

## Supplementary Table 2.

## Articles included in different analysis

Analysis	Total datasets	Total articles	Total patients	Datasets (articles) with short-term follow-up	Patients with short-term follow-up	Datasets (articles) with long-term follow-up	Patients with long-term follow-up	Mutations
Meta-analysis	36	34	311	34 (32)	282	16 (16)	169	DYT- <i>TOR1A</i> (N=31, n=269), DYT- <i>THAP1</i> (N=3, n=16), NBIA/DYT- <i>PANK2</i> (N=2, n=26)
Comparison between <i>TOR1A</i> and other genetic dystonias	87	81	432	79 (74)	362	38 (35)	241	DYT- <i>TOR1A</i> (N=42, n=306), DYT/PARK- <i>TAF1</i> (N=8, n=23), DYT- <i>THAP1</i> (N=8, n=24), DYT- <i>SGCE</i> (N=14, n=25), NBIA/DYT- <i>PANK2</i> (N=8, n=40), CHOR/DYT- <i>ADCY5</i> (N=2, n=3), <i>GNAO1</i> (N=3, n=8), <i>ACTB</i> (N=2, n=3)
Association between age and disease duration and outcomes	70	66	351	64 (60)	297	27 (26)	184	DYT- <i>TOR1A</i> (N=34, n=243), DYT/PARK- <i>TAF1</i> (N=8, n=23), DYT- <i>THAP1</i> (N=8, n=24), DYT- <i>SGCE</i> (N=12, n=21), NBIA/DYT- <i>PANK2</i> (N=8, n=40)
Single case analysis	13	7	13	12 (6)	12	7 (4)	7	DYT- <i>PRKRA</i> (N=1), DYT/PARK- <i>GCH1</i> (N=1), DYT/PARK- <i>GLB1</i> (N=1), CHOR- <i>VPS13A</i> (N=1), DYT- <i>SGCE</i> +DYT- <i>TOR1A</i> (N=1), SCA- <i>ATXN2</i> (N=1), SCA- <i>ATXN3</i> (N=1), DYT/PARK- <i>ATP1A3</i> (N=2), NBIA/DYT- <i>DCAF17</i> (N=1), P <sub>x</sub> MD- <i>SLC2A1</i> (N=1), <i>ATM</i> (N=1), trisomy X (N=1)

N = number of datasets  
n = number of patients