

Non-steroidal and Opioid Analgesics for Rodents and Rabbits

Analgesic	Class of Drug	Mouse	Rat	Guinea Pig	Gerbil	Hamster	Rabbit
Acetaminophen	NSAID	300 mg/kg PO	100-300 mg/kg PO (6 mg/ml drinking water)	-----	100-300 mg/kg PO (6 mg/ml drinking water)	100-300 mg/kg PO (6 mg/ml drinking water)	1 ml drug/100ml drinking water
Carprofen	NSAID	10.0 mg/kg SC or PO q 12-24 hours	5-7 mg/kg SC or PO q 12-24 hours	2.5 mg/kg SC q 24 hours	5.0-10.0 mg/kg SC or PO q 12-24 hours	5.0-10.0 mg/kg SC or PO q 12-24 hours	1.5-5 mg/kg PO, or 4 mg/kg SC q 24 hours
Flunixin	NSAID	2.5 mg/kg SC q 12 hours	1.1-2.5 mg/kg SC q 2 hours	1.1-2.5 mg/kg SC q 2 hours	1.1-2.5 mg/kg SC q 2 hours	1.1-2.5 mg/kg SC q 2 hours	1.1 mg/kg SC or IM q 12 hours
Ketoprofen	NSAID	-----	5.0 mg/kg IM q 12-24 hours	-----	5.0 mg/kg IM q 12-24 hours	5.0 mg/kg IM q 12-24 hours	3.0 ,g/kg IM q 24 hours
Meloxicam	NSAID	2-5 mg/kg IP q 12-24 hours	1-4 mg/kg SC or IP q 24 hours	1-2 mg/kg SC or PO q 24 hours	1.0 mg/kg SC or PO q 24 hours	1.0 mg/kg SC or PO q 24 hours	0.3-0.6 mg/kg SC or PO q 24 hours
Buprenorphine	Opioid	0.05-0.1 mg/kg SC q 3-5 hours **see below	0.01-0.05 mg/kg SC q 6-8 hours **see below	0.05 mg/kg SC q 6-12 hours	0.1-0.2 mg/kg SC q 6-12 hours	0.05-0.5 mg/kg SC q 6-12 hours	0.02-0.1 mg/kg IV or SC q 6-12 hours
Buprenorphine SR (sustained release)	Opioid	0.72 mg/kg to 1.44 mg/kg given once every 3 days ***see below	0.09 mg/kg to 0.6 mg/kg given once every 3 days *** see below	-----	-----	-----	-----
Nalbuphine	Opioid	4-8 mg/kg IM q 4 hours	2-5 mg/kg IM q 4 hours	1-2 mg/kg IM q 4 hours	1-2 mg/kg IM q 4 hours	1-2 mg/kg IM q 4 hours	1-2 mg/kg IM or IV q 4 hours
Meperidine (Demerol)	Opioid	10-20 mg/kg SC or IM q 2-3 hours	10-20 mg/kg SC or IM q 2-3 hours	10-20 mg/kg SC or IM q 2-3 hours	10-20 mg/kg SC or IM q 2-3 hours	10-20 mg/kg SC or IM q 2-3 hours	5-10 mg/kg SC or IM q 2-3 hours

Other analgesics and multimodal combinations of analgesics can be used. Please consult with a DLAR veterinarian for further details.

** Oral and Injectable sustained release formulations are available. Contact our DLAR Veterinarians

*** dose depending on pain severity DLAR recommends injecting the drug slowly (it will be a small volume), and then pinching the skin closed at the injection site for approximately 30 seconds. The diluent (triacetin) is viscous, and the drug will seep out of the needle hole post injection (the manufacturer recommends a 22 G needle for delivery). We also recommend pinching the needle entry site closed for 30 seconds after injection. The more drug that seeps out of the hole, the larger a reaction site your animals will experience.

We recommend administering the drug when your animals are the most quiescent. DLAR also recommends giving injectable analgesic during surgery or at the beginning of surgery to allow time for the analgesic to begin working before the animal would be perceiving pain. Preferably allow 30 minutes to one hour.

REFERENCES

Anesthesia and Analgesia in Laboratory Animals, Second Edition, Richard E Fish, Marilyn J Brown, Peggy J Danneman, Alicia Z Karas (eds.) American College of Laboratory Animal Medicine Series, 2008.

Formulary for Laboratory Animals, Third Edition, Compiled by C Terrance Hawk, Steven L Leary, Timothy H Morris, American College of Laboratory Animal Medicine and European College of Laboratory Animal Medicine, Blackwell Publishing, 2005.

Formulary for Laboratory Animals, Second Edition, Compiled by C Terrance Hawk, Steven L Leary, Timothy H Morris, American College of Laboratory Animal Medicine and European College of Laboratory Animal Medicine, Blackwell Publishing, 1999.

ZooPharm Formulation for: Pain Management in Laboratory Animals Information Sheet Buprenorphine SR™ Lab