

Synnovis Histology: User Handbook

Royal Brompton and Harefield Hospital

Version number 1.0

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| 1.0 | New User Handbooks created for the Histopathology Service – covering the Hub, and the Essential Services Laboratories (ESLs) at GSTT, KCH, PRUH and RBHH. This version is for users of the Royal Brompton and Harefield Laboratories. | February 2026 |

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1. Introduction

1.1 Purpose

The Synnovis Histology User handbook is intended to serve as a user guide to the Histopathology services available from the Hub Laboratory as well as Cellular Pathology Laboratories based at St Thomas' Hospital, Guy's Hospital, Kings College Hospital, Princess Royal University Hospital and Royal Brompton and Harefield Hospitals. It is aimed for use by all staff groups involved with requesting Histological investigations.

The user handbook consists of five individual documents:

| | |
|-------------------|---|
| • TS-GST-HIS-POL1 | Histology User Guide - GSTT |
| • TS-HUB-POL2 | Histology User Guide – Hub & ESL |
| • TS-KD-POL1 | Histology User Guide – KCH Denmark Hill |
| • TS-KP-POL1 | Histology User Guide - PRUH |
| • TS-RBH-HIS-POL1 | Histology User Guide – RBHH |

This guide is for teams using services at the Royal Brompton and Harefield Hospital Sites.

1.2 ABOUT US

The Synnovis Analytics Histopathology service comprises of a Hub Laboratory, situated at Blackfriars, with Essential Service Laboratories (ESLs) at our partner Trust sites:

- Guy's and St Thomas Hospitals
- Royal Brompton and Harefield Hospital
- Kings College Hospital NHS Foundation Trust (Denmark Hill)
- Princess Royal University Hospital)

Routine core laboratory operations and non-urgent tests will be received either directly at the Hub laboratory, or at the ESL sites and then transferred to the Hub laboratory for further processing. Urgent tests (primarily frozen sections, where results are required immediately to guide surgery) will be delivered close to patients in ESLs on the four main hospital sites.

The ESLs will therefore serve as a delivery point for samples at the Hospital sites, before they are transferred to the Hub laboratory for processing.

1.2.1 Accreditation of our Services

At the time of writing, histopathology tests and services provided by the Hub laboratory, St Thomas Hospital, King's College Hospital, Royal Brompton and Harefield and Princess Royal University Hospital are not UKAS accredited. Once the service migration to the Hub laboratory has completed (scheduled to be completed in autumn 2025), the Histopathology services at these sites will undergo assessment for accreditation under ISO15189:2022 throughout 2026.

1.2.2 Services and Specialities

Histopathology is a core diagnostic pathology service that involves the study of tissue structures in disease process and plays a major role in cancer diagnosis and patient management.

The Synnovis Histopathology laboratories provide a comprehensive tissue diagnostic service to hospitals networked within the Southeast London Cancer network and local general practitioners. It serves the regional cancer centre and is also a national and international referral centre for expert opinion. The specialist diagnostic and scientific teams aim to deliver a high-quality service with cutting edge diagnostic techniques through close links with the genetics and molecular diagnostics department. Multidisciplinary team meetings (MDM) are held across sites enabling close integration of clinical teams and specialist pathologists.

Areas of expertise at the Royal Brompton and Harefield include:

- Cardiovascular System (CVS)
- Cardiac and Cardiothoracic Transplant pathology
- Thoracic (Lung, Pleura and Mediastinum)

The laboratory works in conjunction with:

- Cytology and the St. John's Dermatopathology Laboratories at St. Thomas' Hospital (skin samples),
- Head and Neck/Oral Pathology (head & neck and maxillo-facial samples) at Guy's Hospital,
- And the Institute of Liver Studies Laboratories at King's College Hospital.

Frozen sections

In addition to processing fixed tissue, the department offers a frozen section service at both the Brompton and Harefield sites, incorporating receipt of fresh tissue for diagnostic purposes, enzyme histochemistry, research, clinical trials and tissue banking.

Immunocytochemistry and molecular pathology

Advanced Diagnostics is a section within the Histopathology department which, offers immunocytochemistry, chromogenic and fluorescent in-situ hybridisation and molecular testing.

The laboratory is a referral centre for HER-2 and PD-L1 testing.

Cytopathology

Cytopathology is provided at all sites, please see Section 4 of this document for use of the Cytology service at RBH.

2. CONTACT US

The Histopathology department is located on second floor of the North Wing, St Thomas' Hospital. All visitors should access the department via the main entrance and report to reception where they will be directed to a named individual.

2.1 Contact address

Department of Histopathology
Royal Brompton Hospital
Sydney Street
Chelsea
London
SW3 6NP

Department of Histopathology
Harefield Hospital
Hill End Road
Harefield
Middlesex
UB9 6JH

2.2 Contact and enquiries

Brompton Hospital Histology Enquiries Tel 0207 351 8425

Harefield Hospital Histology Enquires: Tel: 01895 828 725

- Please note that the Harefield Hospital is not staffed continuously, please contact the Brompton site in the first instance.

2.2.1 Clinical Advice and Interpretation

If you are calling for clinical advice and interpretation of the histopathology report, the secretarial staff will put you through to the Consultant Pathologist reporting the case you require.

Consultant Histopathologists are available for advising on individual clinical cases, professional judgments on the interpretation of the results of examinations and consulting on scientific and logistic matters. Consultants are also available in support of the trust Medical Examiners to discuss any deaths within the Trusts, this being co-ordinated by the PALS team with a daily rota for the on-call pathologist for such discussions.

2.3 Hours of opening

The department is open from 09:00 – 17:30, Monday to Friday (except bank holidays).

2.4 Clinical staff contact details

The full lists of Consultant Pathologist staff at Royal Brompton and Harefield Hospitals are available on the Trust website.

Clinical Lead

Dr Jan Lukas Robertus j.robertus@rbht.nhs.uk Ext 88424

2.5 Service Leads

Operations Service Director

Khadijah Owusu-Ansah: khadijah.owusu-ansah@synnovis.co.uk

Deputy Operations Service Director

Histology: Getnet Demissie: getnet.demissie@synnovis.co.uk

Operations Manager

Histology: Lyn Golding lyn.golding@synnovis.co.uk

Advanced Diagnostics: Miguel Evaristo Miguel.evaristo@synnovis.co.uk

Senior Quality Manager

Fiona Denham Fiona.denham@synnovis.co.uk

Quality Manager

Karen Boniface karen.boniface@synnovis.co.uk

2.6 Complaints

Complaints may be made directly to the department, via PALS or via Synnovis Customer Support. Complaints are handled according to the Synnovis Complaints Policy and Procedure located at <http://www.synnovis.co.uk/customer-service>.

2.7 Protection of patient information

All patient information is handled under the terms of the Data Protection Act 2018. All personal information received by Synnovis is dealt with according to the Synnovis

Privacy, Data Protection & Cookie Policy which is available at
<http://www.synnovis.co.uk/privacy-policy>.

3. HISTOPATHOLOGY INFORMATION

The majority of specimens for histological investigations must be placed in 10% neutral buffered formalin as soon as possible following removal to ensure that the tissue sample is preserved as much as possible to its life like state. The fixative acts as a preservative arresting the deleterious effects of putrefaction and autolysis. It also hardens and alters the tissue chemically in such a way that it is not harmed by the effects of processing and allows for histological tests to be performed.

In difficult or unusual cases (particularly non-thoracic cases), any query concerning correct tissue preparation should be directed to the Brompton Hospital Laboratory by telephoning RBH Ext: **82101**. For example, skin biopsies may require immunofluorescence that requires some of the tissue being submitted unfixed.

3.1 Fixatives and specimen containers

The type of fixative and container required for a specimen is described in Table 1 below.

| Specimen Type | Fixative | Container |
|------------------------------|---|--|
| Biopsies | 10% neutral buffered formalin | Small plastic jar 60 ml |
| Endomyocardial Biopsies | 10% neutral buffered formalin However - If special fixation for EM studies or snap freezing is required, the specimen should be sent without fixative | Small sterile plastic jar 60 ml |
| Transplant Biopsies | 10% neutral buffered formalin | Small plastic jar 60 ml |
| Routine Histology/Resections | Specimens taken between 9.00am and 5.00pm may be sent fresh as soon after resection as possible, without fixative unless there is a biohazard associated with the patient, in which case the specimens must be put into fixative 10% neutral buffered formalin. | Universal container 30 ml Small plastic jar 60 ml Large jar 350 ml |
| Royal Brompton Hospital | Note: after 5.00pm any routine specimens must be put into fixative and sent to the laboratory the following day. | Plastic buckets 1.8, 2.5, 5 and 10 litre. |
| Routine Histology/Resections | all specimens except those for frozen section should be placed in 10% neutral buffered formalin as soon as possible after resection. | Universal container 30 ml Small plastic jar 60 ml Large jar 350 ml |
| Harefield Hospital | | Plastic buckets 1.8, 2.5, 5 and 10 litre. |
| Amputations | No fixation | Sealed large container |

Table 1 - specimen types and fixation requirements

Specimens must not be squashed into containers inadequate for their size and should be covered by at least 10 to 20 times their volume with fixative.

Note that for amputation specimens, these should be sent to the mortuary for incineration unless they are required for histological examination. They should be sent in a sealed container (if needed supplied by laboratory or Mortuary-RBH), stored in a body fridge with appropriate labelling and completed request form clearly marked for disposal only. Also, all patient details need to be entered into the Mortuary Register. Unless otherwise instructed by the patient/family, arrangements will be made to dispose of the limb as soon as is practicable thereafter. If long-term retention is required, the Histology Department should be informed as soon as possible, as alternative storage arrangements will have to be made, possibly at the patient's expense.

3.1.1 Formalin

Specimens are normally received in **10% neutral buffered formalin** unless specifically stated in Table 1.

Formalin is a clear fluid with a pungent toxic vapour. Samples collected in formalin should be kept at ambient room temperature (18-25°C) for optimal fixation of the tissue. Samples in formalin **should not** be stored in a fridge as this hinders fixation.

Formalin pots must be checked for leakage and expiry date expiry date; also, handle carefully using gloved hands. If pots are beyond their expiry date, return to Histopathology for disposal. In the event of a formalin spillage, wipe it immediately with a De-Formalizer pad; wash the affected area with water and wash your hands.

3.1.2 Hazards

Formalin is a hazardous substance and care is to be taken when in use. Beware of spills and inhaling vapour, as formaldehyde is a toxic agent that may cause mild to severe irritation of skin and mucous membranes. Wear gloves when opening a specimen pot, tighten the lid when closing, and place the labelled specimen pot into a plastic pathology specimen bag. Wash off any spills with copious amounts of water.

3.1.3 Stock specimen containers

Please contact the laboratory if these are required.

3.2 Fresh/Unfixed tissue

Some tissues samples, such as myocardial biopsies, are sent unfixed due to clinical requirement or for rapid diagnosis. These include frozen sections, enzyme histochemistry, and suspected lymphoma samples. **All these sample types should be pre-booked with the laboratory** (see Section 3.3) to guarantee availability of staff/facilities (RBH Ext 82101).

These specimens must be transported **immediately** to the laboratory in a closed labelled container and handed to a member of laboratory staff. Any biohazard should be indicated on the card and specimen. Any indication of infection type would be advantageous.

3.3 Specimens that should be pre-booked (24 hours' notice)

| Type of specimen | How to be received | Who needs to be contacted |
|-----------------------------|-----------------------------|--|
| Rapid Frozen section | Unfixed (dry pot) URGENT | Inform the laboratory 24 hours prior Ext 82101 See Section 3.4 |

Table 2 - specimens requiring pre-booking

3.4 Frozen sections

All frozen sections **must** be pre-booked with the department **24 hours in advance** as a Consultant Pathologist and BMS have to be made available.

To make a booking contact the Histopathology **ext: 88425 or 82101 (RBH) or emailing HistopathologyTests@rbht.nhs.uk**. You must provide:

:

- Patient details,
- The estimated time of frozen section,
- Theatre details (including phone number),
- Contact number and Surgeon name,
- Site (Harefield or Brompton Hospital)

If there is a delay in operation contact the Histopathology laboratory and indicate the new time of the frozen section. In the event of cancellation please notify the department.

Specimens must be delivered immediately to the histopathology laboratory on the respective site. Tissue should be placed into a suitably labelled dry container and sent to the laboratory by vacuum tube (RBH site) or special porter (HH site).

Any biohazard should be indicated on the request and specimen. Any indication of infection type would be advantageous. Please note that as there are no separate containment facilities for the handling of unfixed 'high-risk' tissue (e.g. TB, HIV, HBsAg), a frozen section service cannot be provided on these cases.

Note: Frozen sections at Harefield are usually reported remotely using a digital pathology system from the RBH site, unless a consultant is on-site at Harefield.

3.5 Requests and labelling

Each specimen should be labelled with the patient's name, date of birth, hospital number and NHS number, anatomical site and nature of tissue. It should have an accompanying Epic Beaker Request, or use of the downtime forms if Epic Beaker is unavailable. The request must have the following details stated:

- **Patient's full name** (forename and family name)
- **Gender**
- **Date of birth**
- **Hospital number** (If sending samples from external sources such as GP surgeries, a hospital number need only be provided if it is known)
- **NHS Number**
- **Type of sample and anatomical site.** If more than one specimen from same patient, indicate the pot number and the specific specimen site.
- **Examination requested**
- **Consultant / clinician / healthcare provider** (name, contact details and address). The requesting clinician must sign and give a contact Telephone / bleep number.
- **Ward / clinic / patient location**
- **Date and time of sample collection**
- **Clinically relevant information** (required for examination performance and result interpretation purposes)
- **Funding details:** indicate if NHS, private, or contract funding

The sender will be contacted when histology samples are received without an appropriate request. Testing will be delayed until the request is corrected on Epic. This will be logged as an incident where testing is delayed, and patient care has been compromised on the Trust Adverse Incident reporting system (RADAR).

Please note: **The laboratory can accept request forms in various formats from external users.** Please contact the laboratory if you are unsure of the correct format for use. If necessary, the laboratory is willing to cooperate with users in order to clarify a request. The laboratory is able to provide confirmation of sample receipt.

3.5.1 Synnovis Tissue Sciences Downtime paper request form

This should only be used for urgent cases when the Epic system is not available.

Failure to complete details on a request form or specimen pot will mean a delay in issue of a result, and result in laboratory staff contacting the sender and requesting them to attend at the laboratory and fill in or correct the missing details.

3.5.2 Requests to Process Donor Organ Tissue

Donor organ tissue (including trimmed pieces of lung, organs rejected for transplantation, and EVLP tissue (whole lungs and wedge biopsies)) **will not be processed without donor consent.** A copy of the donor consent form (either the original consent form or printout from the EOS database) must be received with this tissue, or it will be disposed of as clinical waste without histological examination.

3.5.3 Specimen labels

If possible, use computer generated labels that accompany patient notes.

Fill in the specimen pot details using **a ballpoint pen or permanent marker**, not a fibre-tip pen where the ink will run should a spill occur.

All details should be filled, and where more than one specimen is taken, pot numbers and specimen information should match the details on the request card. At least two forms of personal ID must match, full name, and date of birth (and/or hospital number) together with the nature of specimen. ***A discrepancy will result in a delay in processing and could impact on patient management.***

3.6 Urgent Specimens and Cancer pathway requests

When requesting Histology on patients that are on a cancer pathway, select 'Urgent cancer pathway' or '2WW' for 2 Week-wait, if submitting an Epic request. If submitting a manual request form (e.g. in the event of Epic downtime), record 'urgent cancer pathway' or '2WW' on the form.

It is also possible to contact the laboratory to make an urgent request. To do so, contact the laboratory (82101 (RBH)) and provide:

- Patient's Name
- Hospital Number
- Nature of specimen
- Name and bleep number/mobile number for further contact
- Location of specimen for collection

The on-call pathologist must be contacted so that the case can be prioritised accordingly. An on-call rota is held by switchboard out of hours and can be accessed via the histopathology office during hours (ext. 88425 and 82073).

3.6.1 Urgent specimen transport from Harefield to Royal Brompton

The Requesting doctor will provide the on-call RBH Histopathology BMS with patient's name and hospital number together with details of investigation(s) they require.

The RBH on-call Histopathology BMS will inform the requesting doctor to place the sample at the Main Reception, Harefield Hospital and also to inform the main reception staff to place in a red despatch box addressed "**Main Reception, Royal Brompton Hospital: Please contact the RBH Switchboard to call the RBH On-call Histopathology BMS on arrival of this Urgent Sample**". The despatch box is situated in the post room adjacent to main reception. Collection will be arranged by the on-call RBH Histopathology BMS.

3.7 Cases requiring Molecular Tests

If a patient is being considered for multiple molecular tests, cases should be indicated on the request form or discussed in advance with the pathologist on-call so that appropriate blocking and cutting of the specimen can be undertaken.

Molecular tests are undertaken by the North Thames Genomic Hub at the Molecular Diagnostics Department, Royal Marsden Foundation Trust, Sutton, Surrey SM2 5NG. For NHS patients this is requested reflex tests by the pathologist. For private patients the clinician must confirm which tests they require.

If the clinician wishes to send the samples to a different laboratory, they need to inform the pathologist on-call and send the appropriate request form for the referral laboratory. **These can be emailed to HistopathologyTests@rbht.nhs.uk or sent to the department.**

If samples have been sent to the Marsden, the phone number for results is 0208 915 6565.

3.7.1 Cases requiring PD-L1 Testing

These tests are not funded by NHSE, so it is essential to add the Oncologist's name and address (for the billing purposes) on the PD-L1 test request form. The request will not be accepted without these details. A copy of this form is attached below (if this does not open, please contact the laboratory who can provide a copy).



HIFORM00213%20-%20RB&HH%20Requ

3.8 Transplant Biopsies

Nearly all transplant biopsies will be taken on the HH site. Non-urgent samples should be sent to the laboratory in formalin as soon as possible. If they arrive before 5pm at RBH, they will be processed overnight and reported the next working day. When appropriate, CD68 and/or C4d staining will follow in 24-48 hours.

Friday transplant biopsies: These must be transported to the laboratory as urgent specimens. A specific procedure has been established whereby the theatre porter collects any urgent biopsies from theatres at 10:30am.

If a case requires reporting or processing out of hours, the clinician must contact the pathologist on-call.

3.9 Referral Cases

Patient material sent for MDM review or second opinion are received into the department and allocated to a reporting consultant according to the speciality. When sending the material to the department use a traceable delivery system. It is also advisable to notify the office (HistopathologyTests@rbht.nhs.uk) that material is being sent to the department. The blocks and slides should be securely packaged, to prevent loss/damage occurring. Refer to packaging instruction P650 for advice. The temperature of the material sent should be maintained at ambient temperature (15-25°C).

The laboratory must be informed upon delivery if any samples have been compromised (for example subjected to temperatures outside the stated range or in an event the safety of the carrier or the general public has been jeopardised).

These cases should be addressed to:

Department of Histopathology
Royal Brompton Hospital
Sydney Street
Chelsea
London
SW3 6NP

Important: Specimen decalcification in acid solution are not recommended or validated for molecular testing and may generate invalid results. Please only provide specimen decalcified in EDTA solution.

3.10 Histology Turnaround Times

| Sample / Test Type | Turnaround Times | Comment |
|---|---|--|
| Frozen sections | Up to one hour | Fresh tissue is usually prepared, sectioned and stained within 20 minutes. A report will be issued immediately. Clinical staff are encouraged to be present in the laboratory where possible. |
| Urgent specimens (cancer pathway) | Up to 7 days (biopsies), 10 days (excisions) (as per RCPPath Key Performance Indicators 2013) | State urgent on the request / form. When an urgent biopsy is received during early to mid-morning the specimen may be prepared and reported on the same day. <i>Discuss with the speciality consultant before sending.</i> Specimens arriving in the afternoon or of other size will require a longer processing time and will be prepared for reporting the following morning by 11am. Indicate clearly who is to be contacted for a phoned report. Where further complex testing is required, a provisional opinion will be given. |
| Non urgent biopsies and large excision specimens | Up to 10 working days | Depending on size and degree of fixation, and if further testing is required, a result is normally issued within ten working days |
| Referral cases | Up to 15 working days | This is dependent on the level of testing required, but a result is normally issued within 15 working days |
| FISH & Molecular | Up to 14 working days | |

Samples which require decalcification or additional tests (such as special stains and Immunohistochemistry) will take longer to report, for example specimens requiring decalcification (e.g. chest wall resections) may take up to 3 weeks.

3.11 Retention of formalin fixed specimens

Formalin fixed specimens are only retained in the laboratory for four weeks following verification of the report, unless otherwise requested by the clinician at the time of the original request for Histopathology, or by the reporting Consultant Pathologist. In both cases, a reason must be specified for retention of the tissue beyond the four weeks post-authorisation of report.

3.12 Notes

Upon authorisation, histology reports are available on Epic in Patient Chart. In cases where requesters do not have access to Epic, electronic copies of reports are emailed to secure nhs.net email addresses only upon request.

The department is closed at the weekend and consequently results on specimens received on Friday will only be available by Monday or Tuesday at the earliest.

3.13 Specimen deliveries to the laboratory

At the Harefield site, samples are collected from wards and theatres at scheduled times listed in Appendix 2. During normal working hours, all specimens must be delivered to Specimen Reception via the rear entrance of the Laboratory Medicine building. Out of hours, all specimens are placed in the Central Specimen Reception fridge.

On the Brompton site, during normal working hours, all specimens should be delivered to the Histopathology Specimen reception area in Laboratory Medicine, Sydney Wing. Out of hours, all Cytology specimens should be placed in the refrigerator in the Histology corridor and Histology specimens in formalin should be placed in the Histology cupboard, under the fridge in the Histology corridor.

The laboratory must be informed upon delivery if any samples have been compromised (for e.g. subjected to temperatures outside the stated range) or in an event where safety of the carrier or the general public has been jeopardised. The laboratory will action the issue by contact the sender to resolve or eliminate recurrence.

4. CYTOLOGY INFORMATION

The laboratory provides a non-gynae cytology service. The samples accepted are listed below:

- Sputum
- Pleural
- Pericardial fluids
- Bronchioloalveolar lavage (BAL)
- Bronchial washings and brushings
- Fine needle aspirates, including transbronchial (EBUS-TBNA)
- Synovial fluids
- Urine
- Faecal fat microscopy

4.1 Range of Investigations

Eosinophil counts, malignant cell identification, BAL cell differential counts, immunohistochemistry via preparation of cell blocks when appropriate, special histology stains for fungi when appropriate, fat-laden macrophages.

N.B.

- The Cytology department provides white cell differential cell counts on BAL specimens ONLY.
- We do not routinely undertake ZN staining for mycobacteria (TB) or Pneumocystis or other infective agents apart from visualising fungi. These tests are undertaken by the microbiology department and separate samples should be sent to that department with an accompanying microbiology form.

4.2 Sputum specimens

Specimens should be taken in the early morning before contamination with food or toothpaste has occurred. The patient should be instructed to avoid spitting saliva or hawking nasal secretions into the container. The products of a deep cough are the only useful specimens. If you require both cytology and microbiology please send sputum in **2** specimen pots with two separate request forms.

4.3 Pleural/Serous fluids

When pleural/serous fluids are drawn off they **MUST** be placed directly into the polypropylene Falcon tubes (blue lid). Failure to do so will allow the formation of a fibrin clot which may compromise and delay diagnosis.

4.4 Fine Needle Aspirates, including TBNAs

RBH site: The FNA syringe should be washed out into normal saline (~5-10ml) and sent immediately to the laboratory.

HH site: In order to ensure appropriate fixation prior to transportation, samples should additionally be mixed with fixative (Cytotrich Red) prior to submission to the laboratory. Details on ordering can be found on the Trust Eproc ordering system.

We will concentrate cells and make the necessary cell blocks for reporting and molecular tests when appropriate. **There is no need to make any direct smears as these waste samples.**

4.5 Bronchial lavage for differential counts

Specimens **MUST** be placed directly in a Falcon Polypropylene tube (Blue Top) and clearly labelled "Differential Count", otherwise the sample will be reported as a standard cytology specimen. Please note there is a calculated variation of percentage in BAL counts.

Macrophages - 4-10%
Lymphocytes - 4-10%
Neutrophils - up to 6%
Eosinophils - up to 5%
Mast Cells - up to 3%

This variation is assessed on a 6 monthly basis and the user guide and BAL count reports updated accordingly.

4.6 Bronchial washings and trap specimens and Bronchio alveolar lavage (not for differential count)

Specimens should be put into a universal pot and submitted to the laboratory.

4.7 Bronchial brushings

It is preferred that brushings are transferred to saline and the same process for aspirates is followed (6.4), especially in cases of suspected malignancy as this allows material to be used more flexibly and efficiently for immunohistochemistry and molecular testing.

4.8 Specimen Collection for Cytology

FAILURE TO USE THE APPROPRIATE CONTAINER WILL LEAD TO A DELAYED OR COMPROMISED DIAGNOSIS AND MAY RESULT IN THE SPECIMEN BEING DISCARDED. A RADAR REPORT WILL BE RAISED IF THE INAPPROPRIATE CONTAINER IS USED AND IF THE SPECIMENS ARE NOT RECEIVED IN TIMELY FASHION.

For Cytological examination, the laboratory requires 2 to 10ml of fluid. If 2 to 10ml is not possible, please let the laboratory know on ext: 82103 and send whatever is possible.

| Specimen Type | Collection Bottle |
|---|---|
| Pleural Effusion/Lavage, Pericardial Effusion, Other serous fluids. | Polystyrene or polypropylene tube |
| Bronchioalveolar Lavage-Normal Cytology | Polystyrene or polypropylene tube |
| Bronchioalveolar Lavage- WBC Differential Count | Falcon Polypropylene tube (BLUE top) |
| Trap Specimen | Polystyrene tube |
| Bronchial Brush | Universal container. Cut the end of the brush into saline. |
| Fine Needle Aspirate & TBNAs | Universal container. Wash needle into saline |
| Urine | Polystyrene Universal or Sputum pot. |
| CSF | Falcon Polypropylene tube (BLUE top) |
| Sputum | Polystyrene Sputum pot. |
| IF YOU ARE UNCERTAIN OF THE CORRECT CONTAINER, PLEASE CALL Ext 2101 FOR ADVICE. | |



FALCON TUBES FOR CYTOLOGY

4.9 Cytology Turnaround Times

The department aims to meet the Royal College of Pathologists turnaround time guidelines which are in calendar days from the sample taken date. Bank holidays and particularly busy periods may result in slight delays

| Specimen type | TAT | Exceptions |
|---------------------------------------|----------------------------|--|
| Diagnostic cytology | 90% in 10 days | |
| Urgent cytology | Within 24 hours | |
| Urgent biopsies, including transplant | Within 24 hours | |
| Non-transplant Biopsies | 80% in 7 days | |
| Routine transplant biopsies | 24-48 hours | |
| Whole workload | 90% in 10 days | |
| Whole workload | 100% in 20 days | Harefield PMs, whose TAT relates to Governance day discussions. |
| Frozen section (verbal report) | 10-30 minutes from receipt | (multiple specimens, complex cases or remote digital reporting can increase this TAT). |

4.10 Criteria for Rejection of Samples

Mismatched or inappropriately labelled specimens or requests will not be processed, as this constitutes a clinical risk.

Hospital clinicians will be informed to visit the laboratory and identify the mistakes and make necessary amendments. They are requested to sign the disclaimer form and take responsibility for any amendments.

If the cytology specimen does not conform to the requirements as given below in section 6.8 Specimen Collection for Cytology - a note will be made on the patient records as the diagnosis may be compromised. This will be done in the form of coded comments

Coded comments

| | |
|------|---|
| INSU | Insufficient material for diagnosis |
| XTYP | Incorrect specimen type |
| AIR | Air-drying artefact (poor fixation) - impaired assessment |
| XDIF | Inappropriate specimen container for Diff Counts – Use polypropylene containers |
| INAD | Inadequate smear |
| THIK | Smear too thick- impaired assessment |
| CLOT | Clot forwarded to Histopathology |
| LEAK | Specimen Received Leaking |

5. OTHER SPECIALIST SERVICES

Paediatric skin and muscle biopsies may rarely be requested and these need to be transported to specialist centres for analysis (usually Queen Square), again with specific requirements for freezing and fixation. The Surgical team will arrange transport but must inform the laboratory of required tests and external provider(s) at least 48 hours before sampling. Mandatory forms for submission to the laboratory regarding the above are available in the laboratory (ext 82101). Of note, it is ideal that sampling is not arranged late in the day or on Fridays as specimens are often needed fresh for specific tests and provider laboratories may not be open out of hours.

6. REFERRAL SERVICES

The referral laboratories used by our service are detailed below:

Some samples received within Histopathology (e.g. wet samples, unstained slides) may need to be forwarded to any of the labs listed. If received at any Histology Specimen Reception at any of our sites, they will be booked onto the LIMS system to enable tracking of the sample.

Please use the contact details of the receiving referral lab below if you have enquiries about your specimen/results. **IF SAMPLES ARE SENT DIRECTLY TO OTHER HOSPITALS/LABS**, our laboratories may not have a means of viewing results and in such cases - **results must be sought from the recipient referral lab**.

| Reference lab | Contact for enquiries/results | Tests |
|--|---|--|
| Guys Hospital Cancer Specialist Diagnostic Services Great Maze Pond London SE1 9RT | Michael Neat m.neat@nhs.net Nicola Foot Nicola.foot@synnovis.co.uk | FISH (on a contingency basis) NTRK: ETV6-NTRK3 fusion |
| St Johns Dermatopathology St Thomas' Hospital Westminster Bridge Road London SE1 7EH | Dr Guy Orchard Guy.Orchard@synnovis.co.uk 0207 188 6327 St John's Institute of Dermatology 020 7188 6364 | Immunohistochemistry (various antibodies) |
| Head & Neck Pathology Floor 4, Guy's Tower, Guy's Hospital, Great Maze Pond, London SE1 9RT | Dr Guy Orchard Guy.Orchard@synnovis.co.uk 0207 188 6327 Any queries regarding samples and reports should be directed to the Head & Neck department at synnovis.hnpath@nhs.net | Immunohistochemistry (various antibodies) Oral cases |

| | | |
|---|--|--|
| Institute of Liver Studies King's College Hospital London SE5 9RS | James Croud 02032992237 James.croud@nhs.net | Immunochemistry (Hep Par1). |
| Neuropathology Lab King's College Hospital London SE5 9RS | General enquiries: (0)203 299 1951 For queries about tests please phone 020 3299 1957. To obtain results please phone 020 3299 1955 or 020 3299 1950. | Immunohistochemistry |
| HSL Advanced Diagnostics 60 Whitfield Street London W1T 4EU | Josep Linares AD Tel: +44 (0)20 3912 0280 Fax: +44 (0)20 3912 0288 E-Mail: advancediagnostics@hslpathology.com Website: www.hsl-ad.com | Immunochemistry (various antibodies) FISH |
| Genomic Health Inc 301 Penobscot drive Redwood City CA US | Customer service: 02030318087 | Oncotype DX |
| Cyted UK Ltd 2 Falcon Road Hinchingbrooke Business Park Huntingdon PE29 6FG | Vicky Edwards 07917691556 Vicky.edwards@cyted.ai Website: www.cyted.ai | Specimen Reporting |
| Department of Haematological Medicine Ground Floor Bessemer Wing King's College Hospital Denmark Hill London SE5 9RS United Kingdom | Service Delivery Manager Reference Haematology Department of Haematology and Blood transfusion Kings College Hospital Denmark Hill London SE5 9RS 020 3299 2455 (ext 32455 internal only) Robert Dunn- services manager | ABI AmpFLSTR kit multiplexed PCR reaction. Products analysed using Applied Biosystems 3130xl Genetic Analyser. DNA extraction (PB/BMA) |
| Poundbury Cancer Institute Newborough House 3 Queen Mother Square Poundbury, Dorchester Dorset DT1 3BJ | Dr Corrado D'Arrigo lab@histo.org Tel: 01305 756485 | PD-L1 for Triple Negative Breast Cancer |
| UCL Institute of Ophthalmology Department of Eye Pathology 11-43 Bath Street London EC1V 9EL or via | Email : moorfields.pathioo@nhs.net or via telephone at 0207 608 6948 or 07407 324 945 | 'Eye' and 'eye-related' specimens |
| South East Genomic Lab Hub Cancer Genetics Genetics Laboratories 5 th Floor Tower Wing Guy's Hospital London SE1 9RT | synnovis.seglhsomaticcancer@nhs.net Richard Hall 020 7188 1702 Email: richard.hall@synnovis.co.uk Amy Roe - Cancer Genetics Operations Lead | Solid tumour genomic testing |

7. References

1. European Committee for Standardization. Medical Laboratories – Requirements for quality & competence (ISO 15189:2022)
2. Royal College of Pathologists. G031 The retention and storage of pathological records and specimens, version 6. October 2025

8. Appendix 1: Full Contact Details for all Histology Laboratories in Synnovis

| Location | Address | Contact Details |
|--|---|---|
| Histopathology Hub Laboratory | Histopathology 4 th Floor Synnovis Hub Laboratory Friars Bridge Court, 41-43 Blackfriars Road, London SE1 8NZ | 020 4614 7519 or 020 4614 7522 Renal Hotline: Tel: 020 4614 7513 |
| Histopathology, St Thomas's Hospital | Histopathology 2nd Floor, North Wing St. Thomas' Hospital Westminster Bridge Road London SE1 7EH | 0207 188 7188 extension 54611 |
| Histology, Royal Brompton Hospital | Cellular Pathology Royal Brompton Hospital Sydney Street London SW3 6NP | +44 (0)20 7351 8425 |
| Histopathology, Harefield Hospital | Pathology Block - Histology Harefield Hospital Hill End Road Harefield UB9 6JH | +44 (0)1895 823 737 |
| Histopathology, Kings College Hospital | Cellular Pathology 2nd Floor Bessemer Wing King's College Hospital Denmark Hill SE5 9RS | 020 3299 3045 kch-tr.histopathologyoffice@nhs.net |
| Histopathology, Princess Royal University Hospital | Cellular Pathology Level 2, South Wing Princess Royal University Hospital Orpington Kent BR6 8ND | 01689 864314 kch-tr.histology@nhs.net |

9. Appendix 2: Sample Collection Times at RBH and HH

Specimens are collected from the wards by the porter at the following times:

Harefield Hospital

Monday to Friday:

| | |
|----------|---|
| 06:00hrs | (ITU and Recovery) |
| 09:00hrs | (Phlebotomy room, ANZAC Centre, except Tuesday & Friday) |
| 09:30hrs | All wards and departments |
| 10:30hrs | All wards and departments |
| 11:30hrs | All wards and departments |
| 13:30hrs | All wards and departments |
| 15:30hrs | All wards and departments |
| 17:00hrs | All wards and departments |

Royal Brompton Hospital

Sydney Wing

09.00hrs***10.00hrs*****11.00hrs*****12.00hrs*****13.00hrs***

14.00hrs

15.00hrs

16.00hrs

17.00hrs

18.00hrs

Fulham Wing

08.30hrs***09.30hrs*****10.30hrs*****11.30hrs*****12.30hrs***

13.30hrs

14.30hrs

15.30hrs

16.30hrs

17.30hrs

All collections are completed on normal working days.

*Sample collections in **bold** are completed on weekends and bank holidays.