

**Supplementary Table 1: Previously reported variants associated with primary non-response to anti-TNF $\alpha$  biologics in the treatment of inflammatory bowel disease, and their significance in the discovery cohort**

Chr	Variant	Risk Allele	OR	P	Potential Genes
1	rs6679677 [1]	A	0.57	0.86	<i>PTPN22, PHTF1</i>
6	rs3851228 [1]	T	0.52	0.52	<i>TRAF3IP2-AS1</i>
9	rs4743820 [1]	T	0.85	0.25	<i>NFIL3</i>
11	rs568617 [1]	T	0.85	0.30	<i>FIBP</i>
12	rs653178 [1]	T	0.95	0.04	<i>SH2B3, ATXN2</i>
13	rs3742130 [1]	A	0.68	0.93	<i>UBAC2, GPR18</i>
21	rs2284553 [1]	G	0.76	0.92	<i>IFNGR2, IFNAR1, IL</i>
9	rs1330307 [1]	C	0.82	0.52	Lnc-RNA
3	rs762787 [2]	T	0.96	0.04	<i>LTF</i>
13	rs9572250 [2]	G	0.71	0.83	<i>KLHL1</i>
9	rs523781 [2]	C	0.61	0.81	Intergenic
12	rs767455 [3]	C	0.78	0.65	<i>TNFRSF1A</i>
1	rs1061624 [3]	G	0.66	0.61	<i>TNFRSF1B</i>
1	rs976881 [4]	C	0.61	0.35	<i>TNFRSF1B</i>
1	rs652625 [4]	A	0.55	0.99	<i>TNFRSF1B</i>
2	rs12469362 [5]	C	0.66	0.59	<i>ADAM17</i>

10	rs1800682 [6]	G	0.83	0.67	<i>ACTA2</i>
1	rs4645983 [6]	A	0.96	0.08	<i>CASP9</i>
1	rs763110 [6]	T	0.86	0.21	<i>FASLG</i>
11	rs1813443 [7]	C	0.60	0.39	<i>CNTN5</i>
7	rs1568885 [7]	A	0.61	0.67	Lnc-RNA
1	rs3766606[8]	T	1.07	0.66	<i>TNFRSF9</i>
1	rs4845604[8]	A	0.79	0.23	<i>RORC</i>
2	rs6708413[8]	A	1.42	0.19	<i>IL1R2, IL18RAP,</i> <i>IL18R1, IL1R1,</i> <i>IL1RL1, IL1RL2</i>
3	rs3197999[8]	A	1.13	0.54	<i>MST1, PFKFB4,</i> <i>MST1R, UCN2, GPX ,</i> <i>IP6K2, BSN, IP6K1,</i> <i>USP4</i>
3	rs9847710[8]	C	1.09	0.57	
3	rs17200795[8]	G	1.44	0.03	<i>TBC1D5</i>
3	rs2045307[8]	T	1.19	0.36	
6	rs2503322[8]	G	1.05	0.68	

7	rs1182188[8]	C	0.97	0.71	<i>CARD11, GNA12, TTYH3</i>
8	rs921720[8]	G	1.02	0.95	<i>TRIB1</i>
9	rs4246905[8]	C	0.91	0.61	<i>TNFSF8, TNFSF15, TNC</i>
10	rs10761659[8]	G	1.11	0.57	
12	rs7956809[8]	G	0.31	0.03	<i>Keratin 4</i>
16	rs1728785[8]	C	1.05	0.95	<i>ZFP90</i>
18	rs8083571[8]	G	1.08	0.51	

**Supplementary references:**

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