

Column E Explanation Form

1. **Registration Number:** 51-F-0031
2. **Number of animals used in this study:** 13
3. **Species (common name) of animals used in this study:** Guinea Pigs
4. **Explain the procedure producing pain and/or distress:**

Guinea pigs used in research at the National Biodefense Analysis and Countermeasures Center (NBACC) and reported in Column E experienced pain and/or distress due their use on studies involving disease pathogenesis in which they were infected by parenteral injection with a CDC Select Agent or other high hazard agent (bacterial or viral infectious agents) and allowed to develop the disease.

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):**

The relief of clinical signs with pain relieving or anesthetic drugs results in inaccurate experimental data because these drugs interfere with certain critical clinical and immunological responses by the test animals to the biological agents and the subsequent analysis of those responses. All studies that result in unalleviated pain or distress to experimental animals require scientific justification, in writing, explaining in detail, why the use of pain relieving drugs is not appropriate and how they would interfere with the scientific goals of the study. Each of these protocols is evaluated on a case by case basis by the IACUC and requires the delineation of relevant and reliable humane endpoints for all studies.

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: N/A

CFR: N/A

Column E Explanation Form

1. Registration Number: 51-F-0031
2. Number of animals used in this study: 42
3. Species (common name) of animals used in this study: Hamsters
4. Explain the procedure producing pain and/or distress:

Hamsters used in research at the National Biodefense Analysis and Countermeasures Center (NBACC) and reported in Column E experienced pain and/or distress due their use on studies involving disease pathogenesis in which they were infected by parenteral injection with a CDC Select Agent or other high hazard agent (bacterial or viral infectious agents) and allowed to develop the disease.

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):

The relief of clinical signs with pain relieving or anesthetic drugs results in inaccurate experimental data because these drugs interfere with certain critical clinical and immunological responses by the test animals to the biological agents and the subsequent analysis of those responses. All studies that result in unalleviated pain or distress to experimental animals require scientific justification, in writing, explaining in detail, why the use of pain relieving drugs is not appropriate and how they would interfere with the scientific goals of the study. Each of these protocols is evaluated on a case by case basis by the IACUC and requires the delineation of relevant and reliable humane endpoints for all studies.

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: N/A

CFR: N/A

Column E Explanation Form

1. **Registration Number:** 51-F-0031
2. **Number of animals used in this study:** 37
3. **Species (common name) of animals used in this study:** Rabbits
4. **Explain the procedure producing pain and/or distress:**

Rabbits used in research at the National Biodefense Analysis and Countermeasures Center (NBACC) and reported in Column E experienced pain and/or distress due their use on studies involving disease pathogenesis in which they were infected by parenteral injection with a CDC Select Agent or other high hazard agent (bacterial or viral infectious agents) and allowed to develop the disease.

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):**

The relief of clinical signs with pain relieving or anesthetic drugs results in inaccurate experimental data because these drugs interfere with certain critical clinical and immunological responses by the test animals to the biological agents and the subsequent analysis of those responses. All studies that result in unalleviated pain or distress to experimental animals require scientific justification, in writing, explaining in detail, why the use of pain relieving drugs is not appropriate and how they would interfere with the scientific goals of the study. Each of these protocols is evaluated on a case by case basis by the IACUC and requires the delineation of relevant and reliable humane endpoints for all studies.

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: N/A

CFR: N/A