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	☐ Yes ☐ No ☐ Unknown;_____

LV end systolic	☐ Yes ☐ No ☐ Unknown;_____
dP/dt	☐ 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 i. Type used _____ ii. Dosing _____ iii. Duration _____ iv. Route of administration _____ ☐ Sedated i. Type used/method _____ ii. Dosing_____ iii. Duration_____ iv. 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