



POLICY

The UNO IACUC will not approve a single animal to be used in more than one major survival surgery from which it is allowed to recover unless they are related components of a **single** protocol and adequate scientific justification is provided in writing. Whenever possible, all major survival surgeries should be done at one time to minimize post-surgical pain, discomfort and/or distress.

Animals that undergo a major survival surgery as part of proper veterinary care could be used in a proposal that requires a major survival surgery as long as the veterinarian has determined that there are no potential health concerns.

An animal that has undergone a major survival surgery may **not** be transferred to another protocol and undergo another major survival surgery **unless**; 1) For USDA covered species, an exemption must be submitted in writing to the United States Department of Agriculture (USDA) Animal Plant Health Inspection Service (APHIS) Administrator. 2) For non-USDA covered species, requests must be submitted to the UNO IACUC. Exemptions will be reviewed and approved on a case by case basis.

Definitions:

- Survival Surgery is defined as any surgery from which the animal recovers consciousness.
- Major Surgery is defined as any surgery which penetrates and exposes a body cavity or produces substantial impairment of physical or physiologic function. (See Examples in Table 1)
- Multiple Major Survival Surgeries occur when an animal undergoes more than one major survival surgeries.

Table 1. Examples of Major and Minor Surgical Procedures

Major Surgical Procedures	Minor Surgical Procedures
Laparotomy (Abdominal Surgery)	Wound suturing, subcutaneous incision
Thoracotomy (open chest surgery)	Superficial vascular cut down
Craniotomy (removal of parts of the skull including burr holes to expose the dura)	Castration/orchidectomy
Joint replacement	Percutaneous biopsy
Limb Amputation	Repair of a prolapse
Orthopedic surgeries	Arthroscopy

REGULATION

Animal Welfare Act in accordance with, (9 CFR Ch. 1), Part 2 – Subpart C, 2.31 (d) (1) (x): No animal will be used in more than one major operative procedure from which it is allowed to recover, unless: (A) Justified for scientific reasons by the principal investigator, in writing; (B) Required as routine veterinary procedure or to protect the health or well-being of the animal as determined by the attending veterinarian; or (C) In



other special circumstances as determined by the Administrator on an individual basis.

Guide for the Care of and Use of Laboratory Animals, ILAR, NAS, 1996, pg 30:

Multiple major survival surgical procedures on a single animal are discouraged but may be permitted if scientifically justified by the user and approved by the IACUC. For example, multiple major survival surgical procedure can be justified if they are related components of a research project, if they will conserve scarce animal resources, or if they are needed for clinical reasons.

PROCEDURE

1) IACUC Approval for Multiple Major Survival Surgeries on a Single Protocol:

- a. Provide written scientific justification for the need of multiple major survival surgeries on an animal.
 - i. The justification must clearly explain why one animal must undergo more than one major survival surgery, i.e., why can't the proposed major surgeries be performed at one time, why do you need to wait between surgeries.
 - ii. The timeline between the proposed major surgeries must be clearly stated in the protocol.

2) Exemption for Multiple Major Survival Surgeries on a Single Animal Involving More than One Protocol:

- a. USDA covered species: APHIS Animal Care Policy #14 describes the process whereby an exemption to perform multiple surgeries on an individual animal under more than one protocol may be granted.
 - i. In order to apply to the USDA Administrator for an exemption, refer to Policy #14 and provide the IACUC Office with the information requested.
 - ii. The IACUC will then review the request and upon approval will give it to the Institutional Official (IO) who will submit the request to the USDA on behalf of the investigator and the institution.
- b. Non-USDA covered species: Multiple major survival surgeries on an animal in more than one protocol must be approved by the IACUC.

LINKS TO RELATED FORMS, RECORD LOGS, AND SOPS

[APHIS Animal Care Policy #14 – Request for Exemption](#)