**S2 Table.** Other variants observed in BPPV families versus public data [1000 Genome (1000G) and NHLBI data on European Americans (EA)].

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Gene** | **Chr** | **ref** | **alt** | **dbSNP** | **Mutant allele count (+/-)** |
| **BPPV families** | **1000G** | **NHLBIEA** |
| *CASP10*(P-values) | chr5 | G | A | Rs13010627 | 8/29 | 88/2412(4.89x10-5) | 527/3753(0.13) |
| *TMEM119* (P-values) | chr12 | G | A | rs144109867 | 1/29 | 1/2503(0.02) | 9/4280(0.07) |
| *NOD2*(P-values) | chr16 |  | C | rs2066847  | 2/28 | 30/247(0.05) | 181/3946(0.38) |
| *STARD6*(P-values) | chr18 | G | A | rs17292725 | 2/28 | 71/2433(0.21) | 334/3966(1.00) |
| *MYBPC3*(P-values) | chr11 | C | T | rs3729986 | 3/27 | 161/2343(0.44) | 694/3462(0.46) |
| *MPO*(P-values) | chr17 | G | A | rs119468010 | 2/28 | 2/2502(8.00x10-4) | 25/4275(0.01) |
| *BAG3*(P-values) | chr10 | G | A | rs35434411 | 5/34 | 37/2467(4.00x10-4) | 266/4027(0.09) |
| *CP*(P-values) | chr3 | G | A | rs61733458 | 4/39 | 98/2402(0.09) | 257/4039(0.33) |
| *LRP2*(P-values) | chr2 | T | C | rs17848169 | 1/29 | 86/2419(1.00) | 318/3982(0.72) |
| *LRP2*(P-values) | chr2 | C | T | rs34291900 | 2/28 | 72/2432(0.22) | 298/4002(0.16) |
| *SYNE2*(P-values) | chr14 | G | A | rs12881815 | 2/28 | 93/2411(0.31) | 423/3877(0.76) |
| *LMNB2*(P-values) | chr19 | C | T | rs121912497 | 2/40 | 23/2481(0.06) | 116/4170(0.32) |
| *DMD*(P-values) | chrX | A | C | rs72468681 | 1/29 | 11/2493(0.13) | N/A |
| *GPR98*(P-values) | chr5 | G | A | rs111033530 | 2/28 | 24/2480(0.04) | 133/4021(0.25) |
| *CIDEC*(P-values) | chr3 | G | A | rs61742367 | 1/29 | 65/2439(0.55) | 256/3966(1.00) |
| *RYR2*(P-values) | chr1 | A | G | rs56229512 | 1/29 | 36/2468(0.36) | 178/3948(1.00) |
| *ANO10*(P-values) | chr3 | G | A | rs17409162 | 2/28 | 177/2327(1.00) | 544/3756(0.58) |