

**SEATTLE CHILDREN'S RESEARCH INSTITUTE
OPERATING POLICIES / PROCEDURES**

DEPARTMENT:	Institutional Animal Care and Use Committee
POLICY NUMBER:	IACUC-023
REPLACES:	
EFFECTIVE DATE:	June 10, 2005
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POSTED FROM:	

TITLE: Criteria For Review Of Protocols Involving Surgery

SUMMARY:

Surgical procedures are a common component of animal research activities, and the IACUC is often called upon to assess the details of these procedures. Further, the IACUC is responsible for determining that personnel are qualified and trained in the procedures to be performed. The purpose of this policy is to establish a uniform method for IACUC review of animal protocols involving surgery.

DEFINITIONS:

1. Aseptic Technique: Used to reduce microbial contamination to the lowest possible practical level.
2. Major Surgery: Penetrates or exposes a body cavity, or produces substantial impairment of physical or physiological functions.
3. Minor Surgery: Does not expose a body cavity, and causes little or no physical impairment.
4. Survival Surgery: The animal awakes from surgical anesthesia.
5. Non-survival Surgery: The animal is euthanized before recovery from anesthesia.

POLICY/PROCEDURE:

023-1 IACUC review responsibilities for surgical procedures shall include:

- 023-1.1 Details of the procedure itself (e.g., postoperative care, aseptic technique, sequence of multiple procedures);

- 023-1.2 Appropriateness of the species for the procedure proposed;
 - 023-1.3 Qualifications of personnel performing surgical procedures;
 - 023-1.4 Species specific, and procedure specific facility requirements;
 - 023-1.5 Patient monitoring practices in the surgical and post-surgical periods and;
 - 023-1.6 Personnel occupational health and safety issues.
- 023-2 The Attending Veterinarian (AV) shall be the IACUC's primary resource for information regarding the surgical procedure and all related aspects.
- 023-3 The Guide discourages the practice of multiple major survival surgeries (MMSS). Animal Welfare Regulations (AWRs) state that animals may not be used in these procedures unless scientific justification is provided by the investigator in writing. Cost savings shall not be the sole justification for MMSS. Subsequent to approval of any MMSS, the IACUC shall ensure that there is sufficient ongoing oversight of the project.
- 023-4 The AV will be the IACUC's primary resource in determining the appropriateness of choice of anesthetics and analgesics.
- 023-5 Aseptic technique shall be used to reduce microbial contamination to the lowest possible practical level. No procedure, germicide, antibiotic, or piece of equipment can achieve this objective alone. Aseptic technique involves preparation of the patient (e.g., hair removal, and disinfection of the operative site), preparation of the surgeon (e.g., surgical scrub-in, sterile gloves, gown, face mask, cap, etc.), and sterilization of surgical instruments, supplies, and implantable materials, along with the use of operative techniques to reduce the likelihood of infection.
- 023-5.1 The IACUC application must provide a complete description of aseptic procedures that will be followed for all survival surgeries, including rodent survival surgeries.
- 023-6 Patient monitoring shall be reviewed by the IACUC. Sophistication of patient monitoring varies with species and procedure. However, the IACUC should expect evidence of the following:
- 023-6.1 A pre-surgical assessment;

- 023-6.2 Adequate monitoring of depth of anesthesia and animal homeostasis (*relatively stable state of equilibrium*) during the surgical procedure;
- 023-6.3 Support such as fluid, external heat and/or ventilation;
- 023-6.4 Monitoring and support during anesthetic recovery, and;
- 023-6.5 Post-surgical monitoring (i.e., contact information, what will be done, how often, by whom, etc.).
- 023-7 Some surgical situations can present certain occupational health and safety risks (e.g., use of inhalation anesthetics, use of certain devices such as lasers). If the circumstances warrant it, the IACUC should consult with Research Technical Operations and/or Environmental Health and Safety.

REFERENCES

ARENA / OLAW, "The Institutional Animal Care and Use Committee Guidebook", 2nd Ed. NIH. Bethesda, MD. 2002

National Research Council, "The Guide for the Care and Use of Laboratory Animals". National Academy Press; Washington DC. 1996.

RSS-OAC-SOP-34: Rodent Survival Surgery

Submitting Office: Office of Institutional Assurances

Approved by:

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