

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?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Seizures?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Other (describe)	
Comments:	
EEG Recording Information	
Was animal anesthetized or awake?	<input type="checkbox"/> Anesthetized (Isoflurane or Ketamine/xylazine or others) <input type="checkbox"/> Awake-fixed head <input type="checkbox"/> Awake-freely-moving (tethered or telemetry)
Number of electrodes	
Type of electrode used	
Electrode placement	
Recording frequency (kHz)	
Recording duration	
Recording modality	<input type="checkbox"/> Wireless <input type="checkbox"/> Wired

Type of recording	<input type="checkbox"/> AC <input type="checkbox"/> DC (*see below)
DC recording features Electrode type Electrode location/coordination Amplifier/digitizer sampling frequency Amplifier/digitizer sampling frequency filters	<input type="checkbox"/> Ag/AgCl (glass micropipettes fabrication [puller/glass filament/tip size and shape/fire polishing?] and solutions [pH value/osmolality]) <input type="checkbox"/> Platinum/iridium (resistance) <input type="checkbox"/> Others _____ _____ _____ <input type="checkbox"/> Notch <input type="checkbox"/> High-pass <input type="checkbox"/> Low-pass
Were cardiac recordings done in parallel to brain recording (synchronized)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Were respiratory recordings done in parallel to brain recording (synchronized)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Video Recordings Were multiple video recordings done? Were video recordings synchronized with electrophysiology recordings? Frame Rate Resolution Date and time Recording Start	<input type="checkbox"/> Yes <input type="checkbox"/> If yes, state number of recordings_____ <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown _____ _____ _____ _____

Recording End	_____
State recording occurred in (postictal, etc.)	_____
Recording start time	_____
Recording end time	_____
Duration of recording	_____
Angle of view	_____
Program used for recording and analysis Commercial software: Name of the company and the version of the software _____	Recording: <input type="checkbox"/> CED/spike 2 <input type="checkbox"/> DSI/Ponemah <input type="checkbox"/> Tucker Davis/Synapse <input type="checkbox"/> Plexon <input type="checkbox"/> Pinnacle <input type="checkbox"/> Open-ephys <input type="checkbox"/> 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?	<input type="checkbox"/> Yes (*see below) <input type="checkbox"/> No <input type="checkbox"/> Unknown
*If yes, what type of tissue was collected?	<input type="checkbox"/> Preserved tissue <input type="checkbox"/> Freshly frozen <input type="checkbox"/> Other _____
*If yes, what amount of tissue was collected?	
How was tissue stored?	<input type="checkbox"/> -20 freezer <input type="checkbox"/> -80 freezer <input type="checkbox"/> Other _____
Medium used for tissue storage	<input type="checkbox"/> 4% paraformaldehyde

	<input type="checkbox"/> Anti-freezing media <input type="checkbox"/> 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>

