



## GUIDANCE FOR INVESTIGATORS

### Pharmaceutical agents used in rats

Drug	Dose (mg/kg)	Route	Effect	Notes	
<b><u>Anesthesia</u></b>					
Pentobarbital	40-50 mg/kg	IV, IP	Sedation/ Anesthesia	Respiratory and cardiac depression.	
	100 mg/kg	IV, IP	Terminal procedures- euthanasia		
Xylazine	4-8 mg/kg	IM	Sedation		
	10 mg/kg	IP			
Acepromazine	1-2mg/kg	IM	Tranquilization		
Ketamine	75mg/kg	IM, IP	Sedation/ Anesthesia		
Midazolam	5mg/kg	IM, IP	Sedation		
Yohimbine	2.1 mg/kg	IP	Reversal of xylazine		
<b><u>Analgesia</u></b>					
Buprenorphine	0.01-.05mg/kg	SQ, IV Q 8-12hrs	Post op pain	Can be used as pre-emptive analgesia during anesthesia. If respiratory depression is a concern, wait until partially recovered and sternal.	
	0.1- 0.25mg/kg	PO Q 8hrs			
Ibuprofen	10-30mg/kg	PO Q 8 hrs	Moderate pain		
Ketaprofen	5mg/kg	SQ	Moderate pain		
<b><u>Antibiotics</u></b>					
Baytril Dilution <i>Mix 1 ml of injectable Baytril with 2 ml sterile saline or water</i>	5mg/kg (1:2 dilution=7.56 mg/ml)	SQ Every 12 hours	Broad spectrum including some anaerobes	Wt	Dose/ml
				250g	0.33
				300g	0.4
				350g	0.46
				400g	0.53
				450g	0.6
				500g	0.66
550g	0.73				
Bactrim (200mg/5ml) Dilution	3ML diluted in 500 mls drinking water	PO	Broad spectrum, especially Staph spp.	Change solution every 3 days.	

### **Ketamine/Xylazine**

<b>Dose Rate:</b>	0.2 ml/100 gm body weight IP, subQ	
<b>Volumes:</b>	Ketamine	5.0 ml
	Xylazine at 20 mg/ml	2.5 ml
	Sterile saline or sterile water	2.5 ml
	Total volume	10.0 ml

### **Ketamine/Xylazine/Acepromazine**

<b>Dose Rate:</b>	0.2 ml/100 gm body weight IP, subQ	
<b>Volumes:</b>	Ketamine	1.0 ml
	Xylazine at 20 mg/ml	0.5 ml
	Acepromazine	0.2 ml
	Sterile saline or sterile water	2.3 ml
	Total volume	4.0 ml