

**Supplementary Table 1.** Profiles of intraoperative latency and amplitude of SEPs between groups

| Variables     | Time | Group P (n=33) | Group R (n=31) | Mean difference (95% CI) | P-value |
|---------------|------|----------------|----------------|--------------------------|---------|
| <b>N20</b>    |      |                |                |                          |         |
| Latency, ms   |      |                |                |                          |         |
| Right         | 1    | 19.98 ± 1.33   | 19.42 ± 1.19   | 0.56 [-0.07, 1.19]       | 0.082   |
|               | 2    | 19.99 ± 1.34   | 19.39 ± 1.22   | 0.61 [-0.04, 1.25]       | 0.067   |
|               | 3    | 20.09 ± 1.42   | 19.45 ± 1.25   | 0.61 [-0.04, 1.25]       | 0.061   |
|               | 4    | 19.99 ± 1.37   | 19.41 ± 1.37   | 0.58 [-0.11, 1.26]       | 0.098   |
|               | 5*   | 19.99 ± 1.31   | 19.30 ± 1.29   | 0.69 [0.04, 1.34]        | 0.039   |
| Left          | 1    | 19.86 ± 1.09   | 18.55 ± 3.67   | 1.31 [-0.03, 2.65]       | 0.065   |
|               | 2    | 19.82 ± 0.96   | 18.54 ± 3.71   | 1.28 [-0.05, 2.62]       | 0.075   |
|               | 3    | 19.89 ± 1.11   | 18.52 ± 3.65   | 1.38 [0.04, 2.71]        | 0.052   |
|               | 4    | 19.86 ± 1.06   | 18.56 ± 3.66   | 1.31 [-0.02, 2.64]       | 0.064   |
|               | 5    | 19.88 ± 1.13   | 18.54 ± 3.65   | 1.34 [0.01, 2.67]        | 0.059   |
| Amplitude, mV |      |                |                |                          |         |
| Right         | 1    | 1.56 ± 1.25    | 1.19 ± 0.76    | 0.37 [-0.15, 0.89]       | 0.157   |
|               | 2    | 1.53 ± 1.21    | 1.08 ± 0.67    | 0.45 [-0.04, 0.94]       | 0.069   |
|               | 3    | 1.54 ± 1.23    | 1.10 ± 0.68    | 0.44 [-0.06, 0.95]       | 0.077   |
|               | 4    | 1.54 ± 1.32    | 1.08 ± 0.66    | 0.45 [-0.07, 0.98]       | 0.086   |
|               | 5    | 1.57 ± 1.37    | 1.16 ± 0.70    | 0.41 [-0.14, 0.96]       | 0.139   |
| Left          | 1    | 1.95 ± 1.35    | 1.60 ± 1.43    | 0.35 [-0.34, 1.05]       | 0.312   |
|               | 2    | 1.95 ± 1.52    | 1.51 ± 1.41    | 0.44 [-0.30, 1.17]       | 0.243   |
|               | 3    | 1.97 ± 1.47    | 1.47 ± 1.35    | 0.49 [-0.21, 1.20]       | 0.169   |
|               | 4    | 1.95 ± 1.54    | 1.49 ± 1.31    | 0.46 [-0.26, 1.17]       | 0.208   |
|               | 5    | 1.98 ± 1.61    | 1.51 ± 1.27    | 0.46 [-0.26, 1.19]       | 0.206   |
| <b>P37</b>    |      |                |                |                          |         |
| Latency, ms   |      |                |                |                          |         |
| Right         | 1    | 41.69 ± 4.14   | 39.71 ± 8.60   | 1.98 [-1.37, 5.32]       | 0.253   |
|               | 2    | 41.53 ± 4.10   | 39.70 ± 8.61   | 1.83 [-1.50, 5.17]       | 0.294   |
|               | 3    | 41.49 ± 3.97   | 39.46 ± 8.33   | 2.03 [-1.20, 5.26]       | 0.226   |
|               | 4    | 41.17 ± 3.95   | 39.28 ± 8.36   | 1.89 [-1.34, 5.13]       | 0.258   |
|               | 5    | 41.06 ± 3.81   | 39.44 ± 8.29   | 1.62 [-1.57, 4.81]       | 0.326   |
| Left          | 1    | 40.92 ± 8.44   | 40.31 ± 8.83   | 0.61 [-3.71, 4.92]       | 0.779   |
|               | 2    | 40.93 ± 8.38   | 40.15 ± 8.84   | 0.77 [-3.53, 5.08]       | 0.723   |
|               | 3    | 40.91 ± 8.30   | 39.89 ± 8.56   | 1.02 [-3.19, 5.23]       | 0.631   |
|               | 4    | 40.68 ± 8.32   | 39.50 ± 8.46   | 1.18 [-3.02, 5.37]       | 0.577   |
|               | 5    | 40.60 ± 8.32   | 39.77 ± 8.50   | 0.83 [-3.37, 5.03]       | 0.694   |
| Amplitude, mV |      |                |                |                          |         |
| Right         | 1    | 0.89 ± 0.58    | 0.83 ± 0.57    | 0.06 [-0.23, 0.35]       | 0.676   |
|               | 2    | 0.91 ± 0.57    | 0.78 ± 0.48    | 0.14 [-0.13, 0.40]       | 0.312   |
|               | 3    | 0.92 ± 0.61    | 0.788 ± 0.53   | 0.13 [-0.15, 0.42]       | 0.356   |
|               | 4    | 0.88 ± 0.62    | 0.792 ± 0.53   | 0.09 [-0.20, 0.38]       | 0.544   |
|               | 5    | 0.88 ± 0.55    | 0.785 ± 0.54   | 0.10 [-0.17, 0.37]       | 0.473   |
| Left          | 1    | 0.93 ± 0.64    | 0.965 ± 0.64   | 0.03 [-0.29, 0.35]       | 0.817   |
|               | 2    | 0.99 ± 0.67    | 1.202 ± 1.43   | 0.22 [-0.34, 0.77]       | 0.451   |
|               | 3    | 0.98 ± 0.72    | 0.947 ± 0.58   | 0.04 [-0.29, 0.37]       | 0.825   |
|               | 4    | 0.95 ± 0.73    | 0.955 ± 0.57   | 0.00 [-0.33, 0.33]       | 0.993   |
|               | 5    | 0.96 ± 0.71    | 0.926 ± 0.55   | 0.04 [-0.28, 0.36]       | 0.813   |

Values are mean ± SD.

\*P < 0.05 between groups P and R.

SEP: somatosensory-evoked potential, P: propofol, R: remimazolam, CI: confidence interval, N20: SEP for median nerve, P37: SEP for tibial nerve, T1: 30-min after anesthetic induction, T2: 30-min after the surgical incision, T3: after laminectomy or discectomy, T4: immediately after the insertion of plates or fixation of pedicle screws, T5: prior to closing the surgical wound