

EUTHANASIA AS AN END POINT

Legal, regulatory, and moral guidelines require that animal pain and/or distress be minimized in any experiment. For these reasons, investigators are encouraged to administer euthanasia in death end point experiments before to the actual death of the animals if experimental validity will not be compromised. These objectives assume that investigators can differentiate between animals found morbid (i.e., affected with disease or illness) and those found moribund (i.e., in the state of dying).

Investigators must be able to judge and perform euthanasia on moribund rodents based on objective signs of dying, depending on experience with the animal model, professional judgement, and the experimental protocol. Some of the known signs of illness or dying that may be applied are listed below to assist investigators in decision making. The use of this information is encouraged with the understanding that the combination of signs indicating euthanasia may vary with experimental end points.

Animals found moribund should be euthanatized. If death itself is the required end point of an experiment, the investigator may receive approval to conduct such studies by providing appropriate justification to the IACUC. Inconvenience or increased cost are not justifiable reasons. Investigators are expected to make a good faith effort to justify their end points, or assure that they can evaluate animals found moribund and agree to perform euthanasia.

In summary, all investigators are expected to monitor experimental animals at least daily (including weekends and holidays), to perform euthanasia on any animals they judge should receive euthanasia, to use alternative end points to death when possible, and to minimize animal numbers within statistical constraints in general, but especially in death as an end point protocols.

Signs for Judging Morbidity (disease/illness) in Rodents

- Rapid respiration
- Respiration very slow, shallow, and labored
- Rapid weight loss ruffled fur (rough hair coat)
- Hunched posture
- Hypothermia or hyperthermia
- Ulcerative dermatitis or infected tumors
- Inappetence
- Diarrhea or constipation