Table 2: Medications and Factors to Consider for Stimulant Use Disorder Treatment in Nonpregnant Adults From the ASAM/AAAP Clinical Practice Guideline on the Management of Stimulant Use Disorder [a]
Note: No medications are approved by the FDA for the treatment of stimulant use disorder.

Medication(s)/Key Citations	**Considerations** [ASAM 2023]
Amphetamine or Methamphetamine Use Disorder	
Mirtazapine [Coffin, et al. 2020; Colfax, et al. 2011]	• May also treat co-occurring depressive disorders • May reduce stimulant-associated sexual risk behaviors in MSM; may reduce insomnia • Adverse effects include weight gain and drowsiness
Injectable XR naltrexone plus XR oral bupropion [b] [Trivedi, et al. 2021; Mooney, et al. 2016]	• May also treat co-occurring AUD, tobacco use, and depression • Injectable XR naltrexone is contraindicated in patients taking opioids or experiencing opioid withdrawal symptoms. For all contraindications, see prescribing information.
Bupropion [b] [Siefried, et al. 2020; Chan(b), et al. 2019]	• Consider for treatment of patients with <18 days use per month; may also treat co-occurring tobacco use or depression • More effective for treatment of cocaine use disorder than amphetamine use disorder
Methylphenidate (MPH) [c] [Siefried, et al. 2020; Lee, et al. 2018]	• Refer patient to an addiction specialist to consider use • Consider for treatment of patients who use ≥10 days per month; may also treat co-occurring ADHD • May require dosing at or above the maximum FDA-approved dose for ADHD treatment
Topiramate [Siefried, et al. 2020; Lee, et al. 2018; Elkashef, et al. 2012]	• May also treat co-occurring AUD • Adverse effects (brain fog, appetite suppression) limit efficacy
Cocaine Use Disorder	
XR mixed amphetamine salts [c] **and topiramate** [Levin, et al. 2020; Tardelli, et al. 2020]	• Refer patient to an addiction specialist to consider use • May also treat co-occurring AUD or ADHD
Sustained-release dextroamphetamine [c] [Nuijten, et al. 2016]	• Refer patient to an addiction specialist to consider use • May also treat co-occurring ADHD and may require dosing at or above the maximum FDA-approved dose for ADHD treatment
Modafinil [c] [Sangroula, et al. 2017; Castells, et al. 2016]	• Refer patient to an addiction specialist to consider use • Avoid in patients with co-occurring AUD or history of pre-existing or substance-induced psychosis • May be particularly helpful in helping a patient achieve abstinence early in treatment or for highly motivated and treatment-adherent patients with frequent use upon treatment initiation
Bupropion [b] [Shoptaw, et al. 2008; Poling, et al. 2006]	• May also treat co-occurring AUD or tobacco use • In 2 RCTs, bupropion combined with CBT or contingency management was superior to placebo for sustained abstinence.
Topiramate [Pearl, et al. 2023; Chan(a), et al. 2019; Baldaçara, et al. 2016; Johnson, et al. 2013]	• May also treat co-occurring AUD • Adverse effects (brain fog, appetite suppression) limit efficacy

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Medication(s)/Key Citations	Considerations [ASAM 2023]

Abbreviations: ADHD, attention-deficit hyperactivity disorder; AUD, alcohol use disorder; ASAM/AAAP, American Society of Addiction Medicine/American Academy of Addiction Psychiatry; CBT, cognitive behavioral therapy; FDA, U.S. Food and Drug Administration; DEA, U.S. Drug Enforcement Agency; MSM, men who have sex with men; RCT, randomized clinical trial; XR, extended-release.

Notes:

a. For treatment considerations in pregnant patients, see ASAM/AAAP Clinical Practice Guideline on the Management of Stimulant Use Disorder > Population-Specific Considerations > Pregnant and Postpartum Patients.
a. Bupropion is a cathinone and can cause a false positive result for amphetamines/methamphetamines [FDA 2025].
b. Although treating stimulant use disorder with psychostimulants is not currently a standardized evidence-based practice, it is legal for professionally licensed, DEA-registered providers to prescribe psychostimulants for this purpose under federal and New York State laws. Referring to an addiction specialist and following the ASAM/AAAP guidelines are recommended.

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