

**Document Number: SASoM/METHOD/088.v3****Title: Preparation of clinical sample slides (non-gynae) using Surepath LBC (liquid based cytology) system****Version: v3****Author: In Hwa Um**

Effective from:	15/03/20
Valid to:	14/03/22

SOP History		
Number	Date	Reason for Change
v1	15/03/16	Original
v2	15/03/18	Update
v3	15/03/20	Biennial Update

1.0 Purpose –

This SOP describes the current procedure for preparation of slides from urine clinical samples using Surepath LBC system in Laboratory 248 at the St Andrews School of Medicine (SASoM).

2.0 Scope –

The scope of this document is to describe the procedure for preparation and fixation of slides from urine clinical samples by using non-gynaecological program on Surepath LBC system in laboratory 248.

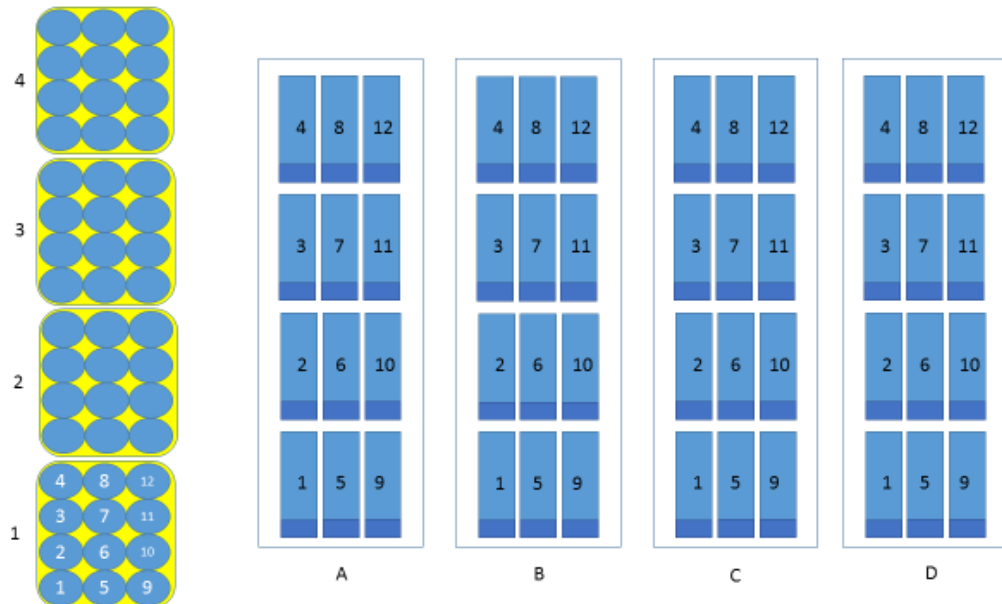
3.0 Responsibilities –

All staff involved in clinical sample slide preparation using Surepath LBC system are responsible for ensuring that the methods are followed in accordance with this SOP. All staff must have read and signed the relevant risk assessment documents before performing this procedure.



4.0 Procedure –

1. Establish the number of slides to be prepared for each clinical sample (from 1 to 3 slides), label the slides with the corresponding sample ID recorded on the sample tubes.
2. Label Surepath centrifuge tubes with sample ID, recorded on the sample tubes.
3. Vortex each sample tubes (@2000rpm for 5sec) and transfer the content of sample tube into the corresponding Surepath centrifuge tube. Close the tube with the appropriate cap. (Note: perform this step one vial at the time)
4. Centrifuge all tubes at 800G for 10min
5. While the centrifuge is on, place slides into correct position on platform. Then load the settling chambers.



6. When centrifugation is completed, decant the supernatant of each tube and break up the cell pellet of each vial by vortexing.
7. Load tubes on Surepath LBC platform and double check if slides and the corresponding tubes are in the correct position.
8. Turn on the Surepath LBC system. Open 'Non-Gynae' software and turn on the vacuum pump.
9. Select 'Sample preparation' on the machine and change the parameters according to the table below. Enter password (10101010). Record the parameters used.

	Resuspension	Sample	Mix	Dilution
Volumes(µl)	250 (1slide) 500 (2slides) 750 (3slides)	200	150 (1slide) 250 (2slides) 400 (3slides)	100
Times (sec)	Sedimentation	Drying	Haematoxylin	EA/OG
	900	60	55	55
Cycles	Mix cycle	Water wash	Alcohol wash	
	8	3	5	

10. Prepare Tris buffer and water nozzle put into tris buffer and alcohol nozzle into the alcohol.



Method Procedure

11. Allow the machine to prime itself and start the cell preparation.
12. At the end of run, remove slide racks from Surepath platform and turn the rack upside down to remove the buffer.
13. Add 200µl of 95% ethanol to each slide and incubate samples for 10min at room temperature.
14. Turn the rack upside down to remove the ethanol and remove the settling chamber and spray cytofix on the slides according to the manufacturer's instruction of the cytofix pump.
15. Allow the slides to dry completely on a flat surface.
16. When slides are dried, transfer them into a slide box and store it in the fridge (2-8°C) for future staining.

The SurePath LBC Non-Gynae Manual is available for Troubleshooting!!

5.0 Personal protection -

A Howie laboratory coat and lab gloves must be worn at all times.

6.0 Spillages -

Always clean up any spills immediately after use, only you know what you have spilt and are aware of its hazard.

8.0 Training -

All staff should undergo training in this technique before performing procedure.

9.0 Related documents -

- 9.1 Risk assessments –COSHH RA07



9.0 Approval and sign off –

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Position: Post Doc

Signature: Date:

Management Approval:

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Position: Research Fellow

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