IACUC Module – Sample Study

Answer the protocol SmartForm pages as follows.

> **Tip:** Save time by cutting and pasting text from the protocol document to the protocol SmartForm pages.

Basic Information

Research Team
The research team you created, for example, "Respiratory Infections Research – {your name/initials}"

Title of Protocol
Evaluation of the Efficacy of a Killed Vaccine in the Prevention of Respiratory Mycoplasmosis

Short Title
{Your Name} Prevention of RM

Non Scientific Summary of Research
In domestic poultry, captive raised upland game birds, and waterfowl, Respiratory Mycoplasmosis (RM) is a chronic respiratory disease affecting the lungs, air sacs and sinuses. Losses in the poultry industries are the result of condemned and downgraded carcasses at slaughter, reduced egg production, poor feed conversion and medication costs. RM is the most costly disease of domestic birds worldwide. A vaccine exists, but it has harmful side effects. This research will examine the efficacy of the killed RM vaccine in the prevention of RM infection.

Principal Investigator
Your assigned PI

Intention of Animal Protocol
Experimental Research

Experimental Research Protocol Addition

Will the protocol include breeding?
No

Protocol Team Members

Adding Team Members

The members from your Research Team will appear here. You may choose to Add or Delete team members as necessary.

Funding Sources

Identifying Organizations

Select any Organization

Indicating Financial Interest

Select any Team Member

Scientific Aims

Scientific Aims of the Research

Chronic respiratory diseases affect the lungs, air sacs and sinuses of domestic poultry, captive raised upland game birds, and waterfowl. Such diseases are the most costly disease of domestic birds worldwide. In an attempt to eliminate the distress and negative side effects created by vaccinating with a live virus, a killed vaccine has been developed. The purpose of this research is to evaluate the efficacy of the killed RM vaccine in comparison with the live vaccine.

Significance and Benefits of Research

The killed vaccine will offer poultry the opportunity to acquire immunity through an immune response to killed viral particles that will not result in active infections.

Experiments

Total number of animals used in the experiment: 60

Experiment	Species	Common Procedures	Variable Procedures	Total Number Used in Experiment	Count by Pain Category
Receive Vaccine	Mouse	• Blood Draw (S)* • Fasting for 24 Hours (S) • Administer RM Virus (T)** • Euthanasia via Isoflurane, 5% Inhaled (S)	• Administer Vaccine (Live)(S) to 20 mice • Administer Vaccine (Killed)(S) to 20 mice	• 40	• D: 40

Control	Mouse	• Blood Draw (S) • Fasting for 24 Hours (S) • Administer RM Virus (T) • Euthanasia via Isoflurane, 5% Inhaled (S)	• None	• 20	• D: 20

*S=Standard
** T=Team

Procedure Personnel Assignment

Update each procedure to indicate your assigned PI will perform the procedure.

Strains

- A/J
- AB1
- BALB/C

Animal Justifications

Justification for the Use of Animals

The RM infection affects domestic poultry hence the use of animals is required to determine the efficacy of the killed RM vaccine in the prevention of RM infection.

Justification of the Requested Species

Mice are required for this study since they are susceptible to respiratory infections. There has been previous success in modeling inflammatory responses to inhaled toxins and pathogens in this species. Other factors include the availability of genetically altered mice with specific receptors deleted and the availability of immune reagents if future studies are warranted.

Actual Number of Animals to be Used or Produced

Pain Category D Actual Animal Count: 60

Justification of Actual Animal Count in this Protocol

Two experiments (Vaccinated and Control), one with 40 (4-6 week old) mice and the other with 20 (4-6 week old) mice will be established. This is the minimal number to achieve the results needed. The actual number of animals requested is the total of animals from the two experiments. No additional animals are needed.

Alternatives

Procedure Causing Pain or Distress
Select any of the Procedures

Date of Search
Select any date

Duplication
Record any references

Housing
Select any vivarium(s) or anti-vivarium(s)

Disposition
All animals will be euthanized according to the procedures described in the protocol.