

Table S1. Overview of performed examinations and timeline showing available data for each timepoint after gene therapy.

Timeline (months after surgery)				1	2	3	4	6	8	12	14	15	20	21	22	23	30	32
Patient	Examination	Eye	Baseline / before gene therapy															
P1	BCVA (LogMAR)*	OD	1.0	0.8		0.8		1.0		0.6		x		0.5		x	0.5	x
		OS	1.3	1.1		0.8		0.9		x		0.7		x		0.6	x	0.6
	BCVA (LogMAR)*	OD	BCVA change to baseline	-0.2		-0.2		0		-0.4		x		-0.5		x	-0.5	x
		OS		-0.2		-0.5		-0.4		x		-0.6		x		-0.7	x	-0.7
	ERG (30Hz)	OD	✓	-		-		-		-		-		✓		x	✓	x
		OS	✓											x		✓	x	✓
	FST (dB)	OD	n.a. **	-		-		-		-		-		-		-	n.a. ♦♦	n.a. ♦♦
		OS														n.a. ♦♦	n.a. ♦♦	
	Visual Field		n.a. **	-		-		-		-		-		✓ (OD)		✓ (OS)	-	-
OCT	OD	✓	✓		✓		✓		✓		x		✓		x	✓	x	
	OS	✓	✓		✓		✓		x		✓		x		✓	x	✓	
Autofluorescence	OD	✓	✓		✓		✓		✓		x		✓		x	✓	x	
	OS	✓	✓		✓		✓		x		✓		x		✓	x	✓	
Wide-angle fundus imaging	OD	✓	✓		✓		✓		✓		x		✓		x	✓	x	
	OS	✓	✓		✓		✓		x		✓		x		✓	x	✓	
Timeline (months after surgery)				1	2	3	4	6	8	12	14	15	20	21	22	23	25	27
P2	BCVA (LogMAR)*	OD	1.1 (OU near)	0.8		0.6		0.6		0.9	0.7		x		0.9		x	0.9
		OS		0.7		0.7		0.7	x		0.7		x		0.5	x		
	BCVA (LogMAR)*	OD	BCVA change to baseline	-0.3		-0.5		-0.5		-0.2	-0.4		x		-0.2		x	-0.2
OS	-0.4			-0.4		-0.4	x		-0.4		x		-0.6	x				
	ERG (30Hz)	OD	n.a. **	-		-		✓		-	-		n.a. ♦		n.a. ♦		n.a. ♦	n.a. ♦

		OS						✓					n.a. ♦		n.a. ♦		n.a. ♦	n.a. ♦
	FST (dB)	OU	n.a. **	-		-		n.a. **		-	-		n.a. **		n.a. **		n.a. **	n.a. **
	Visual Field		n.a. **	-		-		n.a. **		-	-		n.a. **		n.a. **		n.a. **	n.a. **
	OCT	OD	OD	✓		✓		✓		✓	✓		x		✓		x	✓
		OS	OS	✓		✓		✓		✓	x		✓		x		✓	x
	Autofluorescence	OD	✓	✓		✓		✓		✓	✓		x		✓		x	✓
		OS	✓	✓		✓		✓		✓	x		✓		x		✓	x
Wide-angle fundus imaging	OD	✓	✓		✓		✓		✓	✓		x		✓		x	✓	
	OS	✓	✓		✓		✓		✓	x		✓		x		✓	x	
Timeline (months after surgery)				1	2	3	4	6	8	12								
P3	BCVA (LogMAR)*	OD	1.2	1.3		1.3		0.8		1.2								
		OS	1.2	1.2		x		1.0		x								
	BCVA (LogMAR)*	OD	BCVA change to baseline	0.1		0.1		-0.4		0								
		OS		0		x		-0.2		x								
	ERG (30Hz)	OD	✓	-	-	-	-	x	-									
		OS	✓					✓										
	FST (dB)	OD	n.a. **	-	-	-	-	x	-37.41	-58.20								
		OS						-32.12	x	x								
Visual Field		n.a. **	-	-	-	-	✓ (OD)											
OCT	OD	✓	✓		✓		✓		✓									
	OS	✓	✓		x		✓		x									
Autofluorescence	OD	✓	✓		✓		✓		✓									
	OS	✓	✓		x		✓		x									
Wide-angle fundus imaging	OD	✓	✓		✓		✓		✓									
	OS	✓	✓		x		✓		x									
Timeline (months after surgery)				1	2	3	4	6	8									
P4	BCVA (LogMAR)*	OD	0.5	0.4	0.4	0.3	0.5	0.2	x									
		OS	0.7	0.5	x	0.5	x	0.4	0									
	BCVA (LogMAR)*	OD	BCVA change to baseline	-0.1	-0.1	-0.2	0	-0.3	x									
		OS		-0.2	x	-0.2	x	-0.3	-0.7									

	ERG (30Hz)	OD	✓	-	-	-	-	n.a. ♦	-
		OS	✓					n.a. ♦	
	FST (dB)	OD	-09.55	-	-	-	-	-38.05	-
		OS	-10.76					-66.25	
	Visual Field		✓ (OU)	-	-	-	-	✓ (OD)	✓ (OS)
	OCT	OD	✓	✓	✓	✓	✓	✓	x
		OS	✓	✓	x	✓	x	✓	✓
	Autofluorescence	OD	✓	✓	✓	✓	✓	✓	x
		OS	✓	✓	x	✓	x	✓	✓
	Wide-angle fundus imaging	OD	✓	✓	✓	✓	✓	✓	x
		OS	✓	✓	x	✓	x	✓	✓

* visual acuity was assessed in decimal and converted in LogMAR. In P1, visual acuity before treatment was assessed using LEA symbols and in the postoperative course using Landolt C rings (single optotypes); in P2, LEA symbols were used during the entire observation period; P3 was assessed using an ETDRS number chart and assessment of P4 was performed using Landolt C rings (single optotypes) during the entire observation period

** due to demanding set-up, visual impairment, and young age no measurements could be obtained

✓ examination was performed

♦ examination could not be carried out due to non-compliance (patient refused exam)

♦♦ poor data quality, no valid values could be recorded due to reduced compliance of the patient

x due to the interval between each surgery, values for both eyes are not always available for each time point (x = missing data)

- " = examination was not performed because it was not scheduled as part of the routine check-up