PLEASE DO NOT USE

Boric acid monovette

Charcoal swab

Formalin

Sample Type	**Volume Required**	**Sample Container**
Urine	30-60ml Unfixed fluid, please <u>do not</u> use Boric acid	
Serous cavity fluid E.g. Pleural, pericardial, ascetic, peritoneal fluid	30-200ml (200ml allows for molecular testing) Unfixed fluid	
Cyst fluid E.g. Breast cyst, thyroid cyst, ovarian cyst	30ml Unfixed fluid	
Bronchial Brushings	2 slides Alcohol fixed and entire brush head cut off into Cytolyt solution	 
Other Brushings E.g. Gastric, oesophageal, bile duct brushings	Entire brush head cut off into Cytolyt solution	

Cerebrospinal fluid	1-10ml (Split for Flow cytometry - see below for intruction)	
Fine Needle Aspirate E.g. Breast, lung, thyroid, lymph node, salivary gland, soft tissue	2 slides Alcohol fixed or air dried depending on suspected lesion	
Smears Eg Nipple smear	2 slides Alcohol fixed or air dried depending on suspected lesion	

Types of slide

When you are making an FNA slide you can send either air dried slides and/or wet fixed slides.

The following table highlights the best method of preparation depending on the lesion suspected:

Suspected Lesion	**Slide Preparation**
Squamous or small cell	Alcohol (wet) fixed
Glandular (adenocarcinoma)	Air-dried and alcohol fixed
Lymphoma	Air-dried

Ideally, both air dried and wet fixed slides are needed

Preparing your slides

You must spread your FNAs on the glass slides; if you don't, they will be uninterpretable. Deposit the material near to the frosted end of the slide. A second slide is placed with one edge below the material and is moved quickly back to spread the material by capillary action.

Don't press the slides together – otherwise can potentially crush the cells and the material maybe non-diagnostic.

Sample Labelling

As per hospital policy the cytology department requires 4 points of patient identifying data; either full name, DoB, address, NHS No or Hospital No on both form and sample. Microscope slide samples are accepted with 3 points of PID but left or right must be specified on both slide and form for any bilateral organ eg Breast FNA slides. Samples from different sites from same organ must be distinguished clearly on request form and slides/sample container (eg RUL, RML, RLL, LUL, LLL)

<u>Please use a pencil as ink is dissolved in our processing procedure</u>

Air dried slides

Please don't send us heavily blood-stained slides if you can help it; aspirate the blood off first.

Please make sure you dry the slides rapidly and thoroughly in air before you pack them. If you pack them before they are fully dry, the specimen may decompose.

Due to recent breakages and loss of diagnostic material please do not use the POD system to transport glass microscope slides.

Wet fixed slides

Please put the fixative on as soon as you have spread the slide. Don't delay

How quickly can you get a diagnosis?

Fast track FNA slides have to be stained and coverslipped. It takes about 60 – 90 minutes from receipt in the laboratory to get them to the pathologist for diagnosis.

Routine specimens should be reported within 7-10 working days but may take longer with reflex testing or associated histology.

A cell block may add an additional 2-5 working days to the turnaround time while an immunocytochemistry panel may add a week

What is a needle washing?

Special stains, eg. immunostains, are not possible on FNA slides. Therefore if you think special stains may be required for diagnosis it is imperative that a needle wash is collected into cytolyt solution.

Once the FNA is completed and slides are prepared please make another pass through the lesion with your needle; then wash the bore of the needle out into cytolyt solution. If guidance is required please do not hesistate to call the lab on 2206 or 2793.

In the laboratory the cells collected in cytolyt are centrifuged to produce a pellet and then processed in a complex way to cell block. This is then cut and stained as a histology specimen. This procedure takes a day or two but means the cells may then be stained with immunocytochemical markers.

NB. If you have only done a needle washing tino cytolyt in ultrasound (ie. With no FNA slides), please tell the surgeon that the specimen is not suitable for immediate assessment. Otherwise, he may keep the patient waiting unnecessarily.

If guidance is required please do not hesistate to call the lab on 2206 or 2793.