**Brands**
- Selincro
  
  *see index for additional brand names*

**Generic?**
Yes (not for oral)

**Class**
- Neuroscience-based Nomenclature: opioid receptor antagonist (O-RAn)
- Alcohol dependence treatment; mu and delta opioid receptor antagonist and kappa opioid receptor partial agonist

**Commonly Prescribed for**
(bold for FDA approved)
- Reduction of alcohol consumption in patients with alcohol dependence who have a high drinking risk level

**How the Drug Works**
- Reduces alcohol consumption through modulation of opioid systems, thereby reducing the reinforcing effects of alcohol
- Blockade of mu opioid receptors prevents the pleasurable effects of alcohol, whereas modulation of the kappa opioid receptors may reduce dysphoria associated with alcohol withdrawal

**How Long Until It Works**
- Can begin working immediately and can be used as needed

**If It Works**
- Reduces alcohol consumption by diminishing reinforcing properties of alcohol (rewarding effects, cravings)

**If It Doesn’t Work**
- Evaluate for and address contributing factors
- Consider switching to another agent

**Best Augmenting Combos for Partial Response or Treatment Resistance**
- Augmentation with behavioral, educational, and/or supportive therapy in groups or as an individual is key to successful treatment

**Tests**
- None for healthy individuals, although baseline liver function testing, usually obtained anyway for managing alcohol dependence, may be useful

**SIDE EFFECTS**

**How Drug Causes Side Effects**
- Blockade of mu opioid receptors

**Notable Side Effects**
- Nausea, vomiting
- Dizziness, insomnia, headache

**Life-Threatening or Dangerous Side Effects**
- Confusion, rare hallucinations

**Weight Gain**
- Reported but not expected
- May cause weight loss

**Sedation**
- Occurs in significant minority

**What to Do About Side Effects**
- Wait
- Switch to another agent

**Best Augmenting Agents for Side Effects**
- Switching to another agent may be more effective since most side effects cannot be improved with an augmenting agent

**DOSING AND USE**

**Usual Dosage Range**
- 18 mg/day as needed

**Dosage Forms**
- Tablet 18 mg

**How to Dose**
- After an initial visit, patient should keep a record of alcohol consumption for 2 weeks;
patients who continue to have a high drinking risk level during those 2 weeks can be initiated on nalmefene
• Nalmefene is taken as needed: on each day the patient perceives a risk of drinking alcohol, 18 mg should be taken 1–2 hours before the anticipated time of drinking
• If the patient has already begun drinking, 18 mg should be taken as soon as possible
• Maximum dose is 18 mg/day
• Patient should be opioid free for 7–10 days prior to initiating treatment

Dosing Tips
• Can be taken with or without food
• Providing educational materials and counseling in combination with nalmefene treatment can increase the chances of success
• Nalmefene tablet should not be chewed or crushed, as nalmefene may cause skin sensitization when in direct contact with skin

Overdose
• Limited experience

Long-Term Use
• Has been evaluated in trials for up to 1 year

Habit Forming
• No

How to Stop
• Taper not necessary

Pharmacokinetics
• Extensively metabolized by the liver
• Terminal half-life is 12.5 hours

Drug Interactions
• Increased depressive effects, particularly respiratory depression, have occurred when taken with other CNS depressants; consider dose reduction of either or both when taken concomitantly
• UGT2B7 inhibitors (e.g., diclofenac, fluconazole, medroxyprogesterone acetate, meclofenamic acid) may increase nalmefene levels
• UGT2B7 inducers (e.g., dexamethasone, phenobarbital, rifampicin, omeprazole) may decrease nalmefene levels

Other Warnings/Precautions
• To prevent withdrawal in patients dependent on opioids, patients must be opioid free for at least 7–10 days prior to initiating treatment
• Individuals receiving nalmefene who require pain management with opioid analgesia may need a higher dose than usual and may experience deeper and more prolonged respiratory depression; pain management with non-opioid or rapid-acting opioid analgesics is recommended if possible
• Nalmefene should be temporarily discontinued 1 week prior to anticipated use of opioids (e.g., opioid analgesia during elective surgery)
• Use caution when using products containing opioids (e.g., cough medicines)
• Risk of respiratory depression is increased with concomitant use of CNS depressants

Do Not Use
• If patient is taking opioid analgesics
• If patient is currently dependent on opioids or is in acute opiate withdrawal
• If patient has severe renal or hepatic impairment
• If patient has a recent history of acute alcohol withdrawal syndrome
• If patient has galactose intolerance, Lapp lactase deficiency, or glucose-galactose malabsorption
• If there is a proven allergy to nalmefene

SPECIAL POPULATIONS

Renal Impairment
• Dose adjustment not necessary for mild to moderate impairment
• Not recommended for use in severe impairment

Hepatic Impairment
• Dose adjustment not necessary for mild to moderate impairment
• Not recommended for use in severe impairment
Potential Disadvantages
• Individuals whose goal is immediate abstinence

Primary Target Symptoms
• Alcohol dependence

Pearls
• Nalmefene was originally used as a parenteral agent to reverse the opioid agonist effects of opioid anesthesia or in opioid overdose
• In Europe, nalmefene is approved for reduction of alcohol consumption without previous detoxification
• Nalmefene is intended for patients with the goal of reduced-risk drinking (i.e., 3–4 drinks per day in men, maximum 16 drinks per week; 2–3 drinks per day in women, maximum 12 drinks per week); it has been shown to reduce alcohol consumption on average by 60%
• Reduction in alcohol consumption has been shown to be maintained for 12 years
• There is no clinically reported dose-dependent hepatotoxicity
• Like naltrexone, nalmefene is a mu opioid receptor antagonist; however, nalmefene is also a partial agonist at kappa opioid receptors, which are thought to contribute to the dysphoria and anxiety experienced during alcohol withdrawal
• Nalmefene is unique in that it is taken as needed when the patient perceives a risk of drinking alcohol

Cardiac Impairment
• Not studied

Elderly
• Limited data available

Children and Adolescents
• Safety and efficacy have not been established

Pregnancy
• Controlled studies have not been conducted in pregnant women
• Some animal studies have shown adverse effects
• Pregnant women needing to stop drinking may consider behavioral therapy before pharmacotherapy
• Not generally recommended for use during pregnancy, especially during first trimester

Breast Feeding
• Unknown if nalmefene is secreted in human breast milk, but all psychotropics assumed to be secreted in breast milk
  ✽ Recommended either to discontinue drug or bottle feed

Potential Advantages
• Individuals who are not ready to abstain completely from alcohol

THE ART OF PSYCHOPHARMACOLOGY
NALMEFENE (continued)

Suggested Reading


