

Annual Report Addendum, 9/30/2022, Facility No. 21-R-0245  
Category E Explanation-Guinea Pigs

Guinea Pig Sensitization Tests determine the allergenicity of materials. The maximization test and the patch test are required by the FDA Modified ISO 10993-1 matrix for preclinical evaluations of Class II and III medical devices. This procedure has full IACUC approval. During the maximization test, an adjuvant and extract are injected intradermally. The adjuvant enhances the immune response and results in lesion formation at the injection site. These lesions, ranging in size from 3mm to 20mm, are not treated due to the possible interference or enhancement of the sensitization response. During the course of the testing, animals ambulate normally, eat and drink as expected, exhibit expected behaviors for animals which are not in pain, maintain weight as expected, ambulate normally and only vocalize when handled (as is the case with untreated guinea pigs). In order to determine the health status of these animals, daily observations are performed, and technical personnel evaluate the sites. Any abnormal findings are reported to the Attending Veterinarian for assessment. The positive controls for the patch test result in mild diffuse eschar formation over a 2cm x 2cm area and minimal to moderate hive formation during the challenge phase. As is the case with the maximization test, any abnormal findings are reported to the Attending Veterinarian for assessment. Over the duration of the reporting period none of the 1620 guinea pigs used in these evaluations (defined as Category E) required additional veterinary care for problems related to the lesions.

In order to address pain and distress, the Attending Veterinarian researched analgesics and an appropriate oral medication was not available. The nature of the Sensitization Tests negates the use of topical analgesia and the use of non-steroidal anti-inflammatory drugs since the objective of the test is to assess sensitization/allergenicity. We have also performed weight trends and the animals exhibited weight gain throughout the test procedures assessed.