

Metabolic Pathway from Drug Elimination

DRUG	OPIOID CLASS	MAJOR METABOLIC PATHWAY
Morphine	Phenanthrene (w/-OH)	Glucuronidation
Hydromorphone	Phenanthrene	Glucuronidation
Codeine	Phenanthrene (w/ -OH)	Demethylation, glucuronidation
Levorphanol	Phenanthrene	Glucuronidation
Oxycodone	Phenanthrene	Demethylation, glucuronidation, keto-reduction, minor 3A4/2D6
Oxymorphone	Phenanthrene	Glucuronidation
Meperidine	Phenylpiperidine	Oxidation, hydrolysis, demethylation, glucuronidation
Fentanyl	Phenylpiperidine	Oxidation, hydrolysis, minor 3A4
Alfentanil	Phenylpiperidine	Oxidation
Sufentanil	Phenylpiperidine	Dealkylation, demethylation
Methadone	Diphenylheptane	Demethylation, 3A4 substrate (significant)