

TABLE 30.7

Ninety-Five Percent Confidence Limits for Various Percentages of Blood Cells of a Given Type as Determined by Differential Counts*

a	n = 100	n = 200	n = 500	n = 1000	n = 10,000
0	0.0-3.6	0.0-1.8	0.0-0.7	0.0-0.4	0.0-0.1
1	0.0-5.4	0.1-3.6	0.3-2.3	0.5-1.8	0.8-1.3
2	0.0-7.0	0.6-5.0	1.0-3.6	1.2-3.1	1.7-2.3
3	0.6-8.5	1.1-6.4	1.7-4.9	2.0-4.3	2.6-3.4
4	1.1-9.9	1.7-7.7	2.5-6.1	2.9-5.4	3.6-4.5
5	1.6-11.3	2.4-9.0	3.3-7.3	3.7-6.5	4.5-5.5
6	2.2-12.6	3.1-10.2	4.1-8.5	4.6-7.7	5.5-6.5
7	2.9-13.9	3.9-11.5	4.9-9.6	5.5-8.8	6.5-7.6
8	3.5-15.2	4.6-12.7	5.8-10.7	6.4-9.9	7.4-8.6
9	4.2-16.4	5.4-13.9	6.6-11.9	7.3-10.9	8.4-9.6
10	4.9-17.6	6.2-15.0	7.5-13.0	8.2-12.0	9.4-10.7
15	8.6-23.5	10.4-20.7	12.0-18.4	12.8-17.4	14.3-15.8
20	12.7-29.2	14.7-26.2	16.6-23.8	17.6-22.6	19.2-20.8
25	16.9-34.7	19.2-31.6	21.3-29.0	22.3-27.8	24.1-25.9
30	21.2-40.0	23.7-36.9	26.0-34.2	27.2-32.9	29.1-31.0
35	25.7-45.2	28.4-42.0	30.8-39.4	32.0-38.0	34.0-36.0
40	30.3-50.3	33.2-47.1	35.7-44.4	36.9-43.1	39.0-41.0
45	35.0-55.3	38.0-52.2	40.6-49.5	41.9-48.1	44.0-46.0
50	39.8-60.2	42.9-57.1	45.5-54.5	46.9-53.1	49.0-51.0
55	44.7-65.0	47.8-62.0	50.5-59.4	51.9-58.1	54.0-56.0
60	49.7-69.7	52.9-66.8	55.6-64.3	56.9-63.1	59.0-61.0
65	54.8-74.3	58.0-71.6	60.6-69.2	62.0-68.0	64.0-66.0
70	60.0-78.8	63.1-76.3	65.8-74.0	67.1-72.8	69.0-70.9
75	65.3-83.1	68.4-80.8	71.0-78.7	72.2-77.7	74.1-75.9
80	70.8-87.3	73.8-85.3	76.2-83.4	77.4-82.4	79.2-80.8
85	76.5-91.4	79.3-89.6	81.6-88.0	82.6-87.2	84.2-85.7
90	82.4-95.1	85.0-93.8	87.0-92.5	88.0-91.8	89.3-90.6
91	83.6-95.8	86.1-94.6	88.1-93.4	89.1-92.7	90.4-91.6
92	84.8-96.5	87.3-95.4	89.3-94.2	90.1-93.6	91.4-92.6
93	86.1-97.1	88.5-96.1	90.4-95.1	91.2-94.5	92.4-93.5
94	87.4-97.8	89.8-96.9	91.5-95.9	92.3-95.4	93.5-94.5
95	88.7-98.4	91.0-97.6	92.7-96.7	93.5-96.3	94.5-95.5
96	90.1-98.9	92.3-98.3	93.9-97.5	94.6-97.1	95.5-96.4
97	91.5-99.4	93.6-98.9	95.1-98.3	95.7-98.0	96.6-97.4
98	93.0-99.9	95.0-99.4	96.4-99.0	96.9-98.8	97.7-98.3
99	94.6-99.9	96.4-99.9	97.7-99.7	98.2-99.5	98.7-99.2
100	96.4-100.0	98.2-100.0	99.3-100.0	99.6-100.0	99.9-100.0

Courtesy of Runkle CJ: The imprecision of the ratio of two percentages observed in differential white blood cell counts: a warning. *Blood Cells* 11:137-140, 1985.

*n is the number of cells counted, a, the observed percentage of cells of the given type. The limits for n = 100, 200, 500, and 1000 are exact; for n = 10,000, they have been determined with Freeman and Tukey's approximation, as described in the Greig tables.