

Supplementary Tables

Supplementary table 1 (S1): Analysis of the pre- and post-rTMS Rush values in the rTMS and sham stimulation condition in GTS patients

| Rush variable | Stimulation condition | time | Mean ± SD ¹ | Wilcoxon signed rank-test ² | | |
|----------------------------|-----------------------|------|------------------------|--|---------|----------------------------------|
| | | | | W-value | p-value | Bayes Factor (BF ₀₁) |
| Number of body areas | verum | pre | 3.33 (± 0.84) | 51.0 | 0.719 | 4.07 |
| | | post | 3.28 (± 1.05) | | | |
| | sham | pre | 3.45 (± 0.71) | 49.0 | 0.830 | 4.70 |
| | | post | 3.35 (± 0.97) | | | |
| Frequency of motor tics | verum | pre | 2.78 (± 1.01) | 45.0 | 0.653 | 4.47 |
| | | post | 2.85 (± 1.10) | | | |
| | sham | pre | 2.97 (± 1.05) | 54.5 | 0.924 | 4.71 |
| | | post | 2.97 (± 1.05) | | | |
| Frequency of vocal tics | verum | pre | 1.41 (± 1.07) | 83.0 | 0.770 | 4.66 |
| | | post | 1.38 (± 1.18) | | | |
| | sham | pre | 1.55 (± 1.28) | 159.5 | 0.280 | 2.80 |
| | | post | 1.35 (± 0.97) | | | |
| Severity of motor tics | verum | pre | 3.05 (± 0.70) | 87.0 | 0.964 | 4.62 |
| | | post | 2.98 (± 0.88) | | | |
| | sham | pre | 3.05 (± 0.78) | 66.0 | 0.617 | 4.49 |
| | | post | 3.07 (± 0.85) | | | |
| Severity of vocal tics | verum | pre | 1.90 (± 1.19) | 126.5 | 1.000 | 4.87 |
| | | post | 1.90 (± 1.45) | | | |
| | sham | pre | 1.83 (± 1.29) | 47.5 | 0.487 | 3.73 |
| | | post | 1.91 (± 1.25) | | | |
| Total score | verum | pre | 12.47 (± 3.57) | 151.5 | 0.692 | 4.51 |
| | | post | 12.28 (± 4.11) | | | |
| | sham | pre | 12.85 (± 3.98) | 170.5 | 0.840 | 4.93 |
| | | post | 12.67 (± 3.86) | | | |
| Motor tic count per minute | verum | pre | 52.41 (± 30.61) | 212.0 | 0.915 | 5.10 |
| | | post | 51.10 (± 28.31) | | | |
| | sham | pre | 57.26 (± 29.60) | 237.5 | 0.673 | 4.50 |
| | | post | 54.70 (± 30.24) | | | |

¹ Mean values and standard deviations (SD) of Rush variables, including motor tic count per minute, pre- and post-rTMS in the verum and sham stimulation condition are given.

² Results of Wilcoxon signed-rank test (pre- versus post-rTMS Rush value) are given.

Supplementary table 2 (S2): Analysis of the difference of pre- and post-rTMS Rush values in the rTMS and sham stimulation condition in GTS patients

| Rush variable | Stimulation condition | Difference of post- and pre-rTMS Rush score: Mean \pm SD ¹ | Wilcoxon signed rank-test ² | | |
|----------------------------|-----------------------|--|--|---------|----------------------------------|
| | | | W-value | p-value | Bayes Factor (BF ₀₁) |
| Number of body areas | verum | -0.05 (\pm 0.78) | 83.5 | 0.754 | 4.70 |
| | sham | -0.10 (\pm 0.85) | | | |
| Frequency of motor tics | verum | 0.07 (\pm 0.74) | 85.0 | 0.700 | 4.76 |
| | sham | 0.00 (\pm 0.71) | | | |
| Frequency of vocal tics | verum | -0.03 (\pm 0.63) | 162.5 | 0.461 | 3.44 |
| | sham | -0.21 (\pm 0.87) | | | |
| Severity of motor tics | verum | -0.07 (\pm 0.76) | 81.0 | 0.572 | 4.19 |
| | sham | 0.01 (\pm 0.58) | | | |
| Severity of vocal tics | verum | 0.00 (\pm 0.92) | 116.5 | 0.756 | 4.66 |
| | sham | 0.09 (\pm 0.66) | | | |
| Total score | verum | -0.19 (\pm 2.56) | 173.0 | 0.959 | 5.00 |
| | sham | -0.17 (\pm 2.41) | | | |
| Motor tic count per minute | verum | -1.30 (\pm 14.35) | 223.0 | 0.915 | 4.80 |
| | sham | -2.56 (\pm 19.15) | | | |

¹ Mean values and standard deviations (SD) of the difference between pre- and post-rTMS Rush values (post- minus pre-rTMS Rush value) in the verum and sham stimulation condition are given.

² Results of Wilcoxon signed-rank test (verum versus sham stimulation condition) are given.