

**Overview****Useful For**

Detecting disease states or syndromes of the white blood cells, red blood cells, or platelet cell lines of a patient's peripheral blood

**Profile Information**

| Test ID | Reporting Name                  | Available Separately | Always Performed |
|---------|---------------------------------|----------------------|------------------|
| DIFFS   | Morphology Eval (Special Smear) | No                   | Yes              |
| SPSM_   | Special Smear                   | No                   | Yes              |

**Reflex Tests**

| Test ID | Reporting Name                  | Available Separately | Always Performed |
|---------|---------------------------------|----------------------|------------------|
| PINTP   | Peripheral Smear Interpretation | No                   | No               |
| CBCN    | CBC without Differential        | Yes                  | No               |

**Testing Algorithm**

A peripheral blood smear review is performed by a Hematopathologist, at an additional charge, if clinically abnormal results are identified by microscopic examination.

If patient has not had a CBC in the last 3 days, one will be performed at an additional charge.

**Method Name**

Manual-Microscopic Examination of Cells

Includes neutrophilic segs/ bands, lymphocytes, monocytes, eosinophils, basophils, erythrocyte morphology, and platelets

**NY State Available**

Yes

**Specimen****Specimen Type**

Whole blood

**Necessary Information**

Clinician should provide indication for performing test.

**Specimen Required**
**Container/Tube:** 2 slides

**Specimen Volume:** 2 unstained, well prepared peripheral blood smears

**Collection Instructions:** Smears made from blood obtained by either a lavender top (EDTA) tube or finger stick specimen

**Specimen Minimum Volume**

Smears: 2

**Reject Due To**

|                 |        |
|-----------------|--------|
| Gross hemolysis | Reject |
| Clotted blood   | Reject |

**Specimen Stability Information**

| Specimen Type | Temperature         | Time | Special Container |
|---------------|---------------------|------|-------------------|
| Whole blood   | Ambient (preferred) |      | CARTRIDGE         |
|               | Refrigerated        |      | CARTRIDGE         |

**Clinical and Interpretive**
**Clinical Information**

Under normal conditions, the morphology and proportion of each blood cell type is fairly consistent in corresponding age groups. The morphology and proportion of each blood cell type may change in various hematologic diseases. Differential leukocyte count and special smear evaluation is helpful in revealing the changes in morphology or proportion of each cell type in the peripheral blood.

**Reference Values**
**1-3 years**

Neutrophils/bands: 22-51%

Lymphocytes: 37-73%

Monocytes: 2-11%

Eosinophils: 1-4%

Basophils: 0-2%

Metamyelocytes: 0%

Myelocytes: 0%

**4-7 years**

Neutrophils/bands: 30-65%

Lymphocytes: 29-65%

Monocytes: 2-11%

Eosinophils: 1-4%

Basophils: 0-2%

Metamyelocytes: 0%

Myelocytes: 0%

**8-13 years**

Neutrophils/bands: 35-70%

Lymphocytes: 23-53%

Monocytes: 2-11%

Eosinophils: 1-4%

Basophils: 0-2%

Metamyelocytes: 0%

Myelocytes: 0%

**Adults**

Neutrophils/bands: 50-75%

Lymphocytes: 18-42%

Monocytes: 2-11%

Eosinophils: 1-3%

Basophils: 0-2%

Metamyelocytes: &lt;1%

Myelocytes: &lt;0.5%

An interpretive report will be provided.

**Interpretation**

The laboratory will provide an interpretive report of percentage of white cells and, if appropriate, evaluation of white

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cells, red cells, and platelets.

**Cautions**

A poorly prepared peripheral smear may result in less than optimal interpretation.

**Clinical Reference**

Practical Diagnosis of Hematologic Disorders: Fifth Edition. Edited by CR Kjeldsberg. Chicago, IL, American Society of Clinical Pathologists, 2010

**Performance****Method Description**

Microscopic examination of a Wright-Giemsa stained smear.(Unpublished Mayo method)

**PDF Report**

No

**Day(s) and Time(s) Test Performed**

Sunday through Saturday; Continuously

**Analytic Time**

1 day

**Maximum Laboratory Time**

1 day

**Specimen Retention Time**

Slides - 1 year

**Performing Laboratory Location**

Rochester

**Fees and Codes****Fees**

- Authorized users can sign in to [Test Prices](#) for detailed fee information.
- Clients without access to Test Prices can contact [Customer Service](#) 24 hours a day, seven days a week.
- Prospective clients should contact their Regional Manager. For assistance, contact [Customer Service](#).

**Test Classification**

This test has been cleared, approved or is exempt by the U.S. Food and Drug Administration and is used per manufacturer's instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

**CPT Code Information**

85007

85060-(if appropriate)

85027-(if appropriate)

88184-(If appropriate)

88185-(If appropriate)

88187-(if appropriate)

88188-(if appropriate)

88189-(if appropriate)

**LOINC® Information**

| Test ID | Test Order Name                 | Order LOINC Value |
|---------|---------------------------------|-------------------|
| SPSM    | Morphology Eval (special smear) | 14869-2           |

| Result ID | Test Result Name                 | Result LOINC Value |
|-----------|----------------------------------|--------------------|
| SEGBA     | Neutrophilic Segs and Bands      | 23761-0            |
| LYMPH     | Lymphocytes                      | 737-7              |
| MONOC     | Monocytes                        | 744-3              |
| EOS       | Eosinophils                      | 714-6              |
| BASO      | Basophils                        | 707-0              |
| META      | Metamyelocytes                   | 740-1              |
| MYEL      | Myelocytes                       | 749-2              |
| PROMY     | Promyelocytes                    | 783-1              |
| UBLS      | Blasts                           | 709-6              |
| PLSM      | Plasma Cells                     | 79426-3            |
| M_KR      | Megakaryocytes                   | 19252-6            |
| NUCL      | Nucleated RBC                    | 19048-8            |
| FRAGC     | Fragile Cells                    | 34992-8            |
| BL_PR     | Blasts and Promonocytes          | 709-6              |
| MO_PR     | Monocytes and Promonocytes       | 744-3              |
| MANC      | Manual Absolute Neutrophil Count | 753-4              |
| INT01     | Interpretation                   | 59466-3            |
| REV96     | Reviewed by:                     | 18771-6            |