

Endpoint Guidelines

Endpoints for Research Projects in Animals That Have the Potential To Cause Severe Or Chronic Pain or Distress

Definition of endpoints (termination of animals and/or experimental procedures) for studies that have the potential to result in severe or chronic pain or distress should be part of the consultation process between the principal investigator and the attending veterinarian. The investigator should include clearly defined endpoints for such studies in their protocol submitted to the IACUC for review.

The committee requires the following for research proposals that include death as an endpoint:

1. Written justification including discussion of alternative endpoints.
2. Justification of the numbers of animals to be included.
3. Justification for non-use of analgesics if this is so.
4. At least twice daily monitoring once animals exhibit abnormal signs.
5. Maintenance of written records of monitoring.

The following default endpoints, adopted by the IACUC, will be applied only if investigators do not delineate and adequately justify alternative endpoints. These default endpoints are not necessarily consistent with pain and distress free research. In the preparation of applications to the IACUC, investigators are encouraged to develop earlier, more refined endpoints that avoid or minimize discomfort, distress and pain to the animals and that are compatible with experimental objectives.

Default endpoints for laboratory animals including nonhuman primates, dogs, cats, pigs, sheep, goats, rabbits and rodents.

1. Loss of 25% of body weight from baseline weight when assigned to the protocol. A growth nomogram must be used to adjust the basal weight for growing animals.
2. Major organ failure or medical conditions unresponsive to treatment such as respiratory distress, icterus, uremia, intractable diarrhea, self-mutilation or persistent vomiting.
3. Surgical complications unresponsive to immediate intervention; i.e. bleeding, vascular graft/circulation failure, infection, and wound dehiscence.
4. Non-rodent animals that have complete anorexia for 4 days or are unable to consume sufficient nutrients without assistance for 7 days.
5. Clinical or behavioral signs in rodents or rabbits unresponsive to appropriate intervention. In the case of rodents, abnormalities persisting for 24 hours and for rabbits, abnormalities persisting for 48 hours.
 - inactivity
 - labored breathing
 - sunken eyes
 - hunched posture
 - piloerection/matted fur
 - one or more unresolving skin ulcers

- abnormal vocalization when handled
- tumors that affect normal function or that become ulcerated
- anorexia

6. Specific or supervening guidelines for monkeys given MPTP to induce Parkinson's disease or experiencing neurological complications of SIV/HIV:

- loss of 25% body weight from baseline weight when assigned to the protocol.
- inability to feed or drink sufficient nutrients to maintain body weight without assistance for 7 days.
- distress vocalization unresponsive to treatment or intervention for 7 days.