
USDA
Column E Explanation

This form is intended as an aid to completing the Column E explanation. It is not an official form and its use is voluntary. Annual Reports and explanations should NOT include information such as names (principal investigators and research staff), addresses, protocols, meeting notes (either in part or in full), the animals room numbers, grant information, veterinary care programs, and the like. A Column E explanation must be written so as to be understood by lay persons as well as scientists.

1. Registration Number: 14-R-0082

2. Number 6 used in this study.

3. Species (common name) swine used in this study.

4. Explain the procedure producing pain and/or distress. Explanations should include a brief description of the procedure, but also explain what the animals experience, examples of which may include, but are not limited to: neurological signs, seizures, tremors, paralysis, lethargy, inappetence, respiratory signs, GI distress, vomiting, and diarrhea.

The swine were injected with streptozotocin (STZ) to induce diabetes. STZ destroys pancreatic beta cells causing diabetes. Potential side effects include nausea, vomiting, nephrotoxicity, liver damage, hypoglycemia, and myelosuppression.

5. Attach or include an explanation with the reason(s) for why anesthetics, analgesics and tranquilizers could not be used. (For Federally mandated testing, see Item 6 below).

Analgesics, anesthetics, and tranquilizers could not be used to treat side effects of STZ because the induction of diabetes is necessary for the analysis of new peptides being developed to help heal wounds in people with diabetes. The swine were anesthetized for the STZ injection, and analgesics were administered for subsequent dorsal excisional wounding.

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):

If the requirement is per a guidance document, such as an Agency notice or harmonization guideline, please provide specific sufficient information to identify the cited document.

N/A