

**Online Resource 8. Red hair association results comparison.** Analysis GIF and p-values for the top hit SNPs associated with red hair color in the Generation R Study, both by mixed models (EMMAX) and adjustment by genomic components.

	<u>EMMAX</u>	<u>4 PCs</u>
GIF	0.994	0.999
Top-Hits P-value		
rs258322	7.53E-17	4.03E-17
rs8049897	1.38E-10	1.22E-10
rs16471	1.58E-09	1.90E-09
rs4238833	5.71E-08	4.12E-08
rs4785763	1.01E-08	8.56E-08
rs7188458	2.81E-08	5.80E-07