Marquette University Institutional Animal Care and Use Committee

Guidelines for Multiple Major Survival Surgery

General Definitions:

What is meant by major surgery?
A major surgery is any surgical procedure that penetrates and exposes a body cavity, including the cranium, or any procedure that has the potential for inducing permanent physical or physiological impairment.

What is meant by minor surgery?
A minor surgery is one that neither penetrates or exposes a body cavity, nor induces permanent impairment of physical or physiologic function.

Examples are laparoscopy, superficial vascular cutdown, and percutaneous biopsy. A dedicated surgical facility is not required for such procedures, however, the surgical area should be clean and aseptic techniques must be observed. There is no prevention against multiple minor survival procedures. Good professional judgment should be used to limit the number of minor surgical procedures performed on a single animal.

What is meant by multiple survival surgery?
Multiple survival surgery is defined as more than one operative procedure from which the animal is allowed to recover.

Justification for multiple survival surgery
No animal is to be used in more than one major survival operative procedure except in cases of scientific necessity, veterinary care, or multiple procedures are required to meet the objective of a single animal study activity. The IACUC must ensure that survival surgery will avoid or minimize pain and is aseptically performed by qualified personnel.

An animals that has a major operative procedure due to veterinarian intervention, or as an emergency surgery, may still be used in a research proposal that requires a major survival surgery.

PI must provide in the animal care and use protocol a written scientific justification for the need of multiple major survival surgeries on an animal. This 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. Also, the timeline between the proposed major surgeries must be clearly stated in the animal care and use protocol.

Each animal use protocol proposing the use of multiple survival surgery will be considered and reviewed by the IACUC.

References:
1. Animal Welfare Act – (9 CFR, Part 2, Section 2.31(d)(1)(x)
2. University of Nebraska Medical Center – Policy for Multiple Major Survival Surgery
3. Oregon State University – IACUC Policy on Multiple Major Survival Surgical Procedures