University of California, Davis

Addendum to Annual Report of Research Facility

A. USDA Exemptions to Provisions of the Act:

The USDA Administrator granted an exception to the number of cesarean sections that could be performed on nonhuman primates. This exception applied to 59 animals during the reporting period; 10/1/20-9/30/21.

Justification for Cesarean Sections:

Studies that focus on the fetal inherited diseases, other illnesses, and various corrective therapies for these illnesses, require that the animals be delivered by cesarean section at a standardized time point. This is important for several reasons. First, the fetuses and newborns are valuable research animals from which substantial information will be obtained, and delivery by cesarean section decreases the risk of parturition-related mortality. In addition, animals that deliver spontaneously typically do so over a large range of gestational ages, which makes it very difficult to accurately assess a number of significant developmental, physiological, and behavioral milestones. Delivering the newborns by cesarean section is the optimal method for obtaining viable, healthy offspring without confounding variables.

Trained California National Primate Research Center (CNPRC) staff veterinarians perform the surgeries. Animals are administered general anesthesia for the procedures, receive post-operative analgesics, and post-operative care is provided by the Primate Medicine staff at the CNPRC under the direction of staff veterinarians.

Justification for Multiple Cesarean Sections in the Same Animal:

Multiple cesarean sections performed in humans is routine. Nonhuman primates that undergo comparable procedures at the CNPRC rarely have post-surgical complications and, as shown by numerous years of experience (>20 years), are fertile post-operatively. Any animal with evidence of pregnancy complications is not included in the exception. Similar to humans, extensive years of experience indicate that post-operatively these animals do not exhibit any problems or ill health.

The practice has been to maintain a breeding colony of monkeys at the CNPRC that can provide the required number of pregnancies for research purposes. Using animals more than once reduces the number of animals that have to be bred. As an example, if 100 animals are used per year for these studies, and if these animals could not be returned to the breeding colony, it would be necessary to breed additional animals to replace these animals. The net effect of using animals only once would be that an increased number of nonhuman primates would be needed, and that many valuable, healthy research animals would be euthanized because of their surgical history. With multiple use, and using procedures routinely used in humans, these animals can remain productive for many years, thus reducing the number of animals overall that are needed. This exception allows for up to four cesarean sections per animal.

Obtained by Rise for Animals.
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