

Table 1. Colocalization analysis of SNPs of the general factor, ASD and ADHD GWAS (using COLOC and Hyprcoloc).

	SNP	Locus BP (GRCh37)	A1/A2	Chromosome	Minor allele frequency	<i>p</i> -value General factor GWAS	<i>p</i> -value ASD GWAS	<i>p</i> -value ADHD GWAS	Colocalization analysis		
									Probability of the hypothesis of colocalization between ASD and ADHD GWAS		Colocalization between ASD and ADHD GWAS
									COLOC	Hyprcoloc	
General factor GWAS	rs1222063 [§]	96602440	A/G	1	0.37	1.44e-10	2.64e-07	3.07e-08	0.98	0.99	Yes
	rs2391769	96978961	A/G	1	0.33	1.48e-10	1.14e-07	1.04e-07	0.89	0.93	Yes
	rs227378	103620385	A/C	4	0.34	1.66e-08	7.29e-05	6.48e-08	0.90	0.93	Yes
	rs4916723 [§]	87854395	A/C	5	0.41	3.61e-10	1.92e-06	1.81e-08	0.86	0.86	Yes
	rs325506	104012303	C/G	5	0.44	1.69e-09	3.50e-07	8.40e-07	0.73	0.84	Yes
	rs6584649 [‡]	106745104	T/G	10	0.23	1.22e-08	1.33e-04	1.80e-08	0.89	0.90	Yes
	rs7318041	78857224	A/G	13	0.33	4.18e-08	2.92e-05	8.39e-07	0.85	0.89	Yes
	rs6047310 [†]	21201708	A/C	20	0.33	4.32e-09	4.59e-08	1.78e-05	0.51	0.51	Yes
ASD GWAS	rs10099100	10576775	C/G	8	0.34	6.65e-04	1.07e-08	9.00e-01	0.01	< 0.5	No
	rs910805 [†]	21248116	A/G	20	0.24	8.42e-09	2.04e-09	3.31e-04	0.51	< 0.5	No*
ADHD GWAS	rs2842198	43930738	A/G	1	0.40	1.12e-04	5.45e-01	6.26e-09	0.01	< 0.5	No
	rs549845	44076469	A/G	1	0.34	2.50e-06	1.76e-01	1.38e-10	0.01	< 0.5	No
	rs17531412	44182244	A/G	1	0.29	2.59e-05	8.87e-01	1.07e-12	0.01	< 0.5	No
	rs2527776	44345292	A/G	1	0.31	6.60e-06	4.77e-02	4.45e-08	0.01	< 0.5	No
	rs113551349	44475123	T/C	1	0.28	6.15e-04	5.39e-01	1.05e-10	0.01	< 0.5	No
	rs1222063 [§]	96602440	A/G	1	0.37	1.44e-10	2.64e-07	3.07e-08	0.98	0.99	Yes
	rs4858241	20669071	T/G	3	0.33	1.69e-05	1.55e-01	8.17e-09	0.04	< 0.5	No
	rs28411770	31151456	T/C	4	0.38	3.09e-06	3.43e-02	1.15e-08	0.09	< 0.5	No
	rs4916723 [§]	87854395	A/C	5	0.41	3.61e-10	1.92e-06	1.81e-08	0.86	0.86	Yes
	rs304132	88215594	A/C	5	0.40	4.53e-05	2.09e-01	3.05e-08	0.03	< 0.5	No
	rs10262192	114091753	A/G	7	0.43	8.36e-06	5.78e-02	3.66e-08	0.14	< 0.5	No
	rs74760947	34352610	A/G	8	0.06	2.60e-05	2.12e-01	1.39e-08	0.04	< 0.5	No
	rs11591402 [‡]	106747354	A/T	10	0.23	1.33e-08	1.46e-04	1.76e-08	0.89	0.90	Yes
	rs1427829	89760744	A/G	12	0.44	2.67e-07	1.25e-02	1.35e-09	0.17	< 0.5	No
	rs8039398	47730870	T/C	15	0.46	3.09e-03	3.09e-01	2.99e-09	0.02	< 0.5	No
	rs212178	72578131	A/G	16	0.10	3.87e-07	7.26e-03	1.20e-08	0.51	< 0.5	No*

No*: Discordance between COLOC and Hyprcoloc.

[†] rs910805 and rs6047310 are on the same region 20p11 and they are in low LD ($R^2=0.17$).

‡ rs11591402 and rs6584649 are on the same region 10q25 and they are in high LD ($R^2=0.96$).

§ Two of the 8 SNPs (rs1222063 and rs4916723) identified in the ADHD GWAS were also identified in the general factor GWAS.