disposal policy
- Policy is made available to the public
- Compliance with health and safety recommendations

D2 The reason for disposal and the methods used are carefully documented

- Standard operating procedures (SOPs) for tracking the disposal of relevant material detail the method and reason for disposal
- Where applicable, disposal arrangements reflect specified wishes

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 HT Act or associated Directions.

1. **Critical shortfall:**

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

   or

   A combination of several major shortfalls, none of which is critical on its own, but which together could constitute a critical shortfall and should be explained and reported as such.

   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 that:

   - poses a risk to human safety and/or dignity, or
   - indicates a failure to carry out satisfactory procedures, or
   - indicates a breach of the relevant CoPs, the HT Act and other relevant professional and statutory guidelines, or
   - has the potential to become a critical shortfall unless addressed

   or

   A combination of several minor shortfalls, none of which is major on its own, but which, together, could constitute a major shortfall and should be explained and reported as such.

   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, but which indicates a departure from expected standards.

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 or site visit.

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.