

**Column E Explanation - Ferrets**

1. Registration Number: 23-R-0021
2. Number of Category E animals: 53
3. Species: Ferret
  
4. **Explain the procedure producing pain and or distress:** Ferrets in this study were inoculated with wild-type wild-type viruses or exposed to inoculated ferrets in standard cages or transmission cages. Animals inoculated with these viruses will display clinical signs including weight loss and inactivity.
  
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.** Treatment of these animals with analgesics or anti-inflammatory agents will mask clinical signs, alter behavior, and interfere with viral replication and transmission; therefore, it is not possible to relieve pain or distress resulting from influenza infection. Disease progression was monitored and, if necessary, animals were removed from study based on predetermined humane endpoints outlined in the protocol.
  
6. **What, if any, federal regulations require this procedure?** This procedure is the focus of the PI's research and not required by law.

**Column E Explanation – Hamsters**

1. Registration Number: 23-R-0021
  2. Number of Category E animals: 82
  3. Species: Hamsters
  4. **Explain the procedure producing pain and or distress:** Hamsters in this study will be fed experimental diets and then inoculated with SARS-CoV-2 to evaluate the effectiveness of dietary interventions on reducing the severity of COVID-19 infection. SARS-CoV-2 does cause clinical disease in hamsters with weight loss and ruffled fur.
  1. **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.** Treatment of these animals with analgesics or anti-inflammatory agents will mask clinical signs, alter behavior, and interfere with viral replication; therefore, it is not possible to relieve pain or distress resulting from virus infection. Disease progression was monitored and, if necessary, animals were removed from study based on predetermined humane endpoints outlined in the protocol.
  5. **What, if any, federal regulations require this procedure?** This procedure is the focus of the PI's research and not required by law.
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1. Registration Number: 23-R-0021
2. Number of Category E animals: 364
3. Species: Hamsters
4. **Explain the procedure producing pain and or distress:** Hamsters in this study will be inoculated with SARS-CoV-2 or, following vaccination, challenged with SARS-CoV-2. SARS-CoV-2 does cause clinical disease in hamsters with weight loss and ruffled fur.
2. **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.** Treatment of these animals with analgesics or anti-inflammatory agents will mask clinical signs, alter behavior, and interfere with viral replication and transmission; therefore, it is not possible to relieve pain or distress resulting from virus infection. Disease progression was monitored and, if necessary, animals were removed from study based on predetermined humane endpoints outlined in the protocol.
5. **What, if any, federal regulations require this procedure?** This procedure is the focus of the PI's research and not required by law.