# How to Choose the Right Medications for Alcohol Use Disorder

#### Introduction

This fact sheet is specifically for long-term medication treatment to decrease use and to prevent relapse. See the individual medication fact sheets for details on each first- and second-line medication listed here. Other fact sheets focus on medications for alcohol withdrawal.

# **First-Line Treatments**

# Naltrexone (ReVia [oral pill], Vivitrol [monthly injection])

- Mechanism of action: Blocks opioid receptors, reducing the rewarding effect of drinking.
- *Key points:* Usual dose 50 mg daily. First choice for most patients. Well tolerated (main side effect is transient nausea), can be taken as a single daily pill, and can be started while actively drinking. Also available as a oncemonthly injection (Vivitrol); this is especially good for patients with adherence issues, for whom the injection is recommended as first line over the oral tablets. Can be combined with other alcohol use disorder meds and is especially effective when combined with gabapentin.

#### Acamprosate (Campral)

- Mechanism of action: Unclear; may enhance GABA activity.
- *Key points:* Dose is 666 mg three times a day. Second choice after naltrexone. Best for patients who have already achieved abstinence and for patients with liver disease (it does not require hepatic metabolism). Its effect on GABA reduces anxiety in some. Drawbacks: Less compelling efficacy evidence; must take two large pills three times a day.

# **Second-Line Treatments**

#### Gabapentin (Gralise, Horizant, Neurontin)

- Mechanism of action: Unclear; may blunt neuronal hyperexcitability by boosting central GABA.
- *Key points:* Higher dose (1800 mg daily) works better than 900 mg daily. Can be combined with naltrexone, and it augmented the efficacy of naltrexone in one trial. Good for patients with liver disease (it does not require hepatic metabolism). Can also be helpful for patients who have anxiety symptoms. If it is used to manage mild alcohol withdrawal syndrome, then it can be continued for long-term treatment of alcohol use disorder. Drawbacks: Can cause sedation; can be misused for recreational effect; risky in patients with opioid use disorder.

#### Topiramate (Eprontia, Qudexy XR, Topamax, Trokendi XR)

- Mechanism of action: Blocks glutamate, which in turn reduces dopamine, dampening alcohol's reinforcing effect.
- *Key points*: Shown to reduce the number of heavy drinking days. To mitigate side effects, titrate slowly up to 100–150 mg BID over six to eight weeks. Often used at bedtime to minimize side effects. Drawbacks: Cognitive slowing.

#### Disulfiram (Antabuse)

- *Mechanism of action:* Dosed from 250 mg to 500 mg daily. Creates a buildup of acetaldehyde by inhibiting aldehyde dehydrogenase, causing very uncomfortable flushing, headache, tachycardia, nausea, and vomiting if patient consumes alcohol. Disulfiram is an aversive treatment and does not decrease cravings.
- *Key points:* Best for patients who are abstinent, are highly motivated to remain sober, and have caretakers directly observing adherence. Drawbacks: Impulsive patients may drink on disulfiram and risk a reaction; can cause metallic taste; may worsen psychotic symptoms; not good for patients with cardiac disease due to the stress of the alcohol reaction and similarity to heart attack symptoms.

# **Treatments to Consider When Nothing Else Works**

#### Varenicline (Chantix)

- Mechanism of action: Nicotine receptor partial agonist.
- *Key points:* May decrease cravings. Best for patients who smoke and drink; may be more effective in men than women.

#### Ondansetron (Zofran)

- Mechanism of action: 5HT-3 antagonist.
- *Key points:* Works best in those who started drinking at a young age.

