



DEPARTMENT OF HEALTH & HUMAN SERVICES

PUBLIC HEALTH SERVICE  
NATIONAL INSTITUTES OF HEALTH

FOR US POSTAL SERVICE DELIVERY:

Office of Laboratory Animal Welfare  
6700B Rockledge Drive, Suite 2500, MSC 6910  
Bethesda, Maryland 20892-6910  
Home Page: <http://grants.nih.gov/grants/olaw/olaw.htm>

FOR EXPRESS MAIL:

Office of Laboratory Animal Welfare  
6700B Rockledge Drive, Suite 2500  
Bethesda, Maryland 20817  
Telephone: (301) 496-7163  
Facsimile: (301) 480-3387

May 4, 2022

Re: Animal Welfare Assurance  
#A3354-01 (OLAW Case 2G)

Dr. Stanley Halvorsen  
Executive Director of Regulatory Support  
Institutional Official  
State University of New York - University of Buffalo  
(b) (4) Capen Hall  
Buffalo, NY 14260

Dear Dr. Halvorsen,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your April 18, 2022 letter reporting an instance of noncompliance with the PHS Policy on Humane Care and Use of Laboratory Animals at the University at Buffalo, State University of New York. This letter had not been preceded by a preliminary report to OLAW.

According to the information provided, this Office understands that the University at Buffalo, State University of New York Animal Care and Use Committee (ACUC) determined that instances of noncompliance occurred with respect to: failure to adhere to the IACUC-approved protocol. The final report states a Principal Investigator (PI) withheld buprenorphine after administering atipamezole because the animal exhibited signs of labored breathing during a surgical procedure performed on January 20, 2022.

The report states a rat was euthanized on March 7, 2022, as per the natural end of the experiment. According to the PI, apart from accidental extubation during skin closure, the surgery went well. The rat exhibited labored breathing but had a good response to pain, and the animal was ambulatory after administration of atipamezole and placed in a cage with a warm lamp. It is stated the animal received all other post-operative medications excluding buprenorphine to avoid recurrence of respiratory distress. The event was self-reported by the PI on March 10, 2022.

The investigator submitted strategies to prevent recurrence of this incident and will continue to use the lowest dosage of ketamine/xylazine in animals. The PI will administer buprenorphine as described in the protocol and will amend the protocol to include the option to not administer buprenorphine if an animal is at risk of severe respiratory depression. Also, the PI will consult with a Clinical Veterinarian for guidance before withholding analgesics and ensure veterinary staff can assist with monitoring animals. The IACUC accepted the PI's explanation and the corrective action plan. No additional actions were required by the committee.

It is noted that this research is not supported by PHS funding. Noncompliance with the protocol may have been avoided if a vet was involved to address the clinical concerns. The IACUC should emphasize with the PI the importance of discussing animal health concerns with a veterinarian to ensure appropriate assessment/treatment of animals. Based on its assessment of this explanation, OLAW understands that the University at Buffalo, State University of New York has implemented appropriate measures to correct and prevent recurrences of these problems and is now compliant with provisions of the PHS Policy.

We appreciate being informed of these matters and find no cause for further action by this Office.

Page 2 – Dr. Halvorsen  
May 4, 2022  
OLAW Case A3354-2G

Sincerely,

Jacquelyn  
T. Tubbs -S

Digitally signed by  
Jacquelyn T. Tubbs -S  
Date: 2022.05.04  
07:13:33 -04'00'

Jacquelyn Tubbs, DVM, DACLAM  
Senior Animal Welfare Program Specialist  
Division of Compliance Oversight  
Office of Laboratory Animal Welfare

cc: IACUC Contact



University at Buffalo

## Research and Economic Development

*The State University of New York*

April 18, 2022

Axel Wolff, MS, DVM  
Director, Division of Compliance Oversight  
Office of Laboratory Animal Welfare  
National Institutes of Health  
Rockledge 1, Suite 360  
6705 Rockledge Drive  
Bethesda, MD 20892

Dear Dr. Wolff,

The University at Buffalo, the State University of New York, in accordance with A3354-01 and PHS Policy IV.F.3, is providing a report of non-compliance that occurred under PROTO201900029 in which the PI withheld post-surgical buprenorphine after administering atipamezole due to the animal showing signs of labored breathing during the surgical procedure on January 20, 2022. This study is not supported by PHS funding.

The rat was euthanized on March 7, 2022, as per the natural end of the experiment. Per the PI, the surgery went well, aside from accidental extubation at the time of skin closure. The rat had a good response to pain but exhibited labored breathing. The PI administered 60 microliters of atipamezole 1mg/kg solution. The rat was ambulating after the atipamezole and was placed in a cage under a warm lamp. The rat received all other post-operative medication; however, the buprenorphine was withheld to avoid the recurrence of respiratory distress. The incident was self-reported by the PI on March 10, 2022. In the non-compliance report, the PI submitted future strategies to ensure the non-compliance does not occur again. The PI will continue optimizing ketamine/xylazine dosage to use the lowest possible dose in the proposed range. The PI stated that they would consider using benzodiazepine instead of the alpha-2 agonist to help avoid respiratory depression. In addition, the PI stated buprenorphine would be administered as outlined in the protocol. An amendment will be submitted to include the option not to administer buprenorphine if the animal is at risk of severe respiratory depression. The PI will consult with a Clinical veterinarian for advisement before withholding analgesics and ensure veterinary staff can assist with monitoring the animal.

On March 21, 2022, at a fully convened IACUC meeting, the committee reviewed the PI's response. The PI's response detailing the non-compliance incident and the PI's corrective action. The IACUC committee has accepted the PI's explanation of the event and corrective action plan to prevent future instances of non-compliance. No further correction action was requested.

The University at Buffalo, State University of New York, is committed to protecting the welfare of animals used in research and appreciates the guidance and assistance provided by OLAW in this regard. Should you have any questions regarding this report, please do not hesitate to contact myself or Rosemary Dziak, PhD, IACUC Chair.

Thank you for your consideration of this matter.

Sincerely,

(b) (6)

Stanley Halvorsen, PhD  
Executive Director, Regulatory Support  
Institutional Official  
The University at Buffalo

Cc:

(b) (6)

Rosemary Dziak, IACUC Chair

(b) (6)

**Wolff, Axel (NIH/OD) [E]**

---

**From:** Wolff, Axel (NIH/OD) [E]  
**Sent:** Wednesday, April 20, 2022 7:13 AM  
**To:** Stanley Halvorsen  
**Cc:** OLAW Division of Compliance Oversight (NIH/OD)  
**Subject:** submitted noncompliance reports

Thank you for sending 4 reports, Dr. Halvorsen. We will send responses soon.

Axel Wolff, M.S., D.V.M.  
Deputy Director, OLAW