

## SUPPLEMENTARY TABLES

**Supplementary Table 1. Allele frequencies of four Tag SNPs of *EFEMP1* in Europeans and Chinese.**

	Alleles	Risk allele	Risk allele frequency		Ethnic group	Study
			cases	controls		
rs1346786	T/C	T	0.39	0.29	Europeans	Chen Y, 2018, stage1
			0.35	0.30	Europeans	Chen Y, 2018, stage2
			0.88	0.86	Chinese	Present study
rs11125609	C/T	C	0.36	0.28	Europeans	Chen Y, 2018, stage1
			0.31	0.29	Europeans	Chen Y, 2018, stage2
			0.56	0.54	Chinese	Present study
rs10865291	A/G	A	0.43	0.33	Europeans	Chen Y, 2018, stage1
			0.40	0.32	Europeans	Chen Y, 2018, stage2
			0.80	0.78	Chinese	Present study
rs1430193	T/A	T	0.44	0.34	Europeans	Chen Y, 2018, stage1
			0.42	0.33	Europeans	Chen Y, 2018, stage2
			0.09	0.09	Chinese	Present study

**Supplementary Table 2. Number of accounted risk alleles in BA cases and controls and ORs for BA by cumulative risk alleles.**

Number of risk alleles	Control	Case	OR(95%CI)	P value
0	14.6%	9.0%	1	
1	32.9%	24.9%	1.23(0.79,1.91)	3.71E-01
2	34.9%	40.5%	1.88(1.23,2.87)	3.61E-03
3	15.2%	21.6%	2.30(1.45,3.65)	4.01E-04
4	2.5%	3.9%	2.56(1.23,5.32)	1.20E-02

OR: odds ratio; CI: confidence interval.

**Supplementary Table 3. Functional annotation of SNPs correlated with newly identified risk variants using data from HaploReg v4.1.**

SNP	Position	Promoter histone marks <sup>b</sup>	Enhancer histone marks <sup>c</sup>	DNase <sup>d</sup>	Proteins bound <sup>e</sup>	Motifs changed <sup>f</sup>
rs6750380	241362669		ESDR, CRVX		JUND, FOSL2	
rs6707262	241371065		4 tissues			5 altered motifs
rs17095355	111735750		11 tissues	5 tissues		Hoxa5, XBP-1
rs10509906	111757674			ESDR		Ets, Gfi1, Gfi1b
rs2501577	111846687	BLD	7 tissues	IPSC, BLD, BLD		BDP1, TBX5

SNP: Single Nucleotide Polymorphism; The chromosome position (bp) is based on GRCH37;

ESDR: H9 Derived Neuronal Progenitor Cultured Cells or H9 Derived Neuron Cultured Cells; CRVX: HeLa-S3 Cervical Carcinoma Cell Line; IPSC: iPS DF 6.9 Cells; BLD: Primary T cells from peripheral blood or Primary Natural Killer cells from peripheral blood.

b. Evidence of local H3K4Me1 and H3K27Ac modification (cell lines/types: if >3, only the number is included).

c. Evidence of local H3K4Me3 modification (cell lines/types: if >3, only the number is included).

d. Evidence of chromatin hypersensitivity to DNase (cell lines/types: if >3, only the number is included).

e. ChIP-seq experiments indicate alteration in binding of transcription factor (if >3, only the number is included).

f. Evidence of alteration in regulatory motif (if >3, only the number is included).