

Supplementary Table 1. Clinical characteristics of the children with VI and CVI

Participant number (Pp), age, visual acuity in LogMAR (VA), group, diagnosis, and the presence of motor impairment, mental delay, strabismus and nystagmus (+: manifest, +/-: latent, -: absent).

Pp	Age	VA	Group	Diagnosis	Motor imp	Mental delay	Strabismus	Nystagmus
1	8	0.3	VI	Optic nerve hypoplasia	-	-	+/-	-
2	6	0.3	VI	Congenital stationary night blindness (CSNB)	-	-	-	-
3	6	0.4	VI	Congenital stationary night blindness (CSNB)	-	-	+	-
4	8	0.3	VI	Infantile nystagmus syndrome	-	-	-	+
5	9	0.1	VI	Hypermetropia	-	-	+	-
6	6	0.3	VI	Albinism	-	-	-	+/-
7	8	0.2	VI	Macular hypoplasia	-	-	+	+
8	8	0.3	VI	Infantile nystagmus syndrome	-	-	+	+
9	12	1.2	VI	Congenital stationary night blindness (CSNB)	-	-	-	+
10	12	0.3	VI	Congenital stationary night blindness (CSNB)	-	-	-	-
11	6	0.5	VI	Albinism	-	-	+/-	+
12	6	0.3	VI	Congenital stationary night blindness (CSNB)	-	-	-	+
13	12	0.4	VI	Infantile nystagmus syndrome	-	-	-	+
14	7	0.1	VI	Infantile nystagmus syndrome	-	-	-	+
15	6	0.6	VI	Albinism	-	-	+/-	+
16	11	0.2	VI	Macular atrophy	-	-	-	-
17	10	0.8	VI	Cone-rod dystrophy	-	-	-	-
18	6	0.1	VI	Hypermetropia	-	-	+	+
19	8	0.1	VI	Albinism	-	-	+	-
20	7	0.3	VI	Albinism	-	-	+	+/-
21	11	0.5	VI	Albinism	-	-	-	+
22	7	0.4	VI	Cone dysfunction (Bornholm)	-	-	+/-	-
23	6	0.2	VI	Coloboma of the iris and retina, and optic nerve	-	-	+	-
24	10	0.4	VI	Albinism	-	-	+/-	+
25	9	0.6	VI	Aniridia	-	-	+	+

Pp	Age	VA	Group	Diagnosis	Motor imp	Mental delay	Strabismus	Nystagmus
26	12	0.5	VI	Albinism	-	-	+	+
27	11	0.3	VI	Infantile nystagmus syndrome	-	-	-	+
28	7	0.7	VI	Congenital stationary night blindness (CSNB)	-	-	+	+
29	12	0.3	VI	Congenital ptosis	+	-	-	-
30	8	0.2	VI	Hypermetropia	+/-	+	-	-
31	8	0.3	VI	Hypermetropia with astigmatism	-	-	-	-
32	14	0.4	VI	Infantile nystagmus syndrome	-	-	-	+
33	6	0.5	VI	Hypermetropia with astigmatism	-	-	-	+
34	9	0.5	CVI	Noonan syndrome	-	-	+	+/-
35	9	0.3	CVI	Noonan syndrome	+	-	+/-	+/-
36	11	1.0	CVI	Status after meningitis and cerebritis	-	+	-	-
37	7	0.3	CVI	Premature	-	+	+	-
38	10	0.7	CVI	Premature	-	-	-	-
39	8	0.3	CVI	Optic nerve atrophy, microcephalus and bilateral occipital infarcts	-	-	+	+/-
40	7	0.1	CVI	Premature and dysmature	+	-	+	-
41	8	0	CVI	Joubert syndrome	-	-	+	-
42	9	-0.2	CVI	Cerebral arteriovenous malformation, resulting in 2 strokes	-	-	-	-
43	8	-0.2	CVI	Premature	-	+	-	-
44	11	0.3	CVI	White matter damage due to mitochondrial disease and internuclear ophthalmoplegia	+	-	+	+
45	8	0	CVI	Perinatal complications, Stickler syndrome	-	-	-	-
46	8	-0.1	CVI	Premature and perinatal complications	+	-	+	-
47	10	0	CVI	Premature	+	-	-	-
48	8	0.1	CVI	Perinatal complications	-	+	+	-

Pp	Age	VA	Group	Diagnosis	Motor imp	Mental delay	Strabismus	Nystagmus
49	7	0.3	CVI	Dysmature, partial cataract	-	-	-	-
50	10	0.1	CVI	Exact cause unknown	+	+	-	-
51	7	-0.1	CVI	Exact cause unknown	+	-	-	-
52	11	0	CVI	High-energy trauma	-	-	-	-
53	8	0	CVI	Neurofibromatosis 1	-	-	-	-
54	8	0.2	CVI	Premature and perinatal complications	-	-	-	-
55	6	0.2	CVI	Cerebral palsy	+	-	-	+/-
56	11	0.2	CVI	High-energy trauma	-	-	-	+
57	8	0.2	CVI	Exact cause unknown	-	-	-	-
58	9	0.1	CVI	KDM5C-syndrome	-	+	-	-
59	9	0.1	CVI	Perinatal asphyxia	-	+	-	+/-
60	8	0.2	CVI	Chromosomal deletion	+	+	-	+/-
61	13	-0.1	CVI	Perinatal asphyxia	-	+	-	-
62	9	0.1	CVI	Cerebral palsy	-	+	-	-
63	7	0.3	CVI	Bosch-Boonstra-Schaaf optic atrophy syndrome (BBSOAS)	+	-	-	-