

Urine Eosinophils

Principle The presence of eosinophils in the urine may be noted in patients with tubulointerstitial disease associated with hypersensitivity to drugs such as penicillin and its analogues. Eosinophils are also seen in other acute disorders of the genitourinary tract.

The presence of eosinophils in sputum has been vital in the treatment of patients with allergic or other disorders of the bronchial tract.

Eosinophils are difficult to find in the cell sediment or smear if the total number of leukocytes is low.

Safety All specimens, reagents and controls should be handled as though capable of transmitting infectious diseases. Wear appropriate personal protective equipment when running patient samples or performing scheduled maintenance. Refer to: Policy and Procedures Safety Manual Infection Control and Procedures 11-085-01.

Materials and Reagents

Microscope	Hematek Slide Stainer
Sterile Cotton Swab	Hematek Stain Pak
Glass Slides	Transfer Pipet
Cytospin Centrifuge	Cytology Funnel, Caps & Clips

Specimen Fresh voided urine
Freshly collected sputum

Controls Prepare a patient sample that has eosinophils showing orange granules to ensure the quality of the stain is adequate. Document acceptability on log.

Procedure **Urine Smear**
To prepare a urine smear, complete the following:

Step	Action
1	Prepare a cytocentrifuge preparation from unspun urine using the cytospin slide procedure HEM.03-0110. If cytospin centrifuge is not available, spin 10 ml of urine for 10 minutes and make a slide from the sediment.
2	Remove slides from the cytocentrifuge and allow to air dry.
3	Stain slide with Wright Stain on Hematek slide stainer.

**Procedure,
 continued**

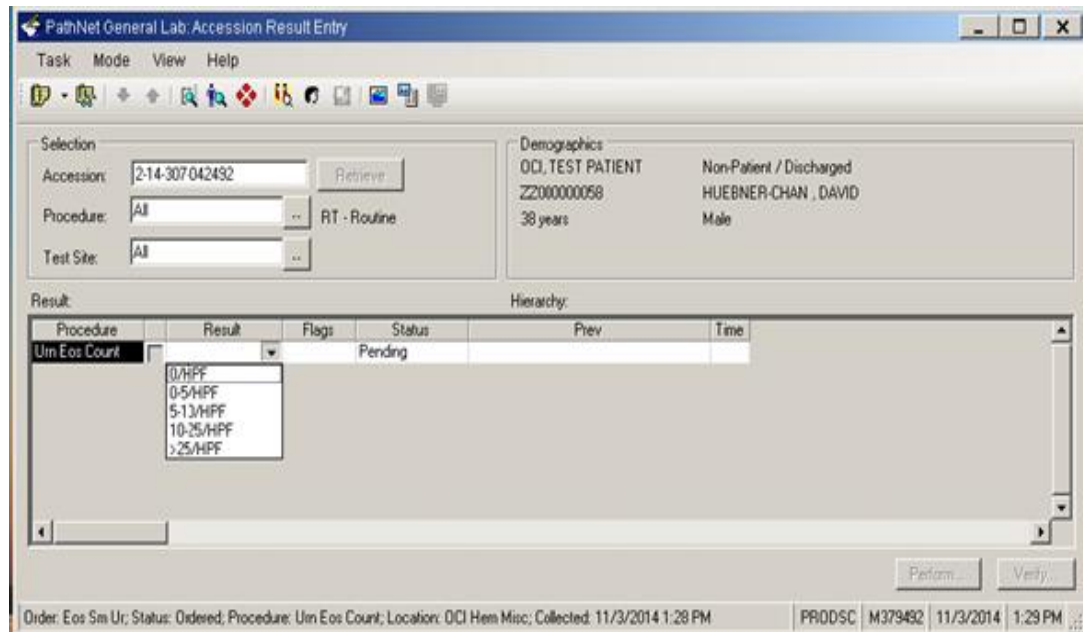
Sputum Smear

To prepare a sputum smear, complete the following:

Step	Action
1	Label a slide with the patient's last name, first initial, date and source.
2	Using a sterile cotton swab, make a round quarter size smear of the sputum on the labeled slide.
3	Allow to air dry.
4	Stain slide with Wright Stain on Hematek slide stainer.

To **READ** the stained urine/sputum smear, do the following:

Step	Action
1	View the slide under oil immersion lens (100X).
2	Count the number of eosinophils seen/100 White cells seen.
3	Report any Eosinophils cells seen as follows: A. 0/HPF B. 0-5/HPF C. 5-10/HPF D. 10-25/HPF E. >25/HPF See attached picture NOTE: Cell and parasite identification can be difficult. If you have any doubt of the correct identification, you may consult your co-worker, supervisor, or pathologist for assistance.



**Result
Reporting**

Results are manually entered in Cerner under the Accession Result Entry (ARE) mode.

For detailed instructions of entering results, please refer to Laboratory Informatics – Cerner Genlab Policies & Procedures Manual, “*Resulting in Cerner GenLab: Manual Entry*” LIS.SCPMG.041 document.

**Reference
Range**

None seen

Reference

John Bernhard Henry, M.D. Clinical Diagnosis & Management by Laboratory Methods, 18th Edition.

Document History Page

Change type: New, Major, Minor etc.	Changes Made to SOP – describe	Name of responsible person/date	Med. Dir. Reviewed/ Date	Lab Manager reviewed/ date	Date change Implemented
Minor	Updated format and revised index number.	Julius Salomon, 7/1/17			