Supplementary Material

Electrophysiological correlates of thalamocortical function in acute severe traumatic brain injury

William H. Curley,¹,² Yelena G. Bodien,²,³ David W. Zhou,²,⁴ Mary M. Conte,⁵
Andrea S. Foulkes,⁶ Joseph T. Giacino,³,⁷ Jonathan D. Victor,⁵,⁸ Nicholas D. Schiff,⁵,⁸,†
and Brian L. Edlow²,⁹,†

†These authors contributed equally to this work.

1 Harvard Medical School, Boston, MA, USA
2 Center for Neurotechnology and Neurorecovery, Department of Neurology, Massachusetts General Hospital, Boston, MA, USA
3 Department of Physical Medicine and Rehabilitation, Spaulding Rehabilitation Hospital, Charlestown, MA, USA
4 Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology, Cambridge, MA, USA
5 Feil Family Brain and Mind Research Institute, Weill Cornell Medical College, New York, NY, USA
6 Department of Medicine, Massachusetts General Hospital and Harvard Medical School, Boston, MA, USA
7 Department of Physical Medicine and Rehabilitation, Massachusetts General Hospital and Harvard Medical School, Boston, MA, USA
8 Department of Neurology, New York Presbyterian Hospital, New York, NY, USA
9 Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital and Harvard Medical School, Charlestown, MA, USA

Correspondence to:
Brian L. Edlow, M.D.
Center for Neurotechnology and Neurorecovery
Massachusetts General Hospital
101 Merrimac Street – Suite 300
Boston, MA 02114, USA
Email: bedlow@mgh.harvard.edu
**Supplementary Table 1.** Sedative, anxiolytic, and analgesic medications administered before and/or during EEG.

| Patient ID | Medications Administered Before/During EEG |
|------------|------------------------------------------|
| P1         | Before: None                               |
|            | During: None                               |
| P2         | **Before:** morphine 2 mg IV               |
|            | **During:** None                           |
| P3         | **Before:** propofol 100 mg/hr IV gtt      |
|            | **During:** propofol 100 mg/hr gtt, propofol 10 mg IV bolus |
| P4         | Before: None                               |
|            | During: None                               |
| P5         | **Before:** oxycodone 5 mg PGT             |
|            | **During:** quetiapine 25 mg PGT           |
| P6         | **Before:** hydromorphone 0.5 mg IV        |
|            | **During:** None                           |
| P7         | **Before:** quetiapine 12.5 mg PGT         |
|            | **During:** None                           |
| P8         | **Before:** propofol 300 mg/hr IV gtt      |
|            | **During:** propofol 300 mg/hr IV gtt, hydromorphone 0.5 mg IV |
| P9         | Before: None                               |
|            | During: None                               |
| P10        | Before: None                               |
|            | During: None                               |
| P11        | **Before:** lorazepam 1 mg IV, haloperidol 5 mg IV |
|            | **During:** None                           |
| P12        | **Before:** midazolam 2 mg IV              |
|            | **During:** None                           |
| P13        | Before: None                               |
|            | During: None                               |
| P14        | Before: None                               |
|            | During: None                               |
| P15        | **Before:** propofol 300 mg/hr IV gtt      |
|            | **During:** propofol 300 mg/hr IV gtt      |
| P16        | Before: None                               |
|            | During: None                               |
| P17        | *Before/During:* None                      |
| P18        | *Before/During:* propofol 250 mg/hr IV gtt, oxycodone 15 mg PGT, fentanyl 100 mcg IV bolus |
| P19        | *Before/During:* propofol 100 mg/hr IV gtt, fentanyl 50 mcg/hr IV gtt, fentanyl 100 mcg IV bolus |
| P20        | *Before/During:* propofol 10 mg/hr IV gtt, oxycodone 10 mg PGT |

*As patients P17-20 were enrolled at follow-up, the precise timing of medication administration during the acute phase could not be definitively determined. As such, we list all possible medications these patients may have received before and/or during acute EEG collection. gtt = continuous infusion; IV = intravenous; PGT = administered via percutaneous gastric tube.*