



## GUIDANCE FOR INVESTIGATORS

### Pharmaceutical agents used in mice

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		
	10-16mg/kg	IP			
Acepromazine	1-2mg/kg	IM	Tranquilization		
	2-5mg/kg	IP			
Ketamine	44mg/kg	IM	Sedation/ Anesthesia		
	100mg/kg	IP			
	20mg/kg 50mg/kg	IM IV	Immobilization		
Midazolam	5mg/kg	IM, IP	Sedation		
Isoflurane	to effect	inhalation	Anesthesia	<i>Preferred method</i>	
<b><u>Analgesia</u></b>					
Buprenorphine- dilute Buprenex Buprenorphine- long-acting (Ethiqa)	.05mg/kg- .1mg/kg	SQ, IV Q 6-8 hrs	Post op pain	Can be used as pre-emptive analgesia during anesthesia.  <i>Preferred method</i>	
	.05ml/mouse	SQ Q 72hrs			
Ibuprofen	40mg/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 10 ml sterile saline or water</i>	5mg/kg (1:10 dilution=2.27 mg/ml)	SQ Every 12 hours	Broad spectrum including some anaerobes	Wt	Dose/ml
				15g	0.03
				20g	0.04
				25g	0.06
				30g	0.07
				35g	0.08
40g	0.09				
Bactrim (200mg/5ml) Dilution	1ML diluted in 167 mls drinking water	PO	Broad spectrum, especially Staph spp.	Change solution every 3 days.	

### **Ketamine/Xylazine**

<b>Dose Rate:</b>	0.2 ml/25 gm body weight IP, subQ	
<b>Volumes:</b>	Ketamine	1.0 ml
	Xylazine at 20 mg/ml	0.5 ml
	Sterile saline or sterile water	8.5 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