

**Exceptions to the Animal Welfare Act Regulations and Standards
FY2019**

Registration Number: 93-R-0032

Customer Number: 1179

48-hour fasting for dogs

1. Title and Section of Animal Welfare Act Regulations (9CFR, Subchapter A) for which an IACUC-approved exception was granted:

9 C.F.R. § 3.9 (a)

2. Description of and rationale for IACUC-approved exception:

An extended fasting period of 48 hours is required to measure ketone levels. Ketones are always present in the blood, but ketone production is minimal after overnight fasting in healthy animals and is normally elevated during extended fasting. The diabetes drug canagliflozin (CANA) has been reported to increase ketone levels, but to determine whether CANA changes ketone production, drug effects must be measured after an extended fast.

During the extended fast, dogs will be visited frequently (multiple times/day) by study staff for monitoring. Comparative Medicine clinical staff will be consulted for appropriate supportive care or possible changes to feeding regimen to ensure animal health.

3. Species and number of animals affected by this exception:

Species - Dog

Animal numbers – 0 (*No animals were affected by this exception in FY2019.*)