

#	Age (yrs)	Gender	Race/Ethnicity	Diagnosis	Lutein + Zeaxanthin Intake (mcg/kg/day)	Total Carotenoid Intake (mcg/kg/day)	Serum Lutein (ng/ml)	Serum Zeaxanthin (ng/ml)	Total Serum Carotenoids (ng/ml)	Skin Raman (Counts)	MPOD Right Eye	MPOD Left Eye
1	1.67	M	Cauc.	Lamellar dermoid with graft OD	NI	NI	83.16	26.14	463.6	18,850	NI	0.03
2	5.75	F	Cauc.	Coloboma OS>OD	7	98.32	82.91	25.47	596.6	44,923	0.29	NI
3	0.58	F	Cauc.	PHPV OS	50	447.16	NI	NI	NI	12,646	0.21	NI
4	2.25	F	Hisp.	ROP with laser, Strabismus	NI	NI	5.61	0.98	58.3	12,890	NI	0.28
5	2.83	F	Cauc.	Corneal laceration, traumatic cataract, PCIOL OS	NI	NI	80.34	39.89	414.4	36,079	0.11	NI
6	2.08	M	Cauc.	Congen. Glaucoma	NI	NI	63.83	20.92	290.8	27,908	BQ	BQ
7	0.33	F	Cauc.	Port wine stain face (OD), blocked tear duct	0.3	16.41	77.59	22.74	409.6	21,463	0.33	0.29
8	1.17	F	Cauc.	Ectropion uvea OS with risk of glaucoma	NI	NI	66.19	26.17	749.6	77,509	0.16	0.13
9	2.92	F	Cauc.	Inherited bilateral RB	NI	NI	81.32	25.02	280.2	26,067	0.37	NI
10	6	F	Cauc.	History of ROP	NI	NI	5.9	0	62.9	7,861	0.25	NI
11	3.92	F	Cauc.	Unilateral RB OS, history of chemo	27.44	126.41	143.39	35.18	761	46,271	0.14	NI
12	0.9	M	Cauc.	Unilateral RB OS, history of enucleation	78	361.96	55.21	14.46	777.7	31,256	0.21	NI
13	2.42	M	Cauc.	Family history RB	44	238.83	60.47	29.83	430.2	37,134	0.26	0.21
14	1.25	F	Cauc.	At risk for vigabatrin toxicity	47	153.47	42.06	7.27	496.7	40,340	BQ	0.16
15	1.67	F	Cauc.	Incontinentia pigmenti vs FEVR	32	82.05	92.16	19.14	343.7	26,921	BQ	0.28
16	-0.1	F	Cauc.	ROP Screening	3.48	18.699	80.73	23.83	222.3	0	BQ	BQ

17	3.83	M	Cauc.	Strabismus	11	16.45	71.19	29.81	373.4	30,480	0.11	0.13
18	-0.1	F	Cauc.	ROP Screening	0.71	2.379	5.88	2.33	11.3	0	0.00	0
19	-0.1	M	Cauc.	ROP Screening	0	0	12.86	31.2	60.3	0	0	0
20	-0.2	F	MR	ROP Screening	0.72	3.19	NI	NI	NI	NI	0	0
21	0.67	M	Cauc.	Central vision loss & optic neuropathy with shunted hydrocephalus	2	6.41	36.74	3.85	313.5	DNV	0.25	0.17
22	4.92	M	Cauc.	Optic atrophy	67	386.74	108.2	34.77	635.7	DNV	BQ	0.28
23	1.25	F	Cauc.	Bilateral aphakia, glaucoma OD	46	90.99	99.9	16.41	804	DNV	0.06	BQ
24	3.33	M	Cauc.	Sibling with RB, patient normal OU	33	90.7	58.42	19.15	713.6	DNV	0.37	0.26
25	-0.1	M	Cauc.	ROP Screening	NI	NI	NI	NI	NI	1,936	0	0
26	-0.1	M	Cauc.	ROP Screening	NI	NI	NI	NI	NI	0	0	0
27	-0.1	M	Cauc.	ROP Screening	NI	NI	NI	NI	NI	0	0	0
28	-0.1	M	Cauc.	ROP Screening	NI	NI	NI	NI	NI	0	BQ	BQ
29	1.17	M	Cauc.	History of ROP, Strabismus	184	593.99	66.21	13.67	1528.5	71,806	0.19	BQ
30	2.25	M	Cauc.	Strabismus	NI	NI	115.56	35.25	358.2	DNV	0.26	0.25
31	4.67	F	Cauc.	Bilateral PCIOL	NI	NI	25.85	12.39	123.21	NI	BQ	BQ
32	4.01	M	Cauc.	Strabismus	31	118.36	28.09	8.43	177.84	31,554	0.08	0.08
33	-0.1	M	Cauc.	ROP Screening	NI	NI	2.11	1.16	4.62	0	0	0
34	-0.2	F	Hisp.	ROP Screening	0.86	1.353	2.06	0.59	4.64	0	0	0
35	5.01	M	Cauc.	Retinoblastoma	NI	NI	32.62	11.1	229.27	40,139	NI	NI
36	1.17	F	Hisp.	ON hypoplasia	NI	NI	8.82	3.3	57.61	21,279	0.06	0.07
37	2.55	M	Cauc.	Nystagmus, History of prematurity	70.5	804.72	40.61	9.91	237.49	35,346	BQ	0.07
38	2.92	F	Cauc.	Possible vigabatrin toxicity	21.8	25.32	35.81	10.18	168.76	12,950	0.08	0.10
39	5.08	F	MR	ROP with history of laser	0	84.75	16.29	0.79	246.03	27,788	0.11	0.11
40	4.1	F	Cauc.	Congen. Glaucoma	NI	NI	27.38	7.86	85.91	NI	0.04	0.06

41	6.08	M	Cauc.	Strabismus	NI	NI	12.41	3.43	71.22	29,918	0.09	0.09
42	4.25	F	Cauc.	Strabismus	232.55	393.73	33.88	9.86	158.79	NI	0.11	0.12
43	5.67	M	Cauc.	Strabismus	NI	NI	42.47	12.47	224.96	37,528	0.09	0.09
44	0.5	F	Cauc.	Oculocutaneous albinism, nystagmus	NI	NI	16.16	1.15	83.55	11,858	0	0
45	0.23	F	MR	PHPV OS	1.8	4.97	49.85	13.87	150.21	21,998	0.04	NI
46	-0.1	M	Cauc.	ROP Screening	14.39	37.96	6.63	2.87	15.49	0	BQ	BQ
47	0.92	M	Cauc.	Tear duct obstruction OU	11.4	22.87	58.03	11.91	187.67	14,592	0.07	0.06
48	1.67	F	MR	Septo-optic dysplasia	111.23	613.23	31.98	12.42	120.14	18,794	0.08	0.07
49	6.05	F	Hisp.	Strabismus	51.9	607.06	40.99	18.12	153.01	28,233	0.12	0.14
50	2.15	M	Cauc.	Unexplained photophobia	11.03	56.89	76.88	22.24	350.27	46,916	0.08	0.12
51	3.46	F	Cauc.	ON hypoplasia	13.79	29.92	46.76	17.48	145.39	20,894	NI	0.08

#### Age Group

1-4 years

4-7 years

full term under 1 year

<34 weeks gestation

#### Race/Ethnicity

Cauc.= Caucasian

Hisp.= Hispanic

MR = Multi-racial

background

#### Carotenoid Intake

NI = No Information

#### Raman

NI = No information

DNV = Data not valid (Instrument miscalibration)

#### MPOD

NI = No information

BQ = Bad quality image, unable to process

#### Diagnosis

**PHPV** = Persistent hyperplastic primary vitreous **ROP** = Retinopathy of prematurity **PCIOL** = Posterior chamber interocular lens

**RB** = Retinoblastoma **FEVR** = Familial exudative vitreoretinopathy **ON** = Optic nerve

**OD** = Right Eye **OS** =Left Eye **OU** = Both Eyes