

Supplemental Digital Content 3

Table 1. Genetic Test Results

Results of Allele Frequency Testing With Odds Ratios for CPSP Adjusted for Sex

Male

SNP	P Value	Risk Allele	Odds Ratio	95% CI
rs1042114	0.0449	G	1.35	1.01–1.81
rs533123	0.4911	C	1.09	0.85–1.4
rs6691840	0.4406	A	1.09	0.87–1.38
rs932816	0.3883	A	1.10	0.88–1.38
rs4141964	0.8819	G	1.01	0.82–1.26
rs2295633	0.9768	C	1.00	0.81–1.24
rs6693882	0.4831	A	1.08	0.87–1.34
rs5275	0.3349	C	1.11	0.89–1.39
rs1800896	0.7223	A	1.03	0.84–1.28
rs6265	0.0329	G	1.30	1.02–1.66
rs2049046	0.1006	T	1.18	0.97–1.46
rs908867	0.3982	G	1.16	0.81–1.68
rs6277	0.7791	T	1.03	0.84–1.27
rs1076560	0.9832	C	1.00	0.74–1.37
rs2734837	0.9373	A	1.01	0.81–1.25
rs11608185	0.9064	C	1.01	0.81–1.26
rs4936272	0.9272	C	1.01	0.82–1.24

rs4648317	0.0404	T	1.36	1.01–1.81
rs4322431	0.3604	T	1.11	0.89–1.39
rs1799978	0.8925	A	1.03	0.64–1.66
rs12364283	0.0573	G	1.47	0.99–2.2
rs17122021	0.0306	T	1.27	1.02–1.57
rs4149117	0.9102	G	1.02	0.75–1.38
rs11568563	0.4042	A	1.19	0.79–1.77
rs8904	0.0308	T	1.25	1.02–1.55
rs10483639	0.0766	C	1.28	0.97–1.7
rs7142517	0.621	C	1.05	0.85–1.31
rs752688	0.0879	T	1.27	0.96–1.69
rs4411417	0.0631	C	1.31	0.98–1.73
rs9671371	0.1585	T	1.18	0.94–1.5
rs12147422	0.1455	T	1.29	0.92–1.81
rs8004445	0.1083	G	1.33	0.94–1.87
rs998259	0.4194	T	1.10	0.87–1.38
rs3783641	0.1748	A	1.21	0.92–1.6
rs8007267	0.2565	T	1.18	0.89–1.58
rs40434	0.1505	C	1.17	0.95–1.44
rs36024	0.3586	C	1.10	0.9–1.35
rs36017	0.4062	G	1.09	0.89–1.34
rs8065080	0.6056	C	1.06	0.86–1.3
rs1979572	0.7951	C	1.03	0.84–1.26
rs4325622	0.8883	C	1.01	0.83–1.24

rs140701	0.5893	G	1.06	0.86–1.3
rs2066713	0.7255	C	1.04	0.84–1.29
rs9966412	0.7198	C	1.06	0.78–1.43
rs2562456	0.9908	T	1.00	0.79–1.27
rs1800469	0.6938	C	1.04	0.84–1.29
rs934778	0.7694	C	1.03	0.83–1.28
rs6746030	0.7984	A	1.04	0.76–1.42
rs6747673	0.2657	A	1.12	0.91–1.38
rs9646771	0.8116	C	1.03	0.83–1.27
rs4646312	0.7426	C	1.03	0.84–1.27
rs6269	0.9745	A	1.00	0.82–1.23
rs4680	0.6193	G	1.05	0.86–1.29
rs7678338	0.5877	T	1.07	0.85–1.34
rs7689605	0.7059	A	1.07	0.74–1.56
rs10028945	0.8413	A	1.02	0.82–1.28
rs12516948	0.5481	A	1.06	0.87–1.31
rs40184	0.5826	A	1.06	0.86–1.3
rs403636	0.578	G	1.08	0.82–1.42
rs6350	0.7908	C	1.05	0.72–1.54
rs3816596	0.1133	T	1.19	0.96–1.47
rs12658835	0.3102	G	1.13	0.89–1.42
rs179997	0.0931	A	1.20	0.97–1.48
rs1800629	0.7464	G	1.05	0.77–1.44
rs1799971	0.877	A	1.02	0.78–1.34

rs563649	0.851	A	1.04	0.68–1.59
rs702764	0.9032	T	1.02	0.76–1.37
rs997917	0.827	C	1.03	0.82–1.29
rs3839874	0.4568	T	1.08	0.88–1.33
rs1975285	0.1264	C	1.21	0.95–1.54
rs11988795	0.6814	C	1.05	0.84–1.3
rs3788862	0.4777	A	1.12	0.81–1.55
rs2283724	0.3758	G	1.15	0.85–1.56
rs1800659	0.8199	C	1.04	0.76–1.42
rs979606	0.7808	G	1.05	0.76–1.44
rs979605	0.7981	T	1.04	0.76–1.44

Female

SNP	P Value	Risk Allele	Odds Ratio	95% CI
rs1042114	0.4777	T	1.22	0.71–2.09
rs533123	0.2344	T	1.32	0.84–2.07
rs6691840	0.5062	C	1.15	0.77–1.72
rs932816	0.1134	A	1.36	0.93–2
rs4141964	0.8969	G	1.02	0.72–1.46
rs2295633	0.9701	C	1.01	0.7–1.44
rs6693882	0.3424	A	1.19	0.83–1.71
rs5275	0.2624	T	1.24	0.85–1.79
rs1800896	0.836	A	1.04	0.73–1.48
rs6265	0.1527	A	1.33	0.9–1.96
rs2049046	0.912	T	1.02	0.72–1.44
rs908867	0.1001	G	1.80	0.89–3.65
rs6277	0.7665	T	1.05	0.74–1.5
rs1076560	0.2939	C	1.32	0.79–2.2
rs2734837	0.4441	G	1.16	0.8–1.67
rs11608185	0.4071	T	1.17	0.81–1.7
rs4936272	0.8405	C	1.04	0.73–1.46
rs4648317	0.2443	T	1.35	0.82–2.22
rs4322431	0.8264	T	1.04	0.71–1.53
rs1799978	0.9657	A	1.02	0.49–2.12
rs12364283	0.0636	G	1.96	0.95–4.02
rs17122021	0.6636	C	1.08	0.75–1.56

rs4149117	0.3099	G	1.31	0.78–2.18
rs11568563	0.3677	A	1.36	0.69–2.67
rs8904	0.6886	T	1.07	0.76–1.52
rs10483639	0.5798	C	1.13	0.73–1.77
rs7142517	0.3528	C	1.19	0.82–1.72
rs752688	0.3529	T	1.23	0.79–1.92
rs4411417	0.4357	C	1.19	0.77–1.86
rs9671371	0.417	T	1.17	0.8–1.72
rs12147422	0.5917	C	1.18	0.64–2.17
rs8004445	0.5917	T	1.18	0.64–2.17
rs998259	0.161	C	1.32	0.89–1.96
rs3783641	0.2708	A	1.28	0.82–1.99
rs8007267	0.7349	T	1.08	0.69–1.7
rs40434	0.6328	C	1.09	0.76–1.56
rs36024	0.3465	C	1.18	0.84–1.66
rs36017	0.1362	G	1.30	0.92–1.83
rs8065080	0.392	T	1.17	0.82–1.65
rs1979572	0.9249	C	1.02	0.72–1.43
rs4325622	0.7257	T	1.06	0.76–1.5
rs140701	0.8004	G	1.05	0.74–1.47
rs2066713	0.4379	C	1.16	0.8–1.67
rs9966412	0.3258	C	1.29	0.77–2.17
rs2562456	0.0596	C	1.47	0.98–2.2
rs1800469	0.6889	C	1.08	0.74–1.57

rs934778	0.2698	T	1.22	0.86–1.74
rs6746030	0.8172	G	1.06	0.65–1.74
rs6747673	0.7852	T	1.05	0.74–1.48
rs9646771	0.6793	C	1.08	0.75–1.55
rs4646312	0.2005	C	1.26	0.89–1.78
rs6269	0.1666	G	1.28	0.9–1.82
rs4680	0.8594	G	1.03	0.73–1.46
rs7678338	0.9765	C	1.01	0.68–1.48
rs7689605	0.7837	A	1.10	0.56–2.17
rs10028945	0.9399	G	1.01	0.7–1.47
rs12516948	0.0607	G	1.39	0.98–1.97
rs40184	0.4379	G	1.15	0.81–1.62
rs403636	0.1104	G	1.44	0.92–2.25
rs6350	0.3448	C	1.39	0.7–2.79
rs3816596	0.0913	C	1.36	0.95–1.96
rs12658835	0.4201	A	1.17	0.8–1.73
rs179997	0.2767	A	1.21	0.86–1.72
rs1800629	0.1789	G	1.44	0.84–2.46
rs1799971	0.1056	A	1.46	0.92–2.3
rs563649	0.9107	A	1.04	0.51–2.11
rs702764	0.6958	T	1.10	0.69–1.76
rs997917	0.1851	C	1.29	0.88–1.89
rs3839874	0.3239	T	1.19	0.84–1.68
rs1975285	0.5818	C	1.13	0.74–1.71

rs11988795	0.6763	T	1.08	0.75–1.57
rs3788862	0.7195	A	1.08	0.71–1.65
rs2283724	0.956	A	1.01	0.68–1.5
rs1800659	0.9196	C	1.02	0.69–1.52
rs979606	0.9499	G	1.01	0.68–1.52
rs979605	0.9138	T	1.02	0.68–1.53

CI = confidence interval; CPSP = chronic postsurgical pain; SNP = single nucleotide polymorphism.

Results of Allele Frequency Testing With Odds Ratios for CPSP Adjusted by Type of Intervention

Hernia Repair

SNP	P Value	Risk Allele	Odds Ratio	95% CI
rs1042114	0.0236	G	1.54	1.06–2.25
rs533123	0.0737	C	1.35	0.97–1.86
rs6691840	0.6271	A	1.07	0.81–1.43
rs932816	0.3894	A	1.13	0.85–1.51
rs4141964	0.4665	G	1.11	0.84–1.45
rs2295633	0.5815	C	1.08	0.82–1.42
rs6693882	0.447	A	1.11	0.85–1.46
rs5275	0.448	C	1.11	0.84–1.47
rs1800896	0.7769	G	1.04	0.8–1.36
rs6265	0.2954	G	1.18	0.86–1.62
rs2049046	0.0846	T	1.26	0.97–1.64
rs908867	0.7426	G	1.08	0.68–1.7
rs6277	0.9769	T	1.00	0.77–1.31
rs1076560	0.9193	A	1.02	0.69–1.52
rs2734837	0.887	A	1.02	0.77–1.35
rs11608185	0.9421	C	1.01	0.77–1.33
rs4936272	0.9972	T	1.00	0.77–1.3
rs4648317	0.0188	T	1.54	1.07–2.22
rs4322431	0.3846	T	1.14	0.85–1.52
rs1799978	0.2826	A	1.43	0.74–2.74

rs12364283	0.0323	G	1.71	1.04–2.82
rs17122021	0.0069	T	1.46	1.11–1.92
rs4149117	0.3494	G	1.20	0.82–1.77
rs11568563	0.6371	A	1.12	0.69–1.82
rs8904	0.0619	T	1.29	0.99–1.68
rs10483639	0.8818	C	1.03	0.72–1.46
rs7142517	0.458	C	1.11	0.84–1.47
rs752688	0.8818	T	1.03	0.72–1.46
rs4411417	0.7637	C	1.06	0.74–1.5
rs9671371	0.6724	T	1.07	0.79–1.44
rs12147422	0.1638	T	1.36	0.88–2.11
rs8004445	0.1638	G	1.36	0.88–2.11
rs998259	0.7293	T	1.05	0.78–1.42
rs3783641	0.6572	T	1.08	0.76–1.53
rs8007267	0.433	C	1.16	0.8–1.67
rs40434	0.068	C	1.29	0.98–1.69
rs36024	0.3791	C	1.13	0.87–1.46
rs36017	0.1429	G	1.22	0.94–1.58
rs8065080	0.8801	T	1.02	0.78–1.33
rs1979572	0.6392	T	1.06	0.82–1.38
rs4325622	0.4272	C	1.11	0.86–1.44
rs140701	0.6907	A	1.05	0.81–1.37
rs2066713	0.8473	C	1.03	0.78–1.36
rs9966412	0.668	T	1.09	0.73–1.62

rs2562456	0.8178	T	1.04	0.76–1.41
rs1800469	0.8683	C	1.02	0.78–1.35
rs934778	0.9155	T	1.02	0.77–1.34
rs6746030	0.9399	G	1.02	0.68–1.51
rs6747673	0.7469	A	1.04	0.8–1.36
rs9646771	0.5801	C	1.08	0.82–1.42
rs4646312	0.7493	C	1.04	0.8–1.36
rs6269	0.873	A	1.02	0.78–1.33
rs4680	0.4535	G	1.11	0.85–1.44
rs7678338	0.119	T	1.26	0.94–1.69
rs7689605	0.0956	A	1.53	0.93–2.51
rs10028945	0.5687	G	1.09	0.82–1.45
rs12516948	0.628	A	1.07	0.82–1.39
rs40184	0.7465	A	1.04	0.8–1.36
rs403636	0.5617	G	1.11	0.78–1.59
rs6350	0.6877	T	1.10	0.69–1.77
rs3816596	0.1785	T	1.20	0.92–1.58
rs12658835	0.8173	G	1.04	0.77–1.4
rs179997	0.0554	A	1.30	0.99–1.71
rs1800629	0.7246	A	1.07	0.72–1.59
rs1799971	0.8182	A	1.04	0.74–1.46
rs563649	0.4823	G	1.23	0.69–2.19
rs702764	0.6628	T	1.09	0.74–1.6
rs997917	0.6567	T	1.07	0.8–1.43

rs3839874	0.8255	C	1.03	0.79–1.34
rs1975285	0.606	C	1.08	0.8–1.48
rs11988795	0.3047	C	1.16	0.88–1.52
rs3788862	0.2316	A	1.28	0.85–1.92
rs2283724	0.197	G	1.29	0.88–1.9
rs1800659	0.3467	C	1.21	0.81–1.8
rs979606	0.5133	G	1.15	0.76–1.72
rs979605	0.5303	T	1.14	0.76–1.72

Vaginal Hysterectomy

SNP	P Value	Risk Allele	Odds Ratio	95% CI
rs1042114	0.8674	G	1.09	0.39-3.03
rs533123	0.8193	C	1.10	0.49-2.44
rs6691840	0.9328	A	1.03	0.53-1.98
rs932816	0.8492	A	1.06	0.57-1.98
rs4141964	0.8795	A	1.05	0.59-1.85
rs2295633	0.9692	C	1.01	0.57-1.8
rs6693882	0.7009	A	1.12	0.63-2
rs5275	0.7815	T	1.09	0.59-2.03
rs1800896	0.326	A	1.33	0.75-2.35
rs6265	0.8248	A	1.07	0.59-1.95
rs2049046	0.3502	T	1.31	0.75-2.28
rs908867	0.0629	G	3.30	0.88-12.37
rs6277	0.541	C	1.19	0.68-2.1
rs1076560	0.9868	A	1.01	0.45-2.27
rs2734837	0.4891	G	1.23	0.68-2.24
rs11608185	0.3135	T	1.36	0.75-2.47
rs4936272	0.7144	T	1.11	0.63-1.95
rs4648317	0.0629	T	2.17	0.95-4.97
rs4322431	0.1314	T	1.63	0.86-3.1
rs1799978	0.8967	G	1.09	0.3-3.88
rs12364283	0.014	G	3.92	1.23-12.46
rs17122021	0.6256	C	1.16	0.64-2.1

rs4149117	0.5246	T	1.30	0.58–2.89
rs11568563	0.4358	C	1.67	0.46–6.1
rs8904	0.7468	T	1.10	0.62–1.93
rs10483639	0.2413	C	1.52	0.75–3.08
rs7142517	0.7815	C	1.09	0.59–2.03
rs752688	0.1552	T	1.66	0.82–3.34
rs4411417	0.2413	C	1.52	0.75–3.08
rs9671371	0.597	T	1.18	0.64–2.15
rs12147422	0.519	T	1.42	0.49–4.15
rs8004445	0.519	G	1.42	0.49–4.15
rs998259	0.6025	C	1.19	0.62–2.3
rs3783641	0.5226	A	1.25	0.63–2.47
rs8007267	0.9203	T	1.04	0.51–2.09
rs40434	0.8411	C	1.06	0.59–1.9
rs36024	0.4307	C	1.25	0.71–2.19
rs36017	0.33	G	1.32	0.76–2.3
rs8065080	0.812	T	1.07	0.61–1.88
rs1979572	0.6834	C	1.12	0.64–1.96
rs4325622	0.6752	T	1.13	0.65–1.96
rs140701	0.5557	G	1.18	0.68–2.06
rs2066713	0.9209	C	1.03	0.56–1.9
rs9966412	0.2202	C	1.68	0.73–3.88
rs2562456	0.7317	C	1.12	0.59–2.13
rs1800469	0.503	T	1.22	0.68–2.19

rs934778	0.4576	C	1.24	0.7–2.19
rs6746030	0.7115	G	1.16	0.53–2.56
rs6747673	0.7887	T	1.08	0.61–1.92
rs9646771	0.9099	T	1.03	0.58–1.85
rs4646312	0.0764	C	1.67	0.95–2.94
rs6269	0.0539	G	1.74	0.99–3.05
rs4680	0.0729	G	1.68	0.95–2.97
rs7678338	0.9435	C	1.02	0.53–1.97
rs7689605	0.5561	G	1.35	0.49–3.71
rs10028945	0.2467	G	1.47	0.76–2.82
rs12516948	0.0115	G	2.06	1.17–3.62
rs40184	0.1268	A	1.55	0.88–2.73
rs403636	0.874	G	1.06	0.49–2.32
rs6350	0.7228	C	1.20	0.43–3.37
rs3816596	0.3529	C	1.32	0.73–2.37
rs12658835	0.9438	G	1.02	0.53–1.96
rs179997	0.294	A	1.35	0.77–2.37
rs1800629	0.3966	G	1.5	0.58–3.85
rs1799971	0.1569	A	1.71	0.81–3.63
rs563649	0.6034	G	1.41	0.39–5.15
rs702764	0.8549	T	1.07	0.51–2.25
rs997917	0.7933	T	1.09	0.59–2
rs3839874	0.2229	T	1.42	0.81–2.48
rs1975285	0.5908	C	1.20	0.62–2.35

rs11988795	0.9778	T	1.01	0.55–1.84
rs3788862	0.3126	A	1.46	0.7–3.08
rs2283724	0.8962	G	1.05	0.53–2.06
rs1800659	0.694	C	1.15	0.58–2.28
rs979606	0.5254	G	1.26	0.62–2.55
rs979605	0.6475	T	1.18	0.58–2.37

Abdominal Hysterectomy

SNP	P Value	Risk Allele	Odds Ratio	95% CI
rs1042114	0.2882	T	1.41	0.75–2.68
rs533123	0.094	T	1.60	0.92–2.78
rs6691840	0.3618	C	1.27	0.76–2.13
rs932816	0.0656	A	1.58	0.97–2.58
rs4141964	0.8076	G	1.06	0.67–1.68
rs2295633	0.9755	T	1.01	0.63–1.6
rs6693882	0.3415	A	1.25	0.79–2
rs5275	0.2132	T	1.34	0.84–2.14
rs1800896	0.5811	G	1.14	0.72–1.79
rs6265	0.0739	A	1.60	0.95–2.7
rs2049046	0.542	A	1.15	0.74–1.77
rs908867	0.5152	G	1.33	0.56–3.18
rs6277	0.4069	T	1.21	0.77–1.89
rs1076560	0.1775	C	1.58	0.81–3.08
rs2734837	0.656	G	1.11	0.69–1.78
rs11608185	0.7742	T	1.07	0.67–1.72
rs4936272	0.6157	C	1.12	0.72–1.73
rs4648317	0.9857	T	1.01	0.53–1.9
rs4322431	0.3985	A	1.23	0.76–1.99
rs1799978	0.8641	A	1.08	0.44–2.67
rs12364283	0.7658	G	1.16	0.44–3.01
rs17122021	0.8146	C	1.06	0.67–1.67

rs4149117	0.0682	G	1.88	0.95–3.73
rs11568563	0.1076	A	1.93	0.86–4.36
rs8904	0.8082	T	1.06	0.68–1.64
rs10483639	0.8326	G	1.06	0.6–1.88
rs7142517	0.309	C	1.27	0.8–2.02
rs752688	0.9358	T	1.02	0.58–1.81
rs4411417	0.9358	C	1.02	0.58–1.81
rs9671371	0.4994	T	1.19	0.72–1.95
rs12147422	0.284	C	1.51	0.71–3.22
rs8004445	0.284	T	1.51	0.71–3.22
rs998259	0.1593	C	1.42	0.87–2.33
rs3783641	0.3389	A	1.32	0.74–2.36
rs8007267	0.6824	T	1.13	0.63–2.04
rs40434	0.6625	C	1.11	0.7–1.73
rs36024	0.5301	C	1.15	0.74–1.78
rs36017	0.2593	G	1.28	0.83–1.99
rs8065080	0.4029	T	1.21	0.77–1.89
rs1979572	0.8393	T	1.05	0.68–1.62
rs4325622	0.9079	T	1.03	0.66–1.58
rs140701	0.8928	A	1.03	0.67–1.59
rs2066713	0.3454	C	1.25	0.79–1.98
rs9966412	0.8023	C	1.09	0.56–2.11
rs2562456	0.0329	C	1.75	1.04–2.94
rs1800469	0.3294	C	1.27	0.78–2.07

rs934778	0.049	T	1.58	1–2.48
rs6746030	0.9857	A	1.01	0.53–1.9
rs6747673	0.9845	T	1.00	0.65–1.56
rs9646771	0.5438	C	1.15	0.73–1.83
rs4646312	0.7682	C	1.07	0.68–1.67
rs6269	0.7732	G	1.07	0.68–1.67
rs4680	0.2706	A	1.28	0.83–1.98
rs7678338	0.9373	T	1.02	0.63–1.65
rs7689605	0.3221	A	1.62	0.62–4.22
rs10028945	0.5277	A	1.16	0.73–1.84
rs12516948	0.64	G	1.11	0.71–1.73
rs40184	0.0279	G	1.63	1.05–2.53
rs403636	0.0557	G	1.71	0.98–2.96
rs6350	0.3665	C	1.54	0.6–3.92
rs3816596	0.1556	C	1.39	0.88–2.21
rs12658835	0.2586	A	1.32	0.81–2.15
rs179997	0.6302	A	1.12	0.71–1.75
rs1800629	0.2718	G	1.44	0.75–2.76
rs1799971	0.3465	A	1.32	0.74–2.35
rs563649	0.6631	A	1.21	0.51–2.84
rs702764	0.7471	T	1.11	0.6–2.04
rs997917	0.0566	C	1.61	0.98–2.63
rs3839874	0.7654	T	1.07	0.69–1.66
rs1975285	0.8153	C	1.07	0.62–1.83

rs11988795	0.5884	T	1.14	0.71–1.84
rs3788862	0.7214	G	1.10	0.66–1.84
rs2283724	0.8101	A	1.06	0.65–1.72
rs1800659	0.8171	T	1.06	0.65–1.72
rs979606	0.6475	A	1.12	0.68–1.84
rs979605	0.786	C	1.07	0.65–1.76

Thoracotomy

SNP	P Value	Risk Allele	Odds Ratio	95% CI
rs1042114	0.7317	G	1.09	0.67–1.76
rs533123	0.2735	T	1.25	0.84–1.86
rs6691840	0.5247	A	1.13	0.77–1.66
rs932816	0.7528	A	1.06	0.75–1.5
rs4141964	0.4986	A	1.13	0.8–1.59
rs2295633	0.5187	T	1.12	0.79–1.59
rs6693882	0.8396	A	1.04	0.73–1.47
rs5275	0.5648	C	1.11	0.77–1.61
rs1800896	0.3566	A	1.17	0.84–1.63
rs6265	0.0386	G	1.49	1.02–2.19
rs2049046	0.6352	T	1.08	0.78–1.5
rs908867	0.3338	G	1.34	0.74–2.46
rs6277	0.6798	T	1.07	0.77–1.5
rs1076560	0.871	C	1.04	0.63–1.72
rs2734837	0.9617	G	1.01	0.71–1.43
rs11608185	0.9207	C	1.02	0.72–1.45
rs4936272	0.8841	C	1.02	0.74–1.42
rs4648317	0.8016	T	1.06	0.65–1.74
rs4322431	0.706	T	1.07	0.75–1.54
rs1799978	0.3281	G	1.42	0.7–2.9
rs12364283	0.796	G	1.09	0.55–2.17
rs17122021	0.9864	C	1.00	0.71–1.43

rs4149117	0.3161	T	1.29	0.79–2.1
rs11568563	0.4098	A	1.36	0.65–2.83
rs8904	0.2625	T	1.21	0.87–1.68
rs10483639	0.0063	C	1.93	1.2–3.11
rs7142517	0.8941	A	1.02	0.73–1.44
rs752688	0.0086	T	1.89	1.17–3.04
rs4411417	0.0078	C	1.90	1.18–3.07
rs9671371	0.0838	T	1.40	0.96–2.04
rs12147422	0.5567	T	1.18	0.68–2.04
rs8004445	0.4064	G	1.27	0.72–2.22
rs998259	0.3923	T	1.17	0.82–1.67
rs3783641	0.0052	A	1.93	1.21–3.07
rs8007267	0.0046	T	1.99	1.23–3.21
rs40434	0.9848	C	1.00	0.72–1.41
rs36024	0.7125	C	1.06	0.77–1.48
rs36017	0.6166	C	1.09	0.78–1.51
rs8065080	0.3106	C	1.19	0.85–1.66
rs1979572	0.3086	C	1.19	0.85–1.65
rs4325622	0.4392	T	1.14	0.82–1.58
rs140701	0.1695	G	1.26	0.91–1.75
rs2066713	0.7555	C	1.06	0.75–1.49
rs9966412	0.2968	C	1.28	0.8–2.04
rs2562456	0.7846	C	1.05	0.72–1.54
rs1800469	0.6806	C	1.07	0.76–1.51

rs934778	0.5505	C	1.11	0.79–1.55
rs6746030	0.6141	A	1.14	0.69–1.87
rs6747673	0.1647	A	1.26	0.91–1.76
rs9646771	0.7584	T	1.06	0.75–1.49
rs4646312	0.9016	C	1.02	0.74–1.42
rs6269	0.8809	G	1.03	0.74–1.43
rs4680	0.8835	A	1.02	0.74–1.42
rs7678338	0.273	C	1.23	0.85–1.78
rs7689605	0.1772	G	1.49	0.83–2.66
rs10028945	0.2999	A	1.21	0.84–1.73
rs12516948	0.7223	A	1.06	0.76–1.48
rs40184	0.6337	A	1.08	0.78–1.5
rs403636	0.8671	G	1.04	0.68–1.58
rs6350	0.3192	C	1.39	0.73–2.64
rs3816596	0.3911	T	1.16	0.83–1.62
rs12658835	0.1841	G	1.28	0.89–1.86
rs179997	0.7695	A	1.05	0.75–1.48
rs1800629	0.3164	G	1.31	0.77–2.21
rs1799971	0.97	G	1.01	0.65–1.56
rs563649	0.2918	A	1.40	0.75–2.65
rs702764	0.7346	C	1.08	0.68–1.72
rs997917	0.3714	C	1.18	0.82–1.69
rs3839874	0.1434	T	1.28	0.92–1.78
rs1975285	0.0698	C	1.44	0.97–2.13

rs11988795	0.5249	T	1.12	0.79–1.6
rs3788862	0.6882	G	1.11	0.66–1.89
rs2283724	0.8181	A	1.06	0.64–1.75
rs1800659	0.3963	T	1.25	0.75–2.07
rs979606	0.6986	A	1.11	0.66–1.86
rs979605	0.6986	C	1.11	0.66–1.86

CI = confidence interval; CPSP = chronic postsurgical pain; SNP = single nucleotide polymorphism.

Results of Risk Genotyping for CPSP

AA+AB / BB

SNP	P Value	Risk Genotype	Odds Ratio	95% CI	N
rs1042114	0.2683	GG+GT	1.18	0.88–1.57	974
rs533123	0.8476	CC+CT	1.03	0.79–1.33	1.000
rs6691840	0.9987	AA+AC	1.00	0.6–1.66	963
rs932816	0.2292	AA+AG	1.16	0.91–1.49	1.000
rs4141964	0.4175	GG	1.11	0.86–1.43	1.004
rs2295633	0.3456	TT	1.20	0.82–1.76	1.000
rs6693882	0.1526	AA+AG	1.25	0.92–1.71	895
rs5275	0.5267	CC+CT	1.08	0.85–1.39	1.004
rs1800896	0.5076	AA+AG	1.12	0.8–1.56	999
rs6265	0.8307	GG	1.03	0.8–1.32	1.004
rs2049046	0.1106	TT	1.28	0.94–1.74	1.005
rs908867	0.1449	GG	1.29	0.92–1.82	1.004
rs6277	0.9953	TT	1.00	0.77–1.29	1.005
rs1076560	0.6963	CC	1.06	0.79–1.42	1.001
rs2734837	0.1971	AA+AG	1.32	0.86–2.03	1.003
rs11608185	0.1691	CC+CT	1.35	0.88–2.08	998
rs4936272	0.2742	CC+CT	1.17	0.88–1.55	1.005
rs4648317	0.3735	CC+CT	1.50	0.61–3.71	1.005
rs4322431	0.6351	TT	1.06	0.83–1.36	1.003
rs1799978	0.1598	AA+AG	-		997
rs12364283	0.5666	AA+AG	1.99	0.18–22.04	1.005

rs17122021	0.0379	TT	1.42	1.02–1.98	921
rs4149117	0.2412	TT	2.03	0.61–6.78	1.005
rs11568563	0.9922	CC	1.01	0.2–5.02	1.002
rs8904	0.2299	TT	1.22	0.88–1.69	1.005
rs10483639	0.1927	CC+CG	1.20	0.91–1.57	1.005
rs7142517	0.4575	CC	1.10	0.86–1.41	1.002
rs752688	0.0293	TT	2.27	1.07–4.85	1.004
rs4411417	0.1469	CC+CT	1.22	0.93–1.61	997
rs9671371	0.0695	TT	1.55	0.96–2.48	1.004
rs12147422	0.3064	TT	1.18	0.86–1.63	1.005
rs8004445	0.794	GG+GT	1.16	0.39–3.47	1.003
rs998259	0.1996	TT	1.38	0.84–2.25	1.001
rs3783641	0.1451	AA+AT	1.22	0.93–1.6	1.004
rs8007267	0.3242	TT	1.48	0.68–3.21	1.004
rs40434	0.0354	CC+CT	1.31	1.02–1.7	1.000
rs36024	0.0866	CC+CT	1.31	0.96–1.8	1.004
rs36017	0.3617	GG	1.14	0.86–1.52	1.004
rs8065080	0.8204	TT	1.03	0.8–1.33	1.002
rs1979572	0.7016	TT	1.06	0.8–1.4	995
rs4325622	0.5322	TT	1.09	0.83–1.44	1.005
rs140701	0.2498	GG	1.17	0.89–1.54	1.002
rs2066713	0.7328	CC+CT	1.07	0.72–1.58	1.003
rs9966412	0.5174	TT	1.32	0.57–3.03	1.003
rs2562456	0.3608	CC+CT	1.13	0.87–1.45	966

rs1800469	0.3747	CC+CT	1.19	0.81–1.75	1.000
rs934778	0.5016	TT	1.09	0.85–1.4	1.002
rs6746030	0.7409	AA+AG	1.05	0.79–1.4	1.004
rs6747673	0.5958	AA+AT	1.09	0.8–1.48	995
rs9646771	0.8517	CC+CT	1.04	0.71–1.52	985
rs4646312	0.5748	TT	1.08	0.83–1.41	1.004
rs6269	0.0192	GG	1.47	1.06–2.04	991
rs4680	0.2331	GG	1.18	0.9–1.56	995
rs7678338	0.8491	CC+CT	1.02	0.8–1.31	996
rs7689605	0.5682	AA+AG	1.11	0.78–1.57	1.005
rs10028945	0.9235	AA+AG	1.01	0.79–1.3	1.005
rs12516948	0.5325	AA+AG	1.11	0.81–1.51	1.001
rs40184	0.9362	AA+AG	1.01	0.77–1.33	1.003
rs403636	0.9868	TT	1.01	0.49–2.08	1.005
rs6350	0.9944	TT	1.01	0.06–16.19	1.001
rs3816596	0.7392	TT	1.07	0.73–1.55	1.004
rs12658835	0.4577	GG	1.20	0.74–1.92	1.000
rs179997	0.4947	AA+AT	1.13	0.79–1.62	1,002
rs1800629	0.1993	GG	1.22	0.9–1.64	992
rs1799971	0.2457	GG	1.57	0.73–3.39	1.004
rs563649	0.8947	AA+AG	1.03	0.7–1.5	1.005
rs702764	0.8461	TT	1.03	0.78–1.36	1.003
rs997917	0.3279	CC+CT	1.13	0.88–1.45	1.003
rs3839874	0.4824	TT	1.12	0.82–1.51	1.001

rs1975285	1	CC+CG	1.00	0.58–1.71	1.000
rs11988795	0.5196	CC+CT	1.14	0.77–1.7	998

AA+BB / AB

SNP	P Value	Risk Genotype	Odds Ratio	95% CI	N
rs1042114	0.5011	GT	1.11	0.82–1.49	974
rs533123	0.7043	CT	1.05	0.81–1.37	1.000
rs6691840	0.6333	AA+CC	1.06	0.82–1.37	963
rs932816	0.6695	AG	1.06	0.82–1.36	1.000
rs4141964	0.1795	AA+GG	1.19	0.92–1.52	1.004
rs2295633	0.1962	CC+TT	1.18	0.92–1.51	1.000
rs6693882	0.3724	AG	1.13	0.87–1.46	895
rs5275	0.3432	CT	1.13	0.88–1.45	1.004
rs1800896	0.6817	AG	1.05	0.82–1.35	999
rs6265	0.375	AG	1.12	0.87–1.46	1.004
rs2049046	0.5915	AA+TT	1.07	0.84–1.37	1.005
rs908867	0.1892	AA+GG	1.27	0.89–1.8	1.004
rs6277	0.593	CT	1.07	0.84–1.37	1.005
rs1076560	0.8658	AA+CC	1.03	0.76–1.38	1.001
rs2734837	0.0534	AG	1.28	1–1.64	1.003
rs11608185	0.0431	CT	1.29	1.01–1.66	998
rs4936272	0.0925	CT	1.4	0.97–1.59	1.005
rs4648317	0.001	CT	1.63	1.21–2.17	1.005
rs4322431	0.8351	AT	1.03	0.8–1.32	1.003

rs1799978	0.7749	AG	1.06	0.7–1.61	997
rs12364283	0.0037	AG	1.73	1.19–2.5	1.005
rs17122021	0.3472	CC+TT	1.13	0.87–1.47	921
rs4149117	0.1966	GG+TT	1.2	0.9–1.63	1.005
rs11568563	0.2017	AA+CC	1.27	0.88–1.85	1.002
rs8904	0.2996	CT	1.14	0.89–1.46	1.005
rs10483639	0.5782	CG	1.08	0.82–1.43	1.005
rs7142517	0.7821	AA+CC	1.04	0.81–1.33	1.002
rs752688	0.5641	CT	1.09	0.82–1.44	1.004
rs4411417	0.5272	CT	1.10	0.83–1.45	997
rs9671371	0.9245	CT	1.01	0.78–1.31	1.004
rs12147422	0.331	CC+TT	1.18	0.85–1.64	1.005
rs8004445	0.2631	GG+TT	1.21	0.87–1.69	1.003
rs998259	0.1733	CC+TT	1.19	0.93–1.54	1.001
rs3783641	0.3512	AT	1.14	0.86–1.51	1.004
rs8007267	0.5378	CT	1.09	0.82–1.45	1.004
rs40434	0.0372	CT	1.30	1.02–1.67	1.000
rs36024	0.3436	CT	1.13	0.88–1.44	1.004
rs36017	0.6142	CG	1.07	0.83–1.36	1.004
rs8065080	0.6548	CC+TT	1.06	0.83–1.36	1.002
rs1979572	0.2942	CC+TT	1.14	0.89–1.46	995
rs4325622	0.2969	CC+TT	1.14	0.89–1.46	1.005
rs140701	0.2046	AA+GG	1.17	0.92–1.51	1.002
rs2066713	0.6162	CC+TT	1.07	0.83–1.37	1.003

rs9966412	0.1594	CC+TT	1.24	0.92–1.68	1.003
rs2562456	0.5129	CT	1.09	0.84–1.41	966
rs1800469	0.6817	CT	1.05	0.82–1.35	1.000
rs934778	0.3662	CC+TT	1.12	0.87–1.44	1.002
rs6746030	0.5739	AG	1.09	0.81–1.46	1.004
rs6747673	0.7742	AA+TT	1.04	0.81–1.33	995
rs9646771	0.7588	CC+TT	1.04	0.81–1.34	985
rs4646312	0.0196	CC+TT	1.34	1.05–1.72	1.004
rs6269	0.007	AA+GG	1.41	1.1–1.81	991
rs4680	0.1527	AA+GG	1.20	0.93–1.54	995
rs7678338	0.3343	CT	1.13	0.88–1.46	996
rs7689605	0.5025	AG	1.13	0.79–1.61	1.005
rs10028945	0.9857	AG	1.00	0.78–1.29	1.005
rs12516948	0.107	AG	1.23	0.96–1.57	1.001
rs40184	0.9752	AG	1.00	0.78–1.29	1.003
rs403636	0.1202	GG+TT	1.24	0.94–1.64	1.005
rs6350	0.4605	CC+TT	1.14	0.8–1.62	1.001
rs3816596	0.8062	CT	1.03	0.81–1.32	1.004
rs12658835	0.8321	AA+GG	1.03	0.8–1.33	1.000
rs179997	0.0755	AA+TT	1.25	0.98–1.61	1.002
rs1800629	0.1224	AA+GG	1.27	0.94–1.73	992
rs1799971	0.0485	AA+GG	1.32	1–1.73	1.004
rs563649	0.973	AG	1.01	0.68–1.49	1.005
rs702764	0.9569	CC+TT	1.01	0.76–1.34	1.003

rs997917	0.3874	CT	1.12	0.87–1.44	1.003
rs3839874	0.6419	CT	1.06	0.83–1.36	1.001
rs1975285	0.0449	CC+GG	1.31	1.01–1.7	1.000
rs11988795	0.5407	CT	1.08	0.84–1.39	998

AB+BB / AA

SNP	P Value	Risk Genotype	Odds Ratio	95% CI	N
rs1042114	0.1826	GG	1.80	0.75–4.34	974
rs533123	0.6398	CT+TT	1.18	0.6–2.31	1.000
rs6691840	0.6369	AA	1.06	0.83–1.37	963
rs932816	0.1799	AA	1.34	0.87–2.05	1.000
rs4141964	0.4207	AA	1.16	0.8–1.69	1.004
rs2295633	0.4989	CC	1.09	0.85–1.4	1.000
rs6693882	0.7143	AA	1.06	0.79–1.42	895
rs5275	0.5882	CT+TT	1.13	0.73–1.75	1.004
rs1800896	0.9286	AA	1.01	0.78–1.31	999
rs6265	0.0343	AG+GG	1.73	1.04–2.88	1.004
rs2049046	0.4	AT+TT	1.12	0.86–1.48	1.005
rs908867	0.4813	AG+GG	1.67	0.4–7.01	1.004
rs6277	0.4447	CT+TT	1.15	0.81–1.63	1.005
rs1076560	0.4003	AC+CC	1.61	0.52–4.96	1.001
rs2734837	0.2395	AG+GG	1.16	0.91–1.49	1.003
rs11608185	0.2222	CT+TT	1.17	0.91–1.5	998
rs4936272	0.3737	CT+TT	1.15	0.85–1.56	1.005

rs4648317	0.0035	CT+TT	1.52	1.15–2.02	1.005
rs4322431	0.207	AT+TT	1.35	0.85–2.14	1.003
rs1799978	0.941	AG+GG	1.02	0.67–1.54	997
rs12364283	0.0053	AG+GG	1.68	1.16–2.42	1.005
rs17122021	0.4718	CT+TT	1.11	0.84–1.45	921
rs4149117	0.3304	GG	1.15	0.87–1.54	1.005
rs11568563	0.2114	AA	1.26	0.88–1.82	1.002
rs8904	0.041	CT+TT	1.31	1.01–1.7	1.005
rs10483639	0.043	CC	2.16	1.01–4.64	1.005
rs7142517	0.4538	AC+CC	1.17	0.78–1.74	1.002
rs752688	0.1628	CT+TT	1.21	0.92–1.59	1.004
rs4411417	0.0297	CC	2.27	1.06–4.84	997
rs9671371	0.2866	CT+TT	1.15	0.89–1.47	1.004
rs12147422	0.7884	CT+TT	1.16	0.39–3.48	1.005
rs8004445	0.2447	GG	1.21	0.88–1.68	1.003
rs998259	0.4981	CC	1.09	0.85–1.4	1.001
rs3783641	0.1669	AA	1.61	0.81–3.19	1.004
rs8007267	0.3414	CT+TT	1.14	0.87–1.5	1.004
rs40434	0.9652	CT+TT	1.01	0.7–1.45	1.000
rs36024	0.6496	CC	1.06	0.81–1.39	1.004
rs36017	0.1395	CG+GG	1.24	0.93–1.64	1.004
rs8065080	0.7511	CC	1.06	0.75–1.49	1.002
rs1979572	0.4098	CC	1.13	0.85–1.5	995
rs4325622	0.5677	CC	1.09	0.81–1.46	1.005

rs140701	0.7955	AA	1.04	0.78–1.39	1.002
rs2066713	0.4743	CC	1.09	0.85–1.4	1.003
rs9966412	0.258	CC	1.18	0.88–1.58	1.003
rs2562456	0.5492	CC	1.19	0.68–2.09	966
rs1800469	0.8669	CC	1.02	0.8–1.31	1.000
rs934778	0.7229	CC	1.07	0.74–1.54	1.002
rs6746030	0.4397	AG+GG	1.50	0.53–4.25	1.004
rs6747673	0.4391	AA	1.11	0.85–1.45	995
rs9646771	0.6637	CC	1.06	0.82–1.36	985
rs4646312	0.0177	CC	1.48	1.07–2.06	1.004
rs6269	0.3373	AA	1.14	0.87–1.5	991
rs4680	0.6717	AA	1.07	0.79–1.44	995
rs7678338	0.1264	CT+TT	1.48	0.89–2.46	996
rs7689605	0.7104	AG+GG	1.33	0.3–5.96	1.005
rs10028945	0.8856	AA	1.03	0.66–1.63	1.005
rs12516948	0.2265	AG+GG	1.18	0.9–1.54	1.001
rs40184	0.9602	AA	1.01	0.75–1.36	1.003
rs403636	0.1328	GG	1.23	0.94–1.6	1.005
rs6350	0.4635	CC	1.14	0.8–1.61	1.001
rs3816596	0.6347	CT+TT	1.06	0.83–1.37	1.004
rs12658835	0.8537	AG+GG	1.02	0.8–1.31	1.000
rs179997	0.0211	AA	1.35	1.05–1.74	1.002
rs1800629	0.4444	AA	1.50	0.53–4.24	992
rs1799971	0.1302	AA	1.23	0.94–1.6	1.004

rs563649	0.6491	AA	1.51	0.25–9.09	1.005
rs702764	0.6171	CT+TT	1.29	0.48–3.49	1.003
rs997917	0.8085	CC	1.06	0.67–1.67	1.003
rs3839874	0.2674	CT+TT	1.16	0.89–1.52	1.001
rs1975285	0.0522	CC	1.29	1–1.66	1.000
rs11988795	0.8385	CT+TT	1.03	0.8–1.32	998

AA / AB / BB

SNP	P Value	Risk Genotype	N
rs1042114	0.3019	GG	974
rs533123	0.8516	CT	1.000
rs6691840	0.8866	AA	963
rs932816	0.2916	AA	1.000
rs4141964	0.3809	AA	1.004
rs2295633	0.3744	TT	1.000
rs6693882	0.3567	AG	895
rs5275	0.6099	CT	1.004
rs1800896	0.7948	AG	999
rs6265	0.0949	AG	1.004
rs2049046	0.2652	TT	1.005
rs908867	0.318	GG	1.004
rs6277	0.7246	CT	1.005
rs1076560	0.6851	CC	1.001
rs2734837	0.1161	AG	1.003

rs11608185	0.0925	CT	998
rs4936272	0.2428	CT	1.005
rs4648317	0.0038	CT	1.005
rs4322431	0.4486	TT	1.003
rs1799978	0.3594	AG	997
rs12364283	0.0129	AG	1.005
rs17122021	0.1159	TT	921
rs4149117	0.2383	TT	1.005
rs11568563	0.4425	AA	1.002
rs8904	0.1075	TT	1.005
rs10483639	0.0953	CC	1.005
rs7142517	0.6548	CC	1.002
rs752688	0.0666	TT	1.004
rs4411417	0.0643	CC	997
rs9671371	0.1699	TT	1.004
rs12147422	0.5926	TT	1.005
rs8004445	0.5081	GG	1.003
rs998259	0.2383	TT	1.001
rs3783641	0.2099	AA	1.004
rs8007267	0.4762	TT	1.004
rs40434	0.0833	CT	1.000
rs36024	0.2289	CT	1.004
rs36017	0.3052	GG	1.004
rs8065080	0.8952	CC	1.002

rs1979572	0.5548	CC	995
rs4325622	0.5804	CC	1.005
rs140701	0.3998	GG	1.002
rs2066713	0.7693	CC	1.003
rs9966412	0.3218	TT	1.003
rs2562456	0.6131	CC	966
rs1800469	0.6681	CT	1.000
rs934778	0.6644	CC	1.002
rs6746030	0.6508	AG	1.004
rs6747673	0.7128	AA	995
rs9646771	0.9085	CC	985
rs4646312	0.0232	CC	1.004
rs6269	0.013	GG	991
rs4680	0.3341	GG	995
rs7678338	0.2533	CT	996
rs7689605	0.7515	AG	1.005
rs10028945	0.9881	AA	1.005
rs12516948	0.2683	AG	1.001
rs40184	0.9965	AA	1.003
rs403636	0.2955	GG	1.005
rs6350	0.7615	CC	1.001
rs3816596	0.8766	TT	1.004
rs12658835	0.758	GG	1.000
rs179997	0.07	AA	1.002

rs1800629	0.2427	AA	992
rs1799971	0.0908	GG	1.004
rs563649	0.9007	AA	1.005
rs702764	0.8788	TT	1.003
rs997917	0.6184	CT	1.003
rs3839874	0.5119	TT	1.001
rs1975285	0.1257	CC	1.000
rs11988795	0.7385	CT	998

CI, confidence interval; CPSP, chronic postsurgical pain; SNP denotes single nucleotide polymorphism.

Haplotype Testing for CPSP

Block	Haplotype	N	P Value	Odds Ratio	95% CI
1	TC	108	0.0118	0.60	0.4–0.9
1	TT	1,605	0.9554	1.01	0.81–1.25
1	GC	293	0.1220	1.22	0.95–1.56
2	AGC	597	0.1255	1.16	0.96–1.41
2	GGC	696	0.1705	0.88	0.73–1.06
2	GAT	690	0.8786	0.99	0.82–1.19
2	GAC	23	0.8489	0.92	0.41–2.1
3	GAC	706	0.6676	0.96	0.8–1.15
3	GTT	335	0.4850	0.92	0.73–1.16
3	GAT	263	0.4255	1.11	0.86–1.44
3	AAC	135	0.3039	1.20	0.85–1.71
3	GTC	447	0.7160	1.04	0.84–1.28
3	ATT	98	0.4306	0.85	0.56–1.28
3	ATC	15	0.4460	0.67	0.24–1.89
3	AAT	9	0.7293	1.26	0.34–4.71
4	TG	1,309	0.9174	1.01	0.84–1.21
4	CG	542	0.6935	0.97	0.79–1.17
4	TA	157	0.6401	1.08	0.78–1.5
5	AGTC	79	0.9373	0.98	0.63–1.54
5	AATC	121	0.0347	0.67	0.46–0.97
5	GAGC	411	0.3026	1.12	0.9–1.39
5	GGGC	308	0.5047	0.92	0.72–1.17

5	GATC	123	0.6094	1.10	0.76–1.58
5	AAGC	250	0.5431	1.09	0.83–1.42
5	AGGC	547	0.5088	1.07	0.88–1.3
5	AGGT	102	0.9671	1.0084	0.68–1.5
5	GAGT	7	0.6971	1.35	0.3–6.03
5	GGGT	20	0.9857	1.01	0.42–2.43
5	AAGT	21	0.0505	0.40	0.15–1.03
5	GGTC	18	0.3523	0.64	0.25–1.65
6	AG	1,536	0.4574	1.08	0.88–1.33
6	GG	348	0.3273	0.89	0.71–1.12
6	AA	124	0.8171	1.04	0.73–1.5
7	TT	1,445	0.3916	0.92	0.76–1.12
7	CC	285	0.7076	0.95	0.74–1.22
7	TC	274	0.1333	1.2	0.94–1.57
8	CC	664	0.8256	1.02	0.85–1.23
8	TC	893	0.2330	1.11	0.93–1.33
8	CG	451	0.0952	0.84	0.68–1.03
9	GAA	156	0.1998	0.81	0.58–1.12
9	GTG	923	0.1205	1.15	0.96–1.37
9	GAG	445	0.9669	1.00	0.81–1.24
9	AAG	476	0.3981	0.92	0.74–1.12
9	AAA	7	0.2605	0.40	0.08–2.08
10	CCGTCTAAA	17	0.2171	1.86	0.68–5.04
10	TCACTCTAA	785	0.6432	1.04	0.87–1.25

10	TCACCCAAA	273	0.7989	0.97	0.75–1.25
10	CCGTCTTAA	38	0.3137	1.39	0.73–2.67
10	CCGTTCTAA	118	0.7377	0.94	0.65–1.36
10	CCGTCCAAA	99	0.4959	0.87	0.58–1.3
10	TCACCTTAG	58	0.0579	1.67	0.98–2.87
10	CCACTCTAA	127	0.3360	0.84	0.58–1.2
10	TCACCTTAA	67	0.2778	0.76	0.47–1.25
10	TCACCCTGA	31	0.3774	0.72	0.35–1.49
10	CAGTCTTAA	18	0.3350	1.59	0.61–4.12
10	CAGTCCAAA	178	0.2967	0.85	0.62–1.16
10	CCGTCCTGA	67	0.8749	1.04	0.64–1.69
10	CCGTCTTAG	50	0.5476	1.19	0.68–2.09
10	CAGTTCTAA	13	0.1686	0.45	0.14–1.45
10	CCATTCTAA	6	0.4080	2.02	0.37–11.05
10	CAGTCTTAG	26	0.2283	1.62	0.73–3.59
11	CCTCTTGCAT	264	0.1644	1.20	0.93–1.56
11	GCCTTGGCTC	170	0.8301	1.04	0.76–1.42
11	GACTCCTCTC	180	0.2994	0.85	0.63–1.16
11	GCCTCTGTTTC	126	0.1538	0.77	0.53–1.1
11	GACTCTGTTTC	394	0.4457	1.09	0.87–1.36
11	GACTCTGCTC	54	0.0027	0.42	0.23–0.75
11	GCCTCTGCTC	699	0.8593	1.02	0.85–1.22
11	GACTCTGCAT	11	0.7523	1.21	0.37–3.98
11	GCCTTGGCAT	13	0.4120	0.63	0.2–1.93

11	CCTCTTGCAC	32	0.1475	1.69	0.82–3.48
11	GACTCTGCAC	11	0.7523	1.21	0.37–3.98
11	CCTCTTGCTC	14	0.6021	0.75	0.26–2.18
11	CCTCTCTCTC	7	0.6971	1.35	0.3–6.03
12	CCG	514	0.1244	1.17	0.96–1.43
12	TCC	269	0.2401	0.86	0.66–1.11
12	TCG	91	0.0993	1.43	0.93–2.19
12	CCC	233	0.8931	1.02	0.78–1.34
12	TTC	511	0.3848	0.91	0.75–1.12
12	TTG	390	0.4826	0.92	0.74–1.15
13	CTGC	374	0.0549	1.25	1–1.56
13	CTGT	609	0.2731	0.90	0.74–1.09
13	TCAC	907	0.7405	0.97	0.81–1.16
13	TTAC	17	0.7948	1.14	0.44–2.95
13	TCGT	49	0.1835	1.48	0.83–2.63
13	CTAC	18	0.3523	0.64	0.25–1.65
13	TCGC	13	0.7919	0.86	0.29–2.58
13	TTGC	20	0.0751	0.43	0.16–1.12
14	CGG	865	0.3568	1.09	0.91–1.3
14	TAA	936	0.4137	0.93	0.78–1.11
14	TAG	183	0.9832	1.00	0.74–1.35
14	TGG	22	0.4016	0.70	0.3–1.63
15	GATAC	816	0.6090	0.94	0.75–1.19
15	AGCGT	277	0.4368	1.11	0.85–1.45

15	GGCGT	9	0.0953	0.28	0.06–1.37
15	GACGT	43	0.6492	0.87	0.47–1.6
15	AATAC	6	0.4109	2.01	0.37–11.03
15	GGTAC	64	0.5988	1.14	0.69–1.89
15	GACAC	13	0.7848	0.86	0.29–2.57
15	AGCAC	17	0.8020	1.13	0.43–2.95
15	AGTAC	16	0.6193	0.78	0.29–2.1

SNPs Included in Each Block

Block	SNPs
1	rs1042114
	rs533123
2	rs932816
	rs4141964
	rs2295633
3	rs6746030
	rs6747673
	rs9646771
4	rs7678338
	rs7689605
5	rs12516948
	rs40184
	rs403636
	rs6350

6	rs1799971
	rs563649
7	rs702764
	rs997917
8	rs3839874
	rs1975285
9	rs6265
	rs2049046
	rs908867
10	rs6277
	rs1076560
	rs2734837
	rs11608185
	rs4936272
	rs4648317
	rs4322431
	rs1799978
	rs12364283
11	rs10483639
	rs7142517
	rs752688
	rs4411417
	rs9671371
	rs12147422

	rs8004445
	rs998259
	rs3783641
	rs8007267
12	rs40434
	rs36024
	rs36017
13	rs1979572
	rs4325622
	rs140701
	rs2066713
14	rs4646312
	rs6269
	rs4680
15	rs3788862
	rs2283724
	rs1800659
	rs979606
	rs979605

CI = confidence interval; CPSP = chronic postsurgical pain; SNP = single nucleotide polymorphism.

Allele Frequencies Adjusted by Pain Intensity (VNRS >3) at the Follow-up Visit 4.4

Months after Surgery

SNP	Chromosome	Base Pair	Beta	P Value
rs1042114	1	29138975	0.1436	0.3658
rs533123	1	29141155	-0.0049	0.9717
rs6691840	1	37325477	-0.1798	0.1584
rs932816	1	46859749	-0.0627	0.5976
rs4141964	1	46865040	0.0735	0.5196
rs2295633	1	46874383	0.0881	0.446
rs6693882	1	96145968	-0.1598	0.1625
rs5275	1	186643058	0.1054	0.3766
rs1800896	1	206946897	-0.0050	0.9635
rs934778	2	25389224	-0.0044	0.9691
rs6746030	2	167099158	0.1149	0.4832
rs6747673	2	167144974	-0.1950	0.07273
rs9646771	2	167163043	-0.0851	0.4651
rs7678338	4	46922107	0.0368	0.769
rs7689605	4	46952029	-0.1097	0.588
rs10028945	4	47428305	0.0972	0.4209
rs12516948	5	1391369	0.1660	0.1337
rs40184	5	1395077	0.0571	0.6039
rs403636	5	1438354	-0.1028	0.473
rs6350	5	1443199	-0.2814	0.1901
rs3816596	5	160975332	0.0724	0.528

rs12658835	5	161275302	0.2310	0.05935
rs179997	6	16318633	-0.0672	0.556
rs1800629	6	31543031	-0.1915	0.2615
rs1799971	6	154360797	0.0135	0.9256
rs563649	6	154407967	-0.1221	0.5914
rs702764	8	54142157	0.0383	0.8109
rs997917	8	54152378	0.2758	0.02371
rs3839874	8	57353827	-0.1203	0.2646
rs1975285	8	57358682	-0.1324	0.307
rs11988795	8	72949601	0.0006	0.9958
rs6265	11	27679916	-0.0298	0.8117
rs2049046	11	27723775	-0.0443	0.6878
rs908867	11	27745764	-0.2779	0.1625
rs6277	11	113283459	-0.1327	0.2442
rs1076560	11	113283688	-0.1209	0.4683
rs2734837	11	113286829	-0.0697	0.5599
rs11608185	11	113294976	-0.0664	0.5795
rs4936272	11	113318907	0.1021	0.3727
rs4648317	11	113331532	0.1694	0.2861
rs4322431	11	113332956	0.0431	0.7227
rs1799978	11	113346351	-0.0843	0.7334
rs12364283	11	113346955	0.3794	0.0816
rs17122021	11	118145686	0.1389	0.2263
rs4149117	12	21011480	-0.0183	0.9138

rs11568563	12	21457434	-0.1492	0.4865
rs8904	14	35871217	0.2505	0.02274
rs10483639	14	55306457	0.1685	0.2504
rs7142517	14	55306804	-0.0747	0.5209
rs752688	14	55311569	0.1758	0.2288
rs4411417	14	55320563	0.1729	0.2386
rs9671371	14	55328635	0.1223	0.3226
rs12147422	14	55344015	-0.0235	0.8978
rs8004445	14	55350666	-0.0600	0.7433
rs998259	14	55355031	0.0702	0.5731
rs3783641	14	55360139	0.1790	0.2129
rs8007267	14	55378991	0.1130	0.4496
rs40434	16	55699525	0.0651	0.5714
rs36024	16	55706391	-0.1383	0.2149
rs36017	16	55718818	0.1740	0.1109
rs8065080	17	3480447	0.0360	0.7511
rs1979572	17	28511978	0.1274	0.2444
rs4325622	17	28526475	-0.1140	0.297
rs140701	17	28538532	-0.0921	0.3922
rs2066713	17	28551665	-0.0453	0.6924
rs9966412	18	58033935	-0.1453	0.3608
rs2562456	19	21666210	0.1829	0.1684
rs1800469	19	41860296	-0.0681	0.5499
rs4646312	22	19948337	-0.0535	0.6325

rs6269	22	19949952	-0.0682	0.547
rs4680	22	19951271	0.0340	0.7552
rs3788862	23	43517364	0.0700	0.4549
rs2283724	23	43559576	0.1195	0.1819
rs1800659	23	43574169	0.0291	0.7494
rs979606	23	43601142	0.0248	0.7901
rs979605	23	43601363	0.0210	0.8225

CI = confidence interval; CPSP = chronic postsurgical pain; SNP = single nucleotide polymorphism; VNRS = verbal numerical rating scale.

Allele Frequencies, Adjusted by a Presence of Neuropathic CPSP

SNP	P Value	Risk Allele	Odds Ratio	95% CI
rs1042114	0.8897	G	1.03	0.72–1.46
rs533123	0.8027	T	1.04	0.77–1.4
rs6691840	0.6169	A	1.07	0.81–1.41
rs932816	0.6251	G	1.07	0.82–1.39
rs4141964	0.5304	G	1.08	0.84–1.4
rs2295633	0.5956	C	1.07	0.83–1.38
rs6693882	0.1807	A	1.19	0.92–1.54
rs5275	0.8286	C	1.03	0.79–1.33
rs1800896	0.8046	A	1.03	0.81–1.32
rs6265	0.0277	G	1.40	1.04–1.88
rs2049046	0.6052	T	1.07	0.84–1.35
rs908867	0.68	G	1.10	0.7–1.72
rs6277	0.6119	T	1.07	0.83–1.36
rs1076560	0.2484	A	1.22	0.87–1.73
rs2734837	0.924	G	1.01	0.78–1.31
rs11608185	0.9324	C	1.01	0.78–1.31
rs4936272	0.1598	C	1.19	0.93–1.51
rs4648317	0.1806	T	1.25	0.9–1.74
rs4322431	0.6295	A	1.07	0.82–1.39
rs1799978	0.6908	G	1.11	0.66–1.87
rs12364283	0.4576	G	1.19	0.76–1.86
rs17122021	0.0928	T	1.25	0.96–1.61

rs4149117	0.8589	T	1.03	0.73–1.47
rs11568563	0.7625	C	1.07	0.68–1.71
rs8904	0.236	T	1.16	0.91–1.47
rs10483639	0.3388	C	1.17	0.85–1.59
rs7142517	0.8448	A	1.03	0.79–1.32
rs752688	0.4965	T	1.12	0.81–1.53
rs4411417	0.4477	C	1.13	0.82–1.55
rs9671371	0.683	T	1.06	0.81–1.39
rs12147422	0.1676	T	1.36	0.88–2.12
rs8004445	0.0953	G	1.47	0.93–2.33
rs998259	0.0231	T	1.35	1.04–1.76
rs3783641	0.8142	A	1.04	0.76–1.43
rs8007267	0.5512	T	1.10	0.8–1.52
rs40434	0.7857	C	1.03	0.81–1.32
rs36024	0.2467	C	1.15	0.91–1.47
rs36017	0.1061	G	1.22	0.96–1.55
rs8065080	0.7439	T	1.04	0.82–1.33
rs1979572	0.9919	T	1.00	0.79–1.28
rs4325622	0.9495	C	1.01	0.79–1.28
rs140701	0.6488	G	1.06	0.83–1.34
rs2066713	0.6292	C	1.07	0.82–1.38
rs9966412	0.3131	C	1.21	0.84–1.75
rs2562456	0.024	C	1.37	1.04–1.79
rs1800469	0.9271	C	1.01	0.78–1.31

rs934778	0.9363	T	1.01	0.79–1.3
rs6746030	0.3645	G	1.19	0.82–1.73
rs6747673	0.0467	A	1.28	1–1.64
rs9646771	0.7896	T	1.04	0.8–1.33
rs4646312	0.6301	T	1.06	0.83–1.35
rs6269	0.6416	A	1.06	0.83–1.35
rs4680	0.1941	A	1.17	0.92–1.49
rs7678338	0.6203	C	1.07	0.82–1.4
rs7689605	0.9455	A	1.02	0.65–1.58
rs10028945	0.0909	A	1.25	0.97–1.61
rs12516948	0.9967	A	1.00	0.79–1.27
rs40184	0.9521	G	1.01	0.79–1.28
rs403636	0.7584	G	1.05	0.77–1.44
rs6350	0.2968	T	1.26	0.82–1.93
rs3816596	0.2657	T	1.15	0.9–1.47
rs12658835	0.0437	G	1.31	1.01–1.71
rs179997	0.4156	A	1.11	0.86–1.42
rs1800629	0.4587	G	1.15	0.79–1.69
rs1799971	0.6422	A	1.08	0.79–1.48
rs563649	0.4021	G	1.25	0.74–2.14
rs702764	0.5364	C	1.11	0.79–1.56
rs997917	0.0018	C	1.50	1.16–1.94
rs3839874	0.6769	T	1.05	0.83–1.34
rs1975285	0.1267	C	1.26	0.94–1.7

rs11988795	0.8808	T	1.02	0.79–1.32
rs3788862	0.4913	A	1.13	0.8–1.59
rs2283724	0.2074	G	1.23	0.89–1.69
rs1800659	0.8108	C	1.04	0.75–1.45
rs979606	0.5807	G	1.10	0.78–1.54
rs979605	0.8356	T	1.04	0.74–1.46

CI = confidence interval; CPSP = chronic postsurgical pain; SNP = single nucleotide polymorphism.

Genotyping Test for Neuropathic CPSP

AA+AB / BB

SNP	P Value	Risk Genotype	Odds Ratio	95% CI	N
rs1042114	0.9304	GG+GT	1.02	0.68–1.51	857
rs533123	0.9286	TT	1.02	0.71–1.45	881
rs6691840	0.928	AA+AC	1.03	0.52–2.03	847
rs932816	0.8206	GG	1.04	0.74–1.46	882
rs4141964	0.5608	GG	1.11	0.79–1.56	885
rs2295633	0.5145	CC+CT	1.20	0.69–2.08	883
rs6693882	0.4851	AA+AG	1.17	0.76–1.81	791
rs5275	0.4142	CC+CT	1.15	0.82–1.62	885
rs1800896	0.4594	AA+AG	1.20	0.74–1.92	881
rs6265	0.0988	GG	1.34	0.95–1.91	885
rs2049046	0.5886	TT	1.12	0.74–1.68	886
rs908867	0.5441	GG	1.16	0.72–1.88	885
rs6277	0.8363	CC+CT	1.04	0.73–1.48	886
rs1076560	0.1735	AA+AC	1.30	0.89–1.91	882
rs2734837	0.2577	AA+AG	1.44	0.76–2.72	884
rs11608185	0.1058	CC+CT	1.75	0.88–3.46	880
rs4936272	0.0181	CC+CT	1.66	1.09–2.53	886
rs4648317	0.2486	TT	1.85	0.64–5.31	886
rs4322431	0.4118	AA+AT	1.15	0.82–1.62	884
rs1799978	0.4977	AA+AG	-		879
rs12364283	0.5121	GG	2.19	0.2–24.32	886

rs17122021	0.2402	TT	1.30	0.84–2.02	810
rs4149117	0.1683	TT	2.65	0.63–11.21	886
rs11568563	0.9378	CC	1.09	0.12–9.83	885
rs8904	0.4495	TT	1.18	0.77–1.82	886
rs10483639	0.3037	CC+CG	1.21	0.84–1.73	886
rs7142517	0.9462	AA+AC	1.01	0.72–1.42	884
rs752688	0.9379	TT	1.04	0.39–2.8	885
rs4411417	0.4002	CC+CT	1.17	0.81–1.68	878
rs9671371	0.8023	CC+CT	1.09	0.56–2.14	885
rs12147422	0.2998	TT	1.28	0.8–2.04	886
rs8004445	0.1125	GG+GT	—		884
rs998259	0.009	TT	2.11	1.19–3.73	882
rs3783641	0.5931	AA+AT	1.10	0.77–1.59	885
rs8007267	0.6994	TT	1.22	0.45–3.33	885
rs40434	0.2828	CC+CT	1.21	0.85–1.73	882
rs36024	0.1071	CC+CT	1.47	0.92–2.35	885
rs36017	0.4043	GG	1.18	0.8–1.73	885
rs8065080	0.3158	TT	1.19	0.84–1.69	883
rs1979572	0.5649	TT	1.12	0.76–1.65	877
rs4325622	0.4463	TT	1.16	0.8–1.68	886
rs140701	0.4498	GG	1.15	0.8–1.66	883
rs2066713	0.2679	CC+CT	1.38	0.78–2.46	884
rs9966412	0.7768	TT	1.18	0.38–3.59	884
rs2562456	0.0595	CC+CT	1.40	0.99–1.99	851

rs1800469	0.3235	CC+CT	1.33	0.76–2.32	882
rs934778	0.9703	TT	1.01	0.71–1.42	886
rs6746030	0.2795	GG	1.26	0.83–1.9	885
rs6747673	0.1021	AA+AT	1.46	0.93–2.3	878
rs9646771	0.9891	CC+CT	1.00	0.59–1.71	868
rs4646312	0.0567	TT	1.41	0.99–2	886
rs6269	0.2354	GG	1.29	0.85–1.97	872
rs4680	0.8601	AA+AG	1.03	0.71–1.51	877
rs7678338	0.0617	CC+CT	1.38	0.98–1.95	877
rs7689605	0.8833	AA+AG	1.04	0.65–1.66	886
rs10028945	0.3147	AA+AG	1.19	0.85–1.67	886
rs12516948	0.8617	AA+AG	1.04	0.67–1.6	882
rs40184	0.9922	AA+AG	1.00	0.69–1.46	885
rs403636	0.4379	TT	1.41	0.59–3.35	886
rs6350	0.2526	TT	4.40	0.27–70.8	883
rs3816596	0.3891	TT	1.24	0.76–2.02	885
rs12658835	0.0392	GG	1.79	1.02–3.13	882
rs179997	0.8161	AA+AT	1.06	0.65–1.74	885
rs1800629	0.6957	GG	1.09	0.72–1.63	873
rs1799971	0.4855	GG	1.39	0.55–3.54	885
rs563649	0.3426	GG	1.31	0.75–2.3	886
rs702764	0.5399	CC+CT	1.13	0.77–1.64	884
rs997917	0.0057	CC+CT	1.61	1.15–2.27	884
rs3839874	0.9483	CC+CT	1.01	0.67–1.54	885

rs1975285	0.4141	CC+CG	1.40	0.62–3.18	882
rs11988795	0.5951	TT	1.15	0.68–1.95	880

AA+BB / AB

SNP	P Value	Risk Genotype	Odds Ratio	95% CI	N
rs1042114	0.9843	GT	1.00	0.67–1.52	857
rs533123	0.9058	CT	1.02	0.71–1.46	881
rs6691840	0.5826	AA+CC	1.10	0.78–1.57	847
rs932816	0.8567	AG	1.03	0.73–1.46	882
rs4141964	0.7604	AA+GG	1.05	0.75–1.48	885
rs2295633	0.8964	CT	1.02	0.73–1.44	883
rs6693882	0.4818	AA+GG	1.14	0.79–1.64	791
rs5275	0.1708	CT	1.27	0.9–1.78	885
rs1800896	0.4482	AG	1.14	0.81–1.6	881
rs6265	0.535	AA+GG	1.12	0.78–1.6	885
rs2049046	0.8803	AA+TT	1.03	0.73–1.44	886
rs908867	0.4299	AA+GG	1.22	0.74–2.02	885
rs6277	0.272	CT	1.21	0.86–1.7	886
rs1076560	0.1385	AC	1.34	0.91–1.98	882
rs2734837	0.1418	AG	1.29	0.92–1.81	884
rs11608185	0.0721	CT	1.37	0.97–1.92	880
rs4936272	0.03	CT	1.46	1.04–2.07	886
rs4648317	0.4297	CT	1.17	0.79–1.72	886
rs4322431	0.299	AT	1.20	0.85–1.69	884

rs1799978	0.5283	AG	1.19	0.69–2.03	879
rs12364283	0.573	AG	1.15	0.71–1.87	886
rs17122021	0.6063	CT	1.10	0.77–1.58	810
rs4149117	0.6814	GG+TT	1.09	0.73–1.62	886
rs11568563	0.7715	AC	1.08	0.65–1.78	885
rs8904	0.6159	CT	1.09	0.78–1.53	886
rs10483639	0.3209	CG	1.21	0.83–1.75	886
rs7142517	0.8989	AA+CC	1.02	0.73–1.44	884
rs752688	0.4573	CT	1.15	0.79–1.68	885
rs4411417	0.4006	CT	1.17	0.81–1.71	878
rs9671371	0.4301	CT	1.15	0.81–1.63	885
rs12147422	0.5533	CC+TT	1.15	0.72–1.84	886
rs8004445	0.3598	GG+TT	1.25	0.77–2.03	884
rs998259	0.8447	CT	1.04	0.73–1.46	882
rs3783641	0.4088	AT	1.17	0.81–1.7	885
rs8007267	0.6767	CT	1.08	0.74–1.59	885
rs40434	0.0862	CT	1.35	0.96–1.89	882
rs36024	0.3675	CT	1.17	0.83–1.64	885
rs36017	0.3977	CG	1.16	0.82–1.62	885
rs8065080	0.1403	CC+TT	1.29	0.92–1.82	883
rs1979572	0.3223	CC+TT	1.19	0.84–1.68	877
rs4325622	0.1479	CC+TT	1.29	0.91–1.81	886
rs140701	0.4648	AA+GG	1.14	0.81–1.59	883
rs2066713	0.4313	CT	1.15	0.82–1.61	884

rs9966412	0.1734	CC+TT	1.35	0.88–2.08	884
rs2562456	0.3238	CT	1.19	0.84–1.7	851
rs1800469	0.2403	CT	1.23	0.87–1.72	882
rs934778	0.9718	CT	1.01	0.72–1.41	886
rs6746030	0.2346	AA+GG	1.30	0.84–1.99	885
rs6747673	0.8773	AA+TT	1.03	0.73–1.44	878
rs9646771	0.7039	CT	1.07	0.76–1.51	868
rs4646312	0.004	CC+TT	1.65	1.17–2.33	886
rs6269	0.0128	AA+GG	1.55	1.1–2.19	872
rs4680	0.1303	AA+GG	1.30	0.92–1.84	877
rs7678338	0.0016	CT	1.73	1.23–2.44	877
rs7689605	0.8214	AG	1.06	0.65–1.71	886
rs10028945	0.8583	AA+GG	1.03	0.73–1.45	886
rs12516948	0.7874	AG	1.05	0.75–1.47	882
rs40184	0.9184	AG	1.02	0.73–1.43	885
rs403636	0.3283	GG+TT	1.21	0.82–1.78	886
rs6350	0.4277	CT	1.21	0.76–1.92	883
rs3816596	0.7137	CT	1.07	0.76–1.5	885
rs12658835	0.7527	AG	1.06	0.75–1.5	882
rs179997	0.4259	AA+TT	1.15	0.82–1.61	885
rs1800629	0.9747	AG	1.01	0.67–1.52	873
rs1799971	0.2924	AA+GG	1.23	0.84–1.79	885
rs563649	0.301	AA+GG	1.35	0.76–2.41	886
rs702764	0.5835	CT	1.11	0.76–1.64	884

rs997917	0.11	CT	1.32	0.94–1.86	884
rs3839874	0.4889	CT	1.13	0.8–1.58	885
rs1975285	0.2645	CC+GG	1.23	0.85–1.78	882
rs11988795	0.6363	CC+TT	1.09	0.77–1.53	880

AB+BB / AA

SNP	P Value	Risk Genotype	Odds Ratio	95% CI	N
rs1042114	0.8442	GG	1.12	0.37–3.39	857
rs533123	0.6023	CT+TT	1.29	0.49–3.4	881
rs6691840	0.5564	AA	1.11	0.79–1.57	847
rs932816	0.4865	AG+GG	1.25	0.67–2.31	882
rs4141964	0.6818	AG+GG	1.12	0.66–1.89	885
rs2295633	0.7695	CC	1.05	0.75–1.48	883
rs6693882	0.1441	AA	1.34	0.9–1.98	791
rs5275	0.3532	CT+TT	1.35	0.71–2.56	885
rs1800896	0.8293	AG+GG	1.04	0.73–1.48	881
rs6265	0.0379	AG+GG	2.59	1.02–6.59	885
rs2049046	0.7498	AT+TT	1.06	0.73–1.55	886
rs908867	0.4984	AA	1.75	0.34–9.12	885
rs6277	0.2038	CT+TT	1.40	0.83–2.35	886
rs1076560	0.7569	AC+CC	1.27	0.28–5.78	882
rs2734837	0.4261	AG+GG	1.15	0.82–1.62	884
rs11608185	0.3999	CT+TT	1.16	0.82–1.64	880
rs4936272	0.9109	CT+TT	1.02	0.67–1.56	886

rs4648317	0.2577	CT+TT	1.24	0.85–1.81	886
rs4322431	0.7091	AT+TT	1.13	0.59–2.16	884
rs1799978	0.6038	AG+GG	1.15	0.67–1.97	879
rs12364283	0.5036	AG+GG	1.18	0.73–1.9	886
rs17122021	0.1263	CT+TT	1.37	0.91–2.04	810
rs4149117	0.9162	GG	1.02	0.69–1.51	886
rs11568563	0.7624	AC+CC	1.08	0.66–1.76	885
rs8904	0.263	CT+TT	1.23	0.86–1.76	886
rs10483639	0.8576	CC	1.10	0.4–2.96	886
rs7142517	0.7572	AA	1.09	0.64–1.85	884
rs752688	0.4538	CT+TT	1.15	0.8–1.65	885
rs4411417	0.9416	CC	1.04	0.39–2.79	878
rs9671371	0.5242	CT+TT	1.12	0.8–1.57	885
rs12147422	0.1104	CT+TT	-		886
rs8004445	0.177	GG	1.39	0.86–2.24	884
rs998259	0.1283	CT+TT	1.30	0.93–1.83	882
rs3783641	0.4952	AT+TT	1.45	0.5–4.22	885
rs8007267	0.5887	CT+TT	1.11	0.77–1.6	885
rs40434	0.3224	CT+TT	1.31	0.77–2.23	882
rs36024	0.6945	CC	1.08	0.75–1.55	885
rs36017	0.0747	CG+GG	1.45	0.96–2.19	885
rs8065080	0.4763	CC	1.18	0.75–1.86	883
rs1979572	0.5732	CC	1.12	0.76–1.65	877
rs4325622	0.3641	CC	1.20	0.81–1.77	886

rs140701	0.9584	AA	1.01	0.68–1.51	883
rs2066713	0.9455	CT+TT	1.01	0.72–1.42	884
rs9966412	0.2214	CC	1.29	0.86–1.96	884
rs2562456	0.0402	CC	2.00	1.02–3.92	851
rs1800469	0.6013	CT+TT	1.10	0.78–1.54	882
rs934778	0.9148	CT+TT	1.03	0.62–1.71	886
rs6746030	0.7874	AA	1.19	0.33–4.33	885
rs6747673	0.1141	AA	1.33	0.93–1.9	878
rs9646771	0.7055	CT+TT	1.0703	0.75–1.52	868
rs4646312	0.1507	CC	1.36	0.89–2.06	886
rs6269	0.0889	AA	1.36	0.95–1.95	872
rs4680	0.0451	AA	1.48	1.01–2.18	877
rs7678338	0.0139	CT+TT	3.38	1.21–9.47	877
rs7689605	0.7673	AG+GG	1.38	0.16–11.51	886
rs10028945	0.0349	AA	1.77	1.04–3.01	886
rs12516948	0.8866	AG+GG	1.03	0.71–1.48	882
rs40184	0.9102	AG+GG	1.02	0.68–1.54	885
rs403636	0.5147	GG	1.13	0.78–1.63	886
rs6350	0.3465	CT+TT	1.25	0.79–1.97	883
rs3816596	0.342	CT+TT	1.18	0.84–1.67	885
rs12658835	0.1577	AG+GG	1.28	0.91–1.79	882
rs179997	0.324	AA	1.19	0.84–1.68	885
rs1800629	0.1098	AG+GG	—		873
rs1799971	0.4344	AA	1.16	0.8–1.67	885

rs563649	0.7426	AA	1.46	0.15–14.12	886
rs702764	0.7891	CC	1.19	0.33–4.32	884
rs997917	0.0266	CC	1.85	1.07–3.19	884
rs3839874	0.4961	CT+TT	1.14	0.79–1.64	885
rs1975285	0.1433	CC	1.30	0.91–1.85	882
rs11988795	0.8927	CC	1.02	0.73–1.44	880

AA / AB / BB

SNP	P Value	Risk Genotype	N
rs1042114	0.9802	GG	857
rs533123	0.8721	CT	881
rs6691840	0.8385	AA	847
rs932816	0.785	GG	882
rs4141964	0.8217	GG	885
rs2295633	0.8055	CC	883
rs6693882	0.3364	AA	791
rs5275	0.3307	CT	885
rs1800896	0.6739	AG	881
rs6265	0.0671	GG	885
rs2049046	0.8543	TT	886
rs908867	0.5935	AA	885
rs6277	0.3639	CT	886
rs1076560	0.3263	AC	882
rs2734837	0.2596	AG	884

rs11608185	0.1036	CT	880
rs4936272	0.0424	CT	886
rs4648317	0.3482	TT	886
rs4322431	0.5791	AT	884
rs1799978	0.6558	AG	879
rs12364283	0.6823	GG	886
rs17122021	0.2431	TT	810
rs4149117	0.3658	TT	886
rs11568563	0.9551	CC	885
rs8904	0.4942	TT	886
rs10483639	0.5868	CG	886
rs7142517	0.9528	AA	884
rs752688	0.7493	CT	885
rs4411417	0.6932	CT	878
rs9671371	0.7298	CT	885
rs12147422	0.2228	TT	886
rs8004445	0.1728	GG	884
rs998259	0.0241	TT	882
rs3783641	0.5964	AT	885
rs8007267	0.8363	TT	885
rs40434	0.2146	CT	882
rs36024	0.2705	CT	885
rs36017	0.1985	GG	885
rs8065080	0.335	CC	883

rs1979572	0.6127	TT	877
rs4325622	0.3475	CC	886
rs140701	0.7101	GG	883
rs2066713	0.4867	CT	884
rs9966412	0.3898	TT	884
rs2562456	0.045	CC	851
rs1800469	0.4075	CT	882
rs934778	0.9943	TT	886
rs6746030	0.4846	AA	885
rs6747673	0.147	AA	878
rs9646771	0.9227	CT	868
rs4646312	0.0157	CC	886
rs6269	0.045	AA	872
rs4680	0.1158	AA	877
rs7678338	0.0014	CT	877
rs7689605	0.9352	AG	886
rs10028945	0.1001	AA	886
rs12516948	0.9631	AG	882
rs40184	0.9924	AG	885
rs403636	0.4966	TT	886
rs6350	0.3726	TT	883
rs3816596	0.5353	TT	885
rs12658835	0.0874	GG	882
rs179997	0.6129	AA	885

rs1800629	0.2778	GG	873
rs1799971	0.4846	GG	885
rs563649	0.5593	AA	886
rs702764	0.8205	CC	884
rs997917	0.0079	CC	884
rs3839874	0.7515	CT	885
rs1975285	0.3168	CC	882
rs11988795	0.823	TT	880

CI = confidence interval; CPSP = chronic postsurgical pain; SNP = single nucleotide polymorphism.

Table 2. General Linear Mixed Model for Four Types of Surgery

Independent Predictors of Risk for CPSP after Hernia Repair Identified in the General Linear Mixed Model for Binomial Distribution with the Variable Recruitment Center as a Random Factor

	Bivariate Analysis	Multivariable Analysis*		Bootstrap Resampling†
	OR (95% CI)	OR (95% CI)		OR (95% CI)
	N = 1,702	β-coefficients	N = 1,702	
Age				
18 – 50	3.1 (2.2–4.4)	1.267	3.5 (2.5–5.1)	3.5 (2.5–5.0)
51 – 64	1.9 (1.3–2.7)	0.688	2.0 (1.4–2.9)	1.9 (1.3–2.9)
> 64	1			
SF-12 score (physical summary)				
0 – 33.5	3.2 (1.9–5.5)	1.140	3.1 (1.8–5.6)	3.2 (1.7–5.9)
33.6 – 55.1	1.7 (1.1–2.5)	0.563	1.8 (1.2–2.7)	1.8 (1.2–2.8)
> 55.1	1			

SF-12 score (mental summary)				
0 – 44.8	1.8 (1.2–2.5)	0.482	1.6 (1.1–2.4)	1.6 (1.1–2.3)
> 44.8	1			
Preoperative pain, surgical area				
VNRS ≤ 3	1			
VNRS > 3	2.0 (1.5–2.7)	0.513	1.7 (1.2–2.3)	1.6 (1.1–2.2)
Preoperative pain, other areas				
VNRS ≤ 3	1			
VNRS > 3	1.8 (1.3–2.5)	0.389	1.5 (1.0–2.2)	1.4 (1.0–2.1)

CI = confidence interval; CSPS = chronic postsurgical pain; OR = odds ratio; SF-12, Short Form Health Survey-12 (version 2 in Spanish);

VNRS = verbal numerical rating scale (0–10).

* *c*-statistic (CI 95%) = 0.645 (0.589–0.702); Hosmer-Lemeshow chi-square test = 3.93; *P* = 0.788.

† A total of 1,000 bootstrap subsamples were modelled. .

Independent Predictors of Risk for CPSP after Vaginal Hysterectomy Identified in the General Linear Mixed Model for Binomial Distribution with the Variable Recruitment Center as a Random Factor

	Bivariate Analysis	Multivariable Analysis*	Bootstrap Resampling†	
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
	N = 409	β-coefficients	N = 409	
Age				
18 – 50	2.5 (1.2–5.3)	1.010	2.7 (1.2–6.2)	2.4 (1.1–5.2)
51 – 64	1.2 (0.6–2.6)	0.366	1.4 (0.7–3.1)	1.4 (0.6–3.0)
> 64	1			
SF-12 score (physical summary)				
0 – 33.5	2.8 (1.0–7.7)	1.024	2.8 (0.8–9.3)	2.8 (0.8–11.8)
33.6 – 55.1	1.1 (0.5–2.6)	0.196	1.2 (0.5–2.9)	1.2 (0.5–3.8)
> 55.1	1			
SF-12 score (mental summary)				

0 – 44.8	2.5 (1.3–4.5)	0.909	2.5 (1.3–4.9)	2.2 (1.2–4.2)
> 44.8	1			
Preoperative pain, surgical area				
VNRS ≤ 3	1			
VNRS > 3	2.0 (1.0–3.9)	0.457	1.6 (0.7–3.5)	1.5 (0.7–3.2)
Preoperative pain, other areas				
VNRS ≤ 3	1			
VNRS > 3	1.0 (0.5–1.8)	-0.408	0.7 (0.3–1.4)	0.6 (0.3–1.3)

CI = confidence interval; CSPS = chronic postsurgical pain; OR = odds ratio; SF-12, Short Form Health Survey-12 (version 2 in Spanish);

VNRS = verbal numerical rating scale (0–10).

* *c*-statistic (CI 95%) = 0.645 (0.589–0.702); Hosmer-Lemeshow chi-square test = 3.93; *P* = 0.788.

† A total of 1,000 bootstrap subsamples were modelled.

Independent Predictors of Risk for CPSP after Abdominal Hysterectomy Identified in the General Linear Mixed Model for Binomial Distribution with the Variable Recruitment Center as a Random Factor

	Bivariate Analysis	Multivariable Analysis*		Bootstrap Resampling†
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
	N = 340	β-coefficients	N = 340	
Age				
18 – 50	3.6 (1.1–12.2)	1.501	4.5 (1.3–15.8)	4.5 (1.5–804943805.7)
51 – 64	3.6 (1.0–13.1)	1.360	3.9 (1.0–14.8)	3.9 (1.2–691944174.7)
> 64	1			
SF-12 score (physical summary)				
0 – 33.5	3.7 (1.6–8.8)	1.085	3.0 (1.1–7.7)	3.0 (1.1–8.7)
33.6 – 55.1	1.9 (1.0–3.6)	0.637	1.9 (1.0–3.7)	1.9 (1.0–4.0)
> 55.1	1			
SF-12 score (mental summary)				

0 – 44.8	1.8 (1.1–3.0)	0.475	1.6 (0.9–2.8)	1.6 (0.9–3.0)
> 44.8	1			
Preoperative pain, surgical area				
VNRS ≤ 3	1			
VNRS > 3	1.4 (0.8–2.5)	-0.046	1.0 (0.5–1.7)	1.0 (0.5–1.8)
Preoperative pain, other areas				
VNRS ≤ 3	1			
VNRS > 3	2.6 (1.6–4.3)	0.815	2.3 (1.3–4.0)	2.3 (1.3–4.2)

CI = confidence interval; CSPS = chronic postsurgical pain; OR = odds ratio; SF-12, Short Form Health Survey-12 (version 2 in Spanish);

VNRS = verbal numerical rating scale (0–10).

* *c*-statistic (CI 95%) = 0.645 (0.589–0.702); Hosmer-Lemeshow chi-square test = 3.93; *P* = 0.788.

† A total of 1,000 bootstrap subsamples were modelled.

Independent Predictors of Risk for CPSP after Thoracotomy Identified in the General Linear Mixed Model for Binomial Distribution with the Variable Recruitment Center as a Random Factor

	Bivariate Analysis	Multivariable Analysis*	Bootstrap Resampling†	
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
	N = 383	β-coefficients	N = 383	
Age				
18 – 50	3.6 (1.9–6.8)	1.221	3.4 (1.8–6.5)	3.4 (1.7–6.9)
51 – 64	1.1 (0.7–1.7)	0.039	1.0 (0.6–1.7)	1.1 (0.6–1.7)
> 64	1			
SF-12 score (physical summary)				
0 – 33.5	1.2 (0.6–2.5)	0.135	1.1 (0.5–2.5)	1.1 (0.5–2.7)
33.6 – 55.1	1.5 (0.9–2.5)	0.466	1.6 (0.9–2.7)	1.5 (0.9–2.7)
> 55.1	1			
SF-12 score (mental summary)				

0 – 44.8	1.5 (0.9–2.3)	0.376	1.5 (0.9–2.4)	1.4 (0.9–2.4)
> 44.8	1			
Preoperative pain, surgical area				
VNRS ≤ 3	1			
VNRS > 3	2.5 (0.9–7.3)	0.684	2.0 (0.6–6.4)	1.9 (0.5–9.3)
Preoperative pain, other areas				
VNRS ≤ 3	1			
VNRS > 3	1.4 (0.8–2.7)	0.380	1.5 (0.8–2.8)	1.4 (0.7–2.8)

CI = confidence interval; CSPS = chronic postsurgical pain; OR = odds ratio; SF-12, Short Form Health Survey-12 (version 2 in Spanish);

VNRS = verbal numerical rating scale (0–10).

* *c*-statistic (CI 95%) = 0.645 (0.589–0.702); Hosmer-Lemeshow chi-square test = 3.93; *P* = 0.788.

† A total of 1,000 bootstrap subsamples were modelled.

Table 3. Independent Predictors of Risk for Neuropathic CPSP Identified in the Logistic Regression Model*

	Bivariate Analysis	Multivariable Analysis*	Bootstrap Resampling	
	OR (95% CI)	OR (95% CI)	subsamples)	
	N = 2,708	β-coefficients	N = 2,708	OR (95% CI)
Surgical specialty				
Vaginal hysterectomy	1			
Abdominal hysterectomy	4.0 (1.9–8.2)	0.974	2.6 (1.2–5.7)	2.6 (1.3–6.7)
Hernia repair	1.6 (0.8–3.1)	0.642	1.9 (0.9–3.8)	1.9 (1.0–4.7)
Thoracotomy	8.6 (4.3–17.0)	2.567	13.0 (6.3–26.8)	13.0 (6.9–34.2)
Age				
18 – 50	2.5 (1.7–3.7)	1.220	3.4 (2.2–5.3)	3.4 (2.2–5.4)
51 – 64	1.6 (1.1–2.5)	0.538	1.7 (1.1–2.7)	1.7 (1.1–2.6)

> 64	1			
SF-12 score (physical summary)				
0 – 33.5	4.6 (2.5–8.3)	1.328	3.8 (2.0–7.1)	3.8 (2.0–8.2)
33.6–55.1	2.0 (1.2–3.4)	0.854	2.3 (1.4–4.0)	2.3 (1.4–4.5)
> 55.1	1			
SF-12 score (mental summary)				
0 – 44.8	2.3 (1.7–3.3)	0.545	1.7 (1.2–2.5)	1.7 (1.1–2.5)
> 44.8	1			
Preoperative pain, surgical area				
VNRS ≤ 3	1			
VNRS > 3	1.5 (1.1–2.2)	0.391	1.5 (1.0–2.2)	1.5 (0.9–2.2)
Preoperative pain, other areas				
VNRS ≤ 3	1			
VNRS > 3	1.7 (1.2–2.4)	0.470	1.6 (1.1–2.4)	1.6 (1.1–2.4)

CI = confidence interval; CSPS = chronic postsurgical pain; OR = odds ratio; SF-12 = Short Form Health Survey-12 (version 2 in Spanish); VNRS = verbal numerical rating scale (0–10).

* *c*-statistic (95% CI) = 0.773 (0.735–0.810); Hosmer-Lemeshow chi-square test = 10.63, *P* = 0.156.

Table 4. Anesthetic and Analgesic Variables by Type of Surgery

Hernia Repair		No. (%) of Patients with CPSP	<i>P</i> Value		
Preoperative variables					
Anticonvulsants					
No (n = 1,730)		234 (13.5%)	0.372		
Yes (n = 25)		5 (20.0%)			
Intraoperative variables					
Type of anesthesia					
General anesthesia (n = 241)		28 (11.6%)	0.161		
Combined anesthesia (n = 138)		24 (17.4%)			
Neuroaxial (epidural and spinal) (n = 1,296)		183 (14.1%)			
Plexus nerve block* (n = 12)		2 (16.7%)			
Local (n = 49)		2 (4.1%)			
Ketamine, intravenous					
No (n = 1,721)		238 (13.8%)	0.999		
Yes (n = 12)		1 (8.3%)			
Remifentanil, intravenous					
No (n = 1,563)		215 (13.8%)	0.897		
Yes (n = 170)		24 (14.1%)			
Postoperative period					
Opioids (first 24h according to protocol)					
No (n = 1,557)		205 (13.2%)	0.027		
Yes (n = 165)		32 (19.4%)			

* Plexus nerve block denotes ilioinguinal block, abdominogenital block or transverse abdominis plane block.

CSPS = chronic postsurgical pain.

Vaginal Hysterectomy

	No. (%) of Patients	
	with CPSWP	P Value
<hr/>		
Preoperative variables		
Anticonvulsants		
No (n = 400)	48 (12.0%)	0.999
Yes (n = 14)	1 (7.1%)	
Intraoperative variables		
Type of anesthesia		
General anesthesia (n = 77)	11 (14.3%)	0.870
Combined anesthesia (n = 20)	2 (10.0%)	
Neuroaxial (epidural and spinal) (n = 317)	36 (11.4%)	
Ketamine, intravenous		
No (n = 406)	45 (11.1%)	0.014
Yes (n = 9)	4 (44.4%)	
Remifentanil, intravenous		
No (n = 378)	43 (11.4%)	0.420
Yes (n = 37)	6 (16.2%)	
Postoperative period		
Opioids (first 24 h according to protocol)		
No (n = 270)	33 (12.2%)	0.739
Yes (n = 144)	16 (11.1%)	
<hr/>		
CSPWP = chronic postsurgical pain.		

Abdominal Hysterectomy

	No. (%) of Patients	
	with CPSP	<i>P</i> Value
<hr/>		
Preoperative variables		
Anticonvulsants		
No (n = 343)	85 (24.8%)	0.374
Yes (n = 7)	3 (42.9%)	
Intraoperative variables		
Type of anesthesia		
General anesthesia (n = 242)	66 (27.3%)	0.500
Combined anesthesia (n = 100)	20 (20.0%)	
Neuroaxial (epidural and spinal) (n = 7)	2 (28.6%)	
Ketamine, intravenous		
No (n = 336)	83 (24.7%)	0.354
Yes (n = 14)	5 (35.7%)	
Remifentanil, intravenous		
No (n = 256)	67 (26.2%)	0.491
Yes (n = 94)	21 (22.3%)	
Postoperative period		
Opioids (first 24 h according to protocol)		
No (n = 200)	51 (25.5%)	0.944
Yes (n = 147)	37 (25.2%)	

CSPS = chronic postsurgical pain.

Thoracotomy	No. (%) of Patients	
	with CPSP	<i>P</i> Value
Preoperative variables		
Anticonvulsants		
No (n = 367)	139 (37.9%)	0.695
Yes (n = 32)	11 (34.4%)	
Intraoperative variables		
Type of anesthesia		
General anesthesia (n = 159)	60 (37.7%)	0.433
Combined anesthesia (n = 239)	89 (37.2%)	
Neuroaxial (epidural and spinal) (n = 1)	1 (100.0%)	
Ketamine, intravenous		
No (n = 386)	144 (37.3%)	0.567
Yes (n = 13)	6 (42.2%)	
Remifentanil, intravenous		
No (n = 258)	99 (38.4%)	0.664
Yes (n = 141)	51 (36.2%)	
Postoperative period		
Opioids (first 24 h according to protocol)		
No (n = 197)	65 (33.0%)	0.058
Yes (n = 199)	84 (42.2%)	

CPSP = chronic postsurgical pain.