



Online Ethics Center
FOR ENGINEERING AND SCIENCE

Unexpected Adverse Events

Author(s)

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Year

2000

Description

A scenario about research in which a strange side effect is noticed in mice which would not affect humans.

Body

Christopher Adams is just beginning his first totally independent research project as an Assistant Professor at a large biomedical research institution. This project is an outgrowth of the work he did as a postdoc. The project will examine the comparative efficacy and safety of two different types of bone implants with regard to their capacity to promote the healing of fractures. The study will be carried out in dogs.

Dr. Adams has submitted a protocol review form to the Institutional Animal Care and Use Committee (IACUC) and has obtained IACUC approval of the study. Twenty dogs are randomly assigned to either Group 1 or Group 2 and implanted with one of two devices. After eight weeks, the dogs will be sacrificed and the bones will be tested.

At six weeks, several animals in Group 2 die. The cause of death is unknown, but the animals appear anxious and uncomfortable at the time of death. The time course of the experiment is almost up, and Dr. Adams wants to continue with the hope that at least some of the animals in Group 2 will live to eight weeks.

As an alternative, he is considering sacrificing all animals at six weeks.

What should Dr. Adams do?

Notes

Caroline Whitbeck introduced methods and modules for discussing numerous issues in responsible conduct of research at a Sigma Xi Forum in 2000. Partial funding for the development of this material came from an NIH grant.

You can find the entire sequence on the OEC at [Scenarios for Ethics Modules in the Responsible Conduct of Research](#). Some information in these historical modules may be out-of-date; for instance, there may be a new edition of the professional society's code that is referred to in an item. If you have suggestions for updates, please contact the OEC.

Contributor(s)

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Resource Type

Case Study / Scenario

Parent Collection

Scenarios for Ethics Modules in the Responsible Conduct of Research

Topics

Animal Use

Discipline(s)

Biomedical Engineering and Bioengineering

Engineering

Life and Environmental Sciences

Research Ethics