

Column E Explanation Form

- 1. Registration Number: 31-R-0011
- 2. Number 3 of animals used in this study.
- 3. Species (common name) GUINEA PIG of animals used in this study.  
(each specie requires a form)

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

INFECTION WITH HERPES SIMPLEX VIRUS (HSV) CAN RESULT IN PARALYSIS IN RARE INSTANCES OR MORTALITY IN NEWBORN GUINEA PIGS

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results. (For Federally mandated testing see question 6 below)

SEE ATTACHED SHEET

6. What, if any, federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number and the specific section number (e.g., APHIS, 9 CFR 113.102):

Agency

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

CFR

Signature

**Answer to question 5:**

These animals are used to study the pathogenesis of herpes simplex virus infection. This virus is neurotropic and resides in neurons. Therefore, analgesics/anesthetics can not be used due to their potential effect in the neuronal element and disruption of normal virus pathogenesis. The infection rarely causes discomfort, but may induce rear leg paralysis that can last up to 72 hours. During the paralysis period, the bladder is expressed twice daily, and the animals checked at least twice a day. Animals that do not recover in 72 hours are promptly euthanized with CO<sub>2</sub>. Paralysis is a rare occurrence. This also pertains to the study of neonatal herpes, a lethal infection in humans. In this model, 60-90% of untreated animals may die from the infection. Animals exhibiting the earliest signs of moribund conditions are euthanized.

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

