

# ANALGESICS AND SEDATIVES

## **Acepromazine**

- Bo** 0.02–0.05 mg/kg BW IV (Dunlop and Hoyt, 1997)  
0.05–0.2 mg/kg BW IM, SC (Dunlop and Hoyt, 1997)
- C** 0.1–0.2 mg/kg BW IM, SC (Kinsell, 1986)  
0.5–1.0 mg/lb BW PO prn (Kinsell, 1986)
- Ch** 0.5 mg/kg BW IM (Johnson-Delaney, 1996)
- D** 0.1–0.5 mg/kg BW IV, IM, SC (Kinsell, 1986)  
0.25–1.0 mg/lb BW PO prn (Kinsell, 1986)  
0.15–0.35 mg/kg BW IM, IV (Arnemo et al., 2002)
- F** 0.2 mg/kg BW IM (Flecknell, 1987)  
0.2–0.5 mg/kg BW IM, SC (Morrisey et al., 1996)  
0.1–0.3 mg/kg BW IM, IV (Cantwell, 2001)
- G** May precipitate seizures (Harkness and Wagner, 1983)
- Go** 0.05–0.5 mg/kg BW IM (Swindle and Adams, 1988)  
0.55 mg/kg BW IV (Swindle and Adams, 1988)  
0.05–0.1 mg/kg BW IM (NCSU, 1987)  
0.02–0.05 mg/kg BW IV (Dunlop and Hoyt, 1997)  
0.05–0.2 mg/kg BW IM SC (Dunlop and Hoyt, 1997)
- M** 1–2 mg/kg BW IM (Harkness and Wagner, 1983)  
2–5 mg/kg BW IP (Flecknell, 1987)
- N** 0.5–1.0 mg/kg BW IM, SC (Melby and Altman, 1976)  
0.2 mg/kg BW IM (Flecknell, 1987)

- R 1–2 mg/kg BW IM (Harkness and Wagner, 1983)
- Rb 1–2 mg/kg BW IM (Harkness and Wagner, 1983)  
5 mg/kg BW IM (Flecknell, 1987)  
2 mg/kg BW IM (Bauck, 1989)
- Rc 2–2.5 mg/kg BW (Evans and Evans, 1986)
- Re 0.125–0.5 mg/kg BW IM (Frye, 1981)
- Sh 0.05–0.5 mg/kg BW IM (Swindle and Adams, 1988)  
0.55 mg/kg BW IV (Swindle and Adams, 1988)  
0.02–0.05 mg/kg BW IV (Dunlop and Hoyt, 1997)  
0.05–0.2 mg/kg BW IM, SC (Dunlop and Hoyt, 1997)
- Sw 0.11–0.22 mg/kg BW SC, IM, IV (Swindle and Adams, 1988)  
0.05–0.1 mg/kg BW IM (NCSU, 1987)  
0.03–0.22 mg/kg BW IM not to exceed 15 mg total (NCSU, 1987)  
0.5–1 mg/kg BW IM, IV (Arnemo et al., 2002)  
1–1.5 mg/kg BW PO (Arnemo et al., 2002)

### **Acepromazine and buprenorphine (respectively)**

- D 0.07 mg/kg BW IM and 0.009 mg/kg BW IM (Flecknell, 1996)

### **Acetaminophen**

- C Toxic
- D 15 mg/kg BW PO q8h (Jenkins, 1987)
- M 300 mg/kg BW PO (Jenkins, 1987)
- N 5–10 mg/kg BW PO (Johnson et al., 1981)
- R 110–300 mg/kg BW PO (Jenkins, 1987)  
100–300 mg/kg BW PO q4h (Flecknell, 1991)  
6 mg/ml in drinking water (Bauer et al., 2003)

**Acetaminophen/codeine**

Rb 1 ml elixer/100 ml drinking water (Wixson, 1994)

**Alphaxalone/alphadolone**

- C 9 mg/kg BW IM (Flecknell, 1987)
- Gp 40 mg/kg BW IM (Flecknell, 1987)
- N 12–18 mg/kg BW IM (Flecknell, 1987)
- R 9–12 mg/kg BW IP (Flecknell, 1987)
- Rb 9–12 mg/kg BW IM (Flecknell, 1987)
- Sw 6 mg/kg BW IM (Flecknell, 1987)

**Aminopyrine**

- D 265 mg total PO (Borchard et al., 1990)
- Gp 130 mg/kg BW PO (Jenkins, 1987)
- H 130 mg/kg BW PO (Jenkins, 1987)
- M 150 mg/kg BW IP (Borchard et al., 1990)  
300 mg/kg BW PO (Borchard et al., 1990)
- R 200 mg/kg BW SC (Borchard et al., 1990)  
650 mg total PO (Borchard et al., 1990)
- Rb 50 mg/kg BW PO (Jenkins, 1987)

**Antipyrine**

- C 100 mg/kg BW IM, IP, SC (Borchard et al., 1990)  
500 mg/kg BW PO (Borchard et al., 1990)
- D 1000 mg total PO (Borchard et al., 1990)
- M 197 mg/kg BW IP (Borchard et al., 1990)
- R 600 mg/kg BW SC (Borchard et al., 1990)  
220 mg/kg BW SC (Borchard et al., 1990)
- Rb 100 mg/kg BW PO (Jenkins, 1987)  
100 mg/kg BW IM, IP, SC (Borchard et al., 1990)  
500 mg/kg BW PO (Borchard et al., 1990)

**Aspirin**

- Bi** 5 mg/kg BW PO tid (Ritchie and Harrison, 1997)  
**C** 10 mg/kg BW PO q48h (Jenkins, 1987)  
1 children's aspirin (1.25 grains) PO q36h (Kinsell, 1986)  
**Ch** 100–200 mg/kg BW PO q6–8h (Johnson-Delaney, 1996)  
**D** 10–20 mg/kg BW PO q12h (Jenkins, 1987)

**Note:** Use buffered tabs: analgesic dosage 10 mg/kg BW PO q12h (Kinsell, 1986)

Antirheumatic maximum dosage 40 mg/kg BW q18h (Kinsell, 1986)

- F** 10–20 mg/kg BW PO sid (Johnson-Delaney, 1996)  
**Go** 10–20 mg/kg BW PO (Swindle and Adams, 1988)  
**Gp** 270 mg/kg BW IP sid (CCAC, 1984)  
86 mg/kg BW PO, try q4h (Flecknell, 1987)  
**H** 240 mg/kg BW IP sid (CCAC, 1984)  
**M** 120–300 mg/kg BW PO (Jenkins, 1987)  
120 mg/kg BW PO q4h (Flecknell, 1987)  
400 mg/kg BW SC sid (CCAC, 1984)  
25 mg/kg BW IP (Borchard et al., 1990)  
**N** 100 mg/kg BW PO sid (CCAC, 1984)  
20 mg/kg BW PO q6–8h (Flecknell, 1987)  
**R** 100 mg/kg BW PO q4h (Flecknell, 1987; Jenkins, 1987)  
400 mg/kg BW SC, PO (Harkness and Wagner, 1983)  
**Rb** 400 mg/kg BW SC, PO sid (Harkness and Wagner, 1983)  
100 mg/kg BW PO, try q4h (Flecknell, 1991)  
20 mg/kg BW PO sid (equivalent to 600-mg dose in humans)  
(Marangos et al., 1994)  
**Sh** 10–20 mg/kg BW PO (Swindle and Adams, 1988)  
**Sw** 10–20 mg/kg BW PO q4h (Swindle and Adams, 1988)

**Azaperone**

- Sw** 0.5–2.2 mg/kg BW IM (Riebold et al., 1995)  
1–8 mg/kg BW IM (Arnemo et al., 2002)



## Bupivacaine

- D 1 ml/4.5 kg BW of 0.25% or 0.5% solution given epidurally (Carroll, 1996)

## Buprenorphine

- Bi 0.01–0.05 mg/kg BW IM (Bennett, 1997)
- Bo 0.01 mg/kg BW IM, IV (Ranheim et al., 2002)
- C 0.005–0.01 mg/kg BW SC, IM q12h (Flecknell, 1985; Jenkins, 1987)  
0.005–0.01 mg/kg BW IV, SC q8–12h (Flecknell, 1996)
- D 0.01–0.02 mg/kg BW SC q12h (Flecknell, 1985; Jenkins, 1987)  
0.003–0.005 mg/kg of preservative-free solution (in 0.9% saline) given epidurally; give 0.3 ml/kg BW not to exceed 6 ml (Carroll, 1996)  
0.005–0.02 mg/kg BW IM, IV, SC q6–12h (Flecknell, 1996)
- F 0.01–0.03 mg/kg BW IM, IV, SC q8–12h (Flecknell, 1996)  
0.01–0.5 mg/kg BW IV, SC q8–12h (Johnson-Delaney, 1996)
- G 0.1–0.2 mg/kg BW SC q8h (Flecknell, 1987)
- Go 0.005 mg/kg BW IM bid (Ranheim et al., 2002)
- Gp 0.05 mg/kg BW SC q8–12h (Flecknell, 1985; Jenkins, 1987)  
0.05 mg/kg BW SC q6–12h (Flecknell, 1991)
- H 0.05 mg/kg BW SC q8–12h (Jenkins, 1987)  
0.5 mg/kg BW SC q8h (Flecknell, 1987)
- M 2 mg/kg BW SC q12h (Flecknell, 1985; Jenkins, 1987)  
2 mg/kg BW SC q3–5h (Gaddes et al., 2000)  
2.5 mg/kg BW IP q6–8h (Jenkins, 1987)  
0.05–0.1 mg/kg BW SC q6–12h (Flecknell, 1991)  
0.05–0.1 mg/kg BW SC bid (Flecknell, 1996)
- N 0.01 mg/kg BW IM, IV q12h (Flecknell, 1985; Jenkins, 1987)  
0.005–0.01 mg/kg BW IM, IV q6–12h (Flecknell, 1996)

- 0.01–0.02 mg/kg BW IM, IV bid, tid (Horne, 2001)
- R** 0.006 mg/ml drinking water (Deeb et al., 1989)  
0.01–0.05 mg/kg BW IV, SC q8–12h (Flecknell, 1996)  
0.1–0.25 mg/kg BW PO q8–12h (Flecknell, 1996)  
5–10 mg/kg BW PO by gavage [Yes, the dose is this high.—  
Eds.] (Martin et al., 2001)  
0.5 mg/kg BW SC tid, qid (Gades et al., 2000)
- Rb** 0.02–0.05 mg/kg BW SC, IM, IV q8–12h (Flecknell, 1985;  
Jenkins, 1987)  
0.02–0.1 mg/kg BW IV, SC q12h (Carpenter et al., 1995)  
0.01–0.05 mg/kg BW SC, IV q6–12h (Flecknell, 1991)
- Sh** 0.005–0.01 mg/kg BW IM q4–6h (Flecknell, 1989)
- Sw** 0.005–0.01 mg/kg BW IM, IV (Swindle and Adams, 1988)  
0.005–0.02 mg/kg BW IM, IV q6–12h (Flecknell, 1996)  
Up to 0.1 mg/kg BW can be used for major surgical procedures (Farris, 1990)

## Butorphanol

- Bi** 1–4 mg/kg BW IV, PO prn not to exceed q4h (Ritchie and Harrison, 1997)  
African grey: 1 mg/kg BW IM (Paul-Murphy et al., 1999)
- Bo** 0.5 mg/kg BW SC (Dunlop and Hoyt, 1997)  
0.5 mg/kg BW IV (Ranheim et al., 2002)
- C** 0.4 mg/kg BW SC q6h (Jenkins, 1987)  
0.22 mg/kg BW IM (Short, 1997)  
0.4–1.5 mg/kg BW PO q4–8h (Hansen, 1996)  
0.4 mg/kg BW SC q3–4h (Flecknell, 1996)  
0.2–0.6 mg/kg BW IM, IV (Jaffe et al., 2003)  
0.2–0.4 mg/kg BW SC (Jaffe et al., 2003)
- D** 0.2–0.4 mg/kg BW SC, IM, IV q2–5h (Jenkins, 1987)  
0.2–0.4 mg/kg BW IM, SC q3–4h (Flecknell, 1996)  
1–3 mg/kg BW PO (Raffe, 1995)  
0.1–0.6 mg/kg BW IM, IV (Jaffe et al., 2003)

- 0.1 mg/kg BW IV, followed by 0.1 mg/kg BW IM, SC (Jaffe et al., 2003)
- F** 0.4 mg/kg BW IM q4–6h (Flecknell, 1996)  
0.05–0.1 mg/kg BW SC q8–12h (Johnson-Delaney, 1996)
- Go** 0.5 mg/kg BW SC (Dunlop and Hoyt, 1997)  
0.5 mg/kg BW IM, SC (Ranheim et al., 2002)
- M** 0.05–5.0 mg/kg BW SC q4h (Jenkins, 1987)  
5.4 mg/kg BW SC (Wright et al., 1985)  
1–5 mg/kg BW SC q4h (Flecknell, 1991)  
5 mg/kg BW SC q1–2h (Gades et al., 2000)
- N** 0.01 mg/kg BW IV q3–4h(?) (Flecknell, 1996)  
0.1–0.2 mg/kg BW IM, IV q3–4h (Horne, 2001)
- R** 0.05–2.0 mg/kg BW SC q4h (Jenkins, 1987)  
2 mg/kg BW SC q4h (Flecknell, 1991)  
2 mg/kg BW SC q1–2h (Gades et al., 2000)
- Rb** 0.1–0.5 mg/kg BW IV q4h (Flecknell, 1989)  
0.1–0.5 mg/kg BW IM, IV, SC q4h (Carpenter et al., 1995)
- Sh** 0.5 mg/kg BW SC q2–3h (Flecknell, 1989)
- Sw** 0.1–0.3 mg/kg BW IM (Swindle and Adams, 1988)

### **Butorphanol and acepromazine (respectively)**

- C** 0.1–0.4 mg/kg BW IM, IV and 0.02–0.05 mg/kg BW IM, IV  
(Raffe, 1995)
- D** 0.2–0.4 mg/kg BW IM, IV and 0.02–0.05 mg/kg BW IM, IV  
(Raffe, 1995)
- Rb** 1 mg/kg BW IM and 1 mg/kg BW IM (Flecknell, 1996)

### **Butorphanol and diazepam (respectively)**

- D** 0.05–0.25 mg/lb BW IM and 0.1–0.2 mg/lb (maximum 10 mg) BW IM for induction (Ko et al., 1994)

## Carprofen

- Bi 5–10 mg/kg BW IM, IV, PO (Joint Working Group, 2001a)
- Bo 1.4 mg/kg BW IV, SC once (Ranheim et al., 2002)
- C 4 mg/kg BW IV, SC (Flecknell, 1996)
- D 2.2 mg/kg BW PO bid (Michels and Carr, 1997)  
4 mg/kg BW IV, SC sid (Flecknell, 1996)  
1–2 mg/kg BW PO bid for 7 days (Flecknell, 1996)
- R 5 mg/kg BW SC (Flecknell, 1996)
- Rb 1.5 mg/kg BW PO bid (Flecknell, 1996)
- Sw 2–4 mg/kg BW IV, SC sid (Flecknell, 1996)

## Chlorpromazine

- C 1–2 mg/kg BW IV, IM q12h (Kinsell, 1986)  
2–3 mg/kg BW PO (Arnemo et al., 2002)
- D 0.5 mg/kg BW IM tid (Hoskins, 1997)  
1.1–6.6 mg/kg BW IM q6–24h (Kinsell, 1986)  
0.55–4.4 mg/kg BW IV q6–12h (Kinsell, 1986)  
2–3 mg/kg BW PO (Arnemo et al., 2002)
- G 0.5 mg/kg BW IM (CCAC, 1984)
- Go 2.2 mg/kg BW PO (Swindle and Adams, 1988)  
1.0–4.4 mg/kg BW IM (Swindle and Adams, 1988)  
0.22–1.10 mg/kg BW IV (Swindle and Adams, 1988)  
0.55–4.4 mg/kg BW IV (Short, 1986)  
2.2–6.6 mg/kg BW IM (Short, 1986)
- Gp 0.5 mg/kg BW IM (CCAC, 1984)  
0.2 mg/kg BW SC (Lumb and Jones, 1984)
- H 0.5 mg/kg BW IM (Melby and Altman, 1976)
- M 5–10 mg/kg BW SC (Taber and Irwin, 1969)  
25–50 mg/kg BW IM (Dolowy et al., 1960)  
3–5 mg/kg BW IV (Harkness and Wagner, 1983)  
3–35 mg/kg BW IM (Harkness and Wagner, 1983)
- N 1–3 mg/kg BW IM (Melby and Altman, 1976)  
2–5 mg/kg BW PO (CCAC, 1984)

- 3–6 mg/kg BW IM (USAF, 1976)
- R** 3–5 mg/kg BW IV or 3–35 mg/kg BW IM (Harkness and Wagner, 1983)
- 1–2 mg/kg BW IM (Clifford, 1984)
- Rb** 1–10 mg/kg BW IM (Carpenter et al., 1995)
- 25 mg/kg BW IM (Produces myositis; CCAC, 1984)
- Sh** 2.2 mg/kg BW PO (Swindle and Adams, 1988)
- 1–4.4 mg/kg BW IM (Swindle and Adams, 1988)
- 0.22–1.10 mg/kg BW IV (Swindle and Adams, 1988)
- 0.55–4.4 mg/kg BW IV (Short, 1986)
- 2.2–6.6 mg/kg BW IM (Short, 1986)
- Sw** 0.5–4.0 mg/kg BW IM (Swindle and Adams, 1988)
- 0.55–3.3 mg/kg BW IV (Swindle and Adams, 1988)
- 1.1 mg/kg BW IM (Boothe, 1988)

### Clonidine

- Bo** 0.015 mg/kg IV (Dunlop and Hoyt, 1997)
- Go** 0.015 mg/kg IV (Dunlop and Hoyt, 1997)
- Sh** 0.015 mg/kg IV (Dunlop and Hoyt, 1997)

### Codeine

- D** 2.2 mg/kg BW SC (Jenkins, 1987)
- M** 20 mg/kg BW SC (Jenkins, 1987)
- 60–90 mg/kg BW PO (Jenkins, 1987)
- 20 mg/kg BW SC q4h (Flecknell, 1987)
- R** 25–60 mg/kg BW SC q4h (Jenkins, 1987)
- 60–90 mg/kg BW SC q4h (Flecknell, 1991)

### Codeine and acetaminophen (suspension)

- D** 1–2 mg/kg BW PO (based on codeine) q4–6h (Watson and Lucroy, 2002)

**Detomidine**

- Bo** 0.03 mg/kg BW IV (Dunlop and Hoyt, 1997)  
0.01–0.04 mg/kg BW IM, IV (Arnemo et al., 2002)
- Go** 0.03 mg/kg BW IV (Dunlop and Hoyt, 1997)  
0.01–0.04 mg/kg BW IM, IV (Arnemo et al., 2002)
- Sh** 0.03 mg/kg BW IV (Dunlop and Hoyt, 1997)  
0.01–0.04 mg/kg BW IM, IV (Arnemo et al., 2002)

**Diazepam**

- Bi** 0.5–1 mg/kg BW IM, IV q8–12h (Ritchie and Harrison, 1997)  
1–1.5 mg/kg IV, IM (McDonald, 1989)  
2.5–4 mg/kg BW PO prn (Ritchie and Harrison, 1997)  
2–5 mg/kg BW IM (Cooper, 1984)
- Bo** 0.2–0.4 mg/kg BW IV (Dunlop and Hoyt, 1997)
- C** 1 mg/kg BW IV to a maximum of 5 mg (Kinsell, 1986)  
1 mg/kg BW IM, IV, PO (Arnemo et al., 2002)
- Ch** 2.5 mg/kg BW IP (Green, 1982)
- D** 1 mg/kg BW IV to a maximum of 20 mg (Kinsell, 1986)  
1 mg/kg BW IM, IV, PO (Arnemo et al., 2002)
- F** 2 mg/kg BW IM (CCAC, 1984; Flecknell, 1987)  
0.5–3 mg/kg BW IM, SC (Cantwell, 2001)
- G** 5 mg/kg BW IP (CCAC, 1984; Flecknell, 1987)
- Go** 0.5–1.5 mg/kg BW IM, IV (Swindle and Adams, 1988)  
15 mg/kg BW PO mixed in feed (NCSU, 1987)  
0.2–0.4 mg/kg BW IV (Dunlop and Hoyt, 1997)
- Gp** 5 mg/kg BW IP (Flecknell, 1987)  
2.5 mg/kg BW IP, IM (Green, 1982)
- H** 5 mg/kg BW IP (CCAC, 1984; Flecknell, 1987)
- M** 5 mg/kg BW IP (Flecknell, 1987)
- N** 1 mg/kg BW IM (Flecknell, 1987)  
1 mg/kg BW IV (Green, 1982)
- R** 2 mg/kg BW IV (Flecknell, 1987)

- 4 mg/kg BW IM, IP (Flecknell, 1987)  
2.5 mg/kg BW IM, IP (Weihe, 1987)
- Rb** 2 mg/kg BW IV (Flecknell, 1987)  
4 mg/kg BW IM, IP (Flecknell, 1987)  
5–10 mg/kg BW IM (Harkness and Wagner, 1983)  
5–10 mg/kg BW IM, IP (Green, 1982)
- Rc** 66–110 mg/kg BW PO (Balsler, 1965)
- Sh** 0.5–1.5 mg/kg BW IM, IV (Swindle and Adams, 1988)  
15 mg/kg BW mixed in feed (NCSU, 1987)  
0.2–0.4 mg/kg BW IV (Dunlop and Hoyt, 1997)
- Sw** 0.5–10 mg/kg BW IM (Swindle and Adams, 1988)  
0.5–1.5 mg/kg BW IV (Swindle and Adams, 1988)

### **Diazepam and xylazine (respectively)**

- Rb** 1 mg/kg BW IV and 3 mg/kg BW IV as a bolus for induction  
(Hatch and Wilson, 1988)

### **Diazepam, xylazine, and atropine (respectively)**

- D** 1 mg/kg BW IV, 1.1 mg/kg BW IV, and 0.05 mg/kg BW IV  
as a bolus for induction (Hatch and Wilson, 1988)

### **Diclofenac**

- Gp** 2.1 mg/kg BW PO (Albengres et al., 1988)  
**M** 8 mg/kg BW PO (Liles and Flecknell, 1992)  
**R** 10 mg/kg BW PO (Liles and Flecknell, 1992)

### **Dipyron**

- Bo** 40 mg/kg BW IV slowly (Ranheim et al., 2002)  
**D** 20–50 mg/kg BW IV slowly (Ranheim et al., 2002)  
**Go** 20–50 mg/kg BW IV slowly (Ranheim et al., 2002)

Sh 20–50 mg/kg BW IV slowly (Ranheim et al., 2002)

Sw 20–50 mg/kg BW IV slowly (Ranheim et al., 2002)

### Fenoprofen

D 0.5–1 mg/kg BW PO q24h (Jenkins, 1987)

### Fentanyl

C 25 µg patch for cats >7 lb (Hansen, 1996)

D 0.04–0.08 mg/kg BW SC, IM, IV q1–2h (Jenkins, 1987)

0.001–0.003 mg/lb BW IM or slow IV (Kinsell, 1986)

25 µg patch for dogs <15 lb; 50 µg patch for dogs 15–40 lb;

75 µg patch for dogs 40–60 lb, and 100 µg patch for dogs >60 lb (Hansen, 1996)

N 0.05–0.10 mg/kg BW SC, IM (Jenkins, 1987)

0.005–0.01 mg/kg BW IV (Horne, 2001)

Rb 25 µg patch for up to 72h (Foley et al., 2001)

Sw 0.02–0.05 mg/kg BW IM, IV (Swindle and Adams, 1988)

50 µg/h patch per 25–30 kg BW pig for up to 72h (Harvey-Clark et al., 2000)

### Fentanyl/droperidol (**Innovar-Vet**) (a preanesthetic dose of atropine may be necessary)

D 1 ml/7–10 kg BW IM (Kinsell, 1986)

1 ml/12–30 kg BW IV (Kinsell, 1986)

F 0.15 ml/kg BW IM (Flecknell, 1987)

Gp 0.5–1.0 ml/kg BW IM (CCAC, 1984)

0.08–0.66 ml/kg BW IM (Hughes, 1981)

0.22 ml/kg BW IM (Sander, 1992)

H 0.01 ml/kg BW IP (CCAC, 1984) (central nervous system stimulation may occur) (Hughes, 1981)

M 0.005 ml/kg BW IM (Jenkins, 1987)



- 0.02–0.03 ml/g BW IM (Hughes, 1981)  
0.5 ml/kg BW IM (Flecknell, 1996)  
N 0.1–0.2 ml/kg BW IM (CCAC, 1984)  
0.3 ml/kg BW IM (Flecknell, 1987)  
R 0.13 ml/kg BW IM (Jenkins, 1987)  
0.5 ml/kg BW IM (Flecknell, 1996)  
Rb 0.17 ml/kg BW IM (CCAC, 1984)  
0.15–0.17 ml/kg BW IM (Lewis and Jennings, 1972)  
Sw 0.07 ml/kg BW IM (Swindle and Adams, 1988)

### Fentanyl/fluanisone

- F 0.5 ml/kg BW IM (Flecknell, 1987)  
G 1 ml/kg BW IM, IP (Jenkins, 1987)  
Gp 1 ml/kg BW IM (Flecknell, 1987; Jenkins, 1987)  
0.65–1 ml/kg BW SC (Arnemo et al., 2002)  
H 1 ml/kg BW IM, IP (Jenkins, 1987)  
0.5 ml/kg BW IM, SC (Arnemo et al., 2002)  
M 0.01 ml/30 g BW IP (Jenkins, 1987)  
0.1–0.3 ml/kg BW IP (Flecknell, 1996)  
0.01 ml/10g BW SC of a 1:10 dilution with sterile water  
(Arnemo et al., 2002)  
N 0.3 ml/kg BW IM (Flecknell, 1996)  
R 0.4 ml/kg BW IM, IP (Jenkins, 1987)  
0.3–0.6 ml/kg BW IP (Flecknell, 1996)  
0.3–0.5 ml/kg BW IP, SC (Arnemo et al., 2002)  
Rb 0.5 ml/kg BW IM (Jenkins, 1987)

### Flunixin

- Bi 1–10 mg/kg IM; can be repeated (Harrison and Harrison, 1986)  
1–10 mg/kg BW IM, IV (Ritchie and Harrison, 1997)

- Bo** 2.2 mg/kg BW IM, IV sid for up to 3 days (Ranheim et al., 2002)
- C** 1 mg/kg BW PO, IV q24h (Haskins, 1987)  
0.3 mg/kg BW IM (Kinsell, 1986)
- D** 0.5–2.2 mg/kg BW IM, IV; no repeat (Jenkins, 1987)  
1 mg/kg BW PO, IV q24h (Haskins, 1987)  
1 mg/kg BW IV sid for 3 days maximum (Boulay et al., 1995)
- F** 0.03 mg/kg BW IM tid prn (Johnson-Delaney, 1996)  
0.3 mg/kg BW PO, SC sid (Johnson-Delaney, 1996)
- Go** 1 mg/kg BW IM, IV once (Ranheim et al., 2002)
- M** 2.5 mg/kg BW SC, IM, try q12h (Flecknell, 1991)
- N** 0.5 mg/kg BW IM sid (Feaser and White, 1992)  
1 mg/kg BW IV bid (Fraser, 1991)  
Prosimians: 0.5 mg/kg BW IM sid (Feaser and White, 1992)  
10 mg/kg BW IM (Borchard et al., 1990)
- R** 1.1 mg/kg BW SC, IM q12h (Flecknell, 1991)  
2.5 mg/kg BW SC, IM (Liles and Flecknell, 1992)
- Rb** 1.1 mg/kg BW SC, IM, try q12h (Liles and Flecknell, 1992)
- Sh** 1 mg/kg BW IM, IV sid for up to 3 days (Ranheim et al., 2002)
- Sw** 2–2.2 mg/kg BW IV, SC up to bid (Laval, 1992)

### Haloperidol

- Bi** 0.2 mg/kg BW (less than 1 kg) PO bid (Rupley, 1997)  
0.15 mg/kg BW (greater than 1 kg) PO sid, bid (Rupley, 1997)  
1–2 mg/kg BW IM q2–3wk (Rupley, 1997)
- Rb** 0.2–0.4 mg/kg BW IM bid (Iglauer et al., 1995)

**Hypnorm**—*See* Fentanyl/fluanisone

**Ibuprofen**

- C 5 mg/kg BW PO q24h (Haskins, 1987)  
 D 10 mg/kg BW PO q24–48h (Jenkins, 1987)  
 5 mg/kg BW PO q24h (Haskins, 1987)  
 Gp 10 mg/kg BW IM, try q4h (Flecknell, 1991)  
 M 7.5 mg/kg BW PO (Jenkins, 1987)  
 7.5 mg/kg BW PO, try q4h (Flecknell, 1991)  
 30 mg/kg BW PO (Liles and Flecknell, 1992)  
 40 mg/kg BW PO as 0.2 mg/ml drinking water (Hayes et al., 2000)  
 R 10–30 mg/kg BW PO (Jenkins, 1987)  
 10–30 mg/kg BW PO, try q4h (Flecknell, 1991)  
 15 mg/kg BW PO (Flecknell, 1996)  
 Rb 10–20 mg/kg BW IV, try q4h (Flecknell, 1991)

**Indomethacin**

- Gp 8.8 mg/kg BW PO (Albengres et al., 1988)  
 M 1 mg/kg BW PO (Liles and Flecknell, 1992)  
 R 2 mg/kg BW PO (Liles and Flecknell, 1992)  
 Rb 12.5 mg/kg BW PO (Keller et al., 1988)

**Ketamine**

- Bi *See under Anesthetics*  
 C 10–30 mg/kg BW IM, IV (Kinsell, 1986)  
 D 2 µg/kg BW/min constant infusion for 18h (Wagner et al., 2002)  
 F 10–20 mg/kg BW IM (Morrisey et al., 1996)  
 20–30 mg/kg BW IM (Flecknell, 1996)  
 Gp 25–30 mg/kg BW IM (Bauck, 1989)  
 22–64 mg/kg BW IP (Sander, 1992)  
 H 60 mg/kg BW IM (Bauck, 1989)  
 N 5–40 mg/kg BW IM (Holmes, 1984)  
 Rb 30 mg/kg BW IM (Bauck, 1989)

**Ketamine and medetomidine (respectively)**

- Bi** 1.5–2 mg/kg BW IM and 60–85 µg/kg BW IM (Joint Working Group, 2001a)
- Gp** 40 mg/kg BW IM, SC and 500 µg/kg BW IM, SC (Arnemo et al., 2002)

**Ketoprofen**

- Bi** 5–10 mg/kg BW IM (Joint Working Group, 2001a)
- Bo** 3 mg/kg BW IM, IV sid for up to 3 days (Ranheim et al., 2002)
- C** 1–2 mg/kg BW IM, IV, SC sid (Hellyer and Gaynor, 1998)  
1 mg/kg BW PO after first 24 h following injection (Hellyer and Gaynor, 1998)  
2 mg/kg BW PO initially, then 1 mg/kg BW/d maintenance (Powell and Lappin, 2001)
- D** 2 mg/kg BW IM (Pibarot et al., 1997)
- Go** 3 mg/kg BW IM, IV for up to 3 days (Ranheim et al., 2002)
- R** 5 mg/kg BW SC (Roughan and Flecknell, 2001)
- Rb** 1 mg/kg BW IM (Perrin et al., 1990)  
3 mg/kg BW IM (Flecknell, 1996)
- Sh** 1 mg/kg BW IM, IV sid for up to 3 days (Ranheim et al., 2002)
- Sw** 3 mg/kg BW IM sid for up to 3 days (Ranheim et al., 2002)

**Ketoprofen and oxymorphone (respectively)**

- D** 2 mg/kg BW IM and 0.05 mg/kg BW IM (Pibarot et al., 1997)

**Ketorolac**

- N** 1 mg/kg BW IM load, then 0.75 mg/kg qid (Platt)

### Meclofenamic acid

- C 2.2 mg/kg BW PO q24h (Haskins, 1987)
- D 0.5–1 mg/kg BW PO sid in food, then qod for maintenance (Boulay et al., 1995)  
2.2 mg/kg BW PO q24h (Haskins, 1987)

**Note:** Test dosage: 0.5 mg/lb sid for 5 days. If therapeutic results achieved, wait until signs exacerbate. Then drop dosage to 0.5 mg/lb qod until achieve signs of remission. Then drop to 0.5 mg/lb every third day for 1 week. If signs still remitted, drop dosage to 0.5 mg/lb every fourth day. If signs still remitted, drop dosage to 0.5 mg/lb every fifth day. When signs show exacerbation, back up one step and maintain that dosage level (Kinsell, 1986).

### Medetomidine

- Bo 10 µg/kg BW IV (Dunlop and Hoyt, 1997)  
5–30 µg/kg BW IM (Arnemo et al., 2002)
- C 10–40 µg/kg BW IV (Ko et al., 1997)  
40–80 µg/kg BW IM (Ko et al., 1997)  
50–150 µg/kg BW IM (Arnemo et al., 2002)
- D 10–20 µg/kg BW IV (Ko et al., 1997)  
30–40 µg/kg BW IM (Ko et al., 1997)  
100–800 µg/kg BW IM, IV, SC (Flecknell, 1996)  
10–80 µg/kg IM, IV (Arnemo et al., 2002)
- F 80 µg/kg BW IM (Ko et al., 1997)  
80–200 µg/kg BW IM, SC (Cantwell, 2001)
- G 100–200 µg/kg BW IP, SC (Cantwell, 2001)
- Go 25 µg/kg BW IM (Flecknell, 1996)  
10 µg/kg BW IV (Dunlop and Hoyt, 1997)  
5–20 µg/kg BW IM (Arnemo et al., 2002)
- Gp 500 µg/kg BW SC (Cantwell, 2001)
- H 100 µg/kg BW IP, SC (Cantwell, 2001)

- M 30–100 µg/kg BW SC (Flecknell, 1996)
- N 50–100 µg/kg BW IM (Horne, 2001)
- R 30–100 µg/kg BW IP, SC (Flecknell, 1996)  
100–300 µg/kg BW SC (Arnemo et al., 2002)
- Rb 100–500 µg/kg BW IM, SC (Flecknell, 1996)  
300–500 µg/kg BW SC (Aeschbacher, 1995)  
250 µg/kg BW IM (Ko et al., 1992)
- Sh 25 µg/kg BW IM (Flecknell, 1996)  
10 µg/kg BW IV (Dunlop and Hoyt, 1997)  
5–30 µg/kg BW IM (Arnemo et al., 2002)
- Sw 80 µg/kg BW IM (Arnemo et al., 2002)

### Medetomidine and butorphanol (respectively)

- C 40–50 µg/kg BW IM and 400 µg/kg BW IM (Arnemo et al., 2002)
- D 10–25 µg/kg BW IM and 100 µg/kg BW IM (Arnemo et al., 2002)
- Sw 40 µg/kg BW IM and 100 µg/kg BW IM (Arnemo et al., 2002)

### Meloxicam

- Bo 0.5 mg/kg BW IV, SC once (Ranheim et al., 2002)
- C 0.2 mg/kg BW SC once (Ranheim et al., 2002)
- D 0.2 mg/kg BW IV, SC first day, then 0.1 mg/kg BW IV SC sid (Ranheim et al., 2002)

### Meperidine

- C 2–10 mg/kg BW SC, IM q2h (Jenkins, 1987)  
2–4 mg/kg BW IM, SC (Kinsell, 1986)
- Ch 1–2 mg/kg BW IM, SC (Johnson-Delaney, 1996)
- D 2–10 mg/kg BW SC, IM q2–3h (Jenkins, 1987)  
6–10 mg/kg BW IM, SC (Kinsell, 1986)

- F 5–10 mg/kg BW IM, SC q2–4h (Flecknell, 1996)
- Go 2–10 mg/kg BW SC, IM (Swindle and Adams, 1988)
- Gp 20 mg/kg BW SC, IM q2–3h (Jenkins, 1987)  
10–20 mg/kg BW SC, IM q2–3h (Flecknell, 1991)
- H 20 mg/kg BW SC, IM q2–3h (Jenkins, 1987)
- M 20 mg/kg BW SC, IM q2–3h (Jenkins, 1987)  
10–20 mg/kg BW SC, IM q2–3h (Flecknell, 1991)  
20–40 mg/kg BW IP (Clifford, 1984)  
60 mg/kg BW IM (Hughes, 1981)
- N 2–4 mg/kg BW IM q3–4h (Jenkins, 1987)  
11 mg/kg BW IM (CCAC, 1984)
- R 20 mg/kg BW SC, IM q2–3h (Jenkins, 1987)  
10–20 mg/kg BW SC, IM q2–3h (Flecknell, 1991)
- Rb 10 mg/kg BW SC, IM q2–3h (Jenkins, 1987)  
10–20 mg/kg BW SC, IM q2–3h (Flecknell, 1991)
- Sh 2–10 mg/kg BW SC, IM (Swindle and Adams, 1988)  
2 mg/kg BW IM, IV q2–4h (Flecknell, 1996)
- Sw 2 mg/kg BW IM, IV q2–4h (Flecknell, 1996)  
4–10 mg/kg BW IM (Swindle and Adams, 1988)

### Metamizole—See Dipyrone

### Methadone

- D 0.1–0.4 mg/kg BW IM q3–6h (Ranheim et al., 2002)
- Gp 3–6 mg/kg BW SC (Jenkins, 1987)
- H 3–6 mg/kg BW SC (Jenkins, 1987)

### Midazolam

- Bi Quail: 6 mg/kg BW IM (Day and Boge, 1996)
- Bo 0.4–1.3 mg/kg BW IV (Dunlop and Hoyt, 1997)
- F 0.5–3 mg/kg BW IM, SC (Cantwell, 2001)

- Go** 0.5 mg/kg BW IV (Flecknell, 1996)  
0.4–1.3 mg/kg BW IV (Dunlop and Hoyt, 1997)
- M** 5 mg/kg BW IM, IP (Flecknell, 1996)
- N** 0.05–0.15 mg/kg BW IM, IV (Horne, 2001)
- R** 2 mg/kg BW IV (Flecknell, 1987)  
4 mg/kg BW IM, IP (Flecknell, 1987)  
5 mg/kg BW IP (Flecknell, 1996)
- Rb** 2 mg/kg BW IV (Flecknell, 1987)  
2 mg/kg BW intranasally (Robertson and Eberhart, 1994)  
4 mg/kg BW IM, IP (Flecknell, 1987)  
0.5–2 mg/kg BW IM, IP, IV (Flecknell, 1996)
- Sh** 0.4–1.3 mg/kg BW IV (Dunlop and Hoyt, 1997)
- Sw** 0.5 mg/kg BW IM (Goodrich et al., 2001)

### Midazolam and ketamine (respectively)

- C** 5–10 mg/kg BW IM and 0.2 mg/kg BW IM (Mama, 1998)

### Midazolam and oxymorphone (respectively)

- D** 0.05 mg/lb BW IM and 0.025–0.1 mg/lb BW IM for induction (Ko et al., 1994)

### Morphine

- C** 0.1 mg/kg BW SC, IM q4–6h (Flecknell, 1985; Jenkins, 1987)  
0.1 mg/kg BW IM, SC q6–7h; use with caution (Kinsell, 1986)
- D** 0.25–5.0 mg/kg BW IM, SC q4–6h (Flecknell, 1985; Jenkins, 1987)  
0.1 mg/kg BW of preservative-free solution (in 0.9% saline) given epidurally; give 0.3 ml/kg BW not to exceed 6 ml (Carroll, 1996)



- 0.3–3 mg/kg BW q8–12h PO of sustained release preparation  
(Watson and Lucroy, 2002)
- F 0.5–5 mg/kg BW IM, SC qid (Flecknell, 1996)
- Gp 10 mg/kg BW SC, IM q2–4h (Flecknell, 1985; Jenkins, 1987)  
2–5 mg/kg BW SC, IM q4h (Flecknell, 1991)
- H 10 mg/kg BW SC, IM q2–4h (Jenkins, 1987)
- M 10 mg/kg BW SC q2–4h (Flecknell, 1985; Jenkins, 1987)  
2–5 mg/kg BW SC, hourly (Flecknell, 1991)
- N 1–2 mg/kg BW SC q4h (Flecknell, 1985; Jenkins, 1987)  
3 mg/kg BW SC (Domino et al., 1969)
- R 10 mg/kg BW SC q2–4h (Flecknell, 1985; Jenkins, 1987)  
2–5 mg/kg BW SC, hourly (Flecknell, 1991)
- Rb 5 mg/kg BW SC, IM q2–4h (Flecknell, 1985; Jenkins, 1987)  
2–5 mg/kg BW SC, IM q2–4h (Flecknell, 1991)
- Sh 0.2–0.5 mg/kg BW IM q4h (Flecknell, 1996)
- Sw 0.2–0.9 mg/kg BW SC (Swindle and Adams, 1988)

### Morphine and acepromazine (respectively)

- C 0.2–0.5 mg/kg BW IM and 0.02–0.05 mg/kg BW IM, IV  
(Raffe, 1995)
- D 0.05–1 mg/lb BW IM and 0.025–0.1 mg/lb (maximum 3 mg) BW IM for induction (Ko et al., 1994)  
0.5–1.5 mg/kg BW IM and 0.02–0.1 mg/kg BW IM, IV  
(Raffe, 1995)

### Nalbuphine

- C 1.5–3 mg/kg BW IV q3h (Flecknell, 1996)
- D 0.5–2.0 mg/kg BW SC, IM, IV q3–8h (Jenkins, 1987)
- G 4 mg/kg BW IP, SC (Flecknell, 1996)
- Gp 1–2 mg/kg BW IM, IP, IV (Flecknell, 1996)  
1 mg/kg BW IP, SC (Flecknell, 1996)

- H 2 mg/kg BW SC (Flecknell, 1996)
- M 4–8 mg/kg BW IM q4h (Flecknell, 1989)  
4 mg/kg BW IP, SC (Flecknell, 1996)
- R 2–5 mg/kg BW IM q4h (Flecknell, 1989)  
1–2 mg/kg BW IM q3h (Flecknell, 1991)  
0.1 mg/kg BW IV (Flecknell, 1996)  
1 mg/kg BW IP, SC (Flecknell, 1996)
- Rb 1–2 mg/kg BW IV q4–5h (Flecknell, 1989)  
1 mg/kg BW IP, SC (Flecknell, 1996)  
0.1 mg/kg BW IV (Flecknell, 1996)
- Sh 1 mg/kg SC q2–3h (Flecknell, 1989)

### **Nalbuphine and xylazine (respectively)**

- D 0.5 mg/kg BW SC and 0.5 mg/kg BW SC (Lester et al., 2003)

### **Naproxen**

- D 5 mg/kg BW loading dose, then 1.2–2.8 mg/kg BW PO q24h (Jenkins, 1987)  
5 mg/kg BW PO sid, then 2 mg/kg BW PO qod are common but not recommended (high ulcerogenic potential and narrow margin of safety) (Boulay et al., 1995)
- Gp 14.9 mg/kg BW PO (Albengres et al., 1988)
- N 10 mg/kg BW PO q12h (Junge et al., 1992)
- R 14.5 mg/kg BW PO (Borchard et al., 1990)

### **Oxymorphone**

- C 0.4–1.5 mg/kg BW SC, IM, IV (Jenkins, 1987)  
0.2 mg/kg BW IM, IV, SC (Short, 1997)
- D 0.22 mg/kg BW SC, IM, IV (Jenkins, 1987)  
0.1 mg/kg of preservative-free solution (in 0.9% saline) given epidurally; give 0.3 ml/kg BW not to exceed 6 ml (Carroll, 1996)

- F 0.05–0.2 mg/kg BW IM, IV, SC (Cantwell, 2001)  
G 0.15 mg/kg BW IM (Trim et al., 1987)  
H 0.15 mg/kg BW IM (Trim et al., 1987)  
M 0.15 mg/kg BW IM (Trim et al., 1987)  
N 0.15 mg/kg BW SC, IM, IV in Old World monkeys (Rosenberg, 1991)  
0.075 mg/kg BW SC, IM, IV in New World monkeys (Rosenberg, 1991)  
0.03–0.2 mg/kg BW IM, IV, SC q3–4h (Horne, 2001)  
R 0.15 mg/kg BW IM (Trim et al., 1987)  
Rb 0.1–0.2 mg/kg BW IM, IV (Cantwell, 2001)  
Sw 0.15 mg/kg BW IM (Swindle and Adams, 1988)

### **Oxymorphone and acepromazine (respectively)**

- C 0.05–0.15 mg/kg BW IM, IV and 0.02–0.05 mg/kg BW IM, IV (Raffe, 1995)  
D 0.1–0.2 mg/kg BW IM, IV and 0.02–0.1 mg/kg BW IM, IV (Raffe, 1995)

### **Pentazocine**

- C 2–3 mg/kg BW SC, IM, IV q4h (Jenkins, 1987)  
8 mg/kg BW IP q4h (Flecknell, 1985)  
1–3 mg/kg BW SC, IM, IV; IV duration 2–4 h (Kinsell, 1986)  
D 2–3 mg/kg BW IM q4h (Flecknell, 1985; Jenkins, 1987)  
15 mg/kg BW PO q8h (Jenkins, 1987)  
1–3 mg/kg BW SC, IM, IV; IV duration 2–4 h (Kinsell, 1986)  
M 10 mg/kg BW SC q3–4h (Flecknell, 1985; Jenkins, 1987)  
10 mg/kg BW SC, hourly (Flecknell, 1991)  
N 2–5 mg/kg BW IM q4h (Flecknell, 1985; Jenkins, 1987)  
R 10 mg/kg BW SC q4h (Flecknell, 1985; Jenkins, 1987)  
10 mg/kg BW SC, hourly (Flecknell, 1991)

- Rb 10–20 mg/kg BW SC, IM q4h (Flecknell, 1985; Jenkins, 1987)  
5 mg/kg BW IV q2–4h (Flecknell, 1991)  
Sw 2–5 mg/kg BW IM q4h (Swindle and Adams, 1988)

### **Pentobarbital sodium**

- C 2–4 mg/kg BW IV for sedation (Kinsell, 1986)  
D 2–4 mg/kg BW IV for sedation (Kinsell, 1986)

### **Perphenazine**

- M 2–4 mg/kg BW PO in drinking water (Carter et al., 2002)

### **Pethidine**

- C 2–4 mg/kg BW q2h (route not stated) (Ranheim et al., 2002)  
D 2–10 mg/kg BW IM q2h (Ranheim et al., 2002)  
Gp 20 mg/kg BW SC, IM q2–3h (Flecknell, 1987)  
M 20 mg/kg BW SC, IM q2–3h (Flecknell, 1987)  
N 2–4 mg/kg BW IM q3–4h (Flecknell, 1987)  
R 20 mg/kg BW SC, IM q2–3h (Flecknell, 1987)  
Rb 10 mg/kg BW SC, IM q2–3h (Flecknell, 1987)  
Sh 2 mg/kg BW IM, IV (Ranheim et al., 2002)  
Sw 2 mg/kg BW IM, IV (Ranheim et al., 2002)

### **Phenacetin**

- M 200 mg/kg BW PO q4h (Flecknell, 1987)  
R 100 mg/kg BW PO q4h (Flecknell, 1987)

### **Phenylbutazone**

- C 15 mg/kg BW IV q8h (Haskins, 1987)  
10–14 mg/kg BW PO q12h (Kinsell, 1986)

- D 15 mg/kg BW IV q8h (Haskins, 1987)  
22 mg/kg BW PO q8h (Haskins, 1987)  
6–7 mg/lb BW PO q8h with maximum dosage of 800 mg per  
day, regardless of weight (Kinsell, 1986)
- Gp 40 mg/kg BW PO (Wilhelmi, 1974)
- M 30 mg/kg BW PO (Liles and Flecknell, 1992)
- R 20 mg/kg BW PO (Liles and Flecknell, 1992)

### Piroxicam

- D 0.3 mg/kg BW PO sid in food, then qod for maintenance  
(Boulay et al., 1995)
- Gp 5.7 mg/kg BW PO (Albengres et al., 1988)
- M 3 mg/kg BW PO (Liles and Flecknell, 1992)
- R 3 mg/kg BW PO (Liles and Flecknell, 1992)
- Rb 0.3 mg/kg BW PO q48h (Flecknell, 1996)

### Romifidine

- D 0.08 mg/kg BW IV (Martin et al., 2001)
- Sh 0.05 mg/kg BW IV (Arnemo et al., 2002)

### Telazol—*See* Tiletamine/zolazepam

### Tepoxaline (also known as Tepoxalin)

- D 10 mg/kg BW PO sid (Ranheim et al., 2002)

### Tiletamine/zolazepam (Telazol)

**Note:** We recommend that users obtain the reference by Schobert, 1987, for the use of Telazol in 52 primate species, 21 cat species, 10 bear species, 8 dog species, 13 members of the Viverridae family, 9 reptile species, 10 species of the

Bovidae family, 33 species of the Cervidae family, 36 bird species, and a table of various miscellaneous species. Not recommended in rabbits.

F 12 mg/kg BW IM (Morrisey et al., 1996)

### **Tiletamine/zolazepam and xylazine (respectively)**

H 20 mg/kg BW IP and 10 mg/kg BW IP (Forsythe et al., 1992)

### **Tramadol**

D 1–3 mg/kg BW PO bid (Editor, Vet Forum, 2003)

### **Vedaprofen**

D 0.5 mg/kg BW PO sid for at least 3 days (Ranheim et al., 2002)

### **Xylazine**

- Bi Used in combination with ketamine
- Bo 0.02–0.15 mg/kg BW IV (Dunlop and Hoyt, 1997)  
0.05–0.3 mg/kg BW IM, SC (Dunlop and Hoyt, 1997)
- C 0.5 mg/lb BW IV (Kinsell, 1986)  
1 mg/lb BW IM, SC (Kinsell, 1986)  
1–3 mg/kg BW IM (Arnemo et al., 2002)  
0.5–1.5 mg/kg BW IV (Arnemo et al., 2002)
- D 0.5 mg/lb BW IV (Kinsell, 1986)  
1 mg/lb BW IM, SC (Kinsell, 1986)  
1–3 mg/kg BW IM (Arnemo et al., 2002)  
0.5–1.5 mg/kg BW IV (Arnemo et al., 2002)
- F 1–2 mg/kg BW IM, SC (Cantwell, 2001)  
4–6 mg/kg BW SC (Arnemo et al., 2002)

- Go** 0.05–1 mg/kg BW IM (Swindle and Adams, 1988); however,  
this is considered unpredictable when given IM  
0.01 mg/kg BW IV (NCSU, 1987)  
0.02–0.15 mg/kg BW IV (Dunlop and Hoyt, 1997)  
0.05–0.3 mg/kg BW IM, SC (Dunlop and Hoyt, 1997)
- Gp** 3–5 mg/kg BW IM (Harkness and Wagner, 1983)  
5 mg/kg BW IP (Arnemo et al., 2002)
- H** 4 mg/kg BW IM (Bauck, 1989)  
10 mg/kg BW IP (Arnemo et al., 2002)
- M** 4–8 mg/kg BW IM (Harkness and Wagner, 1983)  
10 mg/kg BW IP (Flecknell, 1987)
- N** 1–2 mg/kg BW IM (Green, 1982; CCAC, 1984)
- R** 4–8 mg/kg BW IM (Harkness and Wagner, 1983)  
1–3 mg/kg BW IM (Flecknell, 1987)  
10 mg/kg BW IP (Arnemo et al., 2002)
- Rb** 3–5 mg/kg BW IM (Harkness and Wagner, 1983)  
5 mg/kg BW IM (Hughes, 1981)  
1–3 mg/kg BW IM (Flecknell, 1987)  
1–5 mg/kg BW IM, SC (Arnemo et al., 2002)
- Sh** 0.05–1 mg/kg BW IM (Swindle and Adams, 1988)  
0.1–0.15 mg/kg BW slow IV (NCSU, 1987)  
0.02–0.15 mg/kg BW IV (Dunlop and Hoyt, 1997)  
0.05–0.3 mg/kg BW IM, SC (Dunlop and Hoyt, 1997)  
5 mg total dose IM followed by 2 mg/hr infusion (Grant et al., 2001)  
0.1–0.3 mg/kg BW IM (Arnemo et al., 2002)
- Sw** 10 mg/kg BW IM (Swindle and Adams, 1988)

### **Xylazine and butorphanol (respectively)**

- D** 0.25–0.5 mg/lb BW IM and 0.05–0.25 mg/lb BW IM for induction (Ko et al., 1994)

**Xylazine and methadone (respectively)**

- D 0.4 mg/kg BW IM, SC and 0.4 mg/kg BW IM, SC (Arnemo et al., 2002)

**Xylazine and morphine (respectively)**

- D 0.25–0.5 mg/lb BW IM and 0.05–1 mg/lb BW IM for induction (Ko et al., 1994)

**Xylazine and oxymorphone (respectively)**

- D 0.25–0.5 mg/lb BW IM and 0.025–0.1 mg/lb BW IM for induction (Ko et al., 1994)