

**Table S9.** Enrichments or depletion of per-individual PTVs in psoriasis patients compared to controls.

PTV classes			#Case	#Control	$P^{\wedge}$	$OR$ (95% $CI$ ) <sup>^</sup>
PTVs	Total		8.64E+00	8.55E+00	<b>2.43E-02</b>	1.0156 (1.0020,1.0294)
	genotypic composition	Het	6.81E+00	6.74E+00	<b>4.32E-02</b>	1.0133 (1.0004,1.0263)
		Hom	1.83E+00	1.81E+00	8.24E-01	1.0029 (0.9774,1.0292)
	variant types	SNV	3.56E+00	3.47E+00	<b>2.42E-04</b>	1.0388 (1.0179,1.0601)
		Ins	1.97E+00	1.98E+00	6.13E-01	0.9939 (0.9708,1.0176)
		Del	3.11E+00	3.10E+00	8.48E-01	1.0025 (0.9771,1.0285)
pPTVs	Total		1.10E-01	8.80E-02	<b>4.42E-06</b>	1.2432 (1.1330,1.3645)
	genotypic composition	Het	1.10E-01	8.79E-02	<b>4.76E-06</b>	1.2424 (1.1322,1.3637)
		Hom	2.12E-04	9.49E-05	6.47E-01	1.7702 (0.1627,39.1390)
	variant types	SNV	4.26E-02	4.55E-02	3.97E-01	0.9422 (0.8207,1.0813)
		Ins	1.02E-02	5.98E-03	<b>3.10E-03</b>	1.6542 (1.1888,2.3193)
		Del	5.72E-02	3.65E-02	<b>4.18E-10</b>	1.5501 (1.3517,1.7798)

# average number of per-individual PTVs that belong to (sub)class;

<sup>^</sup>  $P$  values,  $OR$  and 95%  $CI$  were obtained through logistic regression, in which  $P < 0.05$  was shown in red.

Het: heterozygotes;

Hom: homozygotes;

Ins: insertions;

Del: deletions.