

Substance Use Disorder Medications

Monitoring Panel



Medications for Alcohol Use Disorder



FDA-Approved Medications (Winslow et al., 2016)

- Naltrexone oral (ReVia)
- Naltrexone extended-release injectable (Vivitrol)
- Acamprosate (Campral)
- Disulfiram (Antabuse)



Off-Label Medications (Fischler et al., 2022)

- Topiramate
- pentin
- Gaba



Naltrexone

- Comprehensive metabolic panel
- Liver function tests (critical)
- Urine drug screen (to ensure opioid-free)
- Pregnancy test (if applicable)

Monitoring Baseline

Monitoring



Laboratory Tests

- Opioid use history (must be opioid-free for 7-10 days)
- Liver disease assessment
- Pain condition assessment
- Medication review for interactions
- Injection site assessment (for injectable form)
- Suicide risk assessment
- Motivation assessment



Follow-up Monitoring



Clinical

Assessments

Comprehensive substance use evaluation

Naltrexone Monitoring Timeline 1-2

Weeks Monthly Quarterly

- | | |
|---------------------------|------------------------------|
| • Liver function tests | • Clinical response |
| • LFTs for first 3 months | • Medication adherence |
| • Liver function tests | • Comprehensive reassessment |
| • Side effect evaluation | • Alcohol use assessment |
| | • Continued need evaluation |
| • Injection site reaction | • Injection site assessment |
| | • Side effect review |



Special Monitoring Considerations

Contraindications & Precautions

- **Contraindications:**
 - Current opioid use or acute opioid withdrawal
 - Failed naloxone challenge test
 - Acute hepatitis or liver failure
 - Hypersensitivity to naltrexone
- **Precautions:**
 - Hepatic impairment (ALT/AST >3x ULN)
 - Renal impairment
 - Thrombocytopenia (for injectable form)
 - Coagulation disorders (for injectable form)
 - Concurrent opioid analgesic needs



Acamprosate Monitoring



Baseline Monitoring

Laboratory

Tests .

- Comprehensive metabolic panel
- Renal function tests (critical)

Pregnancy test (if applicable)

Clinical

Assessments .

Comprehensive substance use evaluation

- Renal function assessment •
- Depression/suicidality assessment •
- Medication review for interactions
- Motivation assessment
- Alcohol abstinence status

July
17

Follow-up Monitoring

Ongoing Monitoring

- **1-2 Weeks:**
 - Side effect evaluation
 - Medication adherence
 - Alcohol use assessment
 - Craving assessment
- **Monthly:**
 - Renal function tests (if baseline abnormal)
 - Clinical response assessment
 - Side effect profile
 - Medication adherence
 - Alcohol use assessment
 - Craving assessment
 - Consider psychosocial support adequacy

Quarterly:

- Comprehensive metabolic panel
- Comprehensive substance use reassessment
-
- Side effect review
-
- Continued need evaluation

Special Monitoring Considerations

Contraindications & Precautions

- **Contraindications:**
 - Severe renal impairment ($\text{CrCl} \leq 30 \text{ mL/min}$)
 -
 - Hypersensitivity to acamprosate
- **Precautions:**
 - Moderate renal impairment (dose adjustment required)
 - History of depression or suicidality
 -
 - Elderly patients
- **Dosing in renal impairment:**
 - $\text{CrCl } 30-50 \text{ mL/min}$: 333 mg TID
 - $\text{CrCl} < 30 \text{ mL/min}$: Contraindicated



Disulfiram Monitoring



Baseline Monitoring



Laboratory Tests

- Comprehensive metabolic panel
- Liver function tests (critical)
- Complete blood count
- ECG (if cardiac history)
- Pregnancy test (if applicable)



Clinical

Assessments

- Comprehensive substance use evaluation

- Cardiac assessment

- Neurological examination

- Psychiatric evaluation

- Medication review for interactions

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Alcohol abstinence verification (≥ 12 hours) **(Stokes & Abdijadid, 2022)**

- Understanding of disulfiram reaction

- Motivation and adherence assessment



Follow-up Monitoring

Ongoing Monitoring

1-2 Weeks:

- Liver function tests

Side effect evaluation

-
-
- Medication adherence
-
- Alcohol use assessment
-
- Reinforcement of disulfiram reaction risks
-

Monthly for first 6 months:

- Liver function tests
-
- Complete blood count
-
- Clinical response assessment
-
- Side effect profile
-
- Medication adherence
-
- Alcohol use assessment
-
- Consider supervised administration

Every 3-6 months thereafter:

- Liver function tests
-
- Complete blood count

- Comprehensive substance use reassessment
-
- Side effect review
-
- Continued need evaluation



Special Monitoring Considerations

Contraindications & Precautions

- **Contraindications:**
 - Recent alcohol consumption (<12 hours)
 - Severe cardiac disease
 -
 - Psychosis
 -
 - Severe hepatic impairment
 -
 - Hypersensitivity to disulfiram or thiuram derivatives
- **Precautions:**
 - Hepatic disease
 -
 - Renal impairment
mellitus
 -
 - Diabetes
 -
 - Hypothyroidism
 -
 - Seizure disorders
 -

Peripheral neuropathy

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Disulfiram reaction: Monitor for flushing, throbbing headache, nausea, vomiting, chest pain, palpitations, dyspnea, hypotension, syncope, confusion



Medications for Opioid Use Disorder



FDA-Approved Medications

- Methadone
- Buprenorphine (Subutex)
- Buprenorphine/naloxone (Suboxone, Zubsolv, Bunavail)
- Naltrexone extended-release injectable (Vivitrol)
HIV, hepatitis panel (recommended)



Buprenorphine

Monitoring



Baseline

Monitoring



Laboratory Tests



Follow-up Monitoring

Comprehensive metabolic panel

- Liver function tests
- Urine drug screen
- Pregnancy test (if applicable)
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Clinical Assessments

- Comprehensive substance use evaluation
- COWS score (for induction) 5 to 24 (Kumar et al., 2024)
- Pain assessment
- Psychiatric evaluation
- Medication review for interactions
- Motivation assessment
- Social support evaluation
- Diversion risk assessment

Buprenorphine Monitoring Timeline Weekly

Monthly Quarterly Annually

- | | | |
|----------------------|----------------|---------------------------|
| • UDS | (induction) | • CMP |
| • Dose adjustment | • UDS | • CMP |
| • LFTs (if abnormal) | | • UDS |
| • Side effects | • Adherence | • HIV/HCV testing |
| | • Reassessment | • Comprehensive review |
| | | • Clinical response |
| | | • Psychosocial needs |
| | | • Treatment plan revision |

□ Special Monitoring Considerations

Contraindications & Precautions

- **Contraindications:**
 - Hypersensitivity to buprenorphine or naloxone
- **Precautions:**
 - Hepatic impairment (dose adjustment may be needed)
 - Respiratory disease
 - CNS depression
 -

- QT prolongation risk
 - Adrenal insufficiency
 - Concurrent benzodiazepine or CNS depressant use
- Pregnancy considerations:**
 - Buprenorphine monoproduct preferred over combination product
 - Neonatal abstinence syndrome monitoring needed



Methadone Monitoring



Baseline Monitoring



Laboratory

Tests

- Comprehensive metabolic panel
- Complete blood count
- ECG (QTc interval)
- Urine drug screen
- Pregnancy test (if applicable)
- HIV, hepatitis panel (recommended)



Clinical

Assessments

Comprehensive substance use evaluation

- Cardiac assessment
- Respiratory assessment
- Pain assessment
- Psychiatric evaluation
- Medication review for interactions
- Motivation assessment
- Social support evaluation



Follow-up Monitoring

Ongoing Monitoring

- **Induction phase (daily):**
 - Vital signs
 - Withdrawal symptoms
 - Sedation level
 - Side effects
- **Stabilization phase (weekly):**
 - Urine drug screen
 - Dose adequacy assessment
 - Side effect evaluation
 - Medication adherence
- **Maintenance phase (monthly):**
 - Urine drug screen
 - Clinical response assessment
 - Side effect profile
 - Psychosocial functioning
- **Every 3-12 months:**
 - ECG (especially if dose >100 mg or risk factors)
 -

- Comprehensive metabolic panel
- Complete blood count
- Comprehensive substance use reassessment
-
- Treatment plan review

Special Monitoring Considerations

Contraindications & Precautions

- **Contraindications:**
 - Significant respiratory depression
 - Acute bronchial asthma in unmonitored setting
 -
 - Paralytic ileus
 - QTc >500 ms
- **Precautions:**
 - QTc prolongation risk factors
 - Respiratory disease
 - Hepatic impairment
 - Renal impairment
 - Concurrent CNS depressant use
 - CYP450 interactions (3A4, 2B6, 2D6)

- **Pregnancy considerations:**
 - Considered standard of care for OUD in pregnancy
 - Dose increases often needed in third trimester
 - Neonatal abstinence syndrome monitoring needed

References

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2. American Psychiatric Association. Practice Guideline for the Pharmacological Treatment of Patients With Alcohol Use Disorder 3.
3. Substance Abuse and Mental Health Services Administration. Medications for Opioid Use Disorder: Treatment Improvement Protocol (TIP) 63
4. Substance Abuse and Mental Health Services Administration. Medication for the Treatment of Alcohol Use Disorder: A Brief Guide
5. Veterans Affairs/Department of Defense Clinical Practice Guideline for the Management of Substance Use Disorders

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