| patents | Refreence | ${ }_{\text {famIr }}$ | ORGIN | consagunrr |  | Mutation 1 | Mutation | $\substack{\text { Prenatal } \\ \text { Fearues }}$ | 58 |  |  | (embrit | Eightat trimu (So) | $\begin{aligned} & \text { AGE AT TIME OF } \\ & \text { EXAMINATION } \\ & \text { (years) } \end{aligned}$ |  |  |  | bran maating | NEUROLODEELIOMENTRL OUTCOME | gpllest | отHER smproms |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Patient 41 | $\underbrace{\text { a }}_{\substack{\text { Moprinan, } 2000 \\ \text { Bon, } 2005}}$ | ${ }^{1}$ | Pasksan | ves | ded |  |  | Not Provied | m |  | Not Proved | Not Provided | Provied | Not Proved | ${ }^{6}$ | Not Proved | Strovied | Not pertorme | ectual disbuily | No | No |
| Patient ${ }^{\text {a }}$ |  | ${ }^{4}$ | stan | ves | Not Provided |  |  | fovided | F |  | Not Provided | rovided | ovided | orided | $\stackrel{8}{8}$ | 0.0 | $0^{0.0}$ | Not pertormed | Moderate inelelectual dishlily | $\begin{aligned} & \text { Yes - rare } \\ & \text { tonic/clonic } \end{aligned}$ | Protund congentat neerosessor deaferss |
| Patient 3 | $\begin{gathered} \text { Moynihan, } 2000 \\ \text { Bond, } 2005 \end{gathered}$ | ${ }^{4}$ | Pakistan | ves | Not Provied |  |  | Provied | F |  | Provied | Not Provied | vorpovided | Not Provided |  | Not Provided No | otpouded | Not pertormed | 1086 | No | No |
| Paternta |  | ${ }^{*}$ | Paskstan | ves | WtProvided |  |  | Not Provided | F |  | Not Provided | Not Provided | Not Proved | Not Provided | Provided | Not Provided | rover | Not pertormed | 1089 | No | Acute Lymphoblastic Leukemia causing death - skin areas of hypopigmentation |
| Patien t5 | Bond, 205 | *2 | Pasksan | ves | ided |  |  | Not Provied | F |  | Not Provided | Not Provied | Not Provied | Not frovied | . | Not Provided No | Not Provided | Not forided | Moderate inelelectual disability | Not Provied | Not Provied |
| Patient ${ }^{\text {f }}$ | Bond, 2005 | ${ }^{12}$ | Pakisian | ves | Not Provied |  |  | Not Provied |  |  | Provided | Provided | Not Provied | Not Provied | 7 | Not Provided Nop | Not Provided | Not Provided | Moderate inetelectual isability | Not Provided | Not Provied |
| Patientif | Hassa, 2007 | ${ }^{3}$ | ${ }^{\text {Pakisisan }}$ | ves | 18.30 |  |  | Not Provied |  |  | Not Provided | Not Provied | Not Provied | Not Provided | 4 | Not Provided Nor | fovided | Not Provied | 1051 | No | No |
| Patient 88 | Hassan, 2007 | ${ }^{1}$ | Pakistan | ves |  |  |  | Not Provied |  |  | Strovided | Not Provied | Vot Provided | Not Provied | 7 | Not Provided No | Not Provided | Not Provied | 10.65 | No | No |
| Patient 9 | Hassa, 2007 | * | Pakisan | ves |  |  |  | Not Provied | м |  | Not Provided | Not Provided | Not Provied | Not Provided | ${ }_{\text {roter }}^{\substack{\text { Nousided }}}$ | Not Provided No | Not Provided | Not Provied |  | no | No |
| Pateret t10 | Hassa, 2007 | * | Paskisan | yes |  |  |  | Not Provied | м |  | Not Provided | Not Provided | Not Provided | Not Provided | Proved | Not Providel ${ }^{\text {a }}$ | Not Provided | Not Provided |  | No | No |
| Pateren t11 | ${ }_{\text {Peganema, }}^{\substack{\text { Palt }}}$ | "4 | Somalia | ves | ${ }^{6}$ |  |  | Soprovided | F |  | ${ }^{3.7}$ | 2,4 | -3,7 | 6 | 8,9 | -1,1 | -1,6 | No oboumalitie: | helelctual dim | No | severe gastric reflux - Moderate to severe bilateral neurosensory deafness - Slight hyperlaxity - Hypoton |
| Patient 112 | ${ }^{1559}, 2013$ | *5 | taly | Yes | Not Provided |  | ca4atict (Pasmi4810) | aided | m |  | Not Provided | 0,5 | Provided | 5 | 6 | suded | 4,1 | Simplified gyral pattern (mostly frontal) - corpus callosum agenesis | 11.69 | no |  |
| Patient 113 | 1s5, 2013 | ${ }^{4}$ | Hay | ves | votroovided |  |  | Not Provided | M |  | -3,5 | 0,5 | 0,5 | 2 | 5 | Not Proved |  |  | 19.56 | No | Skin reas of theerignentation Eethavoral disordes |
| Patient 114 | Lancsaser, 2013 | "6 | Not Provied | No | Not Provided |  |  | Micoceephay |  |  | 6,5 | -3,9 | . 5 | 3 | ${ }^{13,2}$ | Not Provided | ${ }^{6,7}$ | Simplife dral pateen | Not Provided | No | Neurosensory defanes |
| Patient 115 | Tan, 214 | 47 | ucasan | No | 5 |  | ca005 16.8 ( $\left(5^{\circ}\right)$ | Microcephay | F |  | Not Provided | Not frovied | Not frovied | 6 | 8.9 | 1,5 | 3 | No abomamalies | 1275 | No | Asthma Allegies. Sleep ponea |
| Patient16 | 4.2015 | \# | Hispanc | No | 0.5 |  |  | No | м |  | -3,1 | 0,3 | 1.,5 | Not frovided | Notet | Not Provided Noo | Not Provided | Short copus callosum | Not Provided | No | Failue tothrive (enereal untrion) |
| Patient 17 | Veit, 215 | *9 | Turkey | ves | Not Provied |  |  | No | м |  | Not Provided | 2 | Not Provied | 9 | ${ }^{4}$ | Not Provided | -3,2 | Not Provided | Not Provided | No |  |
| Patient 118 | $V_{\text {vit } 2015}$ | *9 | ${ }^{\text {Turkey }}$ | ves | Not Provided |  |  | Vot Powided |  |  | Not Provided | Not Povided | Not Povided | 10 | 4 | Not Provided | -3,4 | Noabomamities | Mid inelelectual disabiliy | No | Congentita hip disiocation |
| Patient 119 | Vegt, 215 | *10 | Pakistan | ves | Not Provied |  |  | Not Provied |  |  | Not Provided | 2 | Not Provied | 2 | 6,2 | Not Provided | . 5 | No abormalities | Not Provided | No | Not Provided |
| Patient 220 | Jouna, 2016 | ${ }^{41}$ | $\mathrm{Canada}^{\text {a }}$ | No | ${ }^{53}$ |  |  | No | F |  | Not Provided | Not frovided | Not Provided | 53 | 1,0 | Not Provided | 0,0 | Corus callosum agenesis | 1084 | No | Learning disbilities |
| Patiental | Joana, 2016 | ${ }^{* 11}$ | ${ }^{\text {Canada }}$ | No | 52 |  |  | No | F |  | Not Provided | Not frovided | Not Provied | 52 | ${ }^{1,3}$ | Not Providea | -0,5 | Corous callsum agenesis | 1278 | No | Mutism - Inemitentataxia |
| Patient 22 | ${ }_{\text {Joun, } 2016}$ | *11 | ${ }^{\text {Canada }}$ | No | ${ }^{44}$ |  |  | Not Provied | m |  | Not Provided | Not Provided | Not Provied | ${ }^{44}$ | ${ }^{1,3}$ | Not Provided | 0,5 | Corous calssum agenesis | 1977 |  | Resolutive obsessivecompusive disoder |
| Paterent 23 | ${ }_{\text {Pagnamena, }}^{\text {Pent }}$ | ${ }_{12}$ | Not Provided | No | 11 | C.6504100C |  | Not Provied | м |  | Not Provided | NotProvided | Not frovided | 11 | -5,5 | Not Provided Nor | Notrowided | No abomamities | develomenenal quoteien :45 | No | Cafesoublit poots |
| eett24 | Abdulub, 217 | ${ }_{4}$ | Paskstan | ves | ${ }^{30}$ |  |  | Not Provied | F |  | Not Provided | ded | Provided | ${ }^{30}$ | Proted | Not Provided No | Not fovided |  | Severe inetelectual disabily - wakking | No |  |
| Patient 25 | Abdulula, ,2017 | ${ }_{13}$ | ${ }_{\text {Paksisan }}$ | Yes | ${ }^{32}$ | c.5127_5128dupGT (p.Ser1710CysfsTer22) | $\begin{gathered} \hline \text { c.5127_5128dupGT } \\ \text { (p.Ser1710CysfsTer22) } \\ \hline \end{gathered}$ | Not Provied | m |  | Not Provided | Not Provided | Not Provided | ${ }^{32}$ | Provided | Not Providel ${ }^{\text {a }}$ | Not frovided |  | Severe inelelectual disabiliry- walking | No | Moderate hearing impirment |
| Patient 26 | Abudulab, 2017 | *13 | ${ }^{\text {Paskstan }}$ | ves | ${ }^{12}$ |  |  | Not Provied | м |  | Not Provided | Not frovided | Not Provided | 12 | ${ }_{\text {roter }}^{\text {Provided }}$ | Not Providel Nop | Not Provided |  | Modeate inetelectual disality | No |  |
| Patient 27 | Abudula, 217 | ${ }^{43}$ | Paskstan | ves | 8 | $\begin{gathered} \text { c.5127_5128dupGT } \\ \text { (p.Ser1710CysfsTer22) } \end{gathered}$ | c.5127_5128dupGT | Not Provided | F |  | Not Provided | Not Provided | Not Povided | 8 | Proved | Not Provided Nop | Not Provided |  | Moderate inelelectual disability | No |  |
| Pateent 28 | Atmad, 2017 | ${ }^{* 14}$ | Paksisan | ves | Not Provided |  |  | Not Provied | No |  | Not Provided | Not Provided | Not Provied | Not Provied | Proved | Not Providel Noo | Not fovided | Not Provied | Not frovided | Not Provided | Not Provided |
| Patientr29 | ${ }_{\substack{\text { Sukumanan } \\ \text { 2017 }}}^{\text {and }}$ | ${ }^{415}$ | Pakistan | ves | 16 |  |  | Not Provided | F |  | Not Provied | Not Provided | Not Provided | 16 | -5 | Not Provided No | Not Provied |  | Midid inelelectual disability |  | No |
| Patient30 | ${ }^{\text {Sukumana, }}$ (ent | *15 | ${ }^{\text {Paksisan }}$ | ves | ${ }^{12}$ |  |  | Not Provided | m |  | Not Provided | Not Provided | Not Provided | 12 | 9 | Not Providel ${ }^{\text {a }}$ | Fovided |  | Midid inelectual disability |  | No |
| Patient 31 | Altres, 2018 | ${ }^{16}$ | SaudiAaba | ves | ${ }^{16}$ |  |  | Not Provided | м |  | 2 | 1100 | Not Provided | Not Proved | $\underset{\text { proted }}{\text { proved }}$ | Not Provided | St Provided | White mater sboumalities | Severe intellectual disability - non walking |  | Bilateral cataract - White matter abnormalities Tetrapyramidal syndrome |
| Patien 332 | Alfaes, 2018 | ${ }^{16}$ | Saudiafaba | ves | ${ }^{10}$ |  |  | Not Provied | m |  | Not Provided | Not Provied | NotProvied | 10 | 2 | 4 | 4 | moderate eventicuomegay | Severe intellectual disability - non walking | ves |  |
| Pateent 33 | Alfres, 2018 | ${ }^{116}$ | ${ }^{\text {araba }}$ | ves | 8 |  |  | Not Provided |  |  | Not Provided | Not Provided | Not Provied | 8 | ${ }^{4}$ | -4,5 | 5 | Thin copus calosum | Severe intellectual disability - non walking |  |  |
| Patient 34 | Atares, 2018 | ${ }^{16}$ | Saudiamba | ves | ${ }^{6}$ |  |  | $\begin{aligned} & \text { Intra uterine } \\ & \text { growth } \\ & \text { retardation } \end{aligned}$ | м |  | - | 1700 | Not Provided | 0,75 | 4 | Not Prow | Not Powder | Thin copus calosum | Not Provied | ves | Sill |
| Patient 33 | Atares, 2018 | 417 | Saudiamba | Not Provided | 3 |  |  | Not Provied | m |  | -3,5 | Not frovided | Not Provied | Not Provied | Noot | Not Provided Nop | Notrowided | Decresede cerebaravolume | Intelectual disabaily | ves | Cataract |

