

TABLE 5.9 Suggested Dose Rates for Opioid Analgesics in Laboratory Animals (smaller species).

Drug	Mouse	Rat	Guinea pig	Rabbit	Ferret
Buprenorphine	0.05–0.1 mg/kg sc 12 hourly	0.01–0.05 mg/kg sc or iv, 8–12 hourly 0.1–0.25 mg/kg per os, 8–12 hourly	0.05 mg/kg sc, 8–12 hourly	0.01–0.05 mg/kg sc or iv, 8–12 hourly	0.01–0.03 mg/kg iv, im or sc, 8– 12 hourly
Buprenorphine extended-release*	2.5ml/kg (3.35mg/kg) can be repeated after 3 days	0.5ml/kg (0.65mg/kg) can be repeated after 3 days	-	-	-
Butorphanol	1–2 mg/kg sc, 4 hourly	1–2 mg/kg sc, 4 hourly	1–2 mg/kg sc, 4 hourly	0.1 2 0.5 mg/kg iv, 4 hourly	0.4 mg/kg im, 4– 6 hourly
Hydromorphone	–	–	–	0.1–0.2 mg/kg ? 6–8 hourly	0.1–0.2 mg/kg ?6– 8 hourly
Morphine	2.5 mg/kg sc, 2– 4 hourly	2.5 mg/kg sc, 2– 4 hourly	2–5 mg/kg sc or im, 4 hourly	2–5 mg/kg sc or im, 2– 4 hourly	0.5–2 mg/kg im or sc, 6 hourly
Nalbuphine	2–4 mg/kg im ?4 hourly	1–2 mg/kg im, 3 hourly	1–2 mg/kg iv, ip or im	1–2 mg/kg iv, 4–5 hourly	–
Oxymorphone	0.2–0.5 mg/kg sc ?4 hourly	0.2–0.5 mg/kg sc ?4 hourly	0.2–0.5 mg/kg sc ? 4 hourly	0.05–0.2 mg/kg sc ?6– 8 hourly	0.05–0.2 mg/kg sc ?6–8 hourly
Pentazocine	5–10 mg/kg sc 3– 4 hourly	5–10 mg/kg sc, 3– 4 hourly	–	5–10 mg/kg sc, im or iv, 4 hourly	–
Pethidine (Meperidine)	10–20 /kg sc or im, 2–3 hourly	10–20 mg/kg sc or im, 2–3 hourly	10–20 mg/kg sc or im, 2– 3 hourly	5–10 mg/kg sc or im, 2–3 hourly	5–10 mg/kg im or sc, 2–4 hourly
Tramadol	5 mg/kg sc, ip ?	5 mg/kg sc, ip ?	–	–	–

*Note that considerable individual and strain variation in response may be encountered, and that it is therefore essential to assess the analgesic effect in each animal.
? 5 duration of action uncertain.*

**Manufacturer recommended dose for “Ethiq X R” see text for recommendations for other species.*