According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a per collection of information unless it displays a valid OMB control number. The valid OMB control number 0579-0036. The time required to complete this information collection is estimated to average .5 hours	er for this information collection is	OMB APPROVED 0579-0036	
reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and collection of information.		Interagency Report Control No. 0180-DOA-AN	
		Fiscal year:	2020
UNITED STATES DEPARTMENT OF AGRICULTURE			
ANIMAL AND PLANT HEALTH INSPECTION SERVICE			
Annual Report of Research Facility			
Column E Explanation			
(TYPE OR PRINT)			
This information is required by law (7 U.S.C. 2143 and 9 C.F.R. §2.36). Failure to report according to the regulations can result in an order to cease and desist.			
1. REGISTRATION NUMBER	2. Research Facility Headquarters address		
84-R-0091	Bronco Research Services, LLC		
	PO Box 1417		
	Fort Collins, CO	80522	
3. Number of animals used in the study.	4. Species (common name) of animals used in		
25	the study.		
	Dogs		
5 Evolain the procedure producing pain and distress			

## J. Explain the procedure producing pain and distress.

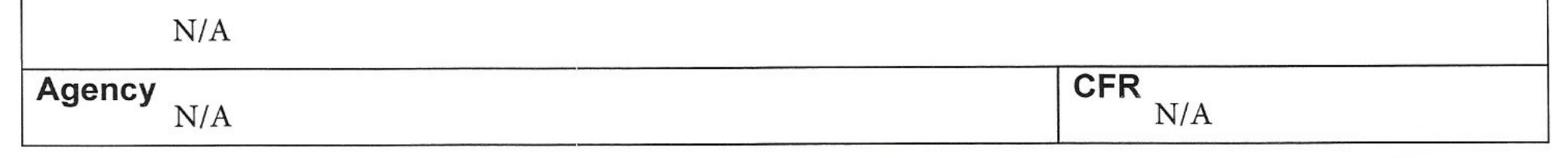
These animals were used to develop a Mechanical Threshold Testing system in combination with an intraarticular injection of kaolin/carrageenan. The dog kaolin carrageenan (K/C) model is used to induce an acute synovitis that manifests as local inflammation and lameness. The K/C model induced lameness peaked at ~10 hr post IA injection and resolved by 34 hours. The K/C model is less severe and more consistent than the other acute synovitis model (sodium urate injection). No long-term consequences to the acute inflammation have been reported for the K/C model and several studies have utilized repeat injections in the same joint after a period of rest with no adverse effects. Animals were treated with analgesics following the 30-hour evaluation, if lameness persisted.

The animals were acclimated to the mechanical threshold testing and it did not cause pain and distress.

6. Provide the scientific justification for not providing the appropriate anesthetics, analgesics, or tranquilizing drugs during procedures where the animal experienced accompanying pain or distress greater than momentary or slight.

The K/C model was developed to allow for the assessment of long acting, novel osteoarthritis treatments for dogs. Analgesics were withheld because the studies involved are designed to evaluate the potential analgesic effect of the experimental compound and the administration of an analgesic would confound the results. Carprofen, ketamine, and grapiprrant are known to be effective in the K/C model and serve as a positive control. Carprofen was used the rescue analgesia as needed.

7. 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):



## APHIS FORM 7023B JUL 2020

