

**Variability in Cochlear Implantation Outcomes
in a Large German Cohort with a Genetic Etiology of Hearing Loss**

Supplemental Digital Content 1.

Genetic Variants of all Genetically Diagnosed Cochlear Implant Patients (n=76) in alphabetical order.

| ID | Gene transcript | Variant 1 (protein change 1) | Variant type | Variant 2 (protein change 2) | Variant type | Zyg | Clin Var | DVD | ACMG/AMP | ACMG/AMP rules applied§ | Seg |
|----------------------|--------------------------------|-------------------------------|--------------|-------------------------------|--------------|----------|----------|------|----------|---|-----|
| 25 ^{&} | <i>ACTG1</i> NM_001199954.1 | c.721G>A (p.(Glu241Lys)) | Missense | - | - | Het | LP | P | LP | PS1_Strong, PM2_Moderate, PP3_Supporting | ND |
| 39 ^{&} | <i>CDH23</i> NM_022124.5 | c.3215C>A (p.(Ala1072Asp)) | Missense | c.3215C>A (p.(Ala1072Asp)) | Missense | Hom | US | P | LP, LP | PS1_Supporting, PM2_Moderate, PM3_Supporting, PP3_Supporting; PS1_Supporting, PM2_Moderate, PM3_Supporting, PP3_Supporting | ND |
| 1021 | <i>CDH23</i> NM_022124.5 | c.902G>A (p.(Arg301Gln)) | Missense | c.6253+1G>A p.? | Splice donor | Comp het | P/LP | P/LP | LP/LP | PS1_Supporting, PM1_Moderate, PM2_Moderate, PM3_Supporting, PP3_Supporting; PS1_Supporting, PM1_Moderate, PM2_Moderate, PM3_Supporting, PP3_Supporting | ND |
| 285 ^{&} | <i>COCH</i> NM_001347720.1 | c.346C>T (p.(Pro116Ser)) | Missense | - | - | Het | P | P | LP | PS1_Strong, PM2_Moderate, PP3_Supporting | ND |
| 58 ^{&} | <i>COL11A1</i> NM_080629.2 | c.2644C>T (p.(Arg882Trp)) | Missense | - | - | Het | NL | US | P | PM2_Moderate, PP3_Strong | ND |

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|-------------------------|-----------------------------------|--|--------------------------------|-------------------------------------|----------------|-------------|------|------|-------|--|-----|
| 56 ^{&} | <i>COL2A1</i> NM_001844.4 | c.1364C>T (p.(Thr455Met)) | Missense & splice region | - | - | Het | NL | P | LP | PP1_Moderate, PP3_Strong, BS2_Strong | Yes |
| 53 ^{&} | <i>COL4A3</i> NM_000091.3 | c.1295C>T (p.(Pro432Leu)) | Missense | - | - | Het | US | P | LP | PS1_Supporting, PM1_Moderate, PM2_Moderate, PP3_Supporting | ND |
| 270 ^{&} | <i>COL4A3</i> NM_000091.3 | c.4421T>C (p.(Leu474Pro)) | Missense | - | - | Het | C | P | LP | PS1_Strong, PM2_Moderate, PP3_Supporting | ND |
| 32 ^{&} | <i>COL4A3</i> NM_000091.3 | c.4882T>G (p.(Ser1628Ala)) | Missense | - | - | Het | US | US | P | PM2_Moderate, PP1_Strong, PP4_Strong | Yes |
| 279 ^{&} | <i>DIAPH1</i> NM_005219.4 | c.3268dup (p.(Met1090Asnfs* 13)) | Frameshift | - | - | Het | LP | LP | LP | PVS1_Strong, PM2_Moderate | ND |
| 247 ^{&} | <i>EDNRB</i> NM_000115.4 | c.878dup (p.(Tyr293*)) | Nonsense | - | - | Het | LP | NL | LP | PVS1_Strong, PM2_Moderate | ND |
| 120 ^{&} | <i>EYA4</i> NM_0013010 13.1 | c.1481dup (p.(Glu496Argfs*4)) | Frameshift | - | - | Het | NL | NL | LP | PVS1_Strong, PM2_Moderate | ND |
| 296 ^{&,\$} | <i>GJB2</i> NM_004004.5 | c.35del (p.(Gly12Valfs*2)) | Frameshift | c.35del (p.(Gly12Valfs*2)) | Frameshift | Hom | P, P | P, P | P; P | PVS1_Strong, PS3_Strong; PVS1_Strong, PS3_Strong | ND |
| 297 ^{&,\$} | <i>GJB2</i> NM_004004.5 | c.35del (p.(Gly12Valfs*2)) | Frameshift | c.35del (p.(Gly12Valfs*2)) | Frameshift | Hom | P, P | P, P | P; P | PVS1_Strong, PS3_Strong; PVS1_Strong, PS3_Strong | ND |
| 304 ^{&,\$} | <i>GJB2</i> NM_004004.5 | c.35del (p.(Gly12Valfs*2)) | Frameshift | c.139G>T (p.(Glu47*)) | Stop gained | Comp het | P, P | P, P | P; P | PVS1_Strong, PS3_Strong; PVS1_Strong, PS1_Strong, PM2_Moderate, PM3_Moderate, PM5_Moderate | ND |
| 305 ^{&,\$} | <i>GJB2</i> NM_004004.5 | c.35del (p.(Gly12Valfs*2)) | Frameshift | c.313_326del (p.(Lys105Glyfs*5)) | Frameshift | Comp het | P, P | P, P | P; LP | PVS1_Strong, PS3_Strong; PVS1_Strong, PM2_Moderate, PM3_Moderate | Yes |
| 307 ^{&,\$} | <i>GJB2</i> NM_004004.5 | c.35del (p.(Gly12Valfs*2)) | Frameshift | c.139G>T (p.(Glu47*)) | Stop gained | Comp het | P, P | P, P | P; P | PVS1_Strong, PS3_Strong; PVS1_Strong | Yes |

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|-------------------------|----------------------------|-------------------------------|------------|-------------------------------|------------|-----|------|------|------|--|-----|
| | | | | | | | | | | PS1_Strong, PM2_Moderate, PM3_Moderate PM5_Moderate | |
| 308 ^{&,\$} | <i>GJB2</i> NM_004004.5 | c.35del (p.(Gly12Valfs*2)) | Frameshift | c.35del (p.(Gly12Valfs*2)) | Frameshift | Hom | P, P | P, P | P; P | PVS1_Strong, PS3_Strong; PVS1_Strong, PS3_Strong | ND |
| 309 ^{&,\$} | <i>GJB2</i> NM_004004.5 | c.35del (p.(Gly12Valfs*2)) | Frameshift | c.35del (p.(Gly12Valfs*2)) | Frameshift | Hom | P, P | P, P | P; P | PVS1_Strong, PS3_Strong; PVS1_Strong, PS3_Strong | Yes |

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|-------------------------|------------------------------|---|----------------|-------------------------------|----------------|-------------|-----------|-----------|--------|---|-----|
| 314 ^{&,\$} | <i>GJB2</i> NM_004004.5 | c.35del (p.(Gly12Valfs*2)) | Frameshift | c.35del (p.(Gly12Valfs*2)) | Frameshift | Hom | P, P, | P, P | P; P | PVS1_Strong, PS3_Strong; PVS1_Strong, PS3_Strong | ND |
| 90 ^{&} | <i>GJB2</i> NM_004004.5 | c.71G>A (p.(Trp24*)) | Stop gained | c.71G>A (p.(Trp24*)) | Stop gained | Hom | P, P | P, P | P, P | PVS1_Strong, PS3_Strong, PM2_Moderate, PM3_Moderate; PVS1_Strong, PS3_Strong, PM2_Moderate, PM3_Moderate | ND |
| 302 ^{&,\$} | <i>GJB2</i> NM_004004.5 | c.71G>A (p.(Trp24*)) | Stop gained | c.71G>A (p.(Trp24*)) | Stop gained | Hom | P, P | P, P | P; P | PVS1_Strong, PS3_Strong, PM2_Moderate, PM3_Moderate; PVS1_Strong, PS3_Strong, PM2_Moderate, PM3_Moderate | Yes |
| 1026 | <i>GJB2</i> NM_004004.5 | c.313_326del (p.(Lys105GlyfsTer5)) | Frameshift | c.35del (p.(Gly12Valfs*2)) | Frameshift | Comp het | P, P | P, P | P, P | PVS1_Strong, PM1_Moderate, PM2_Moderate, PM3_Moderate; PVS1_Strong, PS3_Strong | ND |
| 2002 | <i>GJB2</i> NM_004004.5 | c.35del (p.(Gly12Valfs*2)) | Frameshift | c.35del (p.(Gly12Valfs*2)) | Frameshift | Hom | P, P | P, P | P; P | PVS1_Strong, PS3_Strong; PVS1_Strong, PS3_Strong | ND |
| 2003 | <i>GJB2</i> NM_004004.5 | c.35del (p.(Gly12Valfs*2)) | Frameshift | c.35del (p.(Gly12Valfs*2)) | Frameshift | Hom | P, P | P, P | P; P | PVS1_Strong, PS3_Strong; PVS1_Strong, PS3_Strong | ND |
| 2006 | <i>GJB2</i> NM_004004.5 | c.35del (p.(Gly12Valfs*2)) | Frameshift | c.35del (p.(Gly12Valfs*2)) | Frameshift | Hom | P, P | P, P | P; P | PVS1_Strong, PS3_Strong; PVS1_Strong, PS3_Strong | ND |
| 2001 | KCNE1 NM_000219.6 | c.12dup (p.(Asn5Ter) | Frameshift | c.12dup (p.(Asn5Ter) | Frameshift | Hom | P, P | P, P | P, P | PVS1_Strong, PS1_Moderate, PM2_Moderate; PVS1_Strong, PS1_Moderate, PM2_Moderate | Yes |
| 1030 | <i>LHFPL5</i> NM_182548.4 | c.526C>T (p.(Arg176Cys)) | Missense | c.526C>T (p.(Arg176Cys)) | Missense | Hom | NL, NL | US, US | LP, LP | PM1_Moderate, PM2_Moderate, PM5_Moderate, | ND |

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|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | PP3_Supporting; PM1_Moderate, PM2_Moderate, PM5_Moderate, PP3_Supporting | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|

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|----------------------|---------------------------------------|--|--------------------|---------------------------------------|-----------------|-------------|-----------|-----------|--------|--|-----|
| 106 | <i>LOXHD1</i> NM_144612.6 | c.1904T>C (p.(Leu635Pro)) | Missense | c.2314A>T (p.(Ile772Phe)) | Missense | Comp het | NL, NL | LP, LP | LP, LP | PM1_Supporting, PM2_Supporting, PM5_Moderate, PP1_Moderate, PP3_Supporting; PM2_Moderate, PM3_Moderate, PP1_Moderate, PP3_Supporting | Yes |
| 59 ^{&} | <i>LOXHD1</i> NM_144612.6 | c.3061+1G>A (p.(?)) | Splice donor | c.5144del (p.(Asn1715Thrfs*4)) | Frameshift | Comp het | P, NL | US, US | LP, LP | PVS1_Strong, PM2_Moderate; PVS1_Strong, PM2_Moderate | ND |
| 89 ^{&} | <i>LOXHD1</i> NM_144612.6 | c.5721T>A (p.(Tyr1907*)) | Nonsense | c.5721T>A (p.(Tyr1907*)) | Nonsense | Hom | NL, NL | US, US | LP, LP | PVS1_Strong, PM2_Moderate, BP4_Supporting; PVS1_Strong, PM2_Moderate, BP4_Supporting | ND |
| 257 ^{&} | <i>MARVELD2</i> NM_0010386 03.2 | c.880_890del (p.(Phe294Argfs*17)) | Frameshift | c.1331+2T>C (p.(?)) | Splice donor | Comp het | LP, LP | LP, P | LP, LP | PVS1_Strong, PM2_Moderate, PM3_Supporting; PVS1_Strong, PM2_Moderate, PM3_Supporting | Yes |
| 2004 | <i>MARVELD2</i> NM_0010386 03.3 | c.1331+2T>C (p.(?)) | Splice donor | c.1331+2T>C (p.(?)) | Splice donor | Hom | P, P | P, P | P, P | PVS1_Strong, PS1_Strong, PM2_Moderate; PVS1_Strong, PS1_Strong, PM2_Moderate | ND |
| 259 ^{&} | <i>MITF</i> NM_0013546 04.1 | c.1180-2A>G (p.(?)) | Splice acceptor | - | - | Het | LP | LP | LP | PVS1_Strong, PM2_Moderate | ND |
| 1017 | <i>MITF</i> NM_000248.3 | c.668G>T p.Arg223Leu | Missense | - | - | Het | US | US | LP | PM1_Moderate, PM2_Moderate, PM5_Moderate, PP3_Supporting | ND |

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|---------------------|----------------------------------|-----------------------------------|------------|-------------------------------|----------|-------------|--------|-----------|------------|---|----|
| 1018 | <i>MT-TL1</i> ENST00000386347 | m.3243A>G p.? | Missense | - | - | Het pl | | | N/A (P) | N/A | ND |
| 1028 | <i>MYH14</i> NM_001077186.1 | c.2500C>T p.Arg834Cys | Missense | - | - | Het | NL | US | LP | PM1_Moderate, PM2_Moderate, PP1_Supporting, PP3_Supporting | ND |
| 1029 | <i>MYH14</i> NM_001077186.1 | c.2500C>T p.Arg834Cys | Missense | - | - | Het | NL | US | LP | PM1_Moderate, PM2_Moderate, PP1_Supporting, PP3_Supporting | ND |
| 23 ^{&} | <i>MYO15A</i> NM_016239.3 | c.1137del (p.(Tyr380Metfs*64)) | Frameshift | c.8183G>A (p.(Arg2728His)) | Missense | Comp het | P, LP | P, P | P, P | PVS1_Very strong, PS1_Strong, PM2_Supporting; PS1_Strong, PM1_Moderate, PM2_Moderate, PM3_Moderate | ND |
| 216 | <i>MYO15A</i> NM_016239.3 | c.4240G>A (p.(Glu1414Lys)) | Missense | c.5491G>A (p.(Gly1831Arg)) | Missense | Comp het | P, NL | P, NL | LP, LP | PS1_Strong, PM1_Moderate, PM2_Moderate, PP3_Supporting; PM1_Moderate, PM2_Moderate, PM5_Moderate, PP3_Supporting | ND |
| 99 ^{&} | <i>MYO15A</i> NM_016239.3 | c.9620G>T (p.(Arg3207Arg)) | Missense | c.9620G>T (p.(Arg3207Arg)) | Missense | Hom | LP, LP | NL, NL | LP, LP | PM1_Supporting, PM2_Moderate, PM5_Strong, PP3_Supporting; PM1_Supporting, PM2_Moderate, PM5_Strong; PP3_Supporting | ND |

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| 1031 | MYO15A NM_016239.3 | c.1721G>C; p.Arg574Pro; c.6580C>T p.Arg2194Trp | missense missense | c.6442T>A p.Trp2148Arg | Missense | Comp het | US- US; NL | LP-LP; P | US-LP, LP | PM2_Moderate, PM3_Moderate, PP1_Supporting, BP4_Supporting; PS1_Moderate, PM1_Moderate, PM2_Moderate, PM3_Moderate, PP1_Supporting, BP4_Supporting; PS1_Strong PM1_Moderate, PM2_Moderate, PP3_Supporting | ND |
| 1034 | MYO15A NM_016239.3 | c.8309_8311delAG G p.Glu2770del | Inframe deletion | c.8309_8311delAG G p.Glu2770del | Inframe deletion | Hom | LP; LP | NL; NL | LP, LP | PM1_Moderate, PM2_Moderate, PM3_Moderate, PM4_Moderate, PP3_Supporting | ND |
| 1015 | MYO3A NM_017433.4 | c.732-2A>C p.? | Splice acceptor | - | - | Het | NL | US | LP | PVS1_Strong, PM2_Moderate | ND |
| 181 ^{&} | MYO6 NM_004999.3 | c.866_869del (p.(Lys289Argfs*17)) | Frameshift | - | - | Het | NL [#] | P | LP | PVS1_Strong, PM2_Moderate | ND |
| 1024 | MYO6 NM_004999.3 | Deletion Exon 10-34 | Partial deletion | - | - | Het | - | - | P | N/A | ND |
| 153 | MYO7A NM_000260.3 | c.1792G>A (p.(Ala598Thr)) | Missense | - | - | Het | NL | US | LP | PM1_Moderate, PM2_Moderate, PM5_Supporting, PP1_Supporting | Yes |
| 1016 | MYO7A NM_000260.3 | c.5886_5888delCTT p.Phe1963del | Inframe_ deletion | - | - | Het | P | NL | LP | PS1_Strong, PM1_Moderate, PM2_Moderate, PP3_Supporting | ND |
| 1033 | MYO7A NM_000260.3 | c.4264_4267dupAT CA p.Thr1423AsnfsTer2 9 | Frameshift | c.6445dupC p.Leu2149ProfsTer 44 | Frameshift | Comp het | NL | NL | P | PVS1_Very strong, PM2_Moderate, PM3_Moderate, PP1_Supporting; PVS1_Very strong, PM2_Moderate, PM3_Moderate, PP1_Supporting | ND |
| 299 ^{&,\$} | OTOF NM_194248.2 | c.2719C>T (p.(Gln907*)) | Nonsense | c.5203C>T (p.(Arg1735Trp)) | Missense | Comp het | NL [#] | NL | LP; P | PVS1_Strong, PM2_Moderate, PM3_Moderate; | Yes |

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|---------------------|------------------------------------|-----------------------------|---------------------------|------------------------------|----------|-------------|-----------|-----------|--------|---|----|
| | | | | | | | | | | PS1_Strong, PM2_Moderate, PM5_Moderate, PP3_Supporting | |
| 51 ^{&} | <i>PAX3</i> NM_181459.3 | c.167G>T (p.(Arg56Leu)) | Frameshift | - | - | Het | P | P | LP | PS1_Moderate, PM2_Moderate, PM5_Moderate PP3_Supporting | ND |
| 1003 | <i>PAX3</i> NM_181457.3 | c.187G>A p.Ala63Thr | Missense | - | - | Het | NL | NL | LP | PM1_Moderate, PM2_Moderate, PP3_Supporting, PP4_Supporting | ND |
| 1014 | <i>POU3F4</i> NM_000307.4 | Deletion entire gene p.? | Deletion | - | - | Hemi | | | P | N/A | ND |
| 1023 | <i>POU4F3</i> NM_002700.3 | c.118C>T p.Gln40Ter | Splice stop_ gained | - | - | Het | LP | LP | LP | PVS1_Strong, PM2_Moderate | ND |
| 1027 | <i>PTPRQ</i> NM_0011450 26.2 | c.6475C>T p.Arg2159Ter | Nonsense | c.6475C>T p.Arg2159Ter | Nonsense | Hom | P, P | NL, NL | P, P | PVS1_Strong, PS1_Strong, PM2_Moderate; PVS1_Strong, PS1_Strong, PM2_Moderate | ND |
| 2005 | <i>RRM2B</i> NM_015713.5 | c.846G>C (p.(Met282Ile)) | Missense | c.361C>T (p.(Arg121Cys)) | Missense | Comp het | NL, NL | NL, NL | LP, LP | PS1_Strong, PM2_Moderate, PP3_Supporting; PM1_Moderate, PM2_Moderate, PM3_Moderate, PM5_Moderate, PP3_Supporting | ND |
| 74 ^{&} | <i>SLC26A4</i> NM_000441.1 | c.703C>T (p.(Gln235*)) | Nonsense | c.1280C>A (p.(Ser427Tyr)) | Missense | Comp het | NL, NL | NL, NL | P, LP | PVS1_Strong, PM2_Moderate, PM3_Moderate, PP3_Supporting, PP4_Supporting; PM2_Moderate, PM3_Supporting, PP3_Supporting, PP4_Supporting | ND |

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| 278 ^{&} | <i>SLC26A4</i> NM_000441.1 | c.707T>C (p.(Leu236Pro)) | Missense | c.2145G>T (p.(Lys715Asn)) | Missense | Comp het | P, LP | P, P | P, LP | PS1_Strong, PM1_Moderate, PM2_Supporting, PM5_Moderate, PP3_Supporting; PS1_Strong, PM1_Moderate, PM2_Supporting, PM3_Moderate, BP4_Supporting | ND |
| 65 ^{&} | <i>SLC26A4</i> NM_000441.1 | c.1001+1G>A (p.(?)) | Splice donor | c.2219G>T (p.(Gly740Val)) | Missense | Comp het | P, US | P, P | LP, LP | PVS1_Strong, PM2_Supporting, PM3_Moderate, PP4_Supporting; PM2_Supporting, PM3_Moderate, PP4_Supporting | ND |
| 41 ^{&} | <i>SMPX</i> NM_014332.2 | c.140del (p.(Pro47Leufs*34)) | Frameshift | - | - | Hemi | NL | NL | LP | PVS1_Strong, PM2_Moderate | ND |
| 2000 | <i>SMPX</i> NM_014332.3 | c.127G>T (p.(Glu43Ter)) | Missense | - | - | Hemi | NL | NL | LP | PVS1_Strong, PM2_Moderate | ND |
| 88 ^{&} | <i>SOX10</i> NM_006941.3 | c.570C>A (p.(Cys190*)) | Stop gained | - | - | Het | NL | P | P | PVS1_Strong, PM2_Moderate, PP4_Supporting | ND |
| 202 ^{&} | <i>TFAP2A</i> NM_003220.2 | c.9G>A (p.(Trp3*)) | Nonsense | - | - | Het | NL | NL | LP | PVS1_Strong, PM2_Moderate | ND |

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|-----------------------|-------------------------------|---------------------------------|----------------------------------|-----------------------------|----------|-------------|-------|-------|--------|---|-----|
| 265 ^{&} | <i>TMIE</i> NM_147196.2 | c.250C>T (p.(Arg84Trp)) | Missense | c.250C>T (p.(Arg84Trp)) | Missense | Hom | P, P | P, P | LP, LP | PS1_Moderate, PM2_Moderate, PM5_Moderate, PP3_Supporting; PS1_Moderate, PM2_Moderate, PM5_Moderate, PP3_Supporting | Yes |
| 83*, ^{&} | <i>TMPRSS3</i> NM_024022.2 | c.208del (p.(His70Thrfs*19)) | Frameshift & splice region | c.413C>A (p.(Ala138Glu)) | Missense | Comp het | P, P | P, P | LP, LP | PVS1_Strong, PM2_Supporting, PM5_Moderate; PS1_Strong, PM2_Moderate, PP3_Supportin | Yes |
| 232 (FM 83) | <i>TMPRSS3</i> NM_024022.2 | c.208del (p.(His70Thrfs*19)) | Frameshift & splice region | c.413C>A (p.(Ala138Glu)) | Missense | Comp het | P, P | P, P | LP, LP | PVS1_Strong, PM2_Supporting, PM5_Moderate; PS1_Strong, PM2_Moderate, PP3_Supporting | Yes |
| 1036 | <i>TMPRSS3</i> NM_024022.3 | c.413C>A p.Ala138Glu | Missense | c.307G>A p.Asp103Asn | Missense | Comp het | P, NL | P, NL | P, LP | PS1_Strong, PM1_Moderate, PM2_Supporting, PM3_Moderate, PP1_Moderate, PP3_Supporting; PM1_Moderate, PM2_Moderate, PM3_Moderate, PM5_Moderate, PP3_Supporting | ND |
| 1035 | <i>TMPRSS3</i> NM_024022.3 | c.413C>A p.Ala138Glu | Missense | c.413C>A p.Ala138Glu | Missense | Hom | P, P | P, P | P, P | PS1_Strong, PM1_Moderate, PM2_Supporting, PM3_Moderate, PP1_Moderate, PP3_Supporting; PS1_Strong, PM1_Moderate, PM2_Supporting, PM3_Moderate, PP1_Moderate, PP3_Supporting | ND |
| 55 ^{&} | <i>TMPRSS3</i> NM_024022.2 | c.413C>A (p.(Ala138Glu)) | Missense | c.965C>A (p.(Pro322His)) | Missense | Comp het | P, NL | P, NL | LP, LP | PS1_Strong, PM2_Moderate, PP3_Supporting; PM2_Moderate, | ND |

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| | | | | | | | | | | | PM3_Moderate, PP3_Moderate | |
|--|--|--|--|--|--|--|--|--|--|--|-------------------------------|--|

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| 268 | <i>TMPRSS3</i> NM_024022.2 | c.496C>T (p.(Arg166Trp)) | Missense | c.753G>C (p.(Trp251Cys)) | Missense | Comp het | US, P | US, P | LP, P | PM1_Supporting, PM2_Supporting, PM3_Moderate, PP4_Supporting BP4_Supporting; PS1_Strong, PM1_Moderate, PM2_Moderate, PM5_Moderate, PP3_Supporting, PP4_Supporting | ND |
| 1032 | <i>USH2A</i> NM_206933.2 | c.1036A>C p.Asn346His | Missense | c.949C>A p.Arg317= | Synonymo us | Het | P, P | P, P | P, LP | PS1_Strong, PM1_Moderate, PM2_Moderate, PM3_Moderate, PP3_Supporting, PP4_Supporting; PS1_Strong, PM2_Moderate, PM3_Moderate, PP4_Supporting, BP4_Supporting | ND |
| 271 ^{&} | <i>USH2A</i> NM_206933.2 | c.5118G>A (p.(Trp1706*)) | Stop gained | c.5118G>A (p.(Trp1706*)) | Stop gained | Hom | P, P | P, P | LP, LP | PVS1_Strong, PM2_Moderate; PVS1_Strong, PM2_Moderate | ND |
| 1005 | <i>USH2A</i> NM_206933.2 | c.10058C>T p.Pro3353Leu | Missense | c.14519T>C p.Leu4840Pro | Missense | Het | NL, US | LB, US | LP, LP | PM1_Supporting, PM2_Moderate, PM3_Moderate, PP4_Supporting; PS1_Moderate, PM1_Supporting, PM2_Supporting, PP3_Supporting, PP4_Supporting | ND |
| 197 ^{&} | <i>WFS1</i> NM_0011458 53.1 | c.1316T>G (p.(Phe439Cys)) | Missense | - | - | Het | LP | P | LP | PS1_Strong, PM1_Moderate, PP3_Supporting | ND |
| 148 ^{&} | <i>WFS1</i> NM_006005.3 | c.2054G>A (p.(Arg685His)) | Missense | - | - | Het | US | US | LP | PS1_Strong, PM2_Moderate, PM5_Moderate, PP3_Supporting | ND |
| 1022 | <i>WFS1</i> NM_0011458 | c.2359G>A (p.(Ala787Thr)) | Missense | - | - | Het | C | LP | LP | PS1_Moderate, PM1_Moderate, PM2_Moderate, BP4_Supporting | ND |

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| | 53.1/NM_006 005.3 | | | | | | | | | | | |
|--|----------------------|--|--|--|--|--|--|--|--|--|--|--|

Abbreviations (in alphabetical order):

ACMG/AMP, American College of Medical Genetics and Genomics and the Association for Molecular Pathology; B, benign; C, conflicting interpretations of pathogenicity; Comp het, compound heterozygous; D, deleterious; DC, disease causing; Del, deletion; DVD, Deafness Variation Database; F, female; Het, heterozygous; Hom, homozygous; LB, likely benign; LP, likely pathogenic; M, male; MT, MutationTaster; N/A, not applicable; ND, not determined; NL, not listed; NS, not scored; P, pathogenic; PoD, possibly pathogenic; Poly, polymorphism; PP2, PolyPhen-2; PrD, probably pathogenic; Seg, segregation testing; T, tolerated; US, uncertain significance; XL, X-linked; Zyg, zygosity.

A question mark represents uncertainty about compound heterozygosity.

§ according to American College of Medical Genetics (ACMG)/Association for Molecular Pathology (AMP) guideline criteria (Oza et al. 2018; Richards et al. 2015)

* Index patient of a family; other family members are listed in this table, labeled as family member (fm) next to the ID of the index patient.

Variant is not listed in ClinVar but linked to dbSNP. The variant type is named after the DVD (Azaiez et al. 2018) or according to VarSome.com (Kopanos et al. 2019) for variants that were not listed in the DVD.

§ Causal variants derived from single-gene analysis.

& Patient has been previously reported (Tropitzsch et al. 2021)

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