

**Table e-2 – Relative changes and effect sizes for the original cohort**

	Relative change		Effect size (CI)	
	STN-DBS	GPI-DBS	STN-DBS	GPI-DBS
PDQ SI	-41.2	-43.2	0.94 (0.57 – 1.31)	0.94 (0.40 – 1.46)
UPDRS-I	-30.9	-32.7	0.33 (0.00 – 0.64)	0.44 (-0.04 – 0.90)
UPDRS-II	-23.4	-46.8	0.61 (0.27 – 0.95)	0.82 (0.29 – 1.33)
UPDRS-III	-9.2	-2.8	0.27 (-0.04 – 0.59)	0.06 (-0.38 – 0.50)
UPDRS-IV	-49.1	-63.5	0.69 (0.34 – 1.04)	0.95 (0.39 – 1.48)
H&Y	-0.2	-7.4	0.00 (0.00 – 0.00)	0.36 (-0.11 – 0.82)
S&E	7.2	8.2	1.02 (0.63 – 1.39)	0.72 (0.21 – 1.22)
LEDD	-51.3	-9.7	1.30 (0.87 – 1.72)	0.23 (-0.22 – 0.67)
NMSS	-37.4	-39.5	0.58 (0.24 – 0.91)	0.91 (0.38 – 1.43)
Cardiovascular	-13.0	-64.1	0.08 (-0.23 – 0.39)	0.44 (-0.03 – 0.89)
Sleep/fatigue	-36.9	-39.7	0.55 (0.22 – 0.88)	0.82 (0.31 – 1.32)
Mood/cognition	-55.9	-82.3	0.34 (0.03 – 0.67)	0.82 (0.30 – 1.32)
Perceptual problems/hallucinations	-87.2	-75.0	0.36 (0.04 – 0.68)	0.25 (-0.19 – 0.70)
Attention/Memory	-35.4	-20.2	0.31 (-0.01 – 0.63)	0.21 (-0.24 – 0.65)
Gastrointestinal	2.7	-1.1	0.03 (-0.28 – 0.34)	0.01 (-0.42 – 0.43)
Urinary	-30.2	-5.9	0.29 (-0.03 – 0.60)	0.06 (-0.38 – 0.50)
Sexual function	-48.5	-49.6	0.38 (0.05 – 0.70)	0.64 (0.15 – 1.12)
Miscellaneous	-41.4	-18.4	0.52 (0.19 – 0.85)	0.22 (-0.23 – 0.66)

**Abbreviations:** **CI** = confidence interval; **ES** = effect size; **GPI-DBS** = Pallidal stimulation; **H&Y** = Hoehn and Yahr Scale, **LEDD** = levodopa equivalent daily dose; **NMSS** = Non-motor Symptom Scale; **PDQ SI** = Parkinson’s Disease Questionnaire Summary Index; **RC** = relative change; **S&E** = Schwab and England Scale; **STN-DBS** = Subthalamic stimulation; **UPDRS-I, -II, -III, and -IV** = Unified Parkinson’s Disease Rating Scale-cognition, -activities of daily living, -motor impairment, and -motor complications.

$$RC = (\text{mean Test}_{\text{follow-up}} - \text{mean Test}_{\text{baseline}}) / \text{Test}_{\text{baseline}}$$

$$ES = (\text{mean Test}_{\text{baseline}} - \text{mean Test}_{\text{follow-up}}) / SD \text{ Test}_{\text{change score}}$$

ES: ‘small’ (0.20-0.49), ‘moderate’ (0.50-0.79), and ‘large’ ( $\geq 0.80$ )