

## A.12 Lower Tail Probabilities for the Wilcoxon Signed Rank Statistic

Tabled are the quantities  $p_- = P(W \leq w^*)$ , computed under the assumption that  $H_0$  is true. The upper tail probabilities  $p^+ = P(W \geq w^*)$  can be obtained from these by using the relation

$$P(W \geq w^*) = P(W \leq n(n+1)/2 - w^*).$$

$n$	$w^*$	$p_-$	$n$	$w^*$	$p_-$
3	0	0.125	13	0.011	
4	1	0.125	12	0.009	
	0	0.062	10	0.005	
5	2	0.094	14	32	0.108
	1	0.062	31	0.097	
	0	0.031	26	0.052	
6	4	0.109	21	0.025	
	2	0.047	16	0.010	
	1	0.031	13	0.005	
	0	0.016	15	37	0.104
7	6	0.109	36	0.094	
	4	0.055	31	0.053	
	2	0.023	30	0.047	
	0	0.008	25	0.024	
8	8	0.098	20	0.011	
	6	0.055	19	0.009	
	4	0.027	16	0.005	
	2	0.012	16	43	0.106
	1	0.008	42	0.096	
	0	0.004	36	0.052	
9	11	0.102	30	0.025	
	8	0.049	24	0.011	
	6	0.027	23	0.009	
	3	0.010	20	0.005	
	1	0.004	17	49	0.103
10	14	0.097	48	0.095	
	11	0.053	41	0.049	
	8	0.024	35	0.025	
	5	0.010	28	0.010	
	3	0.005	24	0.005	
11	18	0.103	18	55	0.098
	14	0.051	47	0.049	
	11	0.027	40	0.024	
	7	0.009	33	0.010	
	5	0.005	28	0.005	
12	22	0.102	19	62	0.098
	18	0.055	54	0.052	
	17	0.046	53	0.048	
	14	0.026	46	0.025	
	10	0.010	38	0.010	
	7	0.005	33	0.005	
13	27	0.108	20	70	0.101
	26	0.095	60	0.049	
	22	0.055	52	0.024	
	21	0.047	43	0.010	
	17	0.024	38	0.005	