

### Column E Explanation

1. Registration Number: 55-R-0003
2. Number of animals categorized as column E used in this study: 46
3. Species (common name) of animals used in this study: Ferrets

4. Explain the procedure producing pain and/or distress.

All ferrets were non-invasively infected with influenza virus as part of a research study approved by the Duke Institutional Animal Care and Use Committee (IACUC). The animals experienced signs of influenza. Specific clinical signs varied based on the individual animals response but may have included: weight loss, elevated body temperature, moderate respiratory signs (sneezing, coughing, nasal discharge, etc.), lethargy, and/or inappetance. The pain and distress that can accompany an influenza infection can greatly differ based on the individual.

5. Attach or include with the reason(s) for why anesthetics, analgesics and tranquilizers could not be used.

These animals were used in a research study approved by the Duke IACUC. The purpose of this study was to establish a symptomatic model of influenza virus infection in the ferret that accurately reflects the human disease and determine the efficacy of potential vaccinations and/or therapeutics for influenza (e.g., vaccinations, experimental treatments, drugs, antibodies). It was determined intervention with anesthetics and/or analgesics to alleviate clinical signs would likely have a direct impact on viral replication, the course of infection, the resulting clinical signs, and/or the robustness of the resulting immune response. In addition, it would mask clinical signs used to determine the response to vaccinations and/or therapeutics. All animals were frequently monitored (at a minimum daily) post-infection and evaluated based on clearly defined, IACUC approved humane-endpoints, to quickly identify any signs of infection. The research team and clinical veterinarians worked together to ensure that no animal had signs of severe disease that was not relieved.

6. What, if any, federal regulation require this procedure?

Agency: N/A CFR: N/A

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