

TABLE 5

Critical values of T_L and T_U for the Wilcoxon rank sum test: independent samples. Test statistic is rank sum associated with smaller sample (if equal sample sizes, either rank sum can be used).

a. $\alpha = .025$ one-tailed; $\alpha = .05$ two-tailed

n_2	n_1		3		4		5		6		7		8		9		10	
	T_L	T_U	T_L	T_U	T_L	T_U	T_L	T_U	T_L	T_U	T_L	T_U	T_L	T_U	T_L	T_U	T_L	T_U
3	5	16	6	18	6	21	7	23	7	26	8	28	8	31	9	33		
4	6	18	11	25	12	28	12	32	13	35	14	38	15	41	16	44		
5	6	21	12	28	18	37	19	41	20	45	21	49	22	53	24	56		
6	7	23	12	32	19	41	26	52	28	56	29	61	31	65	32	70		
7	7	26	13	35	20	45	28	56	37	68	39	73	41	78	43	83		
8	8	28	14	38	21	49	29	61	39	73	49	87	51	93	54	98		
9	8	31	15	41	22	53	31	65	41	78	51	93	63	108	66	114		
10	9	33	16	44	24	56	32	70	43	83	54	98	66	114	79	131		

b. $\alpha = .05$ one-tailed; $\alpha = .10$ two-tailed

n_2	n_1		3		4		5		6		7		8		9		10	
	T_L	T_U	T_L	T_U	T_L	T_U	T_L	T_U	T_L	T_U	T_L	T_U	T_L	T_U	T_L	T_U	T_L	T_U
3	6	15	7	17	7	20	8	22	9	24	9	27	10	29	11	31		
4	7	17	12	24	13	27	14	30	15	33	16	36	17	39	18	42		
5	7	20	13	27	19	36	20	40	22	43	24	46	25	50	26	54		
6	8	22	14	30	20	40	28	50	30	54	32	58	33	63	35	67		
7	9	24	15	33	22	43	30	54	39	66	41	71	43	76	46	80		
8	9	27	16	36	24	46	32	58	41	71	52	84	54	90	57	95		
9	10	29	17	39	25	50	33	63	43	76	54	90	66	105	69	111		
10	11	31	18	42	26	54	35	67	46	80	57	95	69	111	83	127		

Source: From F. Wilcoxon and R. A. Wilcox, *Some Rapid Approximate Statistical Procedures* (Pearl River, N.Y. Lederle Laboratories, 1964), pp. 20-23. Reproduced with the permission of American Cyanamid Company.