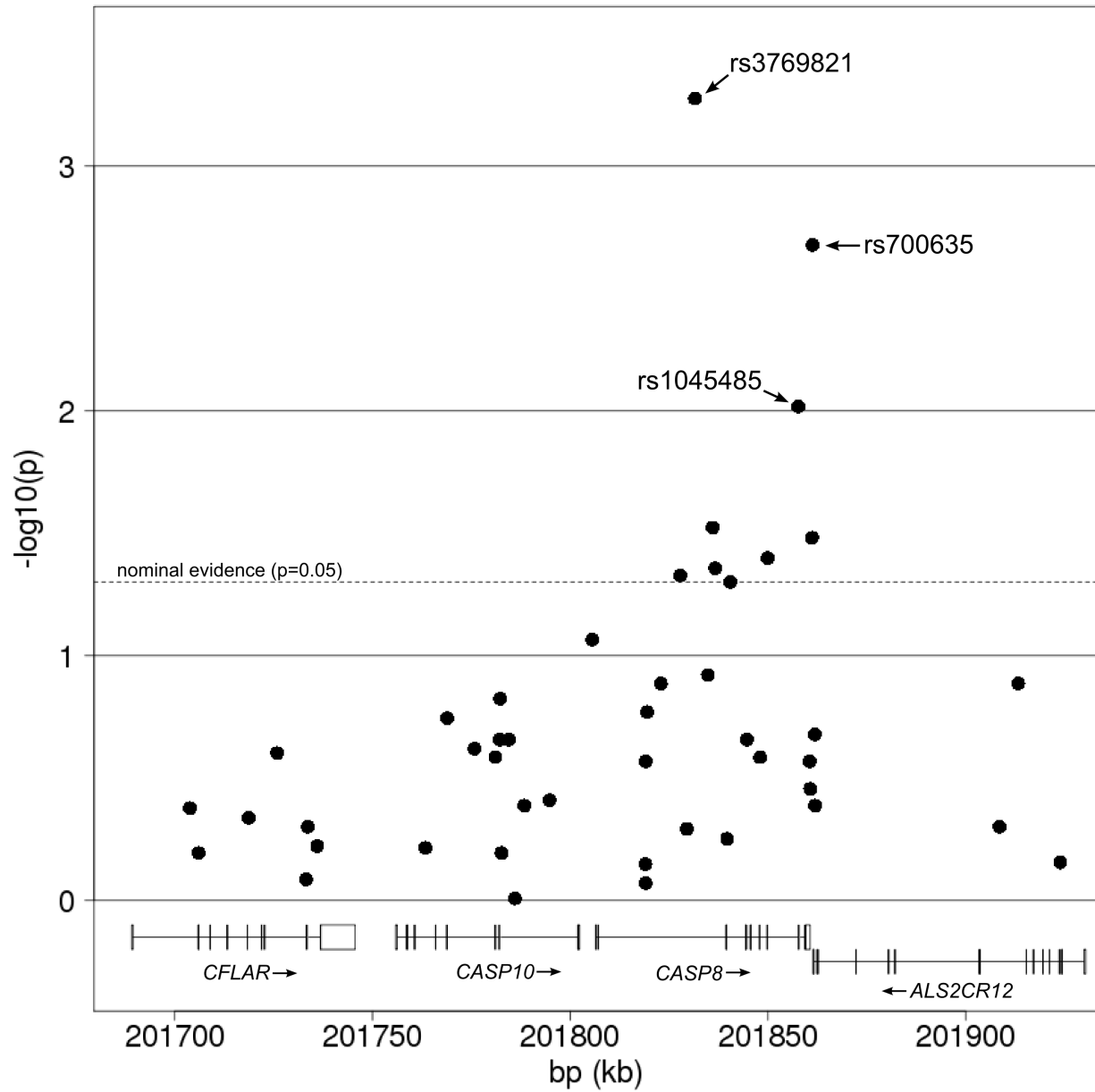


## Supplementary Material

Supplemental Figure S1: Single SNP results based on the most significant meta-association evidence for each tSNP (dominant or recessive models).



**Supplementary Table 1: Tagging-SNP details**

Gene	bp	SNP	Call rate	Call rate	Alleles (maj=1/min=2)	MAF
			SBCS	UBCS		
CFLAR	201704024	rs12620435	100.0	99.8	A / G	0.1135
CFLAR	201706206	rs11681674	98.9	98.1	G / A	0.0037
CFLAR	201718871	rs7573529	99.8	99.7	C / T	0.2054
CFLAR	201726075	rs719126	98.6	99.5	G / A	0.0433
CFLAR	201733376	rs2518142	99.4	99.4	A / G	0.0884
CFLAR	201733866	rs1594	99.9	99.2	C / T	0.4730
CFLAR	201736187	rs12721503	98.9	99.6	T / C	0.0242
CASP10	201763557	rs12613347	99.7	99.5	C / T	0.2186
CASP10	201769065	rs3731714	99.3	98.9	G / A	0.3150
CASP10	201775958	rs41343445	99.5	99.2	A / G	0.0065
CASP10	201781218	rs41419046	98.7	99.8	A / T	0.0080
CASP10	201782343	rs13010627	99.5	81.9	G / A	0.0597
CASP10	201782452	rs17860405	88.1	90.7	A / G	0.0422
CASP10	201782773	rs7576306	99.1	99.6	A / G	0.4998
CASP10	201784693	rs6435068	99.9	98.0	T / C	0.0354
CASP10	201786202	rs41514050	82.4	99.2	C / T	0.0010
CASP10	201788555	rs10931932	98.8	99.5	C / A	0.0871
CASP10	201794910	rs41373151	99.8	99.9	G / A	0.0628
CASP8	201805777	rs3834129	91.0	92.9	ins/del**	0.5257
CASP8	201819185	SNP50_9898_ct	99.0	90.5	C / T	0.0010
CASP8	201819204	rs7608692	99.6	99.2	G / A	0.2105
CASP8	201819265	rs3820972	98.5	99.4	T / G	0.0771
CASP8	201819625	rs3769825	99.7	99.0	C / T	0.4325
CASP8	201823079	rs7570325	100.0	99.8	C / T	0.0286
CASP8	201828012	rs13402616	88.4	99.6	T / C	0.0625
CASP8	201829651	rs35534358	99.6	99.5	T / G	0.0009
CASP8	201831675	rs3769821	99.0	98.9	A / G	0.3166
CASP8	201834953	rs7568770	99.6	99.5	G / A	0.0005
CASP8	201836192	rs6435074	88.1	97.2	C/A	0.2594
CASP8	201836863	rs6723097	98.6	90.0	C/A	0.3535
CASP8	201839832	rs2293554	97.8	99.0	A / C	0.0714
CASP8	201840650	rs34088540	99.9	99.8	T / A	0.0591
CASP8	201844840	rs3817578	99.6	99.4	G / A	0.0479
CASP8	201848183	rs7571586	99.9	100.0	G / C	0.0081
CASP8	201850083	rs36043647	99.7	100.0	T / C	0.0571
CASP8	201857834	rs1045485	99.6	99.6	G / C	0.1347
CASP8/ALS2CR12	201860736	rs1035140	99.5	98.9	A / T	0.4541
CASP8/ALS2CR12	201860874	rs35010052	96.9	81.9	del / ins	0.0141
ALS2CR12	201861323	rs1035142	99.6	99.8	G / T	0.3694
ALS2CR12	201861470	rs700635	99.7	91.4	A / C	0.2691
ALS2CR12	201862034	rs17383714	99.7	99.8	C / T	0.0848
ALS2CR12	201862091	rs11674814	98.9	98.5	G / A	0.4450
ALS2CR12	201908695	rs7579792	98.1	99.7	G / A	0.0927
ALS2CR12	201913442	rs10185177	99.8	99.6	C / T	0.1035
ALS2CR12	201924064	rs3817579	99.9	79.8	A / G	0.0148

\*\*ins is reference allele

**Supplemental Table S2. Single SNPs results for all 45 tSNPs (dominant, recessive models)**

Gene	bp	SNP	Model*	OR <sub>meta</sub> 95% CI	Q p <sub>hom</sub> <sup>^</sup>	p <sub>meta</sub>
CFLAR	201704024	rs12620435	Rec	1.26 0.68-2.33	0.94	0.42
CFLAR	201706206	rs11681674	Dom	1.21 0.54-2.71	0.075	0.64
CFLAR	201718871	rs7573529	Rec	1.13 0.81-1.59	0.40	0.46
CFLAR	201726075	rs719126	Dom	1.16 0.91-1.48	0.93	0.25
CFLAR	201733376	rs2518142	Rec	0.91 0.40-2.06	0.40	0.82
CFLAR	201733866	rs1594	Dom	1.06 0.90-1.23	0.43	0.50
CFLAR	201736187	rs12721503	Dom	0.91 0.65-1.29	0.36	0.60
CASP10	201763557	rs12613347	Rec	1.09 0.79-1.49	0.28	0.61
CASP10	201769065	rs3731714	Rec	0.85 0.60-1.08	0.87	0.18
CASP10	201775958	rs41343445	Rec	0.00 na	na	0.24
CASP10	201781218	rs41419046	Dom	1.35 0.80-2.26	0.57	0.26
CASP10	201782343	rs13010627	Dom	1.15 0.92-1.43	0.40	0.22
CASP10	201782452	rs17860405	Dom	0.82 0.62-1.08	0.29	0.15
CASP10	201782773	rs7576306	Rec	1.04 0.89-1.22	0.37	0.64
CASP10	201784693	rs6435068	Rec	0.35 na	na	0.22
CASP10	201786202	rs41514050	Dom	1.03 na	na	0.98
CASP10	201788555	rs10931932	Rec	0.74 0.33-1.68	0.23	0.41
CASP10	201794910	rs41373151	Rec	1.45 0.43-4.92	0.94	0.39
<b>CASP8</b>	<b>201805777</b>	<b>rs3834129</b>	<b>Rec</b>	<b>0.84 0.69-1.02</b>	<b>0.049</b>	<b>0.086</b>
CASP8	201819185	SNP50_9898_ct	Dom	1.37 na	na	0.71
CASP8	201819204	rs7608692	Dom	0.99 0.85-1.14	0.99	0.85
CASP8	201819265	rs3820972	Dom	1.11 0.92-1.35	0.80	0.27
CASP8	201819625	rs3769825	Rec	1.13 0.95-1.34	0.95	0.17
CASP8	201823079	rs7570325	Rec	na	na	0.13
<b>CASP8</b>	<b>201828012</b>	<b>rs13402616</b>	<b>Rec</b>	<b>2.55 0.76-8.54</b>	<b>0.12</b>	<b>0.047</b>
CASP8	201829651	rs35534358	Dom	1.73 na	na	0.51
<b>CASP8</b>	<b>201831675</b>	<b>rs3769821</b>	<b>Dom</b>	<b>1.28 1.11-1.48</b>	<b>0.37</b>	<b>0.00053</b>
CASP8	201834953	rs7568770	Dom	5.17 na	na	0.12
<b>CASP8</b>	<b>201836192</b>	<b>rs6435074</b>	<b>Dom</b>	<b>1.19 1.02-1.40</b>	<b>0.94</b>	<b>0.030</b>
<b>CASP8</b>	<b>201836863</b>	<b>rs6723097</b>	<b>Rec</b>	<b>1.29 1.01-1.65</b>	<b>0.58</b>	<b>0.044</b>
CASP8	201839832	rs2293554	Rec	1.38 1.48-4.00	0.72	0.56
<b>CASP8</b>	<b>201840650</b>	<b>rs34088540</b>	<b>Dom</b>	<b>0.79 0.63-1.00</b>	<b>0.77</b>	<b>0.050</b>
CASP8	201844840	rs3817578	Dom	0.86 0.67-1.10	0.71	0.22
CASP8	201848183	rs7571586	Rec	0.26 na	na	0.26
<b>CASP8</b>	<b>201850083</b>	<b>rs36043647</b>	<b>Rec</b>	<b>3.11 0.76-12.76</b>	<b>0.49</b>	<b>0.040</b>
<b>CASP8</b>	<b>201857834</b>	<b>rs1045485</b>	<b>Rec</b>	<b>0.47 0.27-0.80</b>	<b>0.72</b>	<b>0.0096</b>
CASP8/ALS2CR12	201860736	rs1035140	Rec	1.10 0.93-1.30	0.81	0.27
CASP8/ALS2CR12	201860874	rs35010052	Dom	1.23 0.80-1.88	0.97	0.35
<b>ALS2CR12</b>	<b>201861323</b>	<b>rs1035142</b>	<b>Dom</b>	<b>1.17 1.01-1.35</b>	<b>0.54</b>	<b>0.033</b>
<b>ALS2CR12</b>	<b>201861470</b>	<b>rs700635</b>	<b>Dom</b>	<b>1.25 1.09-1.44</b>	<b>0.63</b>	<b>0.0021</b>
ALS2CR12	201862034	rs17383714	Rec	0.60 0.25-1.43	0.99	0.21
ALS2CR12	201862091	rs11674814	Dom	0.94 0.81-1.09	0.71	0.41
ALS2CR12	201908695	rs7579792	Rec	0.78 0.36-1.68	0.76	0.50
ALS2CR12	201913442	rs10185177	Dom	0.87 0.73-1.04	0.57	0.13
ALS2CR12	201924064	rs3817579	Dom	0.92 0.58-1.44	0.49	0.70

\* dom indicates a dominant model; rec indicates a recessive model; ^ Q test p-value for heterogeneity across sites; bold=nominally significant (p≤0.05); bold & italic = borderline interest (0.1<p<0.05). Data for rs6723097, rs3834129 and rs6435074 (UBCS) were taken from previously published data (reference 12).