**S3 Table.** Exome variants found in known genes for Mendelian forms of POAG that co-segregated with disease in the family trio (Fig. 1).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gene****(Locus)** | **Gene** **Location** | **Variant Location** | **cDNA Variant** | **Protein Variant** | **Reference Sequence No.** | **MAF %**  | **SIFT** | **PolyPhen-2** | **Co-segregation in pedigree (recombinant)** |
| *MYOC*(GLC1A) | 1:171,635,417-171,652,633 |  |  |  |  |  |  |  |  |
| *CYP1B1*(GLC3A) | 2:38,067,603-38,076,181 |  |  |  |  |  |  |  |  |
| *WDR36*(GLC1G) | 5:110,427,414-110,466,200 | 5:110,439,575 | c.856C>T | p.Arg286Cys | rs144543625 | 0.0454  | Tolerated  | Probably damaging | No (II:5, II:9, II:10) |
| *ASB10*(GLC1F) | 7:150,872,785-150,884,919 |  |  |  |  |  |  |  |  |
| *OPTN*(GLC1E) | 10:13,141,449-13,180,291 | 10:13,152,400 | c.293T>A | p.Met98Lys | rs11258194 | 11.75 | Tolerated | Benign | No (II:7) |
| *TBK1*(GLC1P) | 12:64,845,840-64,895,899 |  |  |  |  |  |  |  |  |
| *LTBP2*(GLC3D) | 14:74,964,873-75,079,306 |  |  |  |  |  |  |  |  |
| *NTF4*(GLC1O) | 19:49,559,080-49,568,333 |  |  |  |  |  |  |  |  |