**Supporting Information 3: Physiologic Measures 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** |
| **Autonomic Variable Measured: Cardiac** | |
| **Cardiac Variables:** |  |
| How was cardiac measure acquired? | ☐ ECG  ☐ Echocardiogram  ☐ Plethysmography |
| Cardiac rhythms observed during the recording | ☐ Polymorphic/monomorphic VT  ☐ Ventricular fibrillation  ☐ Cardiac bigeminy  ☐ AV block  ☐ Bundle branch block  ☐ Atrial fib.  ☐ Atrial flutter  ☐ SVT  ☐ Sinus tachycardia  ☐ Sinus brady  ☐ Asystole  ☐ Sick sinus syndrome  ☐ Other \_\_\_\_\_\_ |
| Echocardiography variables analyzed  Ejection fraction    LV end systolic  dP/dt | ☐ Yes  ☐ No  ☐ Unknown  ☐ Yes  ☐ No  ☐ Unknown  ☐ Yes  ☐ No  ☐ Unknown |
| Comments: |  |
| **ECG:**  Number of electrodes |  |
| Lead recorded | ☐ Lead 1  ☐ Lead 2  ☐ Lead 3  ☐ Lead s  ☐ Lead aVL  ☐ Lead aVF  ☐ Lead V1  ☐ Lead V2  ☐ Lead V3  ☐ Lead V4  ☐ Lead V5  ☐ Lead V6  ☐ Other \_\_\_\_\_\_ |
| Ground electrode | ☐ Positive pole  ☐ Negative pole  ☐ Ground |
| Frequency (kHz) |  |
| Duration |  |
| ECG Measures | ☐ HRV (more details below)  ☐ beat-to-beat  ☐ median  ☐ Mean  ☐ P wave duration  ☐ beat-to-beat  ☐ median  ☐ Mean  ☐ PR interval  ☐ beat-to-beat  ☐ median  ☐ Mean  ☐ QRS duration  ☐ beat-to-beat  ☐ median  ☐ Mean  ☐ QT  ☐ beat-to-beat  ☐ median  ☐ Mean  ☐ Tpeak-Tend  ☐ beat-to-beat  ☐ median  ☐ Mean |
| Recording modality | ☐ Wireless  ☐ Wired |
| **Video:**  Frame rate |  |
| Frame size |  |
| File type |  |
| Recording modality | ☐ Wireless  ☐ Wired |
| Codec |  |
| IR capability | ☐ Yes  ☐ No  ☐ Unknown |
| **Heart Rate Variability Analysis** | ☐ SDNN  ☐ RMSSD  ☐ PNN6  ☐ Low freq  ☐ High freq  ☐ Power  ☐ Very low freq  ☐ Ultra-low freq  ☐ SD1, SD2 |
| Duration of period analyzed |  |
| Duration quantified by beats or time |  |
| Manual adjudication of beats | ☐ Yes  ☐ No  ☐ Unknown |
| If beats were removed, was the predicted RR interval interpolated in? | ☐ Yes  ☐ No  ☐ Unknown |
| Hemodynamics-Systolic, diastolic, mean blood pressure | ☐ Yes  ☐ No  ☐ Unknown |
| Other ways to measure autonomic variables |  |
| Comments: |  |
| **Autonomic Variable Measured: Respiration** | |
| Were respiratory variables collected? | ☐ Yes  ☐ No  ☐ Unknown |
| Method used | ☐ Trans-thoracic impedance  ☐ Plethysmography  ☐ Nasal thermistor  ☐ Electromyography (EMG) |
| TTI (trans-thoracic  impedance) | ☐ Yes  ☐ No  ☐ Unknown |
| Plethysmography | ☐ Yes  ☐ No  ☐ Unknown |
| Nasal thermistor | ☐ Yes  ☐ No  ☐ Unknown |
| Electromyography (EMG) | ☐ Yes  ☐ No  ☐ Unknown |
| Recording modality | ☐ Wireless  ☐ Wired |
| Was physiologic data uploaded?  If data was uploaded, provide location | ☐ Yes  ☐ No  ☐ Unknown |
| Comments: |  |
| Recording information |  |
| Recording paradigm | ☐ Chronic  ☐ Acute |
| Recording start time (Zeitgeber) |  |
| Recording end time (Zeitgeber) |  |
| Recording conditions | ☐ Freely moving  ☐ Restrained  ☐ Nerve Block   1. Type used 2. Dosing 3. Duration 4. Route of administration   ☐ Sedated   1. Type used/method 2. Dosing 3. Duration 4. Route of administration   ☐ Intubated |
| Conditions observed within the recording | ☐ Baseline  ☐ Inter-ictal  ☐ Pre-ictal  ☐ Post-ictal leading up to death  ☐ Period leading up to death without a seizure  ☐ Postictal  ☐ Details on how these stages were defined \_\_\_\_\_\_\_ |
| Comments: |  |
| **Movement** |  |
| Was movement measured? | ☐ Yes  ☐ No  ☐ Unknown |
| Comments: |  |
| **Oxygen levels** |  |
| Were oxygen levels measured? | ☐ Yes  ☐ No  ☐ Unknown |
| Comments: |  |

Abbreviations: AV block: Atrioventricular block; aVF: Augmented vector foot; aVL: Augmented vector left; CRF: Case Report Form; dP/dt: change in pressure over time; ECG: Electrocardiogram; EMG Electromyography; HRV: Heart rate variability; IR: Infrared; Leads V1-6: Chest leads to view the heart in the horizontal plane; PI: Principal investigator; PNN50: The number of pairs of successive NN (R-R) intervals that differ by more than 50 milliseconds; PR interval: The time between atrial depolarization and ventricular depolarization; P wave duration: Duration of the P wave, indicating atrial depolarization; QRS duration: Duration from the beginning of the Q wave to the end of the S wave; QT: The measurement that represents the total time from ventricular depolarization to complete repolarization; RMSSD: Root mean square of successive differences; SD1, SD2: Standard deviation measurements that are used to analyze heart rate variability; SDNN: Standard deviation of normal-to-normal (NN) intervals; Tpeak-Tend: The interval between the apex to the end of the T wave; TTI: Trans-thoracic impedance; VT: Ventricular tachycardia

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>