

98. BONE MARROW DIFFERENTIAL CELL COUNTS

the number of lymphocytes falls, reaching adult levels in the first few years of life [ref. 4, 5]. The data presented are selective as representative of a large literature. Values in parentheses are ranges, estimate "c" (see Introduction).

Specification (Synonym)	Values from						
	Gairdner, et al.	Gairdner, et al.	Glaser, et al.	Osgood & Seaman	Vaughan & Brockmyre	Custer	Wintrobe, et al.
1 Age of subjects	0-24 h	8-10 d	1-20 yr	Adult	Adult	Adult	Adult ♂
2 Volume of marrow	0.25 ml	0.25 ml	1 ml	0.5-10 ml	3 ml	.....	.....
3 Site of aspiration	Tibia	Tibia	Sternum	Sternum	Sternum	"Aspirations & sections"	.....
Cells, % of total count ^{1/}							
4 Pronormoblasts (Proerythroblasts)	0.5(0-1.0)	0	0.5(0-1.5)	0.2(0-1)	.....	(0.1-3.5)	(0.2-1.3)
5 Normoblasts	.....	.....	.....	.....	9.5(2-18)	.....	.....
6 Early (Basophilic)	3.0(0-6)	(0-0.5)	1.7(0-5)	2(0-4)	.....	(1.7-5.5)	(0.5-2.4)
7 Intermediate (Polychromatophilic)	10(5-19)	1.5(0-5)	18(5-34)	6(4-8)	.....	(5.0-20.0)	(17.9-29.2)
8 Late (Orthochromatic)	26(18-41)	6(0-15)	2.7(0-8)	3(1-5)	.....	(5.0-23.8)	(0.4-4.6)
9 Myeloblasts	1.0(0.5-2.0)	1.0(0-3)	1.2(0-3)	0.4(0-1)	1.3(0-3)	(0-3.5)	(0.2-1.5)
10 Promyelocytes	1.5(0.5-5.0)	2.0(0.5-7)	1.8(0-4)	1.4(0-3)	.....	(0.5-8.0)	(2.1-4.1)
11 Myelocytes	.....	.....	16.5(8-25)	4.2(0-12)	8.9(3-15)	.....	.....
12 Neutrophilic	4(1-9)	4(1-11)	.....	.....	.....	(7.0-35)	(8.2-15.7)
13 Eosinophilic	1.0(0-2.5)	1.0(0-2)	.....	.....	.....	(0.3-3.0)	(0.2-1.3)
14 Basophilic	(0-0.5)	(0-0.5)	.....	.....	.....	(0.0-0.5)	.....
15 Metamyelocytes	14(4.5-28)	19(7-37)	23(14-34)	6.5(3-10)	8.8(4-15)	(20.3-49.0)	(10-26.8)
16 Bands	.....	.....	.....	24(17-33)	23.9(12-34)	.....	(9.7-17.7)
Segmented							
17 Neutrophilic	22(10-40)	20(11-45)	12.9(4.5-29)	15(5-25)	18.5(9-32)	(7.0-25.0)	(6.0-12.0)
18 Eosinophilic	1.5(1.0-3.0)	1.0(0-2)	.....	2(0-4)	1.9(0-6)	(0.1-3.0)	(0.0-1.3)
19 Basophilic	0(0-0.5)	0	.....	0.2(0-0.5)	0.2(0-1)	(0.0-1.0)	(0.0-0.2)
20 Lymphocytes	12(4-22)	37(20-62)	16(5-36)	14(3-25)	16.2(8-26)	(2.5-25)	(11.1-23.2)
21 Monocytes	1.5(0-3.0)	1.7(0-3.0)	.....	2(0-4)	2.4(0-6)	(0.1-3.2)	(0.0-0.8)
22 Megakaryocytes	.....	.....	.....	.....	(1-38)/50 low power fields	(0.05-1.2)	(0.0-0.4)
23 Plasma cells	.....	.....	.....	.....	0.3(0-1.5)	(0.1-1.2)	(0.4-3.9)
24 Reticulum cells	.....	.....	.....	.....	0.3(0-1)	(0.3-2.6)	(0.0-0.9)
25 Disintegrated cells ^{2/}	15(1-43)	20(0-40)	.....	19(10-30)	7.9(2-16)	.....	.....
26 Myeloid:erythroid ratio ^{3/}	1.2:1	6.3:1	(1-5):1	3.6(2-8):1	(3.5-30):1	.....	(1.5-3.3):1
Reference	3	3	4	6	7	1	8

^{1/} Unless otherwise specified. ^{2/} Cells which have been damaged in preparation, and therefore cannot be positively identified. ^{3/} Calculated from the number of myeloid cells

(i.e., granulocytes, not total leukocytes) and the number of erythroid cells.

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References

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