

Family/ Patient	Mutation	Polyphen Prediction	Exome variant server: date accessed 11/27/201 2	dbSNP number	Inheritance	Brain/ Eye Findings	Facial Findings	Hand Findings	Endocrinological Findings	Other Findings/ Notes
1a	2q14.2(121,696,089-121,814,359)x1mat				Maternal	Chiari I malformation, small ectopic pituitary	Midface hypoplasia	Right postaxial polydactyl y	GH deficiency, neonatal hypoglycemia, failure to thrive	Advanced early milestones, full scale IQ 118
1b	2q14.2(121,696,089-121,814,359)x1mat				Maternal	Normal	Midface hypoplasia	Postaxial skin changes in normal location for postaxial polydactyl y	Short stature-normal hormone levels	Mother of a, other family members in family with mutation (maternal grandmother and maternal uncle of a) but clinical data unknown
1c	2q.14.2(121,690,804-121,808,876)x1mat				Maternal	Unknown	Normal	Bilateral postaxial polydactyl y	GH deficiency	Sister of a
2	2q14.2(121,651,782-121,803,391)x1					Normal	Bilateral CL/P	Unknown	None	Single umbilical artery, fetus
3a	c.547G>A, p.Val183Met	Benign 0.003			Paternal	Ectopic posterior pituitary, anterior pituitary hypoplasia, stalk abnormality	Normal	Normal	GH deficiency	
3b	c.547G>A, p.Val183Met	Benign 0.003			Paternal	Normal	Normal	Normal	Normal height	Brother of a
3c	c.547G>A, p.Val183Met	Benign 0.003			Unknown	Normal	Normal	Normal	Normal height	Father of a

4	c.607G>A, p.Ala203Thr	Benign 0.004	A=17/G=1 2987	rs14704 4066	Unknown	Ectopic posterior pituitary, anterior pituitary hypoplasia	Normal	Normal	GH, TSH, ACTH, FSH, LH, prolactin deficiencies, height SDS -5.5	Forceps delivery/ hypoxemia
5a	c.677G>A, p.Arg226His	Probably damaging 1.000			Maternal	Semilobar HPE, upslanting palpebral fissures	MC, bitemporal narrowing, upslanting palpebral fissures, flat nasal bridge, short nose w/ anteverted nares, broad and deep philtrum, high- arched palate	Normal	Diabetes insipidus	Also with pathogenic ZIC2 mutation: c.1206C>G, p.Tyr402X
5b	c.677G>A, p.Arg226His	Probably damaging 1.000			Maternal	No HPE; severe develop mental delay	Normal	Normal	None	Also with pathogenic ZIC2 mutation: c.1206C>G, p.Tyr402X
5c	c.677G>A, p.Arg226His	Probably damaging 1.000			Unknown	No HPE; develop mental delay	Normal	Normal	None	Also with pathogenic ZIC2 mutation: c.1206C>G, p.Tyr402X
6	c.757C>T, p.Pro253Ser	Probably damaging 1.000			Unknown	Ectopic posterior pituitary, anterior pituitary hypoplasia	Normal	Normal	GH, TSH deficiencies, partial ACTH deficiency, height SDS -3.5	Breech delivery

7	c.803C>T, p.Ala268Val	Probably damaging 1.000	T=29/C=1 2977	rs14699 2756	Unknown	Normal CT, normal neuropsy ch develop ment	High forehead, flat facial profile, low nasal bridge, broad nasal ridge, hypoplastic nasal septum, abnormal and short philtrum, short columella, right cleft lip with preserved palatal structures	Normal	None	
8	c.803C>T, p.Ala268Val	Probably damaging 1.000	T=29/C=1 2977	rs14699 2756	Unknown	Ectopic posterior pituitary, anterior pituitary hypoplasi a		Normal	Normal	GH, TSH, FSH, LH deficiencies, partial ACTH deficiency, height SDS -3.2
9a	c.803C>T, p.Ala268Val	Probably damaging 1.000	T=29/C=1 2977	rs14699 2756	Unknown	Optic nerve hypoplasi a, absent septum pellucidu m, normal pituitary		Normal	Normal	Without endocrine deficiencies
9b	c.803C>T, p.Ala268Val	Probably damaging 1.000	T=29/C=1 2977	rs14699 2756	Maternal	Optic nerve hypoplasi a, absent septum pellucidu m, schizenc ephalo,		Normal	Normal	Without endocrine deficiencies Forceps delivery; is also carrier of the silent SHH variation c.213G>A, p.Glu71Glu

						normal pituitary				
9c	c.803C>T, p.Ala268Val	Probably damaging 1.000	T=29/C=1 2977	rs14699 2756	Maternal	Normal	Normal	Normal	Normal height	Sister of a
9d	c.803C>T, p.Ala268Val	Probably damaging 1.000	T=29/C=1 2977	rs14699 2756	Unknown	Normal	Normal	Normal	Normal height	Mother of a
10a	c.864_866del CC, His289Profs* 61				Maternal	MRI with semilobar HPE, severe neurodevelopmental delay	Microcephaly, large cleft lip/palate involving partially the premaxilla	Bilateral postaxial polydactyly	None	
10b	c.864_866del CC, His289Profs* 61				Unknown	Not described	Normal	Postaxial polydactyly	None	Mother of a
11a	c.1121G>A, p.Arg374His	Probably damaging 1.00	A=1/G=13 005		Maternal	Unknown	R CL/P	Normal	None	None
11b	c.1121G>A, p.Arg374His	Probably damaging 1.00	A=1/G=13 005		Unknown	Not described	Not described	Not described	Not described	Mother of a
12a	c.1138G>T, p.Glu380X				Maternal	hypoplastic anterior pituitary, post pituitary lobe was not visible, normal cognition	Normal	Normal	TSH, ACTH, GH and ADH deficiencies, height SDS -2.9	
12b	c.1138G>T, p.Glu380X				Unknown	Normal	Normal	Normal	None	Mother of a
13	c.1294G>A, p.Val432Met	Probably damaging 0.990	A=55/G=1 2951	rs14229 6407	Unknown	Anterior pituitary hypoplasia	Normal	Normal	GH, TSH, ACTH, FSH, LH deficiencies, height SDS -6.1	
14	c.1294G>A, p.Val432Met	Probably damaging 0.990	A=55/G=1 2951	rs14229 6407	Unknown	Ectopic posterior pituitary,	Normal	Normal	GH, TSH, ACTH, FSH, LH deficiencies,	Breech delivery/ hypoxemia

						anterior pituitary hypoplasia			height SDS --4.1	
15	c.1294G>A, p.Val432Met	Probably damaging 0.990	A=55/G=12951	rs142296407	Unknown	Not described	Normal	Normal	GH, TSH, ACTH, FSH, LH deficiencies, height SDS -3.2	
16	c.1294G>A, p.Val432Met	Probably damaging 0.990	A=55/G=12951	rs142296407	Unknown	Ectopic posterior pituitary, normal anterior pituitary, stalk abnormality	Normal	Normal	GH, TSH, ACTH, FSH, LH deficiencies	
17	p.Trp441*				de novo	Normal (except for pituitary)	MC, Bilateral CL/P, Hypotelorism, SCI	Postaxial hexadactyly	GH deficiency, pituitary hypoplasia	Sister with HPE (but no genetic testing performed)
18	c.1418G>A, p.Arg473His	Benign 0.188	A=2/G=13004	rs150170739	Unknown	Ectopic posterior pituitary, anterior pituitary hypoplasia	Normal	Normal	GH, TSH, FSH, LH deficiencies, partial ACTH deficiency, height SDS -7.7	
19a	c.1435C>G, p.Arg479Gly	Possibly damaging 0.894		rs121917708	Maternal	Mild gyral asymmetry in perisylvian areas	Large ears, hypoplastic anterior nasal spine, hypotelorism, hypoplastic premaxilla, hypoplastic nose with flattened alae and nasal tip, poorly developed philtrum,	Normal	None	Also with PTCH: 2171 C>T, Thr328Met

							bilateral cleft lip/palate			
19b	c.1435C>G, p.Arg479Gly	Possibly damaging 0.894		rs121917708	Unknown	Normal	Normal	Normal	None	Mother of a
20a	c.1486C>T, p.Arg496X				Paternal	"HPE findings" (but detailed findings not available)	Not described	Normal	None	
20b	c.1486C>T, p.Arg496X				Unknown	Not described	Apparently normal	Normal	None	"Apparently normal", but no details available
21a	c.1547G>C, p.Arg516Pro	Probably damaging 1.000			Paternal	Mild anterior pituitary hypoplasia, maldescended posterior lobe of pituitary	Normal	Unilateral polydactyly	GH deficiency, Hypothyroidism, LH/FSH deficiency, height SDS -3.13	
21b	c.1547G>C, p.Arg516Pro	Probably damaging 1.000			Unknown	Normal	Normal	Normal	None	Father of a
22a	c.1683+1G>A=IVS11+1G>A			rs140347335	Paternal	Normal (though with DD)	HoT, single nares, midface hypoplasia, MC, CL	Normal	GH deficiency	
22b	c.1683+1G>A=IVS11+1G>A			rs140347335	Unknown	Not described	Normal	Normal	None	"Apparently normal", but no details available

23	c.1809C>T, Pro604Ser				Unknown	Agenesis of the right eyeglobe , agenesi s of the genu and body of the corpus collosu m with a thin rostru m, asymmet ric ventricles , migration defects, mainly in the right hemishp ere and abnormal cerebella r foliation	Hypertelori sm, prominent forehead, large anterior fontanel, right sided anophthal mia, small abnormall y modeled and posteriorly angulated ears, preauricula r tage, wide downturne d mouth and short neck	Normal	None	
24	c.1908dupC, p.Val637Argf s*42				de novo	Widening of the left tempora l horn, Pituitary gland not well seen but suboptim al study	Microcepha ly, mildly up slanting palpebra l fissures, high narrow palate	Bilateral postaxial polydactyl y in hands and feet	GH deficiency	Atrio-ventricula r septu m defect
25a	c.2081_2084 del, p.Leu694fsX722, c.1760C>T; p.P608L				Paternal	Hypoplas tic anterior pituitary, ectopic posterior pituitary	Cleft L/P, flat nasal bridge	Normal	Low levels of IGF-1, IGFBP3, deminished GH response after clinidine stimulation, severe GHD, subnormal cortisol	Unilatera l cryptorchidism

									response, partial ACTH def, height SDS -4.5	
25b	c.2081_2084 del, p.Leu694fsX722, c.1760C>T; p.P608L				Unknown	Normal	Normal	Normal	Normal hormone levels, height -1.2 SDS	Father of a, also with c.1760C>T, p.P608L
26a	c.2140G>A, p.Ala714Thr (homozygous)	Benign 0.007			Maternal and probably paternal (incestuous)	Optic nerve hypoplasia, corpus callosum hypoplasia, normal pituitary	Microcephaly	Normal	Without endocrine deficiencies	Consanguineous parents (incestuous)
26b	c.2140G>A, p.Ala714Thr (heterozygous)	Benign 0.007			Maternal or paternal (incestuous)	Normal	Normal	Normal	Normal height	Sister of a
26c	c.2140G>A, p.Ala714Thr (heterozygous)	Benign 0.007			Probably paternal (mother's father is also the father of the index patient and her sister)	Normal	Normal	Normal	Normal height	Mother of a
27	c.2261G>A, p.ArgR754Gln	Probably damaging 1.000	A=4/G=13002	rs144782119	Unknown	Not described	B/L cleft lip/palate	Polydactyly	Not described	
28a	c.2281C>T, p.Leu761Phe	Possibly damaging 0.933			Maternal	Optic nerve hypoplasia, absent septum pellucidum, corpus callosum hypoplasia	schizencephaly	Normal	Normal	GH, TSH, ACTH deficiencies

						ephaly, normal pituitary				
28b	c.2281C>T, p.Leu761Phe	Possibly damaging 0.933			Unknown	Normal	Normal	Normal	Normal height	Mother of a
29	c.2339C>T, p.Ala780Val	Benign 0.032	T=1/C=12 561		Unknown	Unknown	Normal	Normal	GH, TSH, ACTH deficiencies, height SDS -3.3	
30a	c.2362_2368 del, p.Leu788fsX 794				Maternal	severe delay of neuropsychomotor development, diminished brain size, asymmetry of cerebral hemispheres probably secondary to repeated hypoglycemia, hypoplastic anterior pituitary, ectopic post pituitary lobe at median eminence	Absence of midline facial defects	Bilateral postaxial polydactyly	ACTH, GH, TSH and gonadotropin deficiencies, height SDS -5.4	Tonic-clonic seizures, VUR, multiple UTIs, high pitched voice
30b	c.2362_2368 del, p.Leu788fsX 794				Maternal	Normal cognition	Normal	Unilateral postaxial polydactyly	No deficiencies, height SDS -1.0	Mom of a, also with GLI2 variant c.4332G>C, p.M144I and c.4333 C>T,

										p.L1445F heterozygotes both come after stop codon
30c	c.2362_2368 del, p.Leu788fsX794				Maternal	Hypoplastic anterior pituitary, ectopic posterior lobe near the infundibulum and dilated vessels, normal cognition	Normal	Postaxial polydactyly in the left hand	Severe short stature, IGHD, height SDS -4.2	Uncle of a, also with GLI2 variant c.4332G>C, p.M144I and c.4333 C>T, p.L1445F heterozygotes both come after stop codon
30d	c.2362_2368 del, p.Leu788fsX794				Maternal	Normal cognition, hypoplastic anterior pituitary, thin pituitary stalk, ectopic posterior pituitary at the infundibulum, ventricular dilation, sequelae of severe head trauma	Normal	Bilateral postaxial polydactyly	GHD, fathered 4 children, low serum testosterone evolving post head trauma, height -3.0 SDS	Uncle of a, also with GLI2 variant c.4332G>C, p.M144I and c.4333 C>T, p.L1445F heterozygotes both come after stop codon
30e	c.2362_2368 del, p.Leu788fsX794				Paternal	Normal cognition, hypoplastic anterior pituitary,	Normal	Bilateral postaxial polydactyly in hands and feet	Severe short stature, height SDS -4.9, lack of pubertal development, primary	Cousin of a, daughter of d, also with GLI2 variant c.4332G>C, p.M144I and

						thin pituitary stalk, ectopic post pituitary, anomalous venous development L frontal lobe and R cerebellar hemisphere			amenorrhea, GH, TSH and gonadotropin deficiencies, no clinical signs of hypocortisolism	c.4333 C>T, p.L1445F heterozygotes both come after stop codon
30f	c.2362_2368 del, p.Leu788fsX794				Maternal	Not described	Normal	Postaxial polydactyly	None, height SDS +0.7	Sister of a, also with GLI2 variant c.4332G>C, p.M144I and c.4333 C>T, p.L1445F heterozygotes both come after stop codon
30g	c.2362_2368 del, p.Leu788fsX794				paternal	Not described	Normal	Postaxial polydactyly	None	Cousin of a, also with GLI2 variant c.4332G>C, p.M144I and c.4333 C>T, p.L1445F heterozygotes both come after stop codon
30h	c.2362_2368 del, p.Leu788fsX794				Maternal	Not described	Normal	Postaxial polydactyly	None, height SDS -0.6	Father of g, also with GLI2 variant c.4332G>C, p.M144I and c.4333 C>T,

										p.L1445F heterozygotes both come after stop codon
30i	c.2362_2368 del, p.Leu788fsX794				Unknown	Not described	Normal	Postaxial polydactyly	None, height SDS -2.9	Mother of h, b, c, d, also with GLI2 variant c.4332G>C, p.M144I and c.4333 C>T, p.L1445F heterozygotes both come after stop codon
31	c.2488T>C, p.Phe830Leu	Benign 0.034			Unknown	Ectopic posterior pituitary, anterior pituitary hypoplasia	Normal	Normal	GH, TSH, FSH, LH deficiencies, partial ACTH deficiency, height SDS -4.3	Forceps delivery
32a	c.2773C>T, p.Gln925X				Paternal	Aplasia of pituitary	Not described	Postaxial polydactyly	Not described	
32b	c.2773C>T, p.Gln925X				Paternal	Not described	Not described	Polydactyly	Not described	Father of a
32c	c.2773C>T, p.Gln925X				Paternal	Empty sella	Not described	Postaxial polydactyly	Panhypopituitarism	Paternal Uncle of a
32d	c.2773C>T, p.Gln925X				Unknown	Not described	Not described	Polydactyly	Not described	Paternal grandfather of a
33a	c.2798G>A, p.Arg933His	Benign 0.001			Maternal	Ectopic posterior pituitary, anterior pituitary hypoplasia	Normal	Normal	GH, TSH deficiencies, partial ACTH deficiency, height SDS -4.8	Breech delivery/preterm
33b	c.2798G>A, p.Arg933His	Benign 0.001			Unknown	Not described	Normal	Normal	Normal hormone levels, height SD -3.0	Mother of a

34a	c.2840G>A, p.Gly947Asp	Benign 0.427			Maternal	Not visible posterior pituitary, anterior pituitary hypoplasia, abnormal cerebral periventricular venous system, delayed neuropsychomotor development	Epicanthus, palpebral ptosis, micrognathia,	Normal	GH, TSH, ACTH, ADH deficiencies, height SDS -5.5	Breech/preterm, perineal hypospadias, diabetes insipidus, cryptorchidism, 46 XY
34b	c.2840G>A, p.Gly947Asp	Benign 0.427			Unknown	Not described	Normal	Normal	Normal hormone levels, height -3.7 SD	Mother of a
35a	c.3258del1, p.Tyr1086fs*42				Paternal	Normal brain except pituitary absence, optic nerve hypoplasia	CL/P	Postaxial polydactyly	Panhypopituitarism	
35b	c.3258del1, p.Tyr1086fs*42				Paternal	Not described	Not described	Normal	Panhypopituitarism	Dizygotic twin had similar findings, but no molecular testing was performed
35c	c.3258del1, p.Tyr1086fs*42				Unknown	Not described, normal intelligence	Normal	Postaxial polydactyly	None	Family history notable for other individuals with CL/P and polydactyly
35d	c.3258del1, p.Tyr1086fs*42				Unknown	Not described, normal	Normal	Postaxial polydactyly	None	Family history notable for other

						intelligen ce				individuals with CL/P and polydactyly
36	c.3294_3295 delAC, p.Arg1098SerfsX43				Unknown	MRI with aplastic anterior pituitary, otherwise normal, normal develop ment	Deep nasolabial sulcus and midface hypoplasia	Bilateral postaxial polydactyl y	Panhypopituitaris m, hypogonadotropic hypogonadism	Sandle gap toes, micropenis, bilateral cryptorchidism, wide spaced nipples, bifid epiglottis
37	c.3317G>A, p.Gly1106Asp	Benign 0.220			Unknown	Not describe d	R CL/P	Normal	None	
38	c.3349G>T, p.Val1117Leu	Benign 0.001	T=29/G=1 2977	rs14758 0961	Unknown	Ectopic posterior pituitary, anterior pituitary hypoplasi a	Normal	Normal	GH, TSH, FSH, LH deficiencies, height SDS -7.4	
39	c.3349G>T, p.Val1117Leu	Benign 0.001	T=29/G=1 2977	rs14758 0961	Unknown	Not visible posterior pituitary, anterior pituitary hypoplasi a	Normal	Normal	GH, TSH, ACTH, FSH, LH, ADH deficiencies, height SDS -5.5	Diabetes insipidus
40a	c.3351C>A; 3555delC; p.Pro1184Gln; p.Tyr1186Thrfs*34	Benign 0.012			Maternal	Pituitary hypoplasi a, chiari I malforma tion	Solitary median maxillatry central incisor	Unknown	Panhypopituitaris m	
40b	c.3351C>A; 3555delC; p.Pro1184Gln; p.Tyr1186Thrfs*34	Benign 0.012			Unknown	Not describe d	Not described	Unknown	Unknown	Mother of a
41	c.3382C>T, p.Gln1128*				Unknown	MRI with present corpus callosum,	Prominent medial epicanthic folds, flat	Mild brachyda ctyly, minimal	Panhypopituitaris m	Dislocated hips; Also with 324kb deletion at 6p26 which

						no HPE, optic tracts and chiasm normal, ant pituitary small and post pit ectopic, develop mental delay	nasal bridge, broad nose and wide mouth	unilateral postaxial polydactyl y		deletes PARK2, Parents blood sent and pending
42	c.3502C>T, p.Gln1168X				de novo	Hypoplastic pituitary with posterior pituitary ectopically placed, pontocerebellar hypoplasia, temporobasal dysgyria, develop mental delay, microcephaly	Brachycephalic skull, bitemporal narrowing, low frontal hairline, peri-orbital fullness, some flaring of the medial eyebrows, a full, fleshy nasal tip, thin upper lip	Postaxial polydactyl y in one hand	Panhypopituitarism	Atypical VSD, micropenis, bifid uvula, high arched palate
43	c.3590G>A, p.Gly1197Asp	Benign 0.000	A=63/G=12827	rs114823319	Unknown	Normal	Normal	Normal	GH deficiency, height SDS -2.0	
44	c.3638C>A, p.Ser1213Tyr	Possibly damaging 0.845			Unknown	Not described	Bilateral CL/P	Normal	None	
45a	c.3723G>A, p.Met1241Ile; c.4453C>G, p.Pro1485Ala	Benign 0.001; Possibly damaging 0.666	G=2/C=13004	rs138191075; rs145958673	Paternal	Ectopic posterior pituitary, anterior pituitary hypoplasia	Normal	Normal	GH deficiency, partial ACTH deficiency	

						a				
45b	c.3723G>A, p.Met1241Ile; c.4453C>G, p.Pro1485Ala	Benign 0.001; Possibly damaging 0.666	G=2/C=13 004	rs13819 1075; rs14595 8673	Unknown	Not describe d	Normal	Normal	Normal hormone levels, height - 2.2SD	Father of a
46a	c.3768C>T, p.Gln1256X				Paternal	Normal except pituitary aplasia	Not described	Postaxial polydactyl y	Panhypopituitaris m	PDA, microphallus
46b	c.3768C>T, p.Gln1256X				Paternal	Normal except pituitary aplasia	Normal	Postaxial polydactyl y	Panhypopituitaris m	Bilateral cryptorchidism and microphallus (presumably related to pituitary anomalies)
46c	c.3768C>T, p.Gln1256X				Unknown	Not describe d	Not described	Postaxial polydactyl y	No abnormalities described	
47	c.3943C>T, p.Pro1315Ser	Benign 0.001	T=245/C= 12759	rs11437 6238	Unknown	Not visible posterior pituitary, anterior pituitary hypoplasi a	Normal	Normal	GH, TSH, ACTH, FSH, LH, prolactin deficiencies, height SDS -4.1	
48	c.4054A>G, p.Met1352Val; c.4558G>A, p.Asp1520Asn	Benign 0.000; Probably damaging 1.000	G=138/A= 12770; A=142/G= 12864	rs14914 0724;	Unknown	Ectopic posterior pituitary, anterior pituitary hypoplasi a	Normal	Normal	GH, TSH, ACTH, FSH, LH deficiencies, height SDS -4.4	
49	c.4054A>G,p .Met1352Val; c.4558G>A, p.Asp1520Asn	Benign 0.000; Probably damaging 1.000	G=138/A= 12770; A=142/G= 12864		Unknown	Ectopic posterior pituitary, anterior pituitary hypoplasi a	Normal	Normal	GH, FSH, LH deficiencies, height SDS -4.0	
50	c.4054A>G,p .Met1352Val;	Benign 0.000;	G=138/A= 12770;		Unknown	Ectopic posterior	Normal	Normal	GH, TSH, FSH, LH deficiencies,	

	c.4558G>A, p.Asp1520Asn	Probably damaging 1.000	A=142/G= 12864			pituitary, anterior pituitary hypoplasia			height SDS -8.4	
51	c.4054A>G,p .Met1352Val; c.4558G>A, p.Asp1520Asn	Benign 0.000; Probably damaging 1.000	G=138/A= 12770; A=142/G= 12864		Unknown	Ectopic posterior pituitary, anterior pituitary hypoplasia	Normal	Normal	GH, TSH deficiencies, height SDS -2.3	
52a	c.4054A>G, p.Met1352Val; c.4558G>A, p.Asp1520Asn	Benign 0.000; Probably damaging 1.000	G=138/A= 12770; A=142/G= 12864		Maternal	Ectopic posterior pituitary, small anterior lobe and absent pituitary stalk	Normal	Normal	GH, TSH, ACTH deficiencies	Hemangioma on the left ear, micropenis, cryptorchidism
52b	c.4054A>G, p.Met1352Val; c.4558G>A, p.Asp1520Asn	Benign 0.000; Probably damaging 1.000	G=138/A= 12770; A=142/G= 12864		Unknown	Normal	Normal	Normal	Normal	Mother of a
53a	c.4054A>G, p.Met1352Val; c.4558G>A, p.Asp1520Asn	Benign 0.000; Probably damaging 1.000	G=138/A= 12770; A=142/G= 12864		Unknown	Unknown	Unknown	Unknown	Multiple pituitary hormone deficiencies	
54	c.4315G>A, p.Ala1439Thr	Benign 0.000			Not paternal	Ectopic posterior pituitary, anterior pituitary hypoplasia	Solitary median maxillary central incisor	Not described	GH deficiency	Also with c.2362_2368del, p.Leu788fsX794 and with c.4332G>A, p.Met1444Ile; c.4333C>T, p.Leu1445Phe.
55	c.4332G>A, p.Met1444Ile	Benign 0.013	A=10/G=1 2996	rs14646 7786	Unknown	Atresia of the left choana, hypoplasia of the	Prominent forehead, facial asymmetry, small left	Normal	None	Choanal atresia, hypoplasia of L frontal and maxillary

						left frontal and maxillary sinuses, abnormal pneumatization of the right paranasal sinus, mild left-sided septal deviation	orbit, ptosis, L heminasal hypoplasia with a small nasolacrimal pit and nasolacrimal atresia, L ear retroposition (mild), open bite			sinuses, abnormal pneumatization of R paranasal sinus, mild L septal deviation
56	c.4332G>A, p.Met1444Ile; c.4333C>T, p.Leu1445Phe	Benign 0.013; Possibly damaging 0.808	A=10/G=1 2996; T=10/C=1 2996	rs14646 7786; rs14620 7623	Unknown	Ectopic posterior pituitary, anterior pituitary hypoplasia	Normal	Normal	GH, TSH, ACTH, FSH, LH deficiencies, height SDS -5.3	
57	c.4332G>A, p.Met1444Ile; c.4333C>T, p.Leu1445Phe	Benign 0.013; Possibly damaging 0.808	A=10/G=1 2996; T=10/C=1 2996	rs14646 7786; rs14620 7623	Unknown	Not visible posterior pituitary, anterior pituitary hypoplasia	Normal	Normal	GH, TSH, ACTH, FSH, LH deficiencies, height SDS -5.7	
58	c.4332G>A, p.Met1444Ile; c.4333C>T, p.Leu1445Phe	Benign 0.013; Possibly damaging 0.808	A=10/G=1 2996; T=10/C=1 2996	rs14646 7786; rs14620 7623	Unknown	Ectopic posterior pituitary, anterior pituitary hypoplasia	Normal	Normal	GH, TSH, FSH, LH deficiencies, partial ACTH deficiency, height SDS -6.3	
59	c.4332G>A, p.Met1444Ile; c.4333C>T, p.Leu1445Phe	Benign 0.013; Possibly damaging 0.808	A=10/G=1 2996; T=10/C=1 2996	rs14646 7786; rs14620 7623	Unknown	Ectopic posterior pituitary, anterior pituitary hypoplasia	Normal	Normal	GH, TSH, ACTH, FSH, LH deficiencies, height SDS -3.0	

60a	c.4332G>A, p.Met1444Ile; c.4333C>T, p.Leu1445Phe	Benign 0.013; Possibly damaging 0.808	A=10/G=1 2996; T=10/C=1 2996	rs14646 7786; rs14620 7623	Unknown	Hypoplastic adenohy pophysis with neurohyp ophys identified in the posterior portion of the sella. Pituitary stalk was normal in size and infundibul um was normal	Normal	Normal	GH, TSH, FSH, LH deficiencies	Sister of b
60b	c.4332G>A, p.Met1444Ile; c.4333C>T, p.Leu1445Phe	Benign 0.013; Possibly damaging 0.808	A=10/G=1 2996; T=10/C=1 2996	rs14646 7786; rs14620 7623	Unknown	Hypoplastic anterior lobe and normal location of neurohyp ophys is	Normal	Normal	GH, TSH, FSH, LH deficiencies	Sister of a
61a	c.4332G>A, p.Met1444Ile; c.4333C>T, p.Leu1445Phe	Benign 0.013; Possibly damaging 0.808	A=10/G=1 2996; T=10/C=1 2996	rs14646 7786; rs14620 7623	Unknown	Ectopic posterior pituitary, anterior pituitary hypoplasia	Normal	Not described	GH, TSH, ACTH deficiencies	Breech delivery
61b	c.4332G>A, p.Met1444Ile; c.4333C>T, p.Leu1445Phe	Benign 0.013; Possibly damaging 0.808	A=10/G=1 2996; T=10/C=1 2996	rs14646 7786; rs14620 7623	Unknown	Ectopic posterior pituitary, anterior pituitary hypoplasia, stalk interrupti on	Normal	Not described	GH, TSH, FSH, LH, PRL deficiencies	

61c	c.4332G>A, p.Met1444Ile; c.4333C>T, p.Leu1445Phe, c.2362_2368 del, p.Leu788fsX 794	Benign 0.013; Possibly damaging 0.808	A=10/G=1 2996; T=10/C=1 2996	rs14646 7786; rs14620 7623	Paternal	Ectopic posterior pituitary, anterior pituitary hypoplasia	Solitary median maxillary central incisor	Not described	GH deficiency	Also with c.2362_2368d el, p.Leu788fsX79 4 and with c.4315G>A, p.Ala1439Thr.
61d	c.4332G>A, p.Met1444Ile; c.4333C>T, p.Leu1445Phe, c.2362_2368 del, p.Leu788fsX 794	Benign 0.013; Possibly damaging 0.808	A=10/G=1 2996; T=10/C=1 2996	rs14646 7786; rs14620 7623	Unknown	Ectopic posterior pituitary, anterior pituitary hypoplasia, stalk abnormality	Solitary median maxillary central incisor, cleft lip and palate	Not described	GH deficiency	Father of a, also with GLI2 variant c.2362_2368d el, p.Leu788fsX79 4. Sister was born with severe facial malformations and died few hours after born.
62	c.4558G>A, p.Asp1520Asn	Probably damaging 1.000	A=142/G= 12864	rs11481 4747	de novo	CT normal, left sided anophthalmia, normal neurosy- ch develop- ment	High forehead, facial asymmetry with hypoplastic left side, left sided anophthal- mia, abnormally modeled ears, bilateral preauricula- r skin tags, Tessier cleft number 7 at left	Normal	None	

63a	c.4628G>A, P.Arg1543His	Probably damaging 1.000	A=6/G=13 000	rs13898 7487	Paternal	Severe anterior pituitary hypoplasia and absent posterior pituitary and pituitary stalk. Right optic nerve was hypoplastic with absent right sided chiasm	Crowding of midfacial features and antimongoloid slant which resolved	Normal	GH, TSH, ACTH, FSH, LH deficiencies	
63b	c.4628G>A, P.Arg1543His	Probably damaging 1.000	A=6/G=13 000	rs13898 7487	Unknown	Normal	Normal	Normal	Normal	Father of a
64	c.4661C>T, p.Pro1554Leu	Probably damaing 0.993			Unknown	Severe MR, agenesis of the genu of the CC, abnormal develop ment of the ventricula r frontal horns, abnormal gyri	HiT, epicanthal folds, malar hypoplasia, broad and poorly developed nasal tip, bilateral CL/P, prominent lower lip	Normal	None	
65a	c.4663T>C, p.Ser1555Pro	Probably damaging 0.981	C=38/T=1 2968	rs14437 2453	Maternal	CT normal, arched eyebrows , down slanted palpebral	Flat face, maxillary hypoplasia, arched eyebrows, down slanted	Right hand preaxial polydactyl y	None	

						fissures, epicanthus inversus	palpebral fissures, epicanthus inversus, large ears, low nasal bridge, flat nose, bilateral cleft lip/palate, hypoplastic columella and philtrum			
65b	c.4663T>C, p.Ser155Pro	Probably damaging 0.981	C=38/T=1 2968	rs14437 2453	Unknown	Normal	Hypotelorism	Normal	None	Mom of a

AF: anterior fontanelle CC: corpus callosum; CL: cleft lip, CL/P: cleft lip and palate; DD: developmental delay; GH: growth hormone; HoT: hypotelorism; MC: microcephaly; PDA: patent ductus arteriosus; SCI: single central incisor; SDS: standard deviation score