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 114 of animals used in this study.

3. Species (common name) rabbits 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.

Rabbits were orally inoculated with *Vibrio cholera* subsequently developing diarrhea, dehydration, and electrolyte loss between 12-18 hours post-inoculation. All rabbits were euthanized by 21 hours post-infection.

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

Use of antibiotics to cure the infection would confound the experiment, which seeks to measure the virulence of the *V. cholerae* strains being tested. In addition, the administration of rehydration fluids could adversely affect the host-pathogen interactions taking place within the intestinal tract as the effect of the rehydration fluid on the physiology and gene expression of *V. cholerae* in the small intestine is unknown.

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

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