

Table: Considerations in the Selection of A Specific Opioid for Pain Management

Indication	Desirable Drug Characteristics	Specific Classes/Drugs	Comment
For PRN use in outpatient treatment of acute pain	Short-acting, rapid onset, non-injectable formulation	Mixed agonist-antagonists <ul style="list-style-type: none"> • pentazocine • butorphanol Pure agonists plus acetaminophen, aspirin, or ibuprofen <ul style="list-style-type: none"> • codeine • hydrocodone • dihydrocodeine • oxycodone Pure single-entity agonists <ul style="list-style-type: none"> • morphine • hydromorphone • oxycodone • oxymorphone • codeine • meperidine Other centrally-acting analgesics <ul style="list-style-type: none"> • tramadol 	Pentazocine and butorphanol have ceiling doses for analgesia and for respiratory depression, and a likelihood of psychotomimetic side effects greater than the pure mu agonists. Combination products or tramadol are commonly used first, although there is no evidence that this is a more effective strategy, than the use of a single-entity drug. Combination drug use is limited by the nonopioid; acetaminophen dose should not exceed 4 gm (and less in patients with hepatopathy or high level of alcohol use). Meperidine has poor oral potency and a toxic metabolite; it should not be used if patient has impaired renal function. Oxymorphone now in a rectal formulation; an oral form is in development.
For PRN use when starting therapy in an opioid-naïve patient with chronic pain who is expected to transition to more regular use, or a long-acting drug	Short-acting, rapid onset, non-injectable formulation, pure agonist	As above, without the agonist-antagonists	Consider using a drug, such as oxycodone or morphine, that can be easily transitioned to a long-acting formulation of the same drug.
For PRN use in combination with a long-acting drug to treat breakthrough pain	Short-acting, rapid onset, non-injectable formulation, pure agonist	As above, without the agonist-antagonists, plus oral transmucosal fentanyl citrate (OTFC)	The use of a short-acting PRN drug in addition to a long-acting opioid is called a “rescue” dose. If a combination drug is used, must monitor the intake of the nonopioid component to avoid toxicity. OTFC has a faster onset of action than oral formulations.
For fixed scheduled dosing to manage chronic pain	Pure agonists, single-entity drugs, long-acting formulations are more convenient	Pure single-entity agonists <ul style="list-style-type: none"> • morphine • hydromorphone • oxycodone • oxymorphone Other <ul style="list-style-type: none"> • tramadol Modified-release opioids <ul style="list-style-type: none"> • morphine • oxycodone • fentanyl Long half-life drugs <ul style="list-style-type: none"> • levorphanol • methadone 	Long-acting formulations are preferred. Modified-release fentanyl is a transdermal system. Modified-release oral hydromorphone and oxymorphone are in development. Morphine has active metabolites that accumulate in setting of renal failure; may not be a preferred drug if renal function is changing. Although levorphanol (14-16 hours) and methadone (12->120 hours) have long half-lives, multiple daily dosing is usually required. Safe use of methadone requires knowledge of its variable kinetics and potency.