Supplementary Table 1. Summary of SNPs Analyzed for Neurotransmitter Genes Between the No Palpitations and Palpitations Groups

Gene	SNP	Position	Chr	MAF	Alleles	Chi Square	p	Model
SEROTONERGIC NEUROTRANSMISSION								
RECEPTORS								
5-HYDROXYTRYPTAMINE RECEPTOR 1A								
HTR1A	rs6449693	63256017	5	0.437	A > G	FE	0.032	D
5-HYDROXYTRYPTAMINE RECEPTOR 1B								
HTR1B	rs6296	78172259	6	0.313	G > C	1.739	0.419	A
5-HYDROXYTRYPTAMINE RECEPTOR 2A								
HTR2A	rs6314	47409033	13	0.078	C > T	0.589	0.745	A
HTR2A	rs7322347	47410102	13	0.42	T > A	1.005	0.605	A
HTR2A	rs1923882	47411660	13	0.223	C > T	4.679	0.096	A
HTR2A	rs7997012	47411984	13	0.380	G > A	1.923	0.382	A

HTR2A	rs3742278	47419576	13	0.189	A > G	2.636	0.268	A
HTR2A	rs1923884	47421835	13	0.167	C > T	1.288	0.525	A
HTR2A	rs1923886	47423290	13	0.427	T > C	1.688	0.43	A
HTR2A	rs7330636	47423591	13	0.364	C > T	1.457	0.483	A
HTR2A	rs9567739	47424943	13	0.374	G > C	1.568	0.457	A
HTR2A	rs2296972	47428470	13	0.33	G > T	3.143	0.208	A
HTR2A	rs9534495	47429227	13	0.114	A > G	FE	0.853	A
HTR2A	rs9534496	47431107	13	0.182	G > C	0.816	0.665	A
HTR2A	rs4942578	47432609	13	0.264	G > T	0.08	0.961	A
HTR2A	rs2770292	47435105	13	0.162	C > G	3.196	0.202	A
HTR2A	rs1928042	47437215	13	0.218	A > C	4.588	0.101	A
HTR2A	rs2770293	47438973	13	0.376	C > T	2.399	0.301	A
HTR2A	rs1328674	47441706	13	0.044	G > A	n/a	n/a	n/a
HTR2A	rs2770298	47446846	13	0.26	T > C	2.491	0.288	A
HTR2A	rs1928040	47447235	13	0.48	T > C	1.292	0.524	A
HTR2A	rs972979	47449163	13	0.373	G > A	2.978	0.226	A

HTR2A	rs731779	47452037	13	0.171	T > G	2.176	0.337	A
HTR2A	rs2770304	47455364	13	0.333	A > G	1.333	0.514	A
HTR2A	rs927544	47456050	13	0.255	T > C	2.758	0.252	A
HTR2A	rs594242	47458051	13	0.169	C > G	2.491	0.288	A
HTR2A	rs4941573	47464856	13	0.447	A > G	1.147	0.564	A
HTR2A	rs1328684	47466229	13	0.314	T > C	1.818	0.403	A
HTR2A	rs6304	47466548	13	0.01	A > G	n/a	n/a	n/a
HTR2A	rs2296973	47466780	13	0.281	G > T	0.754	0.686	A
HTR2A	rs2070037	47467069	13	0.216	T > C	0.664	0.718	A
HTR2A	rs9534511	47468579	13	0.445	C > T	1.856	0.395	A
HTR2A	rs6313	47469939	13	0.45	C > T	1.34	0.512	A
HTR2A	HapA03	–	–	–	–	4.677	0.096	–
HTR2A	HapA07	–	–	–	–	1.538	0.464	–
HTR2A	HapB01	–	–	–	–	1.726	0.422	–
HTR2A	HapB02	–	–	–	–	1.393	0.498	–
HTR2A	HapB03	–	–	–	–	1.688	0.43	–

HTR2A	HapC01	–	–	–	–	2.322	0.313	–
HTR2A	HapC05	–	–	–	–	3.147	0.207	–
HTR2A	HapD01	–	–	–	–	0.08	0.961	–
HTR2A	HapD02	–	–	–	–	0.41	0.815	–
HTR2A	HapE01	–	–	–	–	4.588	0.101	–
HTR2A	HapF01	–	–	–	–	1.274	0.529	–
HTR2A	HapF02	–	–	–	–	2.343	0.310	–
HTR2A	HapF03	–	–	–	–	2.491	0.288	–
HTR2A	HapG01	–	–	–	–	3.039	0.219	–
HTR2A	HapH01	–	–	–	–	0.626	0.731	–
HTR2A	HapH06	–	–	–	–	2.694	0.26	–
HTR2A	HapI01	–	–	–	–	1.312	0.519	–
5-HYDROXYTRYPTAMINE RECEPTOR 3A								
HTR3A	rs1985242	113848272	11	0.37	T > A	2.016	0.365	A
HTR3A	rs11214796	113854678	11	0.261	T > C	1.545	0.462	A
HTR3A	rs10160548	113856680	11	0.378	T > G	1.255	0.534	A

HTR3A	HapA01	–	–	–	–	2.126	0.345	–
HTR3A	HapA04	–	–	–	–	1.306	0.52	–
PRODYNORPHIN								
PDYN	rs6045868	1967277	20	0.334	G > A	0.687	0.709	A
PDYN	rs2235751	1969933	20	0.361	G > A	1.042	0.594	A
SYNTHESIS								
TYROSINE HYDROXYLASE								
TH	rs2070762	2186334	11	0.5	T > C	2.202	0.333	A
TH	rs6357	2188237	11	0.243	G > A	0.556	0.757	A
TH	rs6356	2190950	11	0.403	G > A	0.332	0.847	A
TH	HapA01	–	–	–	–	0.346	0.841	–
TH	HapA02	–	–	–	–	0.488	0.784	–
TH	HapA04	–	–	–	–	FE	0.873	–
SYNTHESIS								
TRYTOPHAN HYDROXYLASE 2								
TPH2	rs11179000	72338627	12	0.268	A > T	4.34	0.114	A

TPH2	rs7955501	72350025	12	0.357	A > T	FE	0.006	D
TPH2	rs1487275	72410291	12	0.259	T > G	FE	0.028	D
CATECHOLAMINERGIC NEUROTRANSMITTERS								
TRANSPORTERS								
SOLUTE CARRIER FAMILY 6 MEMBER 2 NORADRENALINE TRANSPORTER								
SLC6A2	rs2242446	55690424	16	0.242	T > C	4.321	0.115	A
SLC6A2	rs17841327	55694252	16	0.321	C > A	FE	0.017	D
SLC6A2	rs3785143	55695105	16	0.087	C > T	0.904	0.636	A
SLC6A2	rs192303	55700223	16	0.291	G > C	2.548	0.28	A
SLC6A2	rs6499771	55700670	16	0.155	A > G	2.719	0.257	A
SLC6A2	rs36027	55702779	16	0.439	A > G	1.841	0.398	A
SLC6A2	rs36024	55706390	16	0.403	C > T	3.4	0.183	A
SLC6A2	rs36021	55711949	16	0.416	T > A	0.052	0.974	A
SLC6A2	rs40147	55716839	16	0.323	C > T	2.73	0.255	A

SLC6A2	rs1814270	55717076	16	0.404	T > C	1.136	0.567	A
SLC6A2	rs36017	55718817	16	0.438	C > G	0.762	0.683	A
SLC6A2	rs3785155	55722389	16	0.138	G > A	0.637	0.727	A
SLC6A2	rs47958	55726461	16	0.433	C > A	1.846	0.397	A
SLC6A2	rs5568	55730123	16	0.315	A > C	0.226	0.893	A
SLC6A2	rs1566652	55731574	16	0.321	G > T	0.598	0.742	A
SLC6A2	rs5569	55731834	16	0.303	C > T	2.799	0.247	A
SLC6A2	rs998424	55731945	16	0.303	C > T	3.999	0.135	A
SLC6A2	HapA01	–	–	–	–	7.613	0.022	–
SLC6A2	HapC01	–	–	–	–	2.747	0.253	–
SLC6A2	HapC10	–	–	–	–	0.525	0.769	–
SLC6A2	HapD01	–	–	–	–	3.368	0.186	–
SLC6A2	HapD04	–	–	–	–	3.282	0.194	–
SOLUTE CARRIER FAMILY 6 MEMBER 3 DOPAMINE TRANSPORTER								
SLC6A3	rs3863145	1392710	5	0.219	C > T	FE	0.033	D
SLC6A3	rs40184	1395076	5	0.419	G > A	3.312	0.191	A

SLC6A3	rs11564773	1396812	5	0.052	A > G	FE	1	A
SLC6A3	rs6876225	1406035	5	0.035	C > A	n/a	n/a	n/a
SLC6A3	rs6347	1411411	5	0.265	A > G	2.486	0.289	A
SLC6A3	rs37022	1415628	5	0.216	T > A	FE	0.032	R
SLC6A3	rs2975292	1419931	5	0.447	C > G	1.982	0.371	A
SLC6A3	rs11564758	1420587	5	0.323	G > C	0.435	0.805	A
SLC6A3	rs464049	1423904	5	0.465	T > C	FE	0.043	R
SLC6A3	rs10053602	1428134	5	0.213	T > C	0.005	0.997	A
SLC6A3	rs463379	1431163	5	0.253	C > G	1.919	0.383	A
SLC6A3	rs403636	1438353	5	0.207	G > T	0.981	0.612	A
SLC6A3	rs6350	1443198	5	0.06	C > T	FE	0.624	A
SLC6A3	rs2937639	1443727	5	0.471	G > A	3.347	0.188	A
SLC6A3	HapA01	–	–	–	–	1.528	0.466	–
SLC6A3	HapA07	–	–	–	–	1.848	0.397	–
SLC6A3	HapA09	–	–	–	–	0.606	0.739	–
SLC6A3	HapA10	–	–	–	–	0.432	0.806	–

METABOLISM								
CATECHOL-O-METHYLTRANSFERASE								
COMT	rs5748489	19927145	22	0.388	C > A	2.834	0.242	A
COMT	rs2020917	19928883	22	0.263	C > T	2.308	0.315	A
COMT	rs737866	19930108	22	0.265	A > G	2.19	0.335	A
COMT	rs1544325	19931667	22	0.397	G > A	2.441	0.295	A
COMT	rs5993882	19937532	22	0.234	T > G	2.503	0.286	A
COMT	rs5993883	19937637	22	0.495	T > G	1.465	0.481	A
COMT	rs740603	19945176	22	0.495	G > A	1.108	0.575	A
COMT	rs4646312	19948336	22	0.371	T > C	FE	0.038	D
COMT	rs165656	19948862	22	0.489	C > G	4.433	0.109	A
COMT	rs6269	19949951	22	0.391	A > G	2.311	0.315	A
COMT	rs4633	19950234	22	0.472	C > T	3.283	0.194	A
COMT	rs6267	19950262	22	0.002	G > T	n/a	n/a	n/a
COMT	rs740601	19950762	22	0.399	A > C	3.02	0.221	A
COMT	rs5031015	19951102	22	0.001	G > A	n/a	n/a	n/a

COMT	rs4818	19951206	22	0.387	C > G	3.905	0.142	A
COMT	rs4680	19951270	22	0.475	G > A	3.794	0.15	A
COMT	rs165774	19952560	22	0.288	G > A	3.749	0.153	A
COMT	rs174699	19954457	22	0.098	T > C	1.396	0.498	A
COMT	rs9332377	19955691	22	0.129	T > C	0.029	0.986	A
COMT	rs165599	19956780	22	0.338	A > G	1.04	0.595	A
COMT	HapA01	–	–	–	–	3.057	0.217	–
COMT	HapA06	–	–	–	–	2.493	0.287	–
COMT	HapA10	–	–	–	–	2.248	0.325	–
COMT	HapB02	–	–	–	–	4.797	0.091	–
COMT	HapB20	–	–	–	–	4.314	0.116	–
COMT	HapC01	–	–	–	–	1.04	0.595	–
COMT	HapC02	–	–	–	–	1.062	0.588	–
COMT	PAIN LPS	–	–	–	–	3.858	0.145	–
COMT	PAIN APS	–	–	–	–	4.228	0.121	–
COMT	PAIN HPS	–	–	–	–	0.106	0.948	–

COMT	PAIN DIPLO	–	–	–	–	6.984	0.222	–
COMT	PAIN RECODE	–	–	–	–	FE	0.053	–
CYTOCHROME P450 FAMILY 3 SUBFAMILY A MEMBER 4								
CYP3A4	rs4646437	99365082	7	0.163	C > T	0.101	0.951	A
GALANIN AND GMAP PREPROPEPTIDE								
GAL	rs694066	68452984	11	0.104	G > A	0.522	0.77	A
GAL	rs3136540	68456409	11	0.249	C > T	0.191	0.909	A
GAL	rs1042577	68458469	11	0.334	G > A	1.168	0.558	A
GAL	HapA01	–	–	–	–	0.923	0.63	–
GAL	HapA04	–	–	–	–	0.141	0.932	–
GALANIN RECEPTOR 1								
GALR1	rs949060	74958937	18	0.381	G > C	2.792	0.248	A
GALANIN RECEPTOR 2								
GALR2	rs2443168	74066446	17	0.443	T > A	0.953	0.621	A
GALR2	rs2598414	74067098	17	0.391	C > T	0.582	0.748	A
GALR2	HapA01	–	–	–	–	0.582	0.748	–

GALR2	HapA03	–	–	–	–	1.048	0.592	–
GTP CYCLOHYDROLASE 1								
GCH1	rs7142517	55306803	14	0.297	C > A	1.458	0.482	A
GCH1	rs841	55310491	14	0.236	C > T	6.157	0.046	A
GCH1	rs752688	55311568	14	0.236	C > T	6.157	0.046	A
GCH1	rs7155309	55322850	14	0.234	T > C	5.993	0.05	A
GCH1	rs12587434	55325582	14	0.236	T > G	8.452	0.015	A
GCH1	rs9671371	55328634	14	0.337	C > T	7.625	0.022	A
GCH1	rs2183081	55336750	14	0.409	T > C	4.439	0.109	A
GCH1	rs17128050	55343878	14	0.148	T > C	FE	0.023	D
GCH1	rs3783637	55348117	14	0.155	C > T	4.13	0.127	A
GCH1	rs3783638	55348372	14	0.187	G > A	1.726	0.422	A
GCH1	rs998259	55355030	14	0.168	C > T	0.756	0.685	A
GCH1	rs3783642	55360202	14	0.461	T > C	5.265	0.072	A
GCH1	HapA01	–	–	–	–	2.582	0.275	–
GCH1	HapA05	–	–	–	–	6.021	0.049	–

GCH1	HapA06	–	–	–	–	1.518	0.468	–
GCH1	HapB01	–	–	–	–	2.573	0.276	–
GCH1	HapB03	–	–	–	–	11.757	0.003	–
DRUG METABOLISM								
ATP-BINDING CASSETTE, SUBFAMILY B (MDR/TAP) MEMBER 1								
ABCB1	rs2235048	87138510	7	0.471	T > C	FE	0.013	R
ABCB1	rs6961419	87172135	7	0.4	T > C	0.137	0.934	A
ABCB1	rs1128503	87179600	7	0.433	C > T	3.039	0.219	A
ABCB1	rs1922241	87185893	7	0.299	G > A	0.446	0.8	A
ABCB1	rs10264990	87202614	7	0.293	T > C	1.7	0.427	A
ABCB1	rs1989830	87205662	7	0.309	C > T	0.196	0.906	A
ABCB1	rs1858923	87221215	7	0.445	T > C	4.791	0.091	A
ABCB1	rs9282564	87229439	7	0.089	A > G	1.319	0.517	A
ABCB1	rs13233308	87244959	7	0.438	C > T	FE	0.02	D
ABCB1	rs10267099	87278759	7	0.213	A > G	0.128	0.938	A
ABCB1	HapA01	–	–	–	–	3.673	0.159	–

ABCB1	HapA05	–	–	–	–	0.655	0.721	–
ABCB1	HapB01	–	–	–	–	6.227	0.044	–
ABCB1	HapB02	–	–	–	–	6.39	0.041	–
RECEPTORS								
ADRENOCEPTOR ALPHA 1D								
ADRA1D	rs3787441	4205059	20	0.268	T > C	0.433	0.805	A
ADRA1D	rs6084664	4207929	20	0.159	T > C	1.337	0.513	A
ADRA1D	rs2326478	4208246	20	0.326	C > T	0.761	0.684	A
ADRA1D	rs835880	4208894	20	0.225	A > G	0.732	0.693	A
ADRA1D	rs8183794	4210447	20	0.182	C > T	3.48	0.176	A
ADRA1D	rs6116268	4211439	20	0.48	C > T	1.005	0.605	A
ADRA1D	rs946188	4215315	20	0.236	A > G	0.188	0.91	A
ADRA1D	rs1556832	4215556	20	0.461	C > T	3.013	0.222	A
ADRA1D	rs8118409	4216662	20	0.229	G > A	0.052	0.974	A
ADRA1D	rs4815670	4216863	20	0.467	G > A	0.434	0.805	A
ADRA1D	rs6076639	4219257	20	0.206	C > T	0.247	0.884	A

ADRA1D	rs4815675	4223453	20	0.423	T > C	0.705	0.703	A
ADRA1D	HapA01	–	–	–	–	1.185	0.553	–
ADRA1D	HapA03	–	–	–	–	0.73	0.694	–
ADRA1D	HapB02	–	–	–	–	0.199	0.905	–
ADRA1D	HapB03	–	–	–	–	0.957	0.62	–
ADRA1D	HapC01	–	–	–	–	0.413	0.814	–
ADRA1D	HapC02	–	–	–	–	0.131	0.937	–
ADRA1D	HapC03	–	–	–	–	0.052	0.974	–
ADRA1D	HapD01	–	–	–	–	0.791	0.673	–
ADRA1D	HapD02	–	–	–	–	2.328	0.312	–
ADRENOCEPTOR ALPHA 2A								
ADRA2A	rs521674	112835589	10	0.364	A > T	n/a	n/a	n/a
ADRA2A	rs3750625	112839600	10	0.079	C > A	1.257	0.533	A
ADRENOCEPTOR BETA 2								
ADRB2	rs2400707	148205051	5	0.401	G > A	5.781	0.056	A
ADRB2	rs11168070	148205926	5	0.357	C > G	1.959	0.375	A

ADRB2	rs1042718	148206916	5	0.203	C > A	1.904	0.386	A
ADRB2	rs1042719	148207446	5	0.315	G > C	1.444	0.486	A
ADRB2	HapA01	–	–	–	–	0.986	0.611	–
ADRB2	HapA02	–	–	–	–	0.861	0.65	–
ADRB2	HapA05	–	–	–	–	3.068	0.216	–
ADRENOCEPTOR BETA 3								
ADRB3	rs4994	37823797	8	0.092	T > C	0.979	0.613	A
G PROTEIN-COUPLED RECEPTOR KINASE 3								
GRK3	rs1008673	25994012	22	0.148	A > G	2.127	0.345	A
GRK3	rs3817819	26075187	22	0.421	C > T	1.237	0.539	A
GRK3	rs5761159	26102307	22	0.438	G > T	4.133	0.127	A
GRK3	rs9608416	26111017	22	0.468	A > G	5.208	0.074	A
GRK3	HapA01	–	–	–	–	4.494	0.106	–
GRK3	HapA04	–	–	–	–	4.953	0.084	–
GENES INVOLVED IN VARIOUS ASPECTS OF NEUROTRANSMISSION								
TRANSPORTER								

SOLUTE CARRIER FAMILY 6 MEMBER 1 – GABA TRANSPORTER								
SLC6A1	rs2697149	11036479	3	0.221	T > G	1.368	0.505	A
SLC6A1	rs2601126	11036623	3	0.407	C > T	FE	0.009	D
SLC6A1	rs1710885	11038806	3	0.192	T > C	0.717	0.699	A
SLC6A1	rs1710886	11039654	3	0.333	G > C	0.271	0.873	A
SLC6A1	rs1710887	11039959	3	0.395	G > T	1.37	0.504	A
SLC6A1	rs9990174	11040438	3	0.326	G > T	0.833	0.659	A
SLC6A1	rs1568072	11041605	3	0.22	C > T	2.694	0.26	A
SLC6A1	rs1728811	11041869	3	0.426	C > T	1.798	0.407	A
SLC6A1	rs11718132	11045019	3	0.134	G > T	2.515	0.284	A
SLC6A1	rs2697144	11051098	3	0.251	A > G	0.483	0.785	A
SLC6A1	rs2928079	11055113	3	0.425	A > T	2.697	0.26	A
SLC6A1	rs1170695	11055337	3	0.309	T > C	0.667	0.716	A
SLC6A1	rs2933308	11055623	3	0.366	G > A	0.625	0.732	A
SLC6A1	rs10510403	11066669	3	0.141	A > G	0.202	0.904	A
SLC6A1	rs2675163	11075013	3	0.231	T > C	1.472	0.479	A

SLC6A1	rs10514669	11075911	3	0.194	C > T	2.695	0.26	A
SLC6A1	rs2697138	11076906	3	0.145	C > A	1.049	0.592	A
SLC6A1	rs1062246	11080168	3	0.417	A > G	3.149	0.207	A
SLC6A1	HapA01	–	–	–	–	8.75	0.013	–
SLC6A1	HapA02	–	–	–	–	2.725	0.256	–
SLC6A1	HapA04	–	–	–	–	1.456	0.483	–
SLC6A1	HapB01	–	–	–	–	2.335	0.311	–
SLC6A1	HapB03	–	–	–	–	1.798	0.407	–
SLC6A1	HapC01	–	–	–	–	0.625	0.732	–
SLC6A1	HapC02	–	–	–	–	1.018	0.601	–
SLC6A1	HapC03	–	–	–	–	0.667	0.716	–
SLC6A1	HapD01	–	–	–	–	1.955	0.376	–
SLC6A1	HapD02	–	–	–	–	3.67	0.16	–
TRANSPORTER								
SOLUTE CARRIER FAMILY 6 MEMBER 4 – SEROTONIN TRANSPORTER								
SLC6A4	rs3813034	28524803	17	0.476	A > C	3.347	0.188	A

SLC6A4	rs1042173	28525010	17	0.478	T > G	3.573	0.168	A
SLC6A4	rs4325622	28526474	17	0.473	T > C	3.048	0.218	A
SLC6A4	rs3794808	28531792	17	0.469	G > A	4.312	0.116	A
SLC6A4	rs140701	28538531	17	0.464	G > A	2.731	0.255	A
SLC6A4	rs140700	28543388	17	0.089	G > A	5.729	0.057	A
SLC6A4	rs2020942	28546913	17	0.346	G > A	0.005	0.998	A
SLC6A4	rs8076005	28547209	17	0.214	A > G	1.477	0.478	A
SLC6A4	rs6354	28549897	17	0.18	A > C	3.025	0.22	A
SLC6A4	rs2066713	28551664	17	0.345	C > T	0.441	0.802	A
SLC6A4	HapA01	–	–	–	–	5.074	0.079	–
SLC6A4	HapA11	–	–	–	–	0.236	0.889	–
SLC6A4	HapB01	–	–	–	–	3.304	0.192	–
SLC6A4	HapB04	–	–	–	–	0.002	0.999	–
SLC6A4	5HTTLPR	–	–	–	–	5.168	0.075	–
SLC6A4	Combined 5HTTLPR and	–	–	–	–	1.582	0.453	–

	rs25531 Additive							
SLC6A4	Combined 5HTTLPR and rs25531 Dominate	–	–	–	–	FE	0.617	–
SLC6A4	Combined 5HTTLPR and rs25531 Recessive	–	–	–	–	FE	0.237	–
NITRIC OXIDE SYNTHASE 1								
NOS1	rs2682826	117652837	12	0.311	C > T	1.037	0.595	A
NOS1	rs816361	117655130	12	0.318	C > G	1.113	0.573	A
NOS1	rs816363	117660466	12	0.458	C > G	0.024	0.988	A
NOS1	rs9658498	117668524	12	0.409	T > C	0.591	0.744	A
NOS1	rs1353939	117675352	12	0.261	G > A	1.092	0.579	A
NOS1	rs1047735	117685269	12	0.346	C > T	2.378	0.305	A

NOS1	rs12829185	117694019	12	0.243	C > T	0.96	0.619	A
NOS1	rs2293054	117701713	12	0.299	G > A	3.14	0.208	A
NOS1	rs6490121	117708194	12	0.364	A > G	2.623	0.269	A
NOS1	rs2293052	117715619	12	0.358	C > T	0.381	0.826	A
NOS1	rs7977109	117730339	12	0.418	A > G	1.009	0.604	A
NOS1	rs3782206	117745088	12	0.116	C > T	1.4	0.497	A
NOS1	rs7295972	117747367	12	0.445	G > A	1.4	0.497	A
NOS1	rs11068447	117747686	12	0.124	C > T	1.775	0.412	A
NOS1	rs547954	117754505	12	0.206	C > T	2.559	0.278	A
NOS1	rs3782212	117755401	12	0.27	C > T	7.098	0.029	A
NOS1	rs12578547	117763346	12	0.266	T > C	2.612	0.271	A
NOS1	rs471871	117765517	12	0.246	A > T	4.068	0.131	A
NOS1	rs545654	117777048	12	0.496	T = C	0.379	0.828	A
NOS1	rs1552227	117779034	12	0.257	C > T	0.061	0.97	A
NOS1	rs10507279	117780273	12	0.122	G > A	1.671	0.434	A
NOS1	rs693534	117784717	12	0.382	G > A	0.315	0.854	A

NOS1	rs1123425	117786104	12	0.439	A > G	1.716	0.424	A
NOS1	rs3782221	117795880	12	0.27	G > A	1.52	0.468	A
NOS1	HapA02	–	–	–	–	0.069	0.966	–
NOS1	HapA04	–	–	–	–	0.931	0.628	–
NOS1	HapB02	–	–	–	–	1.092	0.579	–
NOS1	HapB03	–	–	–	–	0.591	0.744	–
NOS1	HapC01	–	–	–	–	2.378	0.305	–
NOS1	HapC03	–	–	–	–	0.96	0.619	–
NOS1	HapD01	–	–	–	–	0.287	0.866	–
NOS1	HapD02	–	–	–	–	2.534	0.282	–
NOS1	HapD03	–	–	–	–	0.983	0.612	–
NOS1	HapE01	–	–	–	–	0.217	0.897	–
NOS1	HapE03	–	–	–	–	1.4	0.497	–
NOS1	HapF01	–	–	–	–	3.265	0.195	–
NOS1	HapF02	–	–	–	–	0.954	0.621	–
NOS1	HapF04	–	–	–	–	0.388	0.824	–

NOS1	HapF06	–	–	–	–	0.567	0.753	–
NITRIC OXIDE SYNTHASE 2A								
NOS2A	rs9906835	26089373	17	0.413	A > G	0.907	0.635	A
NOS2A	rs2297512	26092554	17	0.385	A > G	0.866	0.649	A
NOS2A	rs2297516	26095729	17	0.416	A > C	0.170	0.918	A
NOS2A	rs2297518	26096596	17	0.145	G > A	1.494	0.474	A
NOS2A	rs2248814	26100320	17	0.393	G > A	0.829	0.661	A
NOS2A	rs1137933	26105931	17	0.17	C > T	2.059	0.357	A
NOS2A	rs4795067	26106674	17	0.278	A > G	0.266	0.875	A
NOS2A	rs3729508	26109029	17	0.422	G > A	1.453	0.484	A
NOS2A	rs944725	26109570	17	0.382	C > T	1.711	0.425	A
NOS2A	rs3730013	26125917	17	0.342	C > T	0.121	0.941	A
NOS2A	rs10459953	26127517	17	0.366	G > C	2.674	0.263	A
NOS2A	rs2779248	26127831	17	0.347	T > C	3.892	0.143	A
NOS2A	HapA01	–	–	–	–	0.201	0.905	–
NOS2A	HapA04	–	–	–	–	0.942	0.625	–

NOS2A	HapB01	–	–	–	–	3.383	0.184	–
NOS2A	HapB02	–	–	–	–	2.054	0.358	–
NOS2A	HapC01	–	–	–	–	4.951	0.084	–
NOS2A	HapC02	–	–	–	–	2.549	0.28	–
NOS2A	HapC03	–	–	–	–	0.108	0.947	–
TACHYKININ PRECURSOR 1								
TAC1	rs7793277	97359584	7	0.267	C > G	FE	0.034	R
TAC1	rs2072100	97361783	7	0.476	A > G	FE	0.006	D
TAC1	rs1229434	97365841	7	0.429	A > G	FE	0.007	D
TAC1	rs4526299	97367628	7	0.195	C > T	2.57	0.277	A
TAC1	HapA01	–	–	–	–	7.106	0.029	–
TAC1	HapA05	–	–	–	–	2.436	0.296	–
TAC1	HapA06	–	–	–	–	5.555	0.062	–
TACHYKININ RECEPTOR 1								
TACR1	rs1106855	75277986	2	0.243	G > A	0.762	0.683	A
TACR1	rs4439987	75287105	2	0.385	A > G	0.067	0.967	A

TACR1	rs11688000	75293156	2	0.39	A > G	0.505	0.777	A
TACR1	rs6546952	75301762	2	0.399	T > C	0.492	0.782	A
TACR1	rs17564182	75302305	2	0.224	C > G	0.469	0.791	A
TACR1	rs3771810	75307652	2	0.167	T > C	1.078	0.583	A
TACR1	rs34242711	75321179	2	0.199	G > A	0.887	0.642	A
TACR1	rs2111378	75354603	2	0.315	C > T	12.886	0.002	A
TACR1	rs3771825	75355479	2	0.197	C > T	1.302	0.522	A
TACR1	rs3771827	75361863	2	0.453	T > C	n/a	n/a	n/a
TACR1	rs741418	75363185	2	0.44	A > G	13.752	0.001	A
TACR1	rs9808455	75369568	2	0.479	T > C	14.279	0.001	A
TACR1	rs3771836	75380951	2	0.484	T > G	4.227	0.121	A
TACR1	rs759588	75384548	2	0.378	C > T	6.247	0.044	A
TACR1	rs3821318	75387310	2	0.458	C > T	4.766	0.092	A
TACR1	rs6733933	75387833	2	0.189	A > G	3.343	0.188	A
TACR1	rs13428269	75395778	2	0.169	C > T	0.511	0.774	A
TACR1	rs3771853	75401613	2	0.407	C > T	1.367	0.505	A

TACR1	rs12477554	75402064	2	0.462	G > A	0.933	0.627	A
TACR1	rs4853116	75411277	2	0.334	A > G	2.066	0.356	A
TACR1	rs3821320	75414091	2	0.41	A > G	4.672	0.097	A
TACR1	rs4853119	75416295	2	0.229	T > C	1.28	0.527	A
TACR1	rs3771863	75419713	2	0.195	C > T	2.783	0.249	A
TACR1	HapA01	–	–	–	–	1.72	0.423	–
TACR1	HapA04	–	–	–	–	0.927	0.629	–
TACR1	HapB01	–	–	–	–	12.886	0.002	–
TACR1	HapB02	–	–	–	–	9.879	0.007	–
TACR1	HapB03	–	–	–	–	1.302	0.522	–
TACR1	HapC01	–	–	–	–	13.37	0.001	–
TACR1	HapC04	–	–	–	–	14.808	0.001	–
TACR1	HapD03	–	–	–	–	1.32	0.517	–
TACR1	HapD05	–	–	–	–	6.247	0.044	–
TACR1	HapE01	–	–	–	–	0.737	0.692	–
TACR1	HapE04	–	–	–	–	1.697	0.428	–

NEUROPEPTIDE Y								
NPY	rs16148	24322337	7	0.424	T > C	FE	0.008	R
NPY	rs16147	24323409	7	0.496	A > G	1.963	0.375	A
NPY	rs16478	24324607	7	0.29	C > T	FE	0.032	R
NPY	rs16139	24324878	7	0.029	A > G	n/a	n/a	n/a
NPY	rs1468271	24326980	7	0.027	A > G	n/a	n/a	n/a
NPY	rs5574	24329132	7	0.429	C > T	1.19	0.551	A
NPY	HapA01	–	–	–	–	1.258	0.533	–
NPY	HapA04	–	–	–	–	4.959	0.084	–
NPY	HapA05	–	–	–	–	5.371	0.068	–
NEUROPEPTIDE Y RECEPTOR Y1								
NPY1R	rs9764	164245404	4	0.282	T > C	0.259	0.879	A
NPY1R	rs7687423	164250796	4	0.41	G > A	1.838	0.399	A
NPY1R	HapA01	–	–	–	–	0.314	0.855	–
NPY1R	HapA04	–	–	–	–	1.696	0.428	–

BRAIN-DERIVED NEUROTROPHIC FACTOR								
BDNF	rs7124442	27677040	11	0.29	T > C	1.891	0.389	A
BDNF	rs6265	27679915	11	0.222	G > A	4.49	0.106	A
BDNF	rs11030101	27680743	11	0.409	A > T	0.47	0.791	A
BDNF	rs11030102	27681595	11	0.205	C > G	4.51	0.105	A
BDNF	rs11030104	27684516	11	0.233	A > G	4.922	0.085	A
BDNF	rs2049045	27694240	11	0.156	G > C	5.567	0.062	A
BDNF	rs11030107	27694834	11	0.205	A > G	4.565	0.102	A
BDNF	rs7103411	27700124	11	0.243	T > C	4.994	0.082	A
BDNF	rs16917237	27702382	11	0.231	G > T	4.856	0.088	A
BDNF	rs6484320	27703187	11	0.243	A > T	4.994	0.082	A
BDNF	rs7127507	27714883	11	0.295	T > C	2.297	0.317	A
BDNF	rs2049046	27723774	11	0.464	A > T	0.805	0.669	A
BDNF	HapA01	–	–	–	–	0.365	0.833	–

A—additive model; ABCB—ATP-binding cassette subfamily B (MDR/TAP) member 1; ADRA1D—adrenoceptor alpha 1D; ADRA2A—adrenoceptor alpha 2A; ADRB2—adrenoceptor beta 2; ADRB3—adrenoceptor beta 3; BDNF—brain-derived neurotrophic factor; chr—chromosome; COMT—

catechol-O-methyltransferase; CYP3A4—cytochrome P450 family 3 subfamily A polypeptide 4; D—dominant model; FE—Fisher's exact test; GAL—galanin; GALR1—galanin receptor 1; GALR2—galanin receptor 2; GCH1—GTP cyclohydrolase 1; GRK3—G protein-coupled receptor kinase 3; hap—haplotype; HTR1A—5-hydroxytryptamine receptor 1A G protein coupled; HTR1B—5-hydroxytryptamine receptor 1B G protein coupled; HTR2A—5-hydroxytryptamine receptor 2A G protein coupled; HTR3A—5-hydroxytryptamine receptor 3A ionotropic; MAF—minor allele frequency, n/a—not assayed because SNP violated Hardy-Weinberg expectations ($p < 0.001$) or because MAF was $0 < 0.05$; NOS1—nitric oxide synthase 1; NOS2A—nitric oxide synthase 2 inducible; NPY—neuropeptide Y; NPY1R—neuropeptide Y receptor Y1; PDYN—prodynorphin; R—recessive model; SLC6A1—solute carrier family 6 (neurotransmitter transporter, GABA) member 1; SLC6A2—solute carrier family 6 (neurotransmitter transporter, noradrenaline) member 2; SLC6A3—solute carrier family 6 (neurotransmitter transporter, dopamine) member 3; SLC6A4—solute carrier family 6 (neurotransmitter transporter, serotonin) member 4; SNP—single nucleotide polymorphism; TAC1—tachykinin precursor 1; TACR1—tachykinin receptor 1; TH—tyrosine hydroxylase; TPH2—tryptophan hydroxylase 2