Gene	Chromosome	Start	End	# SNPs	p-value
TRANK1	3	36868307	36986548	359	1.37×10^{-7}
ITIH1	3	52811601	52826084	173	2.40×10^{-7}
ITIH3	3	52828783	52843025	173	7.71×10^{-8}
ITIH4	3	52847005	52864717	188	4.41×10^{-8}
MUSTN1	3	52863875	52869318	185	5.62×10^{-8}
TMEM110-MUSTN1	3	52867130	52931597	272	6.56×10^{-8}
TMEM110	3	52870771	52931597	267	7.06×10^{-8}
SFMBT1	3	52937582	53080089	460	4.38×10^{-7}
RPS6KA2	6	166822853	167275771	1449	9.40×10^{-7}
MAD1L1	7	1855427	2272583	1279	4.63×10^{-7}
MYRF	11	61520120	61555989	196	6.06×10^{-8}
DKFZP434K028	11	61521500	61525136	154	1.98×10^{-6}
TMEM258	11	61556601	61560085	143	6.30×10^{-8}
MIR611	11	61559966	61560033	134	7.39×10^{-8}
FEN1	11	61560108	61564714	140	8.29×10^{-8}
FADS1	11	61567096	61584529	183	2.11×10^{-7}
MIR1908	11	61582632	61582712	148	5.55×10^{-7}
GAL3ST3	11	65808235	65816651	171	4.46×10^{-7}
SF3B2	11	65819815	65836382	176	2.49×10^{-7}
PACS1	11	65837823	66012218	360	1.95×10^{-7}
KLC2	11	66024764	66035332	143	1.11×10^{-6}
RAB1B	11	66036055	66044963	141	1.32×10^{-6}
CNIH2	11	66045671	66051685	136	1.65×10^{-6}
YIF1A	11	66052050	66056638	141	1.56×10^{-6}
CACNA1C	12	2162415	2807115	1298	3.11×10^{-7}
CACNA1C-AS4	12	2329702	2332647	141	3.91×10^{-7}
CACNA1C-IT3	12	2378941	2397911	124	6.26×10^{-8}
KMT2D	12	49412757	49449107	81	9.13×10^{-7}
RHEBL1	12	49458467	49463775	65	2.26×10^{-6}
STARD9	15	42867856	43013196	229	8.86×10^{-8}
CDAN1	15	43015759	43029417	111	1.34×10^{-6}
TTBK2	15	43036541	43213007	220	1.28×10^{-6}
LOC100505679	15	84841241	84850985	85	2.15×10^{-6}
LOC642423	15	84868829	85748518	1817	1.13×10^{-6}
GOLGA6L5	15	85047737	85060078	103	7.32×10^{-7}
UBE2Q2P1	15	85070426	85114026	189	2.68×10^{-7}
LINC00933	15	85113879	85123412	194	2.06×10^{-7}
ZSCAN2	15	85144248	85166947	220	2.72×10^{-7}
SCAND2P	15	85174690	85185694	180	1.59×10^{-6}
GSDMB	17	38060847	38074903	239	1.51×10^{-6}
ORMDL3	17	38077295	38083884	251	1.24×10^{-6}
LRRC3C	17	38097726	38100987	271	6.61×10^{-7}
GSDMA	17	38119225	38134019	345	9.66×10^{-7}
PSMD3	17	38137020	38154213	344	1.58×10^{-6}
NCAN	19	19322781	19363061	237	8.11×10^{-7}
HAPLN4	19	19366451	19384074	153	1.36×10^{-6}
TM6SF2	19	19375173	19384074	147	1.65×10^{-6}
PBX4	19	19672515	19729725	186	1.05×10^{-6}
STK4	20	43595119	43708593	364	1.21×10^{-7}
KCNS1	20	43720949	43729753	201	2.98×10^{-9}
WFDC5	20	43738092	43743813	201	2.31×10^{-8}
WFDC12	20	43752066	43753106	197	3.22×10^{-7}

Table 2: **Resulting associated genes using PASCAL.** These are the significant genes for BD1 with a p-value lower than the Bonferroni correction (p-value $< 2.28 \times 10^{-8}$) sorted by chromosome. The genes in bold are the novel genes found with PASCAL.