

**Supplementary Table S1.** Case-control study for the association between TLR low-frequency/rare variants and lupus nephritis.

CHR	SNP	BP	MA	MAF LN	MAF Controls	p*	OR (95% CI)	Gene
4	rs142003616**	38,800,721	G	0.01	0.0003	8.6x10 <sup>-5</sup>	32.8 (3.9 - 272.7)	TLR1
4	rs76600635	38,800,323	G	0.005	0	0.004	NA (NA)	TLR1
4	rs72493538	38,798,515	A	0.005	0	0.004	NA (NA)	TLR1
1	rs79088436	223,309,138	G	0.005	0.0003	0.01	16.5 (1.7 - 158.4)	TLR5
4	rs117985012	38,857,896	A	0.005	0.0003	0.01	16.4 (1.7 - 157.9)	TLR6
4	rs55695972	38,828,383	G	0.005	0.0003	0.01	16.4 (1.7 - 157.8)	TLR6
4	rs41305843	38,798,235	A	0.003	0	0.02	NA (NA)	TLR1
4	rs10006364	154,606,190	G	0.01	0.004	0.03	3.1 (1.3 - 8.4)	TLR2
4	rs113706342	38,798,294	G	0.02	0.01	0.04	2.0 (1.1 - 3.8)	TLR1
4	rs41311400	38,798,425	A	0.02	0.01	0.04	2.0 (1.1 - 3.8)	TLR1

**CHR**, chromosome; **SNP**, Single Nucleotide Polymorphism; **BP**, base pairs (hg19); **MA**, minor allele ; **MAF**, minor allele frequency; **LN**, lupus nephritis (n=292); Controls, combined healthy subjects (n=1030) and SLE patients without nephritis (n=563); **p**, p-value; **OR**, Odds ratio; **95% CI**, 95% confidence intervals. \*Fisher's exact test was used, only rs142003616 passed Bonferroni correction ( $p=0.039$ ), where Bonferroni significance threshold is equal to  $1.1 \times 10^{-4}$  ( $0.05/455$  low frequency and rare variants included in the test). \*\*mAF [LN vs SLE(w/oLN); 0.01 vs 0 ],  $p=0.001$ ].