Table 1: Fisher's exact test for 2×2 tables.

Consider a 2 by 2 table: $\begin{matrix} a & A-a & \mid A \\ b & B-b & \mid B \end{matrix}$ with rows and/or columns exchanged so that (1) $A \geq B$ and (2) $(a/A) \geq (b/B)$. The table entries are ordered lexicographically by A (ascending). B (descending) and a (descending). For each triple (A, B, a) the table presents critical values for one-sided tests of the hypothesis that the true proportion corresponding to a/A is greater than the true proportion corresponding to b/B. Significance levels of 0.05, 0.025 and 0.01 are considered. For $A \leq 15$ all values where critical values exist are tabulated. For each significance level two columns give: (1) the nominal critical value for b (that is, reject the null hypothesis if the observed b is less than or equal to the table entry) and (2) the p-value corresponding to the critical value (this is less than the nominal significance level in most cases due to the discreteness of the

A	B	a	b	p	b	p	b	p
3	3	3	0	.050	—	—	—	—
4	4	4	0	.014	0	.014	—	—
4	3	4	0	.029	—	—	—	—
5	5	5	1	.024	1	.024	0	.004
5	5	4	0	.024	0	.024	—	—
5	4	5	1	.048	0	.008	0	.008
5	4	4	0	.040	—	—	—	—
5	3	5	0	.018	0	.018	—	—
5	2	5	0	.048	—	—	—	—
6	6	6	2	.030	1	.008	1	.008
6	6	5	1	.040	0	.008	0	.008
6	6	4	0	.030	—	—	—	—
6	5	6	1	.015	1	.015	0	.002
6	5	5	0	.013	0	.013	—	—
6	5	4	0	.045	—	—	—	—
6	4	6	1	.033	0	.005	0	.005
6	4	5	0	.024	0	.024	—	—
6	3	6	0	.012	0	.012	—	—
6	3	5	0	.048	—	—	—	—
6	2	6	0	.036	—	—	—	—
7	7	7	3	.035	2	.010	1	.002
7	7	6	1	.015	1	.015	0	.002
7	7	5	0	.010	0	.010	—	—
7	7	4	0	.035	—	—	—	—
7	6	7	2	.021	2	.021	1	.005
7	6	6	1	.025	0	.004	0	.004
7	6	5	0	.016	0	.016	—	—
7	6	4	0	.049	—	—	—	—
7	5	7	2	.045	1	.010	0	.001
7	5	6	1	.045	0	.008	0	.008
7	5	5	0	.027	—	—	—	—
7	4	7	1	.024	1	.024	0	.003
7	4	6	0	.015	0	.015	—	—
7	4	5	0	.045	—	—	—	—
7	3	7	0	.008	0	.008	0	.008
7	3	6	0	.033	—	—	—	—
7	2	7	0	.028	—	—	—	—
8	8	8	4	.038	3	.013	2	.003
8	8	7	2	.020	2	.020	1	.005
8	8	6	1	.020	1	.020	0	.003
8	8	5	0	.013	0	.013	—	—
8	8	4	0	.038	—	—	—	—
8	7	8	3	.026	2	.007	2	.007
8	7	7	2	.035	1	.009	1	.009
8	7	6	1	.032	0	.006	0	.006
8	7	5	0	.010	0	.010		

Table 2: Sample sizes for comparing two proportions with a one-sided Fisher's exact test in 2×2 tables.
Let P_A and P_B be the true proportions in two populations. The sample size, N, for two equally sized groups is tabulated for one-sided significance level α and probability β of not rejecting the null hypothesis. Each rectangular portion of the table contains sample sizes for *two* pairs of α and β values, one above the diagonal and one below it. The arcsine approximation was used to estimate N.

$\alpha = .01$ and $\beta = .01$

P_A	P_B .001	.01	.05	.10	.15	.20	.25	.30	.40	.50	.60	.70	.80	.90
.001	—	2305	288	129	81	58	45	37	26	20	15	12	10	8
.01	1679	—	689	221	123	82	61	48	32	24	18	14	11	9
.05	210	502	—	1169	366	191	122	87	52	35	25	19	14	11
.10	94	161	852	—	1877	538	266	163	83	51	34	25	18	13
.15	59	90	266	1368	—	2489	683	327	132	73	46	31	22	15
.20	43	60	140	392	1814	—	3012	805	222	105	61	39	27	18
.25	33	44	89	194	498	2194	—	3447	417	158	83	50	32	21
.30	27	35	63	119	239	587	2511	—	981	256	116	64	39	25
.40	19	24	38	60	96	162	304	715	—	1068	267	116	61	34
.50	14	17	26	37	53	77	116	187	778	—	1068	256	105	51
.60	11	13	19	25	34	45	61	84	195	778	—	981	222	83
.70	9	10	14	18	23	29	37	47	84	187	715	—	805	163
.80	7	8	11	13	16	20	24	29	45	77	162	587	—	538
.90	6	6	8	10	11	13	15	18	25	37	60	119	392	—

$\alpha = .01$ and $\beta = .05$ (or $\alpha = .05$ and $\beta = .01$)

$\alpha = .025$ and $\beta = .05$ (or $\alpha = .05$ and $\beta = .025$)

P_A	P_B .001	.01	.05	.10	.15	.20	.25	.30	.40	.50	.60	.70	.80	.90
.001	—	1384	173	78	49	35	27	22	16	12	9	8	6	5
.01	1119	—	414	133	74	50	37	29	20	14	11	9	7	5
.05	140	335	—	702	220	115	74	52	31	21	15	12	9	7
.10	63	108	568	—	1127	323	160	98	50	31	21	15	11	8
.15	40	60	178	911	—	1494	410	197	79	44	28	19	13	9
.20	29	40	93	261	1208	—	1808	483	133	63	37	24	16	11
.25	22	30	60	129	332	1462	—	2069	251	95	50	30	20	13
.30	18	23	42	79	159	391	1673	—	589	154	70	39	24	15
.40	13	16	25	40	64	108	203	476	—	641	161	70	37	21
.50	10	12	17	25	35	51	77	125	519	—	641	154	63	31
.60	8	9	13	17	23	30	40	56	130	519	—	589	133	50
.70	6	7	9	12	15	19	25	32	56	125	476	—	483	98
.80	5	6	7	9	11	13	16	19	30	51	108	391	—	323
.90	4	4	6	7	8	9	10	12	17	25	40	79	261	—

$\alpha = .025$ and $\beta = .10$ (or $\alpha = .10$ and $\beta = .025$)

$\alpha = .05$ and $\beta = .05$

P_A	P_B .001	.01	.05	.10	.15	.20	.25	.30	.40	.50	.60	.70	.80	.90
.001	—	1152	144	65	41	29	23	19	13	10	8	6	5	4
.01	912	—	345	111	62	41	31	24	16	12	9	7	6	5
.05	114	273	—	585	183	96	61	44	26	18	13	10	7	6
.10	51	88	463	—	939	269	133	82	42	26	17	13	9	7
.15	32	49	145	743	—	1245	342	164	66	36	23	16	11	8
.20	23	33	76	213	985	—	1506	403	111	53	31	20	14	9
.25	18	24	49	106	271	1192	—	1723	209	79	42	25	16	11
.30	15	19	35	65	130	319	1364	—	491	128	58	32	20	13
.40	11	13	21	33	52	88	165	388	—	534	134	58	31	17
.50	8	10	14	20	29	42	63	102	423	—	534	128	53	26
.60	6	7	10	14	18	24	33	46	106	423	—	491	111	42
.70	5	6	8	10	13	16	20	26	46	102	388	—	403	82
.80	4	5	6	7	9	11	13	16	24	42	88	319	—	269
.90	3	4	5	5	6	7	9	10	14	20	33	65	213	—

$\alpha = .05$ and $\beta = .10$ (or $\alpha = .10$ and $\beta = .05$)

P_A	P_B	$\alpha = .10$ and $\beta = .10$