Supplementary Table SIII Power analysis for each variant in the current replication cohorts.

SNP-allele	Nearest gene	OR Chinese	Frq Chinese	Frq$_{controls}$	Ave allele freq in controls in our 3 samples	Power alpha = 0.0033	Power alpha = 0.05
rs2268361-T 2p16.3	FSHR	0.84	0.496	0.65 0.62 0.63	0.63	0.8525	0.9786
rs2349415-T 2p16.3	FSHR	1.33	0.181	0.33 0.37 0.34	0.35	0.999	1
rs4385527-A 9q22.32	C9orf3	0.78	0.219	0.43 0.47 0.42	0.44	0.997	1
rs3802457-A 9q22.32	C9orf3	0.69	0.096	0.03 0.026 0.031	0.03	0.3895	0.7574
rs1894116-G 11q22.1	YAP1	1.3	0.194	0.1 0.11 0.083	0.10	0.8294	0.9732
rs705702-G 12q13.2	RAB5B/SUOX	1.32	0.245	0.34 0.25 0.32	0.30	0.999	1
rs2272046-C 12q14.3	HMGA2	0.67	0.093	0.026 0.019 0.025	0.02	0.2713	0.6441
rs4784165-G 16q12.1	TOX3	1.26	0.325	0.26 0.31 0.27	0.28	0.9788	0.9987
rs2059807-G 19p13.3	INSR	1.24	0.301	0.39 0.67 0.61	0.56	0.9778	0.9986
rs6022786-A 20q13.2	SUMO1P1	1.24	0.339	0.43 0.46 0.44	0.44	0.9812	0.9989

For each SNP, the table includes the odds ratio (OR) and frequency (Frq) of the risk allele in the Chinese population, the frequency in the control subjects in the three cohorts studied (Boston 1, Greek and Boston EMR), the average allele frequency in the three cohorts and the power at the alpha levels indicated, assuming a prevalence of PCOS of 8% and the effect size demonstrated in the Han Chinese study. The three cohorts provided sufficient power to replicate the Han Chinese variants at alpha = 0.05. The majority also had sufficient power at an alpha = 0.0033.