(from Gadot & Najera et al., 2021)

**Supplementary File A.** Detailed overview of all complications and adverse events from systematic review.

Surgery-related5Infection (surgically treated) – transient5Infection (antibiotics only) – transient5Intracranial hemorrhage (asymptomatic) – transient2Intracranial hemorrhage (w/ sequelae)¹ – permanent2Device-related²2Mispositioned electrodes – transient8Allergy to device – transient5Mispositioned pulse generator – transient2	2.0 2.0 0.8 0.8 3.2 2.0 0.8
Infection (antibiotics only) – transient       5         Intracranial hemorrhage (asymptomatic) – transient       2         Intracranial hemorrhage (w/ sequelae)¹ – permanent       2         Device-related²       2         Mispositioned electrodes – transient       8         Allergy to device – transient       5         Mispositioned pulse generator – transient       2	2.0 0.8 0.8 3.2 2.0
Infection (antibiotics only) – transient       5         Intracranial hemorrhage (asymptomatic) – transient       2         Intracranial hemorrhage (w/ sequelae)¹ – permanent       2         Device-related²       8         Mispositioned electrodes – transient       8         Allergy to device – transient       5         Mispositioned pulse generator – transient       2	0.8 0.8 3.2 2.0
Intracranial hemorrhage (w/ sequelae)¹ – permanent       2         Device-related²       8         Mispositioned electrodes – transient       8         Allergy to device – transient       5         Mispositioned pulse generator – transient       2	3.2 2.0
Device-related²8Mispositioned electrodes – transient8Allergy to device – transient5Mispositioned pulse generator – transient2	3.2 2.0
Mispositioned electrodes – transient8Allergy to device – transient5Mispositioned pulse generator – transient2	2.0
Allergy to device – transient 5 Mispositioned pulse generator – transient 2	2.0
Allergy to device – transient 5 Mispositioned pulse generator – transient 2	
	0.8
T 11 1	0.0
Lead breakage – transient 1	0.4
Tension in cables – transient 1	0.4
Pulse generator erosion through skin – transient 1	0.4
Unexpected battery depletion – transient 1	0.4
High impedance – transient 1	0.4
Stimulation-induced	
Pain associated with leads or pulse generator – permanent 15	6.0
Increased libido – permanent 6	2.4
Seizures (generalized tonic-clonic) – transient 5	2.4
Seizures (absences or partial) – transient 3	1.2
Forgetfulness – permanent 3	1.2
Micturition, enuresis, polyuria – permanent 2	0.8
De novo obsession associated with DBS therapy/device – permanent 2	0.8
Word-finding difficulties – permanent 1	0.4
Increased irritability, anger, impulsivity – permanent 1	0.4
Sleep disorder – permanent 1	0.4
Compulsive gambling – permanent 1	0.4
Other <sup>3</sup>	
Suicide attempts 6	2.4
Suicide 1	0.4

<sup>&</sup>lt;sup>1</sup>Sequelae include permanent finger palsy (1) & permanent dysarthria (1)

<sup>&</sup>lt;sup>2</sup>Excludes expected battery depletion and subsequent pulse generator replacement; includes only those SAEs where unexpected surgical revision, removal, or replacement of leads/pulse generator were required

<sup>&</sup>lt;sup>3</sup>In 1 patient the following occurred (not included in previously listed SAEs): generalized tonic-clonic seizure, bronchopneumonia, intracranial infection, pleural effusion, pneumothorax, shock, axillary vein thrombosis, pharmacologically induced coma

## (from Gadot & Najera et al., 2021)

Transient, Non-Serious, Stimulation-Induced Adverse Events	n	%
Hypomania	30	25.2
Gastrointestinal upset (nausea, vomiting/emesis, diarrhea, stomachaches)	7	5.9
Worse anxiety	6	5.0
Sleep disorder	6	5.0
Headaches	5	4.2
Dysgeusia/ageusia	4	3.4
Worse depression	3	2.5
Tiredness	3	2.5
Paresthesias in hands or feet	3	2.5
Disinhibition	3	2.5
Jaw sensations	2	1.7
Facial asymmetry	2	1.7
Aggression	2	1.7
Difficulty with concentration	2	1.7
Significant weight gain (> 20%)	2	1.7
Dysphagia	1	0.8
Walking difficulties	1	0.8
Dyskinesias	1	0.8
Worse obsessions	1	0.8
Dyspnea	1	0.8
Sexual intrusions	1	0.8
Dizziness	1	0.8
Forgetfulness	1	0.8
Dysarthria	1	0.8
Visual disturbance	1	0.8
Vertigo	1	0.8
Olfactory hallucinations	1	0.8
Déjà vu	1	0.8
Tingling or other sensation in chest wall	1	0.8
Reduced libido	1	0.8
Sympathetic signs (flushing, tachycardia, hypertension)	1	0.8
V 1		

Supplementary File B. Thompson & Sharp Test for Funnel Plot Asymmetry. Standardized treatment effect plotted as a predictor weighted by the inverse variance. Non-significant effect seen suggesting random dispersion of treatment effect irrespective of study size. Additive residual heterogeneity variance by the DerSimonian-Laird method for  $\tau^2 = 14.5481$ .

