



Pathology and Laboratory Medicine

DIFFERENTIAL
LEUKOCYTE
COUNT
(PERIPHERAL
BLOOD)

Orderable - CBCD

Turn Around Time: > 4 hours STAT: 2 hours

Alternate Name(s):

White Blood Cell Differential Lymphocytes Monocytes Neutrophils Bands Eosinophils Basophils

Specimen:



Laboratory: Core Lab



Requisition:GENERAL LABORATORY
REQUISITION

Adult	Pediatric Venous	Pediatric
		(Capillary)
4 mL K ₂ EDTA	2 mL Paeds K ₂	0.5 mL K ₂ EDTA
(Lavender)	EDTA (Lavender)	(Lavender)
Vacutainer tube	Vacutainer	Microtainer
		0.5 mL K₂ EDTA
		(Lavender)
		Microtainer



Method of Analysis:

Automated differential generated by Hematology analyzer, based on characteristic light scattering properties. Confirmed with microscopic examination when required.

Collection Information:

A differential may be added to a CBC (complete blood count) order up to 8 hours from collection of the sample. Red cell morphological assessment will not be completed if the sample is > 4 hours old.

Reference Ranges:

Lymphocytes	
<u>Age</u>	<u>Range</u>
18 years-Adult:	1.0-4.0 x 10 ⁹ /L
10-17 years:	1.5-4.0 x 10 ⁹ /L
2-9 years:	2.0-8.0 x 10 ⁹ /L
1-23 months:	4.0-10.5 x 10 ⁹ /L





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Newborn-30 days: 2.0-17.0 x 10⁹/L

Monocytes	
<u>Age</u>	<u>Range</u>
18 years-Adult:	0.2-0.8 x 10 ⁹ /L
10-17 years:	0.2-0.8 x 10 ⁹ /L
2-9 years:	0.2-0.8 x 10 ⁹ /L
1-23 months:	0.2-1.5 x 10 ⁹ /L
Newborn-30 days:	0.2-3.1 x 10 ⁹ /L

		Neutrophils	
Ħ	Test Schedule:	<u>Age</u>	<u>Range</u>
8	As required	18 years-Adult:	2.0-7.5 x 10 ⁹ /L
			Critical Low: 0.6 x 10 ⁹ /L
		10-17 years:	1.5-8.0 x 10 ⁹ /L
		2-9 years:	1.5-8.5 x 10 ⁹ /L
		1-23 months:	1.5-8.5 x 10 ⁹ /L
		Newborn-30 days:	6.0-26.0 x 10 ⁹ /L

Bands	
<u>Age</u>	<u>Range</u>
18 years-Adult:	0-0.5 x 10 ⁹ /L
10-17 years:	0-1.0 x 10 ⁹ /L
2-9 years:	0-1.0 x 10 ⁹ /L
1-23 months:	0-1.0 x 10 ⁹ /L
Newborn-30 days:	0-3.5 x 10 ⁹ /L

Eosinophils	
<u>Age</u>	<u>Range</u>
18 years-Adult:	0.0-0.4 x 10 ⁹ /L
10-17 years:	0-0.4 x 10 ⁹ /L
2-9 years:	0-0.5 x 10 ⁹ /L
1-23 months:	0-0.7 x 10 ⁹ /L
Newborn-30 days:	0-1.5 x 10 ⁹ /L

Basophils	
<u>Age</u>	<u>Range</u>
18 years-Adult:	0-0.1 x 10 ⁹ /L
10-17 years:	0-0.1 x 10 ⁹ /L
2-9 years:	0-0.1 x 10 ⁹ /L
1-23 months:	0-0.1 x 10 ⁹ /L
Newborn-30 days:	0-0.4 x 10 ⁹ /L







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Critical Value:

The presence of blasts and/or an absolute neutrophil count ≤0.5 x 109/L

Interpretive Comments:

Normal ranges were adopted through consensus by the three London teaching hospitals (VH, UH, SJH). Adult reference ranges have been validated on current instrumentation by testing of normal donors.