



Cytology User Manual

Introduction

This handbook is intended to serve as a user guide to the services available from the Cytology Laboratory based at Stephenson Way, London. It is aimed for use by all staff groups involved with requesting Cytological investigations.

About Us

Unilabs Cytology Laboratory is an UKAS accredited medical laboratory (No. 9344); accredited to ISO15189:2012 for the scope described in the UKAS Schedule of Accreditation which can be found on the UKAS website: <https://www.ukas.com/browse-ukas-accredited-organisations/>

Users of the Cytopathology service should refer to the UKAS schedule of accreditation for a list of currently accredited tests. (No 9344)

We provide a wide spectrum of tests for both gynae cervical cytology and non-gynae with rapid turnaround times.

Gynae tests include: ThinPrep PAP smear and High-Risk HPV panel with 16 & 18 genotyping (Cobas), High Risk HPV with reflex PAP smear, ThinPrep PAP smear, Full HPV Subtyping (Including High and Low risk HPV subtypes), Chlamydia and Gonorrhoea PCR and Sexual Health Screen PCR.

Non-Gynae examination samples include fresh body fluids, FNAs, imprints, urines, respiratory specimens, CSFs, and synovial fluids.

Contact Details

Address: UNILABS
Cytology Department
24-32 Stephenson Way
London
NW1 2HD

Telephone enquiries: +44 (0)020 7299 4490

E-mail enquiries: UKdiagnostics_1@unilabs.com

Opening hours: from 09:00 – 17.30, Monday to Friday (except bank holidays).

Clinical advice and interpretation

Contact Dr Mark Wilsher, Medical Director of Cytology.
Mobile phone: +44 (0) 791736390
e-mail mark.wilsher@unilabs.com

Staff contact details

Medical Director of Cytology

Dr Mark Wilsher *MBChB (Distinction) Otago, FRCPath, FRCPA*
e-mail: mark.wilsher@unilabs.com

Pathology Operations Director

Krista De-Four *MSc, MS, CMI*
e-mail: krista.de-four@unilabs.com

Cytology Lead BMS

Shohret Cagacar *FIBMS, MSc*
e-mail: shohret.cagacar@unilabs.com

Quality Manager

Jayne Holloway *MIBMS, BSc*
e-mail: Jayne.holloway@unilabs.com

Protection of patient information

All patient information is handled under the terms of the Data Protection Act 2018.
All staff complete Unilabs mandatory GDPR training online and comply with the departmental quality manual.

Quality Assurance

The laboratory operates daily internal quality control procedures and participates in recognised national external quality assurance schemes covering; sample processing/staining (PHE TEQA), cytology screening/reporting (PHE GEQA), HPV testing (NEQAS microbiology/parasitology) UKNEQAS CPT (for non-gynae and Cell Blocks) and Digital diagnostic Cytopathology reporting. The laboratory also take part in the London synovial fluid interlaboratory reporting scheme.

Complaints

Complaints may be made directly to the department, or via customer services: UKdiagnostics_1@unilabs.com

GYNAE CYTOLOGY

The cervical screening section of the laboratory provides a service to private hospitals and clinics using Hologic ThinPrep and Roche COBAS platforms. Our laboratory provides a wide range of tests suited for private clinic needs.

Gynae tests include:

- ThinPrep PAP smear and High-Risk HPV panel with 16 & 18 genotyping (Cobas)
- High Risk HPV with reflex PAP smear
- ThinPrep PAP smear
- Chlamydia and Gonorrhoea PCR tests (Cobas)
- Full HPV Subtyping (Including High and Low Risk HPV subtypes)
- Sexual Health Screen (Chlamydia Trachomatous. Gonorrhoeae, Mycoplasma Genitalium, Ureaplasma, Trichomonas Vaginalis, Gardnerella Vaginalis and Herpes Simplex Type I / II DNA PCR tests)
- HPV mRNA

Any or all of the above tests can be performed on the same specimen vial. Full HPV Subtyping, Sexual Health Screen and HPV mRNA tests are performed at a referral laboratory.

Sample Types

Only Hologic ThinPrep samples will be accepted for the above tests.

Vaginal and vault smears as well as cervical smears are processed.

Unilabs request form can be downloaded from our website, but we also accept clinics/ hospitals own request forms.

Please ensure all request forms have at least three patient identifiers on both specimen and the referring form. Clinical details and any relevant patient history should be given. Sending clinician's name and the location should always be provided. The specimen collection date should be specified. If the insurers are to be billed all details should be written on the request form.

Sample rejection criteria

The vial is unlabelled.

The request form does not contain all the essential information.

The ThinPrep vial has passed its expiry date.

The vial is received more than 30 days after collection date.

The sample has leaked in transit resulting in a significant loss of fluid.

The sample is received in formalin.

Advice for smear takers

Gynae samples should only be taken by trained staff.

Samples must be collected using a Cervex-broom. Samples are only viable for 30 days from the date taken therefore should be sent to the laboratory soon after collection.

In follow up for an abnormality in endocervical cells endocervical brush as well as Cervex-broom may be necessary depending on nature of cervix.

Use of lubricants should be avoided. If necessary, only a tiny amount of K-Y jelly can be used on the body of the speculum.

Cervix should be seen and noted. If the sample taker has stated that the cervix is not visualised at the time of sample collection, if no abnormality is detected, an inadequate may be given.

Cervex-broom should be rotated 360° at least 5 times.

Smears should be taken mid-cycle whenever possible.

Follow up smears should be taken at least 3 months after the initial smear.

Samples should be kept at room temperature until transported to the laboratory.

Links below can be used by smear takers for further information:

<https://www.gov.uk/government/publications/cervical-screening-primary-hpv-screening-implementation>

NHSCSP Sample acceptance policy <https://www.gov.uk/government/publications/cervical-screening-accepting-samples-in-laboratories/guidance-for-acceptance-of-cervical-screening-samples-in-laboratories-and-pathways-roles-and-responsibilities>

Results

Gynae results are available on the Unilabs Portal once authorised.

NON-GYNAE CYTOLOGY

Please note all fresh cytology specimens should be sent to the laboratory promptly. For slight delays keep refrigerated and **for overnight transportation add equal volume of cytology fixative such as Preservcyt** to preserve the cells.

Type of samples

- Serous fluids, cyst fluids and peritoneal washings
- Urine, ureteric washings, urethral washings,
- Brushings (bronchial, gastric, oesophageal, duodenal, biliary)
- Fine Needle Aspiration / imprints
- Synovial fluids for microscopy and crystals
- Cerebrospinal fluid (CSF)
- Broncho alveolar lavage (BAL)
- Bronchial washing
- Sputum

Turnaround Time

Routine turnaround time for non-gynae reporting is 48 hours. URGENT specimens can be reported within the same day.

Specimen acceptance criteria

All Cytology specimens must be accompanied with a completed request form and include at least three patient identifiers on both specimen and form. Clinical details and any relevant patient history should be given. Sending clinician's name, location and specimen collection date should always be provided.

If special stains or additional tests are requested by the clinician, it should be clearly stated on the request form.

If the insurers are to be billed all details should be written on the request form.

High risk specimens should be clearly marked.

Package and transportation of samples

Cytology samples must be transported to: Unilabs Specimen Reception at:

UNILABS, 24-32 Stephenson Way, London, NW1 2HD

The sample and the request form must be placed in a plastic 'biohazard' Kangaroo bag ensuring that the form and sample are in separate sections of the bag. This will prevent contamination of the request form if the sample container leaks. Parafilm should be used around the lid to lower risk of spillage.

Results

Non-gynae results are available on the Unilabs Portal once authorised.

Specimen types

Serous Fluids and all other drained fluids

Fresh samples should be sent to the laboratory in sterile containers with screw top. The sample should be delivered as soon as possible to minimize cell deterioration. If there is a delay in delivering the sample to the laboratory, the sample should be stored in a fridge. About 20ml is adequate for cytology in almost all cases. Larger volumes should not be sent to the laboratory.

Cerebrospinal fluid

About 5ml of a sample is usually adequate for cytological examination. **The sample should be transported to the laboratory immediately as it degenerates very quickly.**

Brushings

Oesophageal, biliary brushings and any material obtained by brushing can be spread on a slide and fixed promptly or sent to the laboratory in a cytology fixative such as PreservCyt. The brush should be included. **Always use a pencil for labelling slides.**

Respiratory Tract samples

Sputum, bronchoalveolar lavage, bronchial washings, and bronchial brushings.

Sputum sample should be from the first deep cough of the day before food and brushing teeth.

Urinary Tract Samples

Second voided urine sample of the day is considered as the adequate sample. A neat sample of 20ml is sufficient. Early morning urine samples are not suitable for cytological examination.

Fine Needle Aspiration

Any material obtained by aspiration.

Material aspirated is spread along the length of the slides using another slide. Half of the slides prepared are immediately fixed using an alcohol spray fixative to prevent air drying, while the others are rapidly air dried. **Always use a pencil for labelling slides.**

The needle is then rinsed in a pot containing saline. The washings (in a universal sample container) and slides (in a plastic slide mailer) should be sent to the laboratory.

Airdried slides should never be placed near Formalin as its vapour causes artefact resulting in difficulty in interpretation or an inadequate report.

The slides must be placed in a plastic slide mailer while the washings must be collected in a sterile universal pot containing saline or balanced salt solution.

If it is likely that a specimen will need to have Flow Cytometry performed, please inform the laboratory immediately and have the specimen transported ASAP as these specimens must get to the referral laboratory within 24 hours.

Please contact the laboratory with any queries or for additional information.

To download a request form please select from below links:

[Unilabs Cytology Gynae request form](#)

[Unilabs Cytology Non-Gynae request form](#)

Please note: New clients should contact ukdiagnostics_1@unilabs.com to register with us before sending specimens