

Animal Resources Program (ARP)  
Drug Formulary for Laboratory Animals

## CATS

### Anticholinergics

	Dose (mg/kg)	Route	Frequency
Atropine	0.04	SC	once

### Tranquilizers

	Dose (mg/kg)	Route	Frequency
Acepromazine Preanesthesia	0.05-0.1 (max 1 mg)	IV,IM,SC,PO	Once
Sedation (alone)	0.25-0.50 (max 1 mg)	IV,IM,SC,PO	as needed
Chlorpromazine (Thorazine®)	≤1.1 (pre-anesthesia)	IV,IM,PO	q12h
Diazepam (Valium®)	1 (max of 5 mg/24 hrs)	IV	q4h
Xylazine hydrochloride (Rompun®) <sup>1</sup>	1.1-2.2	IV,IM,SC	q4h

<sup>1</sup> Atropine should be used before xylazine to prevent bradycardia. Xylazine 1.1 mg/kg may be used as a preanesthetic emetic in cats. Subsequent sedation lasts 30-90 min.

### Analgesics

	Dose (mg/kg)	Route	Frequency
Butorphanol (Torbutrol®, Stadol®)	0.1-0.4	IM,SC	Q4-6h
Buprenorphine (Buprenex® <sup>V</sup> )	0.005-0.01	IV, SC	q4-8h
Meperidine (Demerol HCl®) <sup>2</sup>	1-4	IM,SC,IV	q2h

<sup>2</sup> Duration of analgesia 45 min and cause cardiac depression.

### Nonsteroidal Anti-inflammatory Drugs (NSAID)

	Dose (mg/kg)	Route	Frequency
Aspirin	10	PO	Every other day
Carprofen	2	PO	Q12h (limit 2 days)
Flunixin	0.25	SC	Once
Ketoprofen	2 (initial dose), 1	PO	Once daily
Meloxicam	0.1	PO	Once daily

### Neuromuscular Blockers<sup>3</sup>

	Dose (mg/kg)	Route	Frequency
D-tubocurarine	0.3	IV	
Gallamine triethiodide (Flaxedil®)	1	IV	q10-20 min
Succinylcholine	0.06	IV	q 2-3 min

<sup>3</sup>Must be used with an appropriate anesthetic and monitor vital signs for depth of anesthesia

### Anesthetics - INJECTABLE

	Dose (mg/kg)	Route	Frequency
Alpha-chloralose (terminal studies only)	65-80	IV,IP	as needed
Ketamine HCl	22-33	IM	q30-45 min
Ketamine HCl/Acepromazine	20/0.2-0.4	IM	once
Ketamine/Xylazine (give xylazine 15 min. before ketamine HCl)	20/1.1	IM	once
Methohexital sodium (Brevital®)	11	IV	as needed
Pentobarbital sodium (Nembutal®)	22-30	IV	once
Tiletamine/zolazepam	9.7-12.5	IM	once
Thiopental sodium (Pentothal®)	13-22	IV	q30-60 min
Urethane (terminal studies only)	1500	IP	once

### Anesthetics - INHALANT

	Induction %	Maintenance %
Halothane (Fluothane®)	4.0	0.9-1.5
Isoflurane (Forane®)	3.5-4.5	1-3
Methoxyflurane (Metofane®)	1-3	0.3-1.0

Cats weighing less than 7 kg should not be anesthetized by circle systems because of respiratory resistance, CO<sup>2</sup> accumulation and respiratory acidosis. Nonrebreathing systems such as the Ayres T-piece are recommended. Anesthesia can be induced in cats with thiamylal, thiopental or ketamine combinations or the animals masked with halothane and then intubated.

Halothane induction chambers can also be used for cats; 1.0% for 1-2 min., then increase to 4.0%; use with 3-5 liters/min. O<sub>2</sub> flow. Atropine is the only preanesthetic that should be used.