

Table S1. Individual data of each participant's age, genetic mutation, RARS subscales and total scores, and daily physical activity level at T1.

No.	Mutation	Age at T1	RARS at T1							m-BAR at T1
			Cognitive	Sensory	Motor	Emotional	Indipendence	Rett characteristics	Total	
1	R306C	11,5	12,5	4	13	4	11,5	29,5	74,5	74
2	P152R	22,0	12,5	3	9,5	2,5	9,5	24,5	61,5	101
3	pro225arg	27,7	15,5	5,5	9,5	4	11	22	67,5	62
4	c.468 C>G	13,1	15	3	13	3	12	25	71	52
5	R168*	17,2	10,5	2	5,5	2,5	10	19,5	50	121
6	R306C	12,8	18,5	5	10,5	5	11	27	77	130
7	R133C	12,3	13,5	2,5	7	3	4,5	15	45,5	97
8	T158M	6,5	17,5	4	9	4	11,5	19	65	124
9	P133C	13,3	15,5	3	10,5	4	10,5	29,5	73	81
10	R255*	10,3	15	2	8,5	3	12	21,5	62	102
11	R255*	31,6	10,5	3,5	12,5	3,5	12	25	67	65
12	T158M	16,7	11,5	2	13	3	11	25,5	66	73
13	R106W	14,4	13,5	4	13	3	11,5	21	66	90
14	T158M	12,7	10,5	3	10	2,5	9	19,5	54,5	109
15	c. 1063_1326del264 + c. 1063insTGCG	13,6	11	2	10,5	2	12	24	61,5	105
16	R294X	3,8	14	5	10	2,5	10	27,5	69	145
17	R294X	12,9	16,5	3	13	4	12	33	81,5	56
18	T158M	38,3	9,5	2	8,5	3	9	23,5	55,5	110
19	R255X	13,3	16	3,5	11	4	12	27	73,5	89
20	R168X	8,8	9	2	9,5	2	12	17	51,5	69

Table S2. Individual data of each participant's RESMES subscales and total scores measured at T1 and T2.

No.	RESMES at T1							RESMES at T2						
	Standing	Sitting	Transition	Walking	Run	Stairs	Total	Standing	Sitting	Transition	Walking	Run	Stairs	Total
1	4	9	18	14	4	8	57	7	3	17	17	4	8	56
2	1	0	16	6	4	6	33	0	0	14	4	4	6	28
3	2	0	18	7	4	6	37	0	0	17	6	4	6	33
4	6	1	24	17	4	8	60	7	0	24	14	4	8	57
5	0	0	13	2	4	6	25	0	0	13	1	4	6	24
6	0	0	7	0	4	4	15	0	0	7	0	4	4	15
7	0	0	0	0	4	2	6	0	0	0	0	4	2	6
8	1	0	20	2	4	8	35	0	0	20	2	4	6	32
9	0	0	13	5	4	7	29	0	0	13	3	4	6	26
10	0	0	16	5	4	6	31	0	0	13	5	4	6	28
11	11	0	22	18	4	8	63	8	0	21	16	4	8	57
12	11	5	24	18	4	8	70	10	2	24	18	4	8	66
13	0	0	8	2	4	6	20	0	0	7	3	4	6	20
14	6	3	19	15	4	8	55	6	3	19	14	4	8	54
15	0	0	7	0	4	6	17	0	0	7	0	4	4	15
16	4	0	10	6	4	8	32	3	0	10	5	4	7	29
17	8	1	21	15	4	8	57	4	0	22	12	4	8	50
18	0	0	7	2	4	3	16	0	0	7	2	4	3	16
19	0	0	9	0	4	6	19	0	0	9	1	4	4	18
20	9	0	19	18	4	8	58	7	0	18	18	4	8	55

Table S3. Individual data of each participant's scoliosis severity level at T1, time elapsed between pre- (T1) and post- (T2) intervention spine radiographs, Cobb's angles measured at T1 and T2, and Cobb's angle variation between T1 and T2. Participants' scoliosis severity level was coded with a 0 to 3 ordinal score (0: no scoliosis; 1: mild scoliosis, curve visible only on thorough examination in forwarding bending; 2: moderate scoliosis, obvious curve in both upright and forward bending; 3: severe scoliosis, pronounced curve preventing upright position without external support).

Nº	Scoliosis severity at T1	Months between T1-T2	Cobb's angle at T1 (°)	Cobb's angle at T2 (°)	Curve convexity	Δ Cobb's angle (°)
1	2	7,9	23	24	Rt	1
2	2	10,2	33	28	Rt	-5
3	2	15,3	32	36	Rt	4
4	3	12,5	27	41	Lt	14
5	1	14,0	11	24	Lt	12
6	1	17,7	14	18	Lt	5
7	2	16,6	20	27	Rt	7
8	1	14,6	10	0	Lt	-10
9	2	18,4	25	21	Lt	-4
10	2	9,8	21	19	Rt	-2
11	3	8,9	41	30	Rt	-11
12	3	8,4	16	17	Rt	2
13	3	9,3	42	65	Lt	23
14	3	10,0	56	58	Rt	2
15	2	11,8	24	30	Rt	6
16	1	11,8	13	1	Rt	-13
17	3	7,4	39	36	Lt	-3
18	3	17,3	41	39	Lt	-3
19	1	10,3	13	16	Rt	4
20	3	13,4	8	14	Rt	6