Chapter 6: Guidelines for Psychotropic Medications

Psychotropic Medications for Bipolar Disorder
Pharmacotherapy in bipolar disorder includes: a) treatment of acute mood episodes, and b) maintenance treatment to prevent mood episode recurrence. Acute episode treatment includes treatment of a) bipolar depressive episodes, b) bipolar manic episodes, and c) bipolar-mixed episodes. Maintenance treatment includes prevention of recurrent depressive episodes, manic episodes, and mixed episodes, and treatment of subsyndromal depressive and/or manic symptoms.

Mood stabilizing and antipsychotic medications that treat bipolar disorder may address specific phases of acute illness or be used during maintenance treatment (see Table 6.1 for details). For example, lamotrigine is effective in treating acute bipolar depression and as maintenance treatment for preventing recurrent bipolar depressive episodes, but is less effective in treating mixed bipolar disorder episodes.

For many patients, effective treatment includes use of more than one medication, such as the use of lithium and lamotrigine in the acute and maintenance treatment of bipolar depression.

Psychotropic Medications for PTSD
There are several different types of medications used in the treatment of PTSD. They include the following:

- **Antidepressants**, particularly SSRIs, provide significant benefit to people with PTSD. They are considered the first-line treatment for PTSD. SSRIs work by blocking the re-absorption of serotonin thereby increasing the serotonin levels in the brain. Sertraline and paroxetine have been approved by the FDA for the treatment of PTSD. The advantage of using SSRIs to treat PTSD is that they are also used to treat depression and other anxiety disorders, which are often comorbid with PTSD. However, antidepressant monotherapy should generally be avoided in patients with PTSD and comorbid bipolar disorder.

In many cases it is necessary to use more than one medication to treat PTSD. Other medications that are used in the treatment of PTSD include:
- Prazosin (decreases the severity/frequency of nightmares)
- Mood stabilizers (stabilizes swings in mood)

**Antipsychotic medications**
The VA/DoD PTSD Clinical Practice Guideline make the following recommendations regarding the use of atypical antipsychotics:
- Atypical antipsychotics are not recommended as monotherapy for PTSD.
- Risperidone (Risperdal) is contraindicated for use as an adjunctive agent because potential harm (side effects) exceeds benefits.
- There is insufficient evidence to recommend any other atypical antipsychotic as an adjunctive agent for PTSD.
- At this time, atypical antipsychotics are recommended as treatment for co-occurring psychotic symptoms and mood disorders in PTSD.
## Psychotropic Medication Dosing

### Table 6.1. Psychotropic Medication Table

<table>
<thead>
<tr>
<th>Medication</th>
<th>Titration To First Target Dose</th>
<th>Assess Response At</th>
<th>Second Target Dose</th>
<th>Relative Advantages</th>
<th>Relative Disadvantages</th>
<th>Side Effects</th>
<th>Common or Major Drug Interactions</th>
<th>Initial Tests</th>
<th>Monitoring Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quetiapine Seroquel®</td>
<td>Day 1 50mg po once at bedtime</td>
<td>4 weeks after first target dose date</td>
<td>600 mg/day</td>
<td>• FDA approved as monotherapy for Acute Bipolar Depression</td>
<td>• Metabolic side effects increase risk of morbidity and mortality for long term maintenance therapy</td>
<td>• Dry mouth, Hyperglycemia, Hyperlipidemia, Increased appetite</td>
<td>Carbamazepine, Other anti-psychotics</td>
<td>• Pregnancy test as clinically indicated</td>
<td>• Pregnancy test every visit for 6 months after the new antipsychotic is initiated and then quarterly.</td>
</tr>
<tr>
<td></td>
<td>Day 2 100 mg po at bedtime</td>
<td></td>
<td></td>
<td>• FDA approved as monotherapy for Acute Mania</td>
<td>• Effectiveness as monotherapy for Bipolar maintenance is unknown</td>
<td>• Orthostatic hypotension, Sedation, Weight gain although relatively uncommon, can cause tardive dyskinesia</td>
<td></td>
<td>• Fasting plasma glucose level or hemoglobin A1c yearly. If high risk for diabetes also 4 months after starting an antipsychotic</td>
<td>• Fasting plasma glucose level or hemoglobin A1c before initiating a new anti-psychotic</td>
</tr>
<tr>
<td></td>
<td>Day 3+ ↑100 mg/day until initial target dose of 300mg</td>
<td></td>
<td></td>
<td>• Improves sleep, Inexpensive</td>
<td></td>
<td></td>
<td>Sexual function inquiry yearly for evidence of galactorrhea/gynecomastia, menstrual disturbance,</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For more information, please visit [https://sharepoint.washington.edu/uwpsychiatry/SPRIT/Pages/default.aspx](https://sharepoint.washington.edu/uwpsychiatry/SPRIT/Pages/default.aspx)
| Lurasidone Latuda® | 20 mg/day | 4 weeks | 40-60 mg/day | FDA approved as monotherapy for Acute Bipolar Depression  
Lower propensity for weight, lipid, cholesterol, and glucose-related adverse effects | Expensive  
Effectiveness as monotherapy for Bipolar maintenance is unknown  
Brief history of use | Hyperglycemia  
Hyperlipidemia  
Akathisia  
Extrapyramidal symptoms  
Sedation  
Weight gain | Carbamazepine  
Ketoconazole  
Rifampin  
St. John’s Wort  
Other anti-psychotics | Pregnancy test  
CBC with diff  
BMI measurement  
Fasting plasma glucose level or hemoglobin A1c before initiating a new antipsychotic  
Lipids (total cholesterol, LDL, HDL, and triglycerides) |  

| Olanzapine Zyprexa®  
And Fluoxetine Prozac® | 5 mg/day in PM | 5 mg/day in PM | 5 mg/day in PM | Metabolic side effects increase risk of morbidity and mortality for long term maintenance therapy  
Polypharmacy  
Effectiveness as monotherapy for Bipolar maintenance is unknown | Hyperglycemia  
Hyperlipidemia  
Increased appetite  
Orthostatic hypotension  
Sedation  
Weight gain  
Constipation  
Diarrhea  
Insomnia  
Nausea  
Nervousness  
Sexual dysfunction | Carbamazepine  
Cimetidine  
St. John’s Wort  
MAOIs  
Sympathomimetics  
Other anti-psychotics  
Other anti-depressants | Pregnancy test  
BMI measurement  
Fasting plasma glucose level or hemoglobin A1c before initiating a new antipsychotic  
BMI measurement every visit for 6 months after the new antipsychotic is initiated and then quarterly. |  

[Link to study](https://sharepoint.washington.edu/uwpsychiatry/SPirit/Pages/default.aspx)
<table>
<thead>
<tr>
<th>Lamotrigine/Lamictal®</th>
<th>25 mg/day for 2 weeks</th>
<th>4 weeks after first target dose date</th>
<th>N/A</th>
<th>FDA approved as monotherapy for Bipolar Maintenance (200 mg/day)</th>
<th>Off label use as monotherapy for Acute Bipolar Disorder</th>
<th>Headache</th>
<th>Carbamazepine</th>
<th>Pregnancy test as clinically indicated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>↑50 mg/day for 2 weeks</td>
<td></td>
<td></td>
<td>• Lab tests not required</td>
<td>• Slow titration schedule</td>
<td>Nausea</td>
<td>Valproate</td>
<td>Pregnancy test</td>
</tr>
<tr>
<td></td>
<td>↑100 mg/day For 1 week then ↑200 mg/day</td>
<td></td>
<td></td>
<td>• Well-tolerated</td>
<td>• Not effective for Acute Bipolar Mania</td>
<td>Rash</td>
<td>Phenytoin</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Not sedating</td>
<td></td>
<td></td>
<td>Phenobarbital</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Weight loss</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Inexpensive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Study to Promote Innovation in Rural Integrated Telepsychiatry

[https://sharepoint.washington.edu/uwpsychiatry/SPRIT/Pages/default.aspx](https://sharepoint.washington.edu/uwpsychiatry/SPRIT/Pages/default.aspx)
<table>
<thead>
<tr>
<th><strong>Lithium</strong></th>
</tr>
</thead>
</table>
| **Eskalith®**  
**Eskalith® CR**  
**Lithobid®** |
| **Day 1** |
| 300 mg/day |
| **Day 2** |
| 600 mg/day |
| **Day 3** |
| 900 mg/day² |
| **Assess serum levels at 1 week** |
| **adjust to 0.6–1.0² mEq/L** |
| **linear kinetics mg/day to mEq/L** |
| **Assess response 4 weeks after first target serum date** |
| N/A |
| **• FDA approved as monotherapy for Acute Bipolar Mania** |
| **• FDA approved as monotherapy for Bipolar Maintenance (0.6–0.75² mEq/L)** |
| **• Long history of use** |
| **• Reduces the risk of suicide and long term mortality** |
| **• Inexpensive** |
| **• Requires blood monitoring.** |
| **• Narrow therapeutic dosage range/toxicity** |
| **• Long-term renal side effects with high dosages.** |
| **• Abrupt discontinuation increases risk for relapse** |
| **• Acne** |
| **• Acute or chronic renal failure** |
| **• Diarrhea** |
| **• GI upset** |
| **• Hypothyroidism** |
| **• Nausea** |
| **• Polyuria** |
| **• Thirst** |
| **• Tremor** |
| **• Weight gain** |
| **• NSAIDs** |
| **• Diuretics** |
| **• ACE-inhibitors** |
| **• Calcium channel blockers** |
| **• Theophylline** |
| **• Pregnancy test** |
| **• TSH** |
| **• Creatinine** |
| **• Electrolytes** |
| **• BUN** |
| **• Urinalysis** |
| **• Lithium Levels 1 week after initiation or dosage change and as clinically indicated (at least every 3 months).** |
| **Therapeutic Serum Concentration:** |
| 0.6–1.0 mEq/L² |
| **• Pregnancy test as clinically indicated** |
| **• TSH every 6 months** |
| **• Creatinine every 6 months** |
| **• Electrolytes every 6 months** |
| **• BUN every 6 months** |
| **• Urinalysis every 6 months** |
| **• Consider BMP for baseline sodium in older adults.** |

<table>
<thead>
<tr>
<th><strong>Fluoxetine</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prozac®</strong></td>
</tr>
<tr>
<td><strong>10 mg every morning X 7d, then ↑ to 20 mg/day</strong></td>
</tr>
<tr>
<td><strong>4 weeks</strong></td>
</tr>
<tr>
<td>40-80mg</td>
</tr>
<tr>
<td><strong>• More activating than other SSRIs</strong></td>
</tr>
<tr>
<td><strong>• Long half-life reduces discontinuation symptoms and may be helpful for patients with incomplete adherence</strong></td>
</tr>
<tr>
<td><strong>• Insomnia</strong></td>
</tr>
<tr>
<td><strong>• GI distress</strong></td>
</tr>
<tr>
<td><strong>• Sexual side effects</strong></td>
</tr>
<tr>
<td><strong>• Moderate P450 interactions</strong></td>
</tr>
<tr>
<td><strong>• St. John’s Wort</strong></td>
</tr>
<tr>
<td><strong>• MAOIs</strong></td>
</tr>
<tr>
<td><strong>• Sympathomimetics</strong></td>
</tr>
<tr>
<td><strong>• Other antidepressants</strong></td>
</tr>
</tbody>
</table>

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**Study to Promote Innovation in Rural Integrated Telepsychiatry**  
[https://sharepoint.washington.edu/uwpsychiatry/SPRIT/Pages/default.aspx](https://sharepoint.washington.edu/uwpsychiatry/SPRIT/Pages/default.aspx)
| **Paroxetine**  
| **Paxil®**  
| **Paroxetine CR** | 10 mg at bedtime X 7d, then ↑ to 20 mg/day | 4 weeks | 50mg | • Weight neutral | • Anticholinergic  
• GI distress  
• Insomnia  
• Sedating  
• Weight gain  
• Pregnancy  
• More common  
• Significant  
• Discontinuation  
• Syndrome | • Headache  
• GI distress  
• Insomnia  
• Sexual side effects  
• More common  
• Significant  
• Discontinuation  
• Syndrome | • Consider  
BMP for baseline sodium in older adults.  
• Pregnancy  
• Test as clinically indicated |
| **Citalopram**  
| **Celexa®** | 10 mg/day X 7d, then 20mg | 4 weeks | 40mg (age > 60 year, max dose is 20mg) | • Well-tolerated  
SSRI | • Dose-dependent  
QTc prolongation | • GI distress  
• Sexual side effects  
• Insomnia  
• Sedation | • Minimal  
CYP 450  
Interactions  
• St. John’s Wort  
• MAOIs  
• Sympathomimetics  
• Other  
antidepressants | • Consider  
BMP for baseline sodium in older adults.  
• EKG as clinically indicated |
| **Sertraline**  
| **Zoloft®** | 25 mg every morning X 7d, then ↑ to 50 mg/day | 4 weeks | 200mg | • FDA approved  
for PTSD | • Minimal  
secretion in breast milk | • Headache  
• Insomnia  
• Sedation  
• GI distress  
• Sexual side effects | • Limited  
CYP 450  
Interactions  
• St. John’s Wort  
• MAOIs  
• Sympathomimetics  
• Other  
antidepressants | • Consider  
BMP for baseline sodium in older adults) |
| **Escitalopram**  
| **Lexapro®** | 5 mg/day X 7d, then ↑ to 10 mg/day | 4 weeks | 20mg | • Best-tolerated  
SSRI | • Headache  
• Insomnia  
• Sedation  
• GI distress  
• Sexual side effects | • Minimal  
CYP 450  
Interactions  
• St. John’s Wort  
• MAOIs  
• Sympathomimetics  
• Other  
antidepressants | • Consider  
BMP for baseline sodium in older adults) |
| **Duloxetine**  
| **Cymbalta®®** | 30 mg/day X 7d, then ↑ to 60 mg/day | 4 weeks | 120mg | • Second line  
treatment for ADHD  
• Hepatotoxicity  
limits use in patients with liver disease or significant alcohol intake | • Agitation  
• GI distress | • St. John’s Wort  
• MAOIs  
• Sympathomimetics  
• Other  
antidepressants | • Baseline  
blood pressure  
• Blood pressure  
monitoring  
• Consider  
AST monitoring |
### Treatment for Neuropathic Pain

**Venlafaxine**<br>Effexor®<br>Venlafaxine XR<br>Effexor ER®

<table>
<thead>
<tr>
<th>Dose</th>
<th>Duration</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>IR 37.5 mg 2x/day X 7d, then ↑ to 75 mg 2x/day</td>
<td>4 weeks</td>
<td>300mg</td>
</tr>
<tr>
<td>ER 75 mg in the morning X 7d, then ↑ to 150 in the morning</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Second line treatment for ADHD
- Treatment for neuropathic pain 225 mg and above
- Preferred for women taking tamoxifen
- IR formulation requires twice daily dosing
- Agitation
- Headache
- Insomnia
- Sedation
- GI distress
- Sexual side effects
- Significant discontinuation syndrome, particularly with IR
- St. John's Wort
- MAOIs
- Sympathomimetics
- Other antidepressants
- Baseline blood pressure
- Consider BMP for baseline sodium in older adults
- Blood pressure monitoring

### Second Line Treatment for ADHD

**Mirtazapine**<br>Remeron®

<table>
<thead>
<tr>
<th>Dose</th>
<th>Duration</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 mg at bedtime X 7d, then ↑ to 30 mg at bedtime</td>
<td>4 weeks</td>
<td>45mg</td>
</tr>
</tbody>
</table>

- Helpful with initial insomnia
- No sexual side effects
- Useful as monotherapy or augmentation for SSRI/SNRI
- Antiemetic effects
- Weight gain
- Metabolic side effects among some patients
- Sedation (paradoxically less sedating at higher doses)
- Stimulates appetite
- Neutropenia risk; avoid in the immunosuppressed
- Minimal CYP 450 Interactions
- St. John’s Wort
- MAOIs
- Sympathomimetics
- Other antidepressants
- Baseline Weight
- Lipids
- Consider BMP for baseline sodium in older adults
- Weight
- Lipids

### Other Antidepressants

**Prazosin**<br>Minipress®

<table>
<thead>
<tr>
<th>Dose</th>
<th>Duration</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mg QHS x 3 days, then 2mg</td>
<td>1 week</td>
<td>10-15mg (lower doses may be adequate for civilians)</td>
</tr>
<tr>
<td>Escalate dose 1-2mg weekly thereafter</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Non-habit-forming
- Well-tolerated
- Dizziness
- Sedation
- Orthostasis
- Priapism
- Caution in combination with antihypertensives
- Blood pressure
- Blood pressure monitoring

1. Consider titrating slower and/or lowering the target dose for elderly patients, patients with anxiety disorders and patients sensitive to side effects.
2. Range may vary from lab to lab.
3. Dosage should be based on the patient's serum level, as well as their clinical response and tolerability.
## Strategies for Managing Medication Side Effects

**General Strategies:**

- Explore whether the side effects are minor or severe, and if psychological factors are amplifying side effects.
- Wait and support. Many side effects (i.e., GI distress with SSRIs) will subside over one to two weeks of treatment.
- Lower the dose (temporarily).
- ‘Treat’ the side effects (see below).
- Change to a different medication.
- Change to or add BA.

### Table 6.2 Management Strategies for Specific Side Effects

<table>
<thead>
<tr>
<th>Side Effect</th>
<th>Strategy</th>
</tr>
</thead>
</table>
| Sedation                        | - Give medication at bedtime  
    - Try caffeine                                                         |
| GI distress / nausea            | - This often improves or resolves over one to two weeks  
    - Take with meals  
    - Consider antacids or H2 blockers                                     |
| Activation / jitters / tremors  | - Start with small doses (especially with underlying anxiety disorder)  
    - Reduce caffeine intake  
    - Reduce dose  
    - Try adding beta blocker (propranolol 10 – 20 mg bid / tid)  
    - Consider time-limited short term trial of benzodiazepine in select patients without substance use disorders or significant avoidance during initial titration |
| Headache                        | - Lower dose  
    - Try acetaminophen                                                    |
| Insomnia                        | - Review sleep hygiene  
    - Trazodone 25 – 100 mg po qhs (can cause orthostatic hypotension and priapism) for patients without bipolar disorder  
    - Make sure activating antidepressants are taken in a.m.                |
| Sexual dysfunction              | - May be part of depression, anxiety, or medical disorders  
    - Consider switching antidepressants to mirtazapine  
    - Decrease dose  
    - Try adding bupropion 75 mg qhs or bid if clinically appropriate  
    - Try adding buspirone 15-30 mg bid  
    - Try adding cyproheptadine 4 mg 1-2 hrs before intercourse  
    - Consider a trial of sildenafil, tadalafil, or vardenafil in consultation with PCP or urologist |
| Orthostatic hypotension / dizziness | - Consider switching to a different medication  
    - Adequate hydration  
    - Sit-stand-get up slowly  
    - Support hose                                                          |
| Anticholinergic (dry mouth/eyes, urinary retention, tachycardia) | - Consider switching to a different medication  
    - Hydration  
    - Sugarless gum/candy  
    - Dietary fiber                                                            |
<table>
<thead>
<tr>
<th>Condition</th>
<th>Management Strategies</th>
</tr>
</thead>
</table>
| Tremor (with lithium)           | - Typically a postural tremor most commonly at initiation or with dose changes though can appear anytime  
                                   - Fatigue, stress, caffeine can worsen tremor  
                                   - Initial management involves addressing aggravating factors, changing lithium to shorter acting lithium, or divide dose throughout the day.  
                                   - Can also consider using propranolol (10-20mg bid/tid) |
| Diarrhea                        | - Immodium or kapectate  
                                   - If persisting for > 5 days, discuss with PCP |
| Constipation                    | - High fiber foods  
                                   - Hydration  
                                   - Exercise  
                                   - Stool softener, e.g., dulcolax, milk of magnesia, magnesium citrate |
| Weight gain                     | - Hydration  
                                   - Increase physical activity  
                                   - Lower calorie intake |
| Weight loss / low appetite      | - Take medication with food  
                                   - Have several small meals a day |
| Sweating or flushed             | - Check temperature to rule out infectious source  
                                   - This often improves with time  
                                   - Hydration |
| Akathisia and/or Extrapyramidal Symptoms | - Consider lowering dose  
                                   - Consider propranolol or benztropine (1-2mg/day in divided doses) which can be effective longer-term  
                                   - Judicious use of a benzodiazepine can reduce akathisia in the short term |