Supplementary Table 9

Study power (expressed in %) as a function of allele odds ratio (OR) and minor allele frequency (MAF). Conditions surpassing 80% power are highlighted in yellow. The power calculations are presented for a) the GWAS discovery stage ($\alpha < 1 \times 10^{-4}$), b) the GWAS and validation stage 1 ($\alpha < 5 \times 10^{-8}$), c) the GWAS, validation stage 1, and replication stage 2 ($\alpha < 5 \times 10^{-8}$)

a) GWAS discovery stage ($\alpha < 1 \times 10^{-4}$), N = 1,484 cases and N = 1,188 controls

		OR							
		1.15	**1.20**	**1.25**	**1.30**	**1.35**	**1.40**	**1.45**	**1.50**
	0.10	1	3.4	9	19.2	34	51.2	67.9	81.2
	0.15	2.2	7.6	19.3	37.6	58.6	77	89.4	95.9
	0.20	3.6	12.5	30.1	53.5	75.2	89.5	96.5	>99
	0.25	5.1	17.4	39.6	65.2	84.7	94.9	98.7	>99
MAF	**0.30**	6.5	21.8	47.2	73	89.9	97.2	>99	>99
	0.35	7.7	25.3	52.6	77.9	92.6	98.2	>99	>99
	0.40	8.6	27.7	56	80.7	94	98.7	>99	>99
	0.45	9.1	29	57.7	81.9	94.5	98.8	>99	>99
	0.50	9.2	29.1	57.7	81.8	94.4	98.8	>99	>99

b) GWAS and validation stage 1 ($\alpha < 5 \times 10^{-8}$), N = 4,112 cases and N = 10,135 controls

		OR							
		1.15	**1.20**	**1.25**	**1.30**	**1.35**	**1.40**	**1.45**	**1.50**
	0.10	1.9	15.8	52.1	86.2	98.2	>99	>99	>99
	0.15	7.2	42.3	85.2	98.8	>99	>99	>99	>99
	0.20	15.7	65.4	96.11	>99	>99	>99	>99	>99
	0.25	25.4	79.9	98.9	>99	>99	>99	>99	>99
MAF	**0.30**	34.1	87.7	>99	>99	>99	>99	>99	>99
	0.35	40.9	91.7	>99	>99	>99	>99	>99	>99
	0.40	45.4	93.6	>99	>99	>99	>99	>99	>99
	0.45	47.6	94.3	>99	>99	>99	>99	>99	>99
	0.50	47.6	94.2	>99	>99	>99	>99	>99	>99

c) GWAS, validation stage 1, and replication stage 2 ($\alpha < 5 \times 10^{-8}$), N = 8,385 cases and N = 21,915 controls

		OR							
		1.15	**1.20**	**1.25**	**1.30**	**1.35**	**1.40**	**1.45**	**1.50**
	0.10	25.9	81.3	>99	>99	>99	>99	>99	>99
	0.15	59.4	98.0	>99	>99	>99	>99	>99	>99
	0.20	81.3	>99	>99	>99	>99	>99	>99	>99
	0.25	91.6	>99	>99	>99	>99	>99	>99	>99
MAF	**0.30**	95.9	>99	>99	>99	>99	>99	>99	>99
	0.35	97.7	>99	>99	>99	>99	>99	>99	>99
	0.40	98.4	>99	>99	>99	>99	>99	>99	>99
	0.45	98.7	>99	>99	>99	>99	>99	>99	>99
	0.5	98.7	>99	>99	>99	>99	>99	>99	>99