**Supporting Information 2: Neurological Variables Case Report Form**

Date that this CRF was filled out:

Name of Laboratory/PI:

Name of person filling out CRF:

Project name/Identifier:

Animal ID or Study ID (as applicable):

**Type of model system:**

* Mammalian systems (e.g., rodents, other mammals): \_\_\_\_\_\_
* Non-mammalian systems (e.g., *Drosophila*, zebrafish): \_\_\_\_\_\_

**Type of study:**

* Anesthetized: \_\_\_\_\_\_
* Non-anesthetized: \_\_\_\_\_\_

**Endpoint of study:**

* Pre-defined time point: \_\_\_\_\_\_
* Seizure-induced sudden death: \_\_\_\_\_\_
* Other \_\_\_\_\_\_

|  |  |
| --- | --- |
| **CDE** | **DATA COLLECTED** |
| **Background Neurological Variables** | |
| Are neurological phenotypes present in this model? | ☐ Yes  ☐ No  ☐ Unknown |
| Seizures? | ☐ Yes  ☐ No  ☐ Unknown |
| Other (describe) |  |
| Comments: | |
| **EEG** **Recording Information** | |
| Was animal anesthetized or awake? | ☐ Anesthetized (Isoflurane or Ketamine/xylazine or others)  ☐ Awake-fixed head  ☐ Awake-freely-moving (tethered or telemetry) |
| Number of electrodes |  |
| Type of electrode used |  |
| Electrode placement |  |
| Recording frequency (kHz) |  |
| Recording duration |  |
| Recording modality | ☐ Wireless  ☐ Wired |
| Type of recording | ☐ AC  ☐ DC (\*see below) |
| **DC recording features**  Electrode type  Electrode location/  coordination  Amplifier/digitizer sampling frequency  Amplifier/digitizer sampling frequency filters | ☐ Ag/AgCl (glass micropipettes fabrication [puller/glass filament/tip size and shape/fire polishing?] and solutions [pH value/osmolarity])  ☐ Platinum/iridium (resistance)  ☐ Others \_\_\_\_\_\_  ☐ Notch  ☐ High-pass  ☐ Low-pass |
| Were cardiac recordings done in parallel to brain recording (synchronized)? | ☐ Yes  ☐ No  ☐ Unknown |
| Were respiratory recordings done in parallel to brain recording (synchronized)? | ☐ Yes  ☐ No  ☐ Unknown |
| **Video Recordings**  Were multiple video recordings done?    Were video recordings  synchronized with  electrophysiology  recordings?    Frame Rate  Resolution  Date and time  Recording Start  Recording End  State recording occurred in  (postictal, etc.)  Recording start time  Recording end time  Duration of recording  Angle of view | ☐ Yes  ☐ If yes, state number of recordings\_\_\_\_  ☐ No  ☐ Unknown  ☐ Yes  ☐ No  ☐ Unknown |
| **Program used for recording and analysis**  Commercial software: Name  of the company and the  version of the software \_\_\_\_\_ | Recording:  ☐ CED/spike 2  ☐ DSI/Ponemah  ☐ Tucker Davis/Synapse  ☐ Plexon  ☐ Pinnacle  ☐ Open-ephys  ☐ Other (provide details) \_\_\_\_\_\_ |
| Open resource tool (please  specify any toolboxes,  libraries and packages that  are used or provide the link  of GitHub if customized  algorithms are used) |  |
| Data sharing plan | List details on how data will be shared and how to access data |
| List any machine learning tools used |  |
| **Tissue Collection and Storage** | |
| Is tissue available for genetic confirmation and collaborative histology studies? | ☐ Yes (\*see below)  ☐ No  ☐ Unknown |
| \*If yes, what type of tissue was collected? | ☐ Preserved tissue  ☐ Freshly frozen  ☐ Other \_\_\_\_\_\_ |
| \*If yes, what amount of tissue was collected? |  |
| How was tissue stored? | ☐ -20 freezer  ☐ -80 freezer  ☐ Other \_\_\_\_\_\_ |
| Medium used for tissue storage | ☐ 4% paraformaldehyde  ☐ Anti-freezing media  ☐ Other \_\_\_\_\_\_ |
| List details |  |
| Comments: | |

Abbreviations: AC: Alternating current; Ag/AgCl: Silver/silver chloride; CRF: Case report form; CED/spike 2: Cambridge Electronic Design Limited recording and analysis package; DC Direct current; DSI/Ponemah: Data Sciences International Ponemah® Software; MATLAB: “Matrix Laboratory” programming and numeric computing platform; pH: Potential of hydrogen; PI: Principal investigator; R: Programming language for statistics and data visualization.

Instructions: Please check boxes where applicable. If none of the predetermined options is appropriate, use the default space to specify your answer. This form is to be filled in for one individual animal, unless otherwise specified.

Please refer to more extensive CRFs, where suitable, as developed by the ILAE/AES Joint Translational Task Force:

Report on preclinical Core CDEs

<https://onlinelibrary.wiley.com/doi/10.1002/epi4.12234>

Report on preclinical neurobehavioral CDEs

<https://onlinelibrary.wiley.com/doi/10.1002/epi4.12236>

Report on preclinical physiology CDEs

<https://onlinelibrary.wiley.com/doi/10.1002/epi4.12261>

Report on preclinical pharmacology model CDEs

<https://onlinelibrary.wiley.com/doi/10.1002/epi4.12254>

Report on preclinical EEG CDEs

<https://onlinelibrary.wiley.com/doi/10.1002/epi4.12260>