




Liquid-based Cytology Smear Processor

 LTS-3000A

LTS-3000A

Liquid-based Thin-layer Cytology Slide Processor

- Centrifugation
- Sedimentation
- Slide Preparation & staining
- Automation, Multifunction and Integration



➤ Introduction

The instrument combines density-gradient centrifugation, natural sedimentation and charge capture to complete the automation of specimen process, transfer, sedimentation and staining in an operation.

➤ Features

Intelligent

Specimen process, transfer, sedimentation and staining are done together which realizes multifunction, intelligent microprocessor-controlling and full automation.

Full automatic

The specimen pretreatment (centrifugation, transfer) is upgraded from conventional manual operation to intelligent automation which reduces the labor and avoid mistakes.

Convenient

1-8 specimens can be processed randomly, it makes specimen be processed conveniently and timely, reproducible slides can be prepared from the same specimen.

Multifunctional

The following values can be set on demands: specimen type, specimen quantity, staining method, staining time, centrifugation time and rate. The working modes are adjustable and transferable during operation.

Quick

The centrifugal & staining system can be operated individually which improves the deficiency, batch process time (including pretreatment) is less than 30 minutes.

Pipeline Anti-occlusion

The anti-occlusion & clearance techniques are adopted comprehensively in case of the staining needle occlusion.

Auto Dripping Staining

The auto dripping staining technique is used avoiding the cross contamination like conventional staining.

Charge Capture

With special slide silicified technique charge coat become stable and endurable without need of gluing.

High Detection Ratio

The capture capability of lesion cells and positive detection ratio are improved greatly by the techniques like density-gradient centrifugation, natural sedimentation and

Slide Effect

The diagnostic material are available with clear background and a thin layer of even cells.

➤ Working Principles

Density-gradient Centrifugation

When the specimens are centrifuged in the instrument, the first centrifugation separates the diagnostic material from non-diagnosis debris like cell fragments, impurity and mucus, the second centrifugation enriches diagnostic material.

Natural Sedimentation and Separation

The process & staining system employs cell diluent for natural sedimentation, since the gravity of lesion cells is higher than that of normal cells, the settling rate of the former is faster, it will settle on slide priorly and combines with charges on slide, this features is useful to collect the lesion cells at most extent and improve the positive detection ratio.

Charge Capture

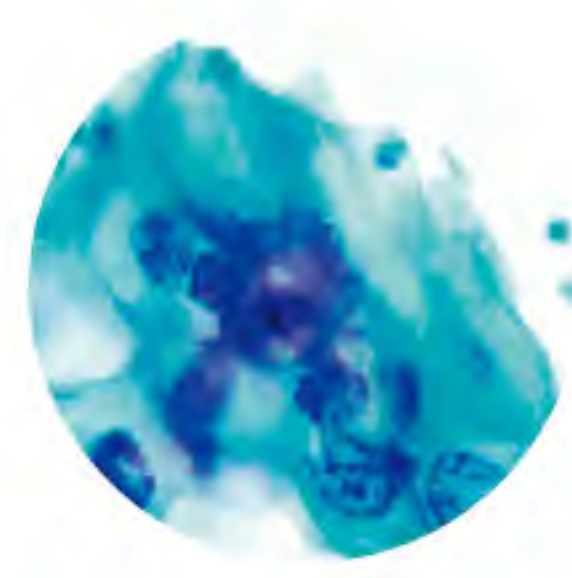
The special polymer materials are used for slide process, which causes the slide surface to carry many positive charges and generate the compact charge coat, the coat can capture cells with negative charges quickly and form the stable bonds, the captured cell quantity can reach to 5,000 - 50,000 per slide .

Automated Staining

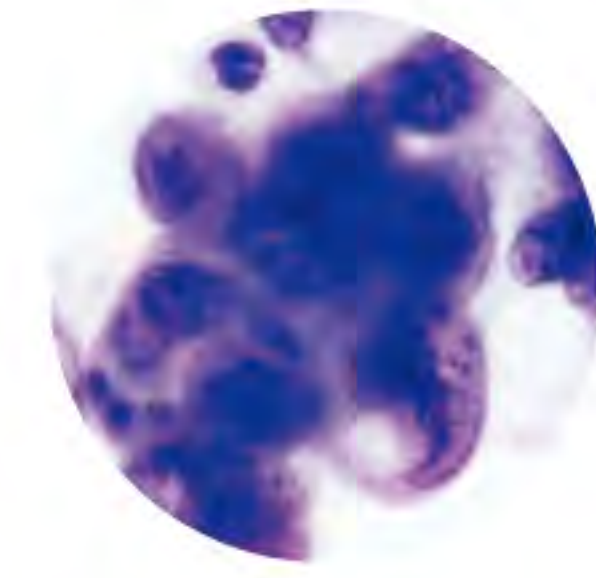
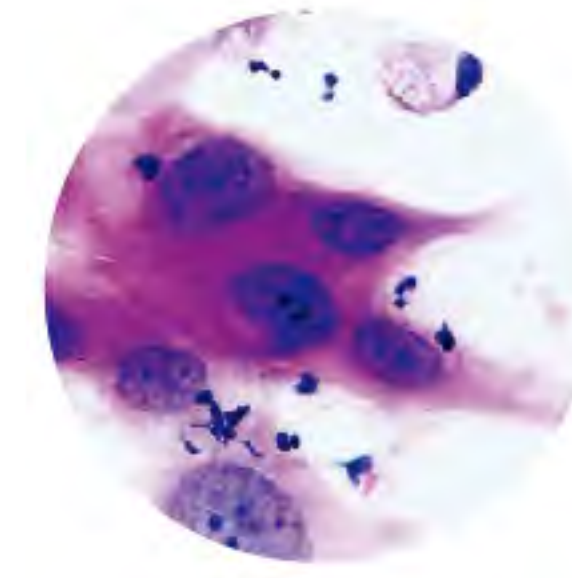
The process & staining system performs full automated dripping staining with mechanical arm, each waste liquid from staining is discharged on time, after each staining is finished the mechanical arm flushes immediately in case of the cross contamination, the Pap and HE staining can be done quickly.

➤ Application

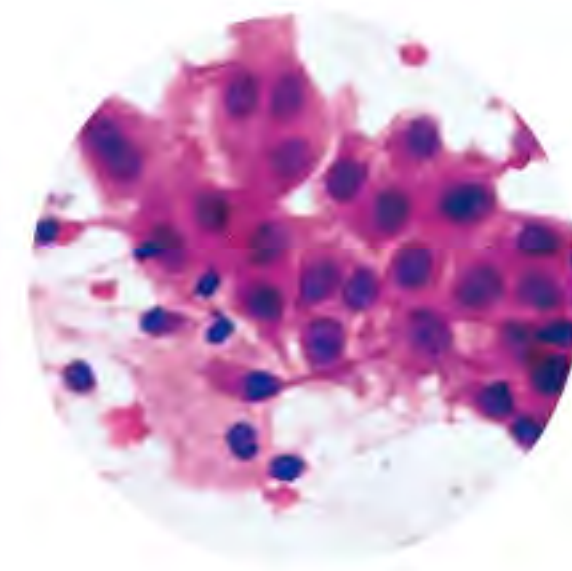
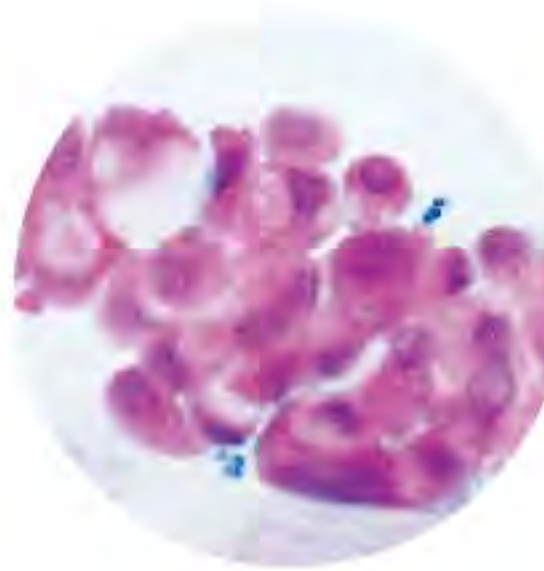
Slide process & staining of cell specimen prior to pathological analysis



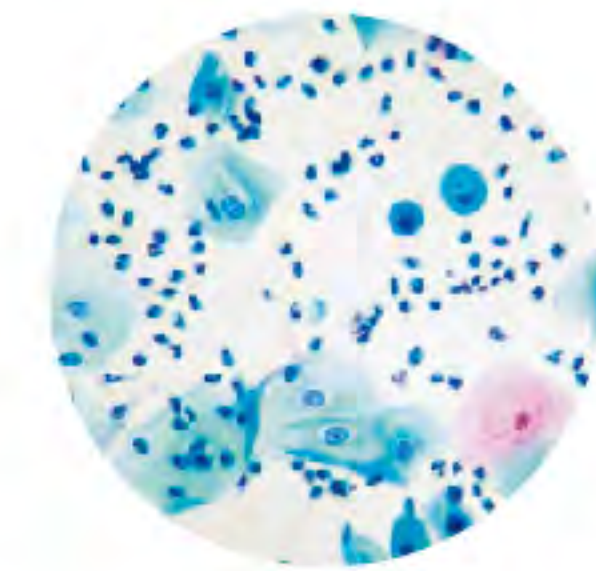
Slide of cervical cells



Slide of pleural effusion



Slide of sputum



Slide of urine, gastric juice, cavity effusion, cerebrospinal fluid

➤ Ancillary Reagent Kit



Cell Preservative Solution

- With cell encapsulation techniques the cells are dispersed evenly and preservable 100 percent up to 4 weeks.



Specimen Collection Brush

- Removable soft brush head is convenient to collect specimens without injuring, the collected cells are no less than 50000.



Natural Settling Chamber & Pipette

- Cells settles in the defined area which is convenient to be observed.
- The pipette are disposable without cross contamination.



Anti fall-off Slide

- Through silicified clean process the slides have the charges to capture the lesion cells.



Density Separation Solution

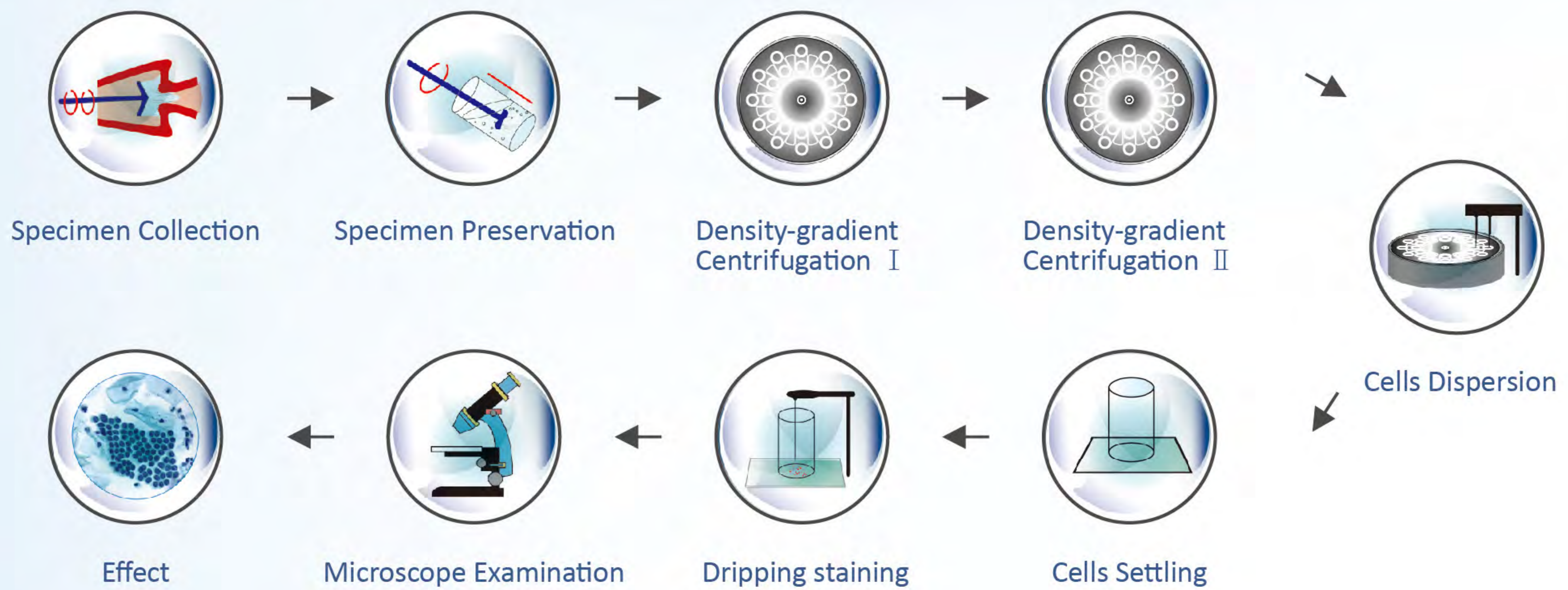
- The density-gradient comes into being during centrifugation which separates the lesion cells from non-diagnostic debris quickly.



Hematoxylin & EA50 staining solution

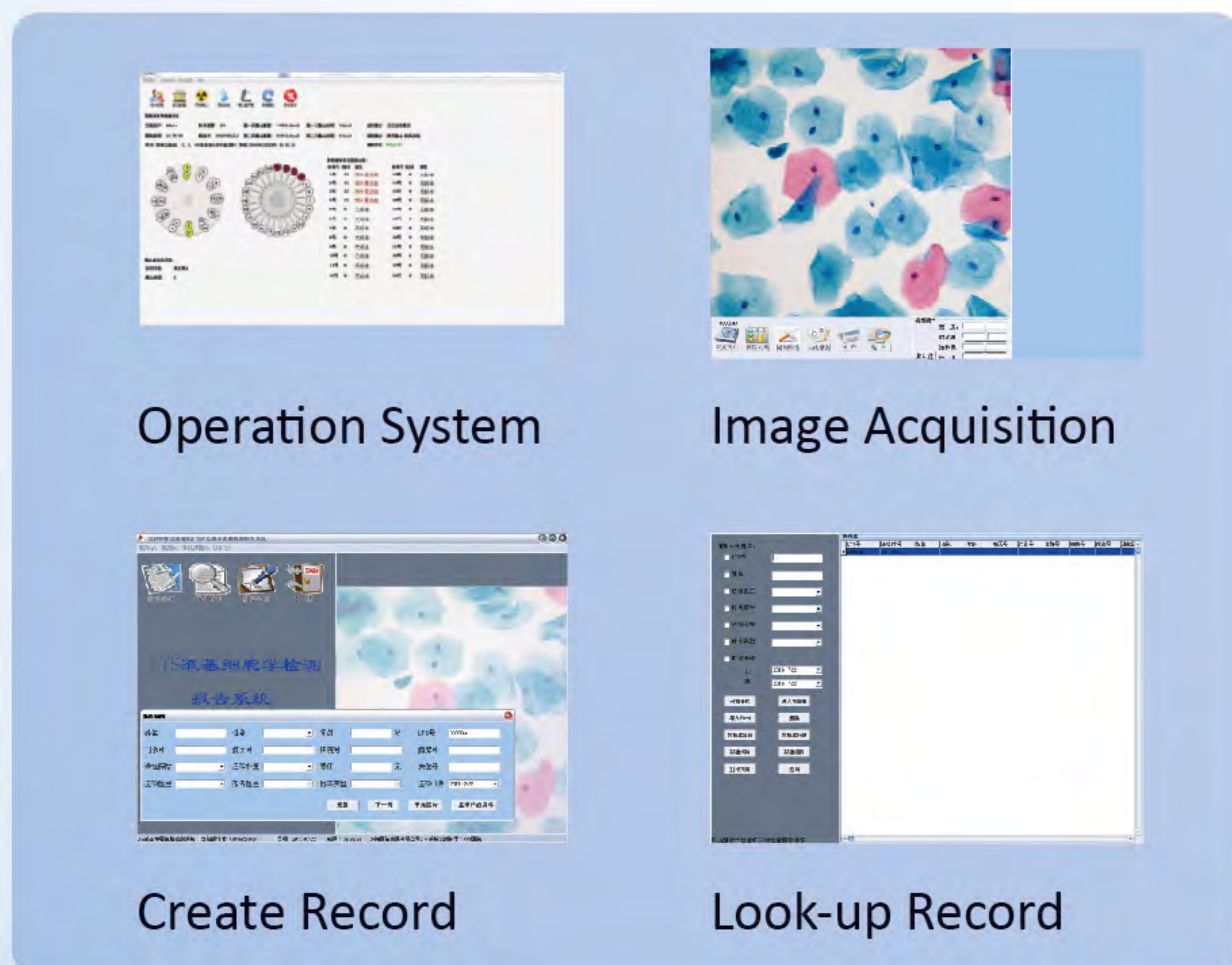
- No-toxic improved staining solution has excellent stability and strong adhesion, odorless, tasteless, non-irritating and fadeless. The deposit and oxidation film seldom occur. It doesn't have limitations on slide itself.
- It has the features like clear display of caryon structure, good color separation, super transparency and vivid cytoplasm coloration. Stained specimens are preservable for long time without fading.

Lituo Image-text System



Lituo Image-text System

- Graphical interface, precise controlling, real-time displaying process.
- Artistic and simple to operate.
- With functions including image collection, process, comparison analysis.
- Powerful record management function.
- Report formats standardized, multi-formats available.



Liquid-based Thin Layer Cytological Test Report			
LTS-3000B		Cell No: Received Date:	
Name:	Age:	Outpatient/ Admission No:	Ward No:
Submission Hospital:		Department:	Submission Doctor:
Specimen Type:		Method of Slide Review:	Degree of Specimen Satisfaction:
Specimen Satisfaction Items:			
(1) Number of Epithelial Cells			
(2) Squamous Cells			
(3) Biochemical Cells			
Inflammation Degree:			
Microorganism:			
(1) Actinomycetes			
(2) Vaginitis of Flora Abnormality			
(3) Infection of Trichomonas			
(4) Infection of Fungi			
(5) Infection of Monilia			
(6) Infection of HPV			
(7) Infection of Herpesvirus			
Analysis of squamous Cells:			
Analysis of Glandular Epithelium:			
Diagnostic Summary:			
Supplementary Suggestions:			
Pathologist:	Re-examination Doctor:	Test Time:	
This report is just for clinical reference and cannot taken as proof material			



Hunan Lituo Biotechnology Co., Ltd.

Add: No. 129, Weiloke Road, Wangcheng Economic Development Zone, Changsha, Hunan, China
Tel: +86 731 82789607 (Sales Center) +86 731 8271 2733 (International Trade Dept)
Fax: +86 731 8278 9603 / Email: info@lituo.com.cn



Zhuhai Lituo Development Co., Ltd.

Add: 2nd Floor, 4th Building, No. 611, Huawei Road, Zhuhai, Guangdong, China
Tel: +86 756 8639 200 / Fax: +86 756 8369 055 / Email: info@lituo.com.cn