

Outcome: Disease
 Design: Unmatched case-control (1:1)
 Hypothesis: Gene only
 Desired power: 0.800000
 Significance: 0.050000, 2-sided
 Gene
 Mode of inheritance: Log-additive
 Allele frequency: 0.0800 to 0.5000 by 0.0700
 Disease model Summary parameters
 * P_0 0.003000 k_P 0.003000
 R_G : 1.0000 (*indicates calculated value)

Parameter	Null	Full	Reduced
Gene	$\beta_G=0$	β_G	—

Frequency	R_G	N	
		Gene	P_0
0.080000	1.0000	Cannot calculate	0.003000
	1.5000	551	0.002775
	2.0000	170	0.002574
	2.5000	90	0.002395
	3.0000	59	0.002234
	3.5000	44	0.002090
	4.0000	34	0.001959
	4.5000	28	0.001841
	5.0000	24	0.001733
	0.150000	1.0000	Cannot calculate
1.5000		329	0.002597
2.0000		104	0.002271
2.5000		57	0.002004
3.0000		38	0.001781
3.5000		29	0.001594
4.0000		23	0.001435
4.5000		20	0.001299
5.0000		17	0.001182
0.220000		1.0000	Cannot calculate
	1.5000	252	0.002437
	2.0000	82	0.002019
	2.5000	46	0.001701
	3.0000	32	0.001452
	3.5000	24	0.001255
	4.0000	20	0.001095
	4.5000	17	0.000965
	5.0000	15	0.000856
	0.290000	1.0000	Cannot calculate
1.5000		217	0.002290
2.0000		72	0.001806
2.5000		41	0.001461
3.0000		29	0.001207
3.5000		22	0.001013
4.0000		19	0.000863
4.5000		16	0.000744
5.0000		14	0.000648

0.360000	1.0000	Cannot calculate	0.003000
	1.5000	200	0.002157
	2.0000	68	0.001625
	2.5000	40	0.001269
	3.0000	28	0.001018
	3.5000	22	0.000835
	4.0000	18	0.000697
	4.5000	16	0.000591
	5.0000	14	0.000508
	0.430000	1.0000	Cannot calculate
1.5000		193	0.002035
2.0000		67	0.001470
2.5000		40	0.001112
3.0000		28	0.000871
3.5000		23	0.000700
4.0000		19	0.000575
4.5000		17	0.000481
5.0000		15	0.000408
0.500000		1.0000	Cannot calculate
	1.5000	195	0.001923
	2.0000	69	0.001336
	2.5000	41	0.000983
	3.0000	30	0.000753
	3.5000	24	0.000595
	4.0000	20	0.000482
	4.5000	18	0.000399
	5.0000	16	0.000335

N is the number of cases required for the desired power

The required number of controls is 1xN