Supplementary Table 1. Interaction results between *ERAP1* SNPs and *HLA-C*06* in all subjects.

Markers	Additive		Multiplicative	
	APp	AP (AP 95%)	P	OR (CI 95%)
rs26653/HLA-C*06	0.60	0.08 (-0.21-0.37)	0.34	0.83 (0.57-1.22)
rs30187/HLA-C*06	0.80	0.04 (-0.28-0.36)	0.88	1.39 (0.65-1.43)
rs27524/HLA-C*06	0.43	0.12 (-0.18-0.41)	0.89	6.21 (0.70-1.52)

Calculating biological interaction in R using the generalized linear model with binominal link. Created interaction variables and attributable proportion (AP) with 95% CI. A new matrix was created with measures of interaction IM (AP, AP.95 Low, AP.95 High, APp).

AP= attributable proportion

Supplementary Table 2. Genotypic effect of marker.

Marker	rs26653	rs30187	rs27524	Cw06	rs10484554
Genotype	OR (CI)	OR (CI)	OR (CI)	OR (CI)	OR (CI)
AA	1.00	1.00	1.00	1.00	1.00
Aa	1.30 (1.09-1.53)	1.15 (0.97-1.36)	1.06 (0.89-1.26)	5.76 (4.74-7.00)	4.58 (3.82-5.50)
aa	1.71 (1.28-2.30)	1.38 (1.07-1.77)	1.26 (0.98-1.61)	6.96 (3.42-14.19)	5.46 (3.28-9.10)
Effect	Additive	Additive	Recessive	Dominant	Dominant

AA= Homozygote for major allele
Aa= Heterozygote
Aa= Homozygote for minor allele

Supplementary Figure 1. Association of *ERAP1* SNP rs26653 stratified by phenotype.
ERAP1 SNP rs26653 stratified in four different age groups and into plaque and guttate phenotype.