

Note to user: this list is not all-inclusive. Agents not recommended by DLAM veterinarians do not appear. However, the absence of an agent does not necessarily mean it is unacceptable. For any questions, call DLAM at 966-3111 and ask to speak to a veterinarian. In all cases, the IACUC must approve an application before any of the listed experiments and agents can be used. Use of this list does not confer approval.

<b><u>Analgesics/Sedatives</u></b>	<b><u>Species</u></b>	<b><u>Dosage</u></b>	<b><u>Route/Frequency</u></b>	<b><u>Comments</u></b>
<b>Acepromazine (tranquilizer)</b>				Phenothiazine neuroleptic that blocks post-synaptic dopamine receptors; has no analgesic effects; hypotensive
	rabbit	1-2 mg/kg	I/M	for sedation
<b>Acetaminophen (analgesic)</b>				Cyclooxygenase inhibitor that does not possess significant anti-inflammatory activity. Potentiates effects of coumarin or inandione anticoagulants. Do not use post-op after halothane anesthesia or in combination with other analgesics as this may lead to renal pathology.
	rat	6 mg/ml of drinking water	PO	FOR MINOR PROCEDURES ONLY
		100-300 mg/kg	PO by gavage every 4 hours	Use only cherry flavored elixir and change water weekly.
<b>Bupivacaine (local analgesic)</b>				
	rat	500 µl maximum	wound infiltration	Use a 0.25 % solution - unpublished dose
	mouse	100 µl maximum	wound infiltration	Use a 0.25 % solution - unpublished dose

<b>Buprenorphine (analgesic)</b>		<b>Controlled substance</b>		Partial opiate agonist; rarely may cause respiratory depression; may cause pica in rats at high dose
	dog	0.005-0.02 mg/kg	IM, IV, SC every 6-12 hrs	
	G. pig	0.05 mg/kg	SC every 6-12 hrs	
	mouse	0.05-0.1 mg/kg	SC every 6-12 hrs	May cause mortality when used with avertin. Wait to administer until ambulatory.
	rat	0.01-0.05 mg/kg	SC every 6-12 hrs	Wait to administer until ambulatory as it can prolong recovery from anesthesia
	rabbit	0.01-0.05 mg/kg	SC every 6-12 hrs	
	swine	0.005-0.02 mg/kg	IM, IV q6-12h	
<b>Butorphanol (analgesic)</b>		<b>Controlled substance</b>		Partial opiate agonist/antagonist related to morphine; use with caution in animals with liver disease, hypothyroidism, renal insufficiency, Addison's, head trauma, increased CSF pressure.
	dog	0.1-0.6 mg/kg	IM, IV, SC every 4 hrs	
	mouse	0.05-5.0 mg/kg	SC every 4 hrs	
	rat	0.05-2.0 mg/kg	SC every 4 hrs	May decrease mothering behavior of nursing dams
	rabbit	0.1-0.5 mg/kg	IV q4h OR IM, IV, SC every 4 hrs	Analgesic dosage
	swine	0.1-0.3 mg/kg	IM	
<b>Butorphanol &amp; acepromazine (sedation and analgesia)</b>				

	cat	0.1-0.4 & 0.02-0.05 mg/kg	IM, IV	
	dog	0.2-0.4 & 0.02-0.05 mg/kg	IM, IV	
	rabbit	1 mg/kg & 1 mg/kg	IM	For sedation and analgesia.
<b>Carprofen (analgesic)</b>				Non-steroidal anti-inflammatory drug (NSAID) inhibits cyclooxygenase, phospholipase A2 and prostaglandin synthesis; do not use in animals with bleeding disorders, IBD, renal or hepatic insufficiency
	dog	2.2 mg/kg	PO twice daily	
	rat	5 mg/kg	SC once daily	
	mouse	5 mg/kg	SC once daily	
	rabbit	1.5 mg/kg	PO twice daily	
	swine	2-4 mg/kg	IV, SC once daily	
<b>Diazepam (sedation/anxiolytic)</b>				Benzodiazepine; muscle relaxant, hyponotic, appetite stimulant and anticonvulsant; may cause excitement; may be teratogenic; additive with other CNS depressant agents, consult DLAM re: other drug interactions.
	cat	1 mg/kg	IV max 5mg OR IM, IV, PO	
	dog	1 mg/kg	IV max 20mg OR IM, IV, PO	
	G. pig	2.5 - 5.0 mg/kg	IP, IM	
	mouse	5 mg/kg	IP	
	rat	2 mg/kg	IV	
		2.5 - 4.0 mg/kg	IM, IP	

	rabbit	2 mg/kg	IV	
		4 - 10 mg/kg	IM, IP	
	swine	0.5-10 mg/kg	IM	
		0.5-1.5 mg/kg	IV	
<b>Flunixin (analgesic)</b>				NSAID very potent inhibitor of cyclooxygenase, analgesic, anti-inflammatory and antipyretic; may cause GI distress; use with caution in animals with GI ulcers, renal, hepatic or hematologic diseases.
	dog	1 mg/kg	SC, IM once daily	Use for a maximum of 3 days.
	rabbit	1.1 mg/kg	SC, IM try twice daily	Use for a maximum of 3 days.
	swine	2-2.2 mg/kg	IV, SC up to twice daily	Use for a maximum of 3 days.
<b>Ketoprofen (analgesic)</b>				NSAID inhibiting cyclooxygenase catalysis of arachidonic acid to prostaglandin precursors ; potential for GI irritation, renal crest necrosis, mild hepatitis.
	dog	2 mg/kg once then 1mg/kg	SC, IM, PO once daily	
	rat	5 mg/kg	SC once daily	
	rabbit	1-3 mg/kg	SC, IM every 12-24 hrs	
	swine	3 mg/kg	IM once daily for up to 3 days	

<b>Medetomidine (sedation)</b>				A2 adrenergic, sedative analgesic; contraindicated in cardiac disease, respiratory disorders, liver or kidney disease; not recommended in pregnant animals; may cause bradycardia, occasional AV block, decreased respiration, hypothermia, hyperglycemia.
	dog	750 $\mu\text{g}/\text{M}^2$	IV	
		1000 $\mu\text{g}/\text{M}^2$	IM	
	G. pig	500 $\mu\text{g}/\text{kg}$	SC	
	mouse	30-100 $\mu\text{g}/\text{kg}$	SC	
	rat	30-100 $\mu\text{g}/\text{kg}$	IP, SC	
	rabbit	100-500 $\mu\text{g}/\text{kg}$	IM, SC	
<b>Meloxicam (analgesic)</b>				NSAID, COX-2 preferential; anti-inflammatory, analgesic and antipyretic; less GI, renal and liver toxicity than older NSAIDs; drug interactions with warfarin, heparin, ACE inhibitors, etc. Contact DLAM for drug interactions
	dog	0.2 mg/kg once then 0.1 mg/kg	IV, SC, PO once daily	
	rat	1 mg/kg	SC once daily for 2 days	
<b>Naproxen (analgesic)</b>				NSAID, propionic acid derivative similar to ibuprofen and ketoprofen with inhibition of cyclooxygenase; GI, hematologic, renal and CNS effects potentially; contact DLAM for drug interactions primarily with other plasma-bound agents

	dog	5 mg/kg then 1.2-2.8 mg/kg	PO once daily	
	rabbit	2.4 mg/ml in drinking water		
	rat	14.5 mg/kg	PO once daily	
	mouse	57-350 mg/kg	PO once daily	
	guinea pig	14.9 mg/kg	PO once daily	
verified by dlam veterinarian and posted to iacuc website 10-26-2005				