

PHARMACOLOGY OF NON-OPIATE ANALGESICS

NON-OPIATES (Route)	ONSET (I.V)	ELIMINATION- HALF LIFE	DOSING	SIDE EFFECTS AND OTHER INFORMATION
KETAMINE (I.V)	30-40 sec	2-3 hr	Loading dose 0.1–0.5 mg/kg IV followed by 0.05–0.4 mg/kg/hr	Can cause acute toler- ance to opioids. May cause hallu- cinations and psychological disturbances.
ACETAMINOPHEN (PO, PR)	30- 60 min variable	2-4 hr	325–1000 mg every 4–6 hr; max dose ≤ 4 g/day)	May be contraindicat- ed with significant hepatic impairment
ACETAMINOPHEN (I.V)	5-10 mins	2 hr	650 mg IV every 4 hrs – 1000 mg IV every 6 hr; max dose ≤ 4 g/day	
KETOROLAC (IM, I.V)	10 mins	2.4 - 8.6 hr	30 mg IM/IV, then 15–30 mg IM/IV every 6 hr up to 5 days; max dose = 120 mg/day × 5 days	Should not be used in patients with renal dysfunction, G.I. bleeding, deranged clotting, con- comitant angio- tensin convert- ing enzyme inhibitor thera- py, congestive heart failure, cirrhosis, asthma and perioperative patients of cardiac bypass surgery.



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NON-OPIATES (Route)	ONSET (I.V)	ELIMINATION- HALF LIFE	DOSING	SIDE EFFECTS AND OTHER INFORMATION
IBUPROFEN (I.V)	N/A	2.2 - 2.4 hr	400–800 mg IV every 6 hr infused over > 30 mins; max dose = 3.2 g/day	As Ketorolac
IBUPROFEN (PO)	25 mins	1.8 - 2.5 hr	400 mg PO every 4 hrs; max dose = 2.4 g/day	As Ketorolac
GABAPENTIN (PO)	N/A	5-7 hr	Starting dose = 100 mg PO three times daily; mainte- nance dose = 900–3600 mg/day in 3 divided doses	Side effects: sedation, dizzi- ness, confusion ataxia. Dose should be adjusted in renal failure. Abrupt discon- tinuation can be associated with drug withdrawal syndrome, seizures.
CARBAMAZEPINE IMMEDIATE RELEASE (PO)	4- 5 hr	25- 65 hrs initially then 12- 17 hr	Starting dose = 50–100 mg PO bid; maintenance dose = 100–200 mg every 4–6 hr; max dose = 1200 mg/day	Side Effects: Side effects: (common) nystagmus, dizziness, diplopia, light- headedness, lethargy; (rare) aplastic anae- mia, and agran- ulocytosis; Stevens–John- son syndrome or toxic epider- mal necrolysis.

