



*John F. Manning, Jr., Ph.D., MBA
Chief Operating Officer
Corporate Chief of Staff*

July 27, 2022

Animal Care Animal and Plant Health Inspection Service
U.S. Department of Agriculture
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Fort Collins, CO 80526-8117
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To Whom it May Concern:

On behalf of the Vanderbilt University Medical Center (Customer ID: 335389, Registration 63-R-0129), we are writing to formally appeal a citation received on July 7, 2022. Specifically, we are appealing the citation for 2.31e(2) (see attached). Upon further review of the protocol and conference with the IACUC reviewers involved in approving the protocol, we believe that it does provide a sufficient description of all experimental groups and rationale for the appropriateness of the number of ferrets to be used.

The citation references two issues with the animal numbers justification. First it states: "The protocol gives a general overview of three phases of the research including model validation, treatment, and vaccination. The description in the 'numbers justification' section of the protocol is not consistent with this overview and asks for numbers of animals in groups that are not specifically identified/described in the overview or elsewhere in the protocol." This appears to be referencing that while the protocol overview refers to three phases of the research project, the number justification refers to four experimental groups. This apparent discrepancy is due to the fact that one of the phases (phases of standard FDA vaccination study protocols) includes two experimental groups. Specifically, the protocol overview describes 1st phase - model development, 2nd phase - therapeutic antibody treatment and vaccination (two separate experimental treatment groups), and 3rd phase - transmission inhibition. The numbers justification references four groups: 1) Model Development, 2) Treatment, 3) Prophylaxis (vaccination) and 4) Transmission. In discussion with the reviewers, it was clear to them that the four experimental groups were referenced in the overview's three experimental phases, despite the use of somewhat inconsistent language. At the time of inspection, a protocol amendment was under review that included a specific request that the investigator further clarify how the phases and experimental groups aligned and consolidate the information in to one section of the protocol. However, there were no concerns noted that the number of animals requested were not adequately justified or accounted for in the experimental design.

The citation goes on to state: "An attachment to the protocol includes a second requested number of ferrets to be used that is over 200 animals less than in the actual body of the protocol." While this is true, the overview of the protocol includes the following statement:

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22-04818_000006

Uploaded to Animal Research Laboratory Overview (ARLO) on 09/23/2022

"Note: With study evolution the attachment is intended as supplemental information only. In areas of conflict the protocol description supersedes the attachment text." The IACUC reviewers did not have a concern with the discrepancy, as the statement in the overview (and the IACUC's standard practice) makes it clear that the protocol supersedes if differences are found, and the attachments provided additional information relevant to the protocol which supported its continued inclusion.

We regret we were not able to address these issues with the Veterinary Medical Officer at the time of the inspection, however we look forward to your review of this appeal. Please do not hesitate to contact me or Dr. Scott Bury at 615-936-6997 (scott.d.bury@vumc.org) with any questions or to provide any further information that may aid in your assessment.

Sincerely,

(b) (6), (b) (7)(C)

Vanderbilt University Medical Center
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Nashville, TN 37232
Customer ID: 335389
Certificate: 63-R-0129



Inspection Report

VANDERBILT UNIVERSITY MEDICAL CENTER
1161 21ST AVE S MCN AA 6206
NASHVILLE, TN 37232

Customer ID: **335389**

Certificate: **63-R-0129**

Site: 001

VANDERBILT UNIVERSITY VICE
PROVOST FOR RESEARCH

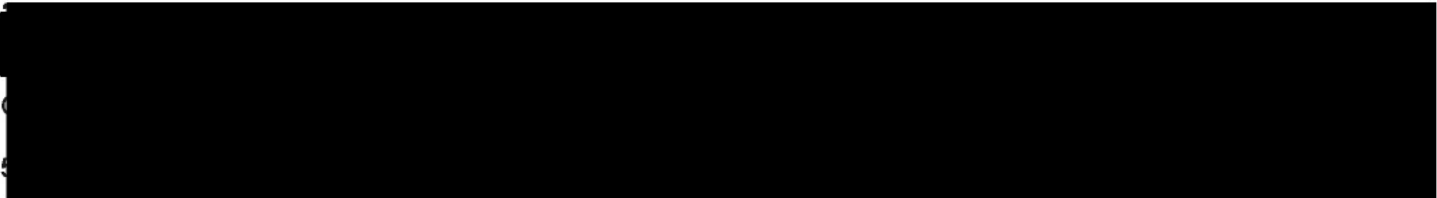
Type: ROUTINE INSPECTION

Date: 05-JUL-2022

2.31(e)(2)

Institutional Animal Care and Use Committee (IACUC).

Protocol M1800049-01 is approved for use of a large number of ferrets. The protocol as approved does not contain a rationale for the appropriateness of the numbers of ferrets to be used. The protocol gives a general overview of three phases of the research including model validation, treatment and vaccination. The description in the 'numbers justification' section of the protocol is not consistent with this overview and asks for numbers of animals in groups that are not specifically identified/described in the overview or elsewhere in the protocol. An attachment to the protocol includes a second requested number of ferrets to be used that is over 200 animals less than in the actual body of the protocol. An animal use proposal must include a rationale for the appropriateness of the numbers of animals to be used so that the IACUC (Institutional Animal Care and Use Committee) can conduct a thorough review of the components of the activities related to the care and use of animals and determine that the proposed activities are in accordance with the Animal Welfare Act. Correct prior to use of any ferrets on this proposal.



Prepared By: SUSANNE BRUNKHORST

USDA, APHIS, Animal Care

Title: VETERINARY MEDICAL
OFFICER

Date:
07-JUL-2022

Received by Title: Attending Veterinarian

Date:
07-JUL-2022



Inspection Report

VANDERBILT UNIVERSITY MEDICAL CENTER
1161 21ST AVE S MCN AA 6206
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3.83 Critical

Watering.

On the morning of Saturday March 26, 2022 the animal care technician found that one rack of squirrel monkeys (housing 5 monkeys on study) was askew and the water line to the rack was disconnected from the water supply. The monkeys

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Inspection Report

appeared fine and the water supply was reattached and flow verified. A vet tech checked on the monkeys that morning-no issues identified. On the morning of Sunday March 27, 2022 the animal care technician noted that one squirrel monkey was lying on the floor of its enclosure. The vet tech started triage and called the veterinarian who arrived quickly. The monkey was hypothermic, in lateral recumbency and appeared dehydrated. Supportive care was provided and due to lack of response the monkey was euthanized a few hours later. A second monkey was found to be alert but with ataxia and tremors of the hind limbs. Treatment and supplementation were supplied, and this monkey made a full recovery. The other three monkeys remained clinically normal. A necropsy report for the monkey that died showed changes consistent with low fluid volume and/or low blood pressure such as severe dehydration. The review of husbandry records conducted by the IACUC showed that the monkeys most likely did not have access to water for a period of up to 17 hours which with other factors such as age and study procedures may have contributed to the clinical presentation of the two affected monkeys.

Access to a sufficient quantity of potable water is necessary for the monkeys to prevent dehydration and provide for good overall health. If potable water is not continually available to the nonhuman primates, it must be offered to them as often as necessary to ensure their health and well-being, but no less than twice daily for at least 1 hour each time, unless otherwise required by the attending veterinarian or research approved by the Committee. The facility has conducted retraining of husbandry staff and instituted additional daily checks of the watering system. Corrected prior to inspection.

This inspection and exit interview were conducted with the Attending Veterinarian, the Director of the Office of Animal Welfare Assurance and other facility representatives.

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Species Inspected

Cust No	Cert No	Site	Site Name	Inspection
335389	63-R-0129	001	VANDERBILT UNIVERSITY VICE PROVOST FOR RESEARCH	05-JUL-2022

Count	Scientific Name	Common Name
000014	<i>Canis lupus familiaris</i>	DOG ADULT
000034	<i>Galago senegalensis</i>	NORTHERN LESSER BUSHBABY
000006	<i>Saimiri sciureus</i>	COMMON SQUIRREL MONKEY
000002	<i>Macaca fascicularis</i>	CRAB-EATING MACAQUE / CYNOMOLGUS MONKEY
000046	<i>Macaca mulatta</i>	RHESUS MACAQUE
000003	<i>Macaca radiata</i>	BONNET MACAQUE
000002	<i>Ovis aries aries</i>	SHEEP INCLUDING ALL DOMESTIC BREEDS
000027	<i>Tupaia glis</i>	COMMON TREE SHREW
000005	<i>Saimiri boliviensis</i>	BLACK-CAPPED SQUIRREL MONKEY
000004	<i>Sus scrofa domestica</i>	DOMESTIC PIG / POTBELLY PIG / MICRO PIG
000143	Total	