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**Electronic copies are available to all staff on Q-Pulse and on Eurofins Biomnis website.**

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## INTRODUCTION

This document details the histology and cytology specimen groups processed at Eurofins Pathology, specimen requirements, turnaround times, specimen stability, and hazards.

Eurofins Pathology Address: 34 Three Rock Road, Sandyford Business Estate, D18A4C0.

Eurofins Pathology Operating Hours: Monday to Friday 0900 – 1730.

Eurofins Pathology Contact Details: **P:** 012958545 **F:** 012955399 **E:** [labsecretary@mcpathology.ie](mailto:labsecretary@mcpathology.ie)

Please note that this document is correct and up-to-date at the time of publishing. Eurofins Pathology is continuously updating its test repertoire, and some tests may be available even though they are not listed in this document or at the above link. If you cannot find details of a test you require, please contact the laboratory on [lab@mcpathology.ie](mailto:lab@mcpathology.ie)

While every effort is made to ensure that the turnaround times stated in this primary sample manual are adhered to at all times, they do remain a guideline as some samples may require longer fixation or extra testing.

To arrange a collection, please contact our Logistics Department on free phone 1800 252 967, or e-mail [logistics@eurofins-biomnis.ie](mailto:logistics@eurofins-biomnis.ie).

## SAMPLE STABILITY

Histology specimens are stable at room temperature once immersed in 10% neutral buffered formalin in an adequately sized container.

Cytology specimens should be refrigerated at 4-6°C, preferably in CytoRich Red Collection Fluid.

Information of sample stability can be found under each specimen group. If there is any doubt, please contact Eurofins Pathology.

## SPECIMEN COLLECTION, HANDLING, STORAGE

The collection of a histology or cytology specimen is performed by qualified medical personnel .

Specimens should be placed in an adequately sized specimen container with enough 10% neutral buffered formalin to completely immerse the specimen. This will allow for satisfactory fixation.

Only tissue or fluid should be submitted to the laboratory. The presence of surgical debris or instruments may lead to rejection of the specimen.

Eurofins Pathology does not process fresh tissue specimens.

If a specimen requires an urgent report, please mark it urgent and contact the laboratory in advance.

### **SPECIMEN LABELLING**

All histology and cytology requests should be submitted preferably using the most recent Eurofins Pathology test request form. All test request form fields must be filled out correctly. Hospital generated labels/stickers may be used so long as they:

- contain the same information as asked for in the test request form,
- are legible and easy to interpret, and
- do not cover the sections designated for Eurofins Pathology use.

The request form and the sample container(s) must be labelled correctly with the following patient details:

Sample container

- Full name
  - Where possible a note should be made on the test request form if the patient has legally changed their name since their last visit.
- Date of Birth
- Medical Record Number / Hospital Number (where applicable)
- Specimen type / Site

The request form must contain the following details:

- Full name
  - Where possible a note should be made on the test request form if the patient has legally changed their name since their last visit.
- Date of Birth
- Medical Record Number / Hospital Number (where applicable)
- Gender
- Patients address
- The name of the referring clinician
- Specimen type / Site
- Any relevant information regarding the specimen (e.g. orientation)
- Any relevant patient history

### **REJECTION OF SPECIMENS**

All efforts will be made by Eurofins Pathology to process a specimen, however there may be situations where the specimen will be rejected by the laboratory.

1. Any request form or specimen container that is not labelled as per the specimen labelling section, will be rejected until remedied by the referring institution.
  - Evidence of this remedy must be in written format and must contain the details and signature of the of the person responsible for the amendment in the referring institution.
2. All specimens must be accompanied with an adequately completed request form, preferably the latest edition of the Eurofins Pathology request form.
3. Prepared FNA slides will be rejected if they are broken on receipt.
4. Cytology samples will be rejected if there is damage to the specimen container.

**SMALL BIOPSIES**

Small biopsies encompass needle tissue cores (prostate, breast, etc) and small surgical tissue pieces measuring less than 5mm.

<b>Precautions:</b>	<ul style="list-style-type: none"> <li>• Samples must be placed in adequate volumes of 10% neutral buffered formalin.</li> <li>• The specimen must be fully immersed in formalin.</li> <li>• An appropriate sized container must be used.</li> </ul>
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<b>Accredited</b>	No
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<b>Method</b>	Routine Histology Processing
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<b>Specimen Requirements</b>	<ul style="list-style-type: none"> <li>• The specimen container(s) must be adequately labelled.</li> <li>• An adequately completed test request form must accompany the specimen.</li> </ul>
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<b>Turnaround Time</b>	7-10 working days
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<b>Stability</b>	Specimen(s) are stable at room temperature once fixed in 10% neutral buffered formalin.
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<b>Hazards</b>	<p>Biological</p> <ul style="list-style-type: none"> <li>• Fixed and Unfixed Human Tissue and Fluid.</li> <li>• Local precautions should be followed.</li> </ul> <p>Chemical</p> <ul style="list-style-type: none"> <li>• Formalin</li> <li>• Local precautions should be followed.</li> </ul>
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<b>Setup schedule</b>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Mon</td> <td>Tue</td> <td>Wed</td> <td>Thu</td> <td>Fri</td> </tr> <tr> <td style="text-align: center;">✓</td> </tr> </table>	Mon	Tue	Wed	Thu	Fri	✓	✓	✓	✓	✓
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**ENDOSCOPIC BIOPSIES**

Endoscopic biopsies are widely used to diagnose and manage gastro- intestinal disease. They may be taken from the upper gastrointestinal tract such as the oesophagus, duodenum or antrum or the lower gastrointestinal tract such as the colon or rectum. The average size of a GI biopsy ranges from 1-5mm

<b>Precautions:</b>	<ul style="list-style-type: none"> <li>• Samples must be placed in adequate volumes of 10% neutral buffered formalin.</li> <li>• The specimen must be fully immersed in formalin.</li> <li>• An appropriate sized container must be used.</li> </ul>
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<b>Accredited</b>	No
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<b>Method</b>	Routine Histology Processing
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<b>Specimen Requirements</b>	<ul style="list-style-type: none"> <li>• The specimen container(s) must be adequately.</li> <li>• An adequately completed test request form must accompany the specimen.</li> </ul>
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<b>Turnaround Time</b>	7-10 working days
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<b>Stability</b>	Specimen(s) are stable at room temperature once fixed in 10% neutral buffered formalin.
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<b>Hazards</b>	<p>Biological</p> <ul style="list-style-type: none"> <li>• Fixed and Unfixed Human Tissue and Fluid.</li> <li>• Local precautions should be followed.</li> </ul> <p>Chemical</p> <ul style="list-style-type: none"> <li>• Formalin</li> <li>• Local precautions should be followed.</li> </ul>
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**RESECTION SPECIMENS INCLUDING BREAST**

Surgical resection specimens are obtained by the therapeutic surgical removal of an entire diseased area or organ. These procedures are often intended as definitive surgical treatment of a disease in which the diagnosis is already known or strongly suspected. However, pathological analysis of these specimens is critically important in confirming the previous diagnosis, staging the extent of malignant disease, establishing whether or not the entire diseased area was removed, identifying the presence of unsuspected concurrent diseases, and providing information for postoperative treatment, such as adjuvant chemotherapy in the case of cancer.

<b>Precautions</b>	<ul style="list-style-type: none"> <li>• Specimens must be placed in an adequate volume of 10% neutral buffered formalin.</li> <li>• The specimen must be fully immersed in formalin.</li> <li>• An appropriate sized container must be used</li> </ul>										
<b>Accredited</b>	No										
<b>Method</b>	Routine Histology Processing										
<b>Sample Requirements</b>	<ul style="list-style-type: none"> <li>• The specimen container(s) must be adequately labelled.</li> <li>• An adequately completed test request form must accompany the specimen.</li> <li>• Details regarding orientation must be described on the test request form.</li> <li>• Details regarding prior treatment (such as chemotherapy, radiotherapy, surgery) must be described on the test request form.</li> </ul>										
<b>Turnaround Time</b>	7-10 working days										
<b>Stability</b>	Specimen(s) are stable at room temperature once fixed in 10% neutral buffered formalin.										
<b>Hazards</b>	<p>Biological</p> <ul style="list-style-type: none"> <li>• Fixed and Unfixed Human Tissue and Fluid.</li> <li>• Local precautions should be followed.</li> </ul> <p>Chemical</p> <ul style="list-style-type: none"> <li>• Formalin</li> <li>• Local precautions should be followed.</li> </ul>										
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**NON-BIOPSY, OTHER**

The “non-biopsy, other” specimen category encompasses a wide range of histopathology samples. Commonly encountered specimen types in this category are: skin (shaves, punches, excisions), curettings, tonsil, gallbladder, appendix, and non-malignant tissue / organ resections.

<b>Precautions</b>	<ul style="list-style-type: none"> <li>• Specimens must be placed in an adequate volume of 10% neutral buffered formalin.</li> <li>• The specimen must be fully immersed in formalin.</li> <li>• An appropriate sized container must be used</li> </ul>
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<b>Accredited</b>	No
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<b>Method</b>	Routine Histology Processing
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<b>Specimen Requirements</b>	<ul style="list-style-type: none"> <li>• The specimen container(s) must be adequately labelled.</li> <li>• An adequately completed test request form must accompany the specimen.</li> <li>• Details regarding orientation must be described on the test request form.</li> </ul>
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<b>Turnaround Time</b>	7-10 working days
------------------------	-------------------

<b>Stability</b>	Specimen(s) are stable at room temperature once fixed in 10% neutral buffered formalin.
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<b>Hazards</b>	<p>Biological</p> <ul style="list-style-type: none"> <li>• Fixed and Unfixed Human Tissue and Fluid.</li> <li>• Local precautions should be followed.</li> </ul> <p>Chemical</p> <ul style="list-style-type: none"> <li>• Formalin</li> <li>• Local precautions should be followed.</li> </ul>
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**DIAGNOSTIC FLUID CYTOLOGY**

A range of fluid types can be collected from the body including urine, cyst fluid, pleural fluid, and ascetic fluid. Cytology specimens can be sent to the laboratory in conjunction with a histopathology specimen or in isolation. Collecting a cytology specimen can be less invasive than sampling for a histopathology specimen, but there are associated limits in the diagnostic value of a cytology specimen.

<b>Precautions</b>	The cytology specimen should be transported to the lab as soon as possible after collection, unless placed in CytoRich Red Collection Fluid.										
<b>Accredited</b>	No										
<b>Method</b>	Routine Cytology Processing										
<b>Specimen Requirements</b>	<ul style="list-style-type: none"> <li>• The specimen container(s) must be adequately labelled.</li> <li>• An adequately completed test request form must accompany the specimen.</li> <li>• Fluid should be freshly collected and placed into: <ul style="list-style-type: none"> <li>○ a container with an equal volume of CytoRich Red Collection Fluid, or</li> <li>○ an empty sterile container and kept refrigerated</li> </ul> </li> <li>• Up to 20mls of the fluid is an adequate volume for testing.</li> </ul>										
<b>Turnaround Time</b>	7-10 working days										
<b>Stability</b>	If transport of the specimen will be delayed for more than 24 hours, the cytofix should be added at collection. The specimen is stable for 48 hours if stored at 4 degrees .										
<b>Hazards</b>	<p>Biological</p> <ul style="list-style-type: none"> <li>• Fixed and Unfixed Human Fluid.</li> <li>• Local precautions should be followed.</li> </ul> <p>Chemical</p> <ul style="list-style-type: none"> <li>• CytoRich Red Collection Fluid</li> <li>• Local precautions should be followed.</li> </ul>										
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<b>FINE NEEDLE ASPIRATION CYTOLOGY</b>
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Fine needle aspiration of mass lesions is commonly utilized in the detection and characterization of a variety of malignant diseases. Obtaining an adequate specimen requires attention to good aspiration technique as well as processing of material obtained. It is highly desirable that several direct smears are prepared (preferably air-dried) for all fine needle aspiration specimens submitted to the laboratory.

<b>Precautions</b>	The specimen should be transported to the lab as soon as possible after collection, unless placed in fixative. Prepared slides must be clearly labelled and indicated whether fixed or air dried.										
<b>Accredited</b>	No										
<b>Method</b>	Routine Cytology Processing										
<b>Sample Requirements</b>	<ul style="list-style-type: none"> <li>The specimen container(s) must be adequately labelled.</li> <li>An adequately completed test request form must accompany the specimen.</li> <li>The aspirated material should be spread onto a glass slides and air dried or fixed (fixative available from the lab)</li> <li>If a needle rinse is available, it should be collected into a container with CytoRich Red Collection Fluid.</li> <li>All slides must be labelled with patient name and date of birth written using pencil on the frosted end of the slide.</li> </ul>										
<b>Turnaround Time</b>	7-10 working days										
<b>Stability</b>	The slides are stable at room temperature once fixed or air dried										
<b>Hazards</b>	<p>Biological</p> <ul style="list-style-type: none"> <li>Fixed and Unfixed Human Fluid.</li> <li>Local precautions should be followed.</li> </ul> <p>Chemical</p> <ul style="list-style-type: none"> <li>CytoRich Red Collection Fluid</li> <li>Local precautions should be followed.</li> </ul>										
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