

## COMMONLY PRESCRIBED PSYCHOTROPIC MEDICATIONS

| NAME Generic (Trade)   | DOSAGE   | KEY CLINICAL INFORMATION   |
|--|--|--|
| <b>Antidepressant Medications*</b>   |  |  |
| Bupropion (Wellbutrin)   | Start: IR-100 mg bid X 7d, then ↑ to 100 mg tid; SR-150 mg qam X 7d then ↑ to 150 mg bid; XL-150 mg qam X 7d, then ↑ to 300 mg qam. Range: 300-450 mg/day.   | SSNRI; <b>Contraindicated in seizure disorder and history of TBI</b> because it decreases seizure threshold; stimulating; not good for treating anxiety disorders; 2 <sup>nd</sup> line tx for ADHD; <b>abuse potential</b> . P: C L: Use caution. ☹ IR/SR/XL.   |
| Citalopram (Celexa)  | Start: 10 mg qday X 7d, then 20 mg. Range: 20-40 mg/d (Max 20 mg for > 55 y/o).  | Well-tolerated SSRI; minimal CYP 450 interactions; good choice for anxious pt. <b>Caution: QTc prolongation</b> . P: C; L: Use caution. ☹  |
| Duloxetine (Cymbalta)  | Start: 30 mg qday X 7d, then ↑ to 60 mg qday. Range: 60-120 mg/day.  | SNRI; TX neuropathic pain; <b>need to monitor BP</b> ; 2 <sup>nd</sup> line TX for ADHD. P: C; L: Safety unknown. \$\$   |
| Escitalopram (Lexapro)   | Start: 5 mg qday X 7d, then ↑ to 10 mg qday. Range: 10-20 mg/d (~3X potent vs. Celexa).  | Best tolerated SSRI; minimal CYP 450 interactions. Good choice for anxious pt. P: C; L: Use caution. ☹   |
| Fluoxetine (Prozac)  | Start: 10 mg qam X 7d, then ↑ to 20 mg qday. Range: 20-60 mg/day.  | More activating than other SSRIs; long half-life reduces withdrawal (1 ½ = 4-6 d). P: C; L: Not recommended. ☹   |
| Mirtazapine (Remeron)  | Start: 15 mg qhs. X 7d, then ↑ to 30 mg qhs. Range: 30-60 mg/qhs.  | Novel mechanism; Sedating and appetite promoting; Neutropenia risk so avoid in the immunosuppressed. P: C; L: Safety unknown. ☹  |
| Paroxetine (Paxil)   | Start: 10 mg qhs X 7d, then ↑ to 20 mg qday. Range: 20-60 mg/day.  | SSRI; Anticholinergic; sedating; <b>significant withdrawal syndrome</b> . P: D; L: Use caution. ☹  |
| Sertraline (Zoloft)  | Start: 25 mg qam X 7d, then ↑ to 50 mg qday. Range: 50-200 mg/day.   | SSRI; limited CYP 450 interactions; mildly activating. P: C; L: Safest. ☹  |
| Venlafaxine (Effexor)  | Start: IR-37.5 mg bid X 7d, then ↑ to 75 mg bid; ER-75 mg qam X 7d, then ↑ to 150 qAM. Range: 150-375 mg/day.  | SNRI. More agitation & GI side effects than SSRIs; tx neuropathic pain 225 mg and above; <b>need to monitor BP</b> ; <b>Significant withdrawal syndrome</b> . P: C; L: Not recommended. ☹ ER \$ IR.  |
| Nortriptyline (Pamelor)  | Start: 25 mg qhs X 7d, then ↑ 25 mg qhs - q weekly to 75 mg qhs. Range: 75-150 mg/day.   | TCA; Sedating; Helpful in neuropathic pain; Baseline EKG; Max dosing 100mg in elderly; <b>Lethal in overdose</b> . P: D; L: Not recommended. ☹   |
| *Warnings/precautions: 1) Potential increased suicidality in first few months, 2) Long term weight gain likely (except venlafaxine & bupropion), 3) Sexual side effects common (except bupropion & mirtazapine), 4) Withdrawal syndrome frequently occurs with abrupt cessation (especially with SSRIs and SNRIs), Increased risk of bleeding with SSRIs and SNRIs (especially in combo with NSAIDs), 5) Risk for Serotonin Syndrome (except bupropion), especially with combination of drugs effecting serotonin metabolism, 6) Hyponatremia sometimes seen with SSRIs and SNRIs especially in elderly. |  |  |
| <b>Antianxiety and Sleep (Hypnotic) Medications</b>  |  |  |
| Alprazolam (Xanax)   | Start: IR-0.25-0.5 mg tid. Usual MAX: 4 mg/d. ER-0.5-1mg qAM Usual MAX:3-6 mg/d  | Equiv. dose: 0.50 mg. Onset: <i>intermediate</i> (1-2 hrs). T½: 11 hrs. More addictive than other benzos and has uniquely problematic withdrawal syndrome. <b>Try to avoid as 1<sup>st</sup> line tx</b> . <b>Significant withdrawal syndrome</b> . P: D; L: Use caution. ☹  |
| Amitriptyline (Elavil)   | Start: 10 mg qhs X 7d, then consider ↑ 25 mg qhs Range: 10-50mg/qhs  | TCA; Sedating; Helpful in neuropathic pain; <b>Lethal in overdose</b> . P: C; L: Compatible. ☹   |
| Clonazepam (Klonopin)  | Start: 0.25 mg bid Usual MAX: 4 mg/day.  | Equiv. dose: 0.25 mg. Onset: <i>intermediate</i> (1-4 hrs). T½: 30-40 hrs. Helpful in TX mania. P: D; L: Not recommended. ☹  |
| Diazepam (Valium)  | Start: 5 mg bid. Usual MAX: 40 mg/day.   | Equiv. dose: 5 mg. Onset: <i>immediate</i> . T½: 50-100 hrs. Caution with liver disease P: D; L: Contraindicated ☹   |
| Lorazepam (Ativan)   | Start: 0.5-1 mg bid to tid. Usual MAX: 6 mg/day. Insomnia: 0.5-2 mg qhs.   | Equiv. dose: 1 mg. Onset: <i>intermediate</i> . T½: 12 hrs. No active metabolites, so safer in liver dz. P: D; L: Use caution. ☹   |
| Buspirone (Buspar)   | Start: 7.5 mg bid. Range: 10-30 mg bid.  | Non-benzo SSRI-like drug FDA approved for anxiety. May take 4-6 weeks to become fully effective. P: B; L: Not recommended ☹  |
| Hydroxyzine (Vistaril)   | Start: 25-100 mg 3-4 X per day. Usual MAX: 400 mg/day.   | Non-benzo Antihistamine FDA approved for anxiety. P: C (Not recommended in 1 <sup>st</sup> trimester); L: Not recommended ☹  |
| Prazosin (Minipress)   | Start: 1 mg qhs. Increase q 2-3 d until symptoms abate. Usual MAX: 10 mg qhs.  | Old BP med used to TX nightmares. Warn about orthostasis in AM after first dose and after each new dosage change. P: C; L: Use caution. ☹  |
| Trazodone (Desyrel)  | Start: 25-50 mg qhs. Range: 50-150 mg qhs.   | Commonly used as sleep aid; <b>inform about priapism risk in men</b> . P: C; L: Use caution ☹  |
| Temazepam (Restoril)   | Start: 15 mg at bedtime. MAX: 45 mg qhs.   | T½: 8.8 hrs. Older benzo hypnotic. No P450 metabolism. More potential for physical dependence. P: X; L: Use caution. ☹   |
| Zolpidem (Ambien)  | Start: 5-10 mg qhs. MAX: 20 mg qhs.  | T½: 2.6 hrs. Potential for sleep-eating and sleep-driving. P: C; L: Compatible ☹ Available in longer acting form (CR \$)   |
| <b>Mood Stabilizers</b>  |  |  |
| Lithium  | Start: 300 mg bid or 600 mg qhs. Target plasma level: acute mania & bipolar depression: 0.8-1.0 meq/L; Maintenance: 0.6-0.8 meq/L. Available in ER form dosed once daily (usually at HS, Lithobid & Eskalith). Plasma levels related to renal clearance.   | <b>Black box warning for toxicity</b> . Teratogenic (cardiac malform.) and will <b>need to inform women of childbearing age of this risk</b> . Check Ca <sup>2+</sup> , TSH and BMP before starting and q6-12 months thereafter. Advise pt about concurrent use of NSAIDs and HTN meds acting on the kidney as can decrease renal clearance. Lithium strongly anti-suicidal. P: D (Not recommended in 1 <sup>st</sup> trimester); L: Not recommended ☹ |
| Divalproex (Depakote)  | Start: 500 mg/day (bid, DR: qday, ER); increase dose as quickly as tolerated to clinical effect. Target plasma level: 75 to 100 mcg/mL (DR) & 85-125 mcg/ml (ER).  | <b>Multiple black box warnings</b> including for hepatotoxicity, pancreatitis, and teratogenicity ( <b>need to inform women of childbearing age of this risk</b> ). Need to monitor LFTs, platelet counts, and coags initially and q3-6 mo. Weight gain common. P: D/X; L: Compatible \$   |
| Lamotrigine (Lamictal)   | Start: 25 mg daily for weeks 1 & 2, then 50 mg daily for weeks 3 & 4, then 100 mg qday for week 5, and finally 200 mg qday for week 6+ (usual target dose). Dosage will need to be adjusted for patients taking enzyme-inducing drugs or Depakote.   | <b>Black box warning</b> for serious, life-threatening rashes requiring hospitalization and d/c of TX (Stevens Johnson syndrome @ approx. 1:1-2000). No drug level monitoring typically required. Need to strictly follow published titration schedule. Fewer cognitive and appetite stimulating side effects. No evidence that doses above 200 mg more effective for mood. P: C; L: Not recommended ☹   |
| <b>Antipsychotic/Mood Stabilizers**</b>  |  |  |
| Aripiprazole (Abilify)   | Mania. Start: 15 mg qday; Range: 15-30 mg/day. MDD adj tx. Start: 2-5 mg/day; adjust dose q1+ weeks by 2-5 mg. Range: 5-10 mg/day. MAX: 15 mg qday. Schizophrenia. Start: 10-15 mg/day; ↑ at 2 week intervals; Range: 10-15/day; MAX: 30 mg/day.   | EPS: Mild; TD Risk: Mild; Sedation: Mild; Metabolic Effects: Mild. Very long half-life: 75 hrs. Least amount of sexual side effects. FDA indication for adjunctive treatment of MDD. Potential increased suicidality in first few months. Need to screen glucose and lipids regularly. P: C; L: Use caution. \$\$  |
| Olanzapine (Zyprexa)   | Mania. Start: 10 mg qhs; Range: 10-20 mg/qhs. MAX: 20 mg/day. Schizophrenia. Start: 5 mg qhs; ↑ by 5 mg qhs per week; Range: 10-15 mg qhs; MAX: 20 mg/day.   | EPS: Mild; TD Risk: Mild; Sedation: Moderate; Metabolic Effects: Severe. <b>Do not prescribe to diabetics</b> . Need to screen glucose and lipids regularly. P: C; L: Not recommended. ☹   |
| Quetiapine (Seroquel)  | Bipolar Dep: Start: 50 mg qhs; Initial target: 300 mg qhs; Range: 300-600 mg/d. Mania. Start: 50 mg bid; Initial target: 200 mg bid. Range: 400-800 mg/d. MDD adj tx. Start: 50 mg qhs; Initial target: 150 mg qhs. Range: 150-300 mg/day. Schizophrenia. Start: 25 mg bid and increase by 50-100 mg/d (bid/tid). Initial target: 400 mg/d. Range: 400-800 mg/d. | EPS: Mild; TD Risk: Mild; Sedation: Moderate; Effects: Moderate. FDA indication for bipolar depression and adjunctive treatment of MDD. Potential increased suicidality in first few months. Need to screen glucose and lipids regularly. <b>Abuse potential</b> . Available in an extended release form: Seroquel XR. <b>Avoid or use alternative in combination with methadone due to QTc prolongation</b> . P: C; L: Use caution. IR \$/XR \$\$     |
| Risperidone (Risperdal)  | Mania. Start: 1-2 mg qhs; ↑ by 1-2 mg/day per week. Range: 3-4 mg/day. MAX: 6 mg/day. Schizophrenia. Start: 1 mg qhs; ↑ by 1 mg/day per week; Range: 3-4 mg/day; MAX: 6 mg/day.  | EPS: Moderate; TD Risk: Moderate; Sedation: Moderate; Metabolic Effects: Moderate. Hyperprolactinemia and sexual side effects common. Need to screen glucose and lipids regularly. P: C; L: Use caution. ☹   |
| Ziprasidone (Geodon)   | Start: 40 mg bid titrating quickly to 60-80 mg bid. Needs to be taken w/ food (doubles absorption). Lower dosages can be more agitating than higher dosages.   | EPS: Moderate; TD Risk: Mild; Sedation: Moderate; Metabolic Effects: Mild. Need to screen glucose and lipids regularly. <b>Contraindicated in combination with methadone due to QTc prolongation</b> . P: C; L: No data/Not recommended. \$  |

\*\*Antipsychotic/mood stabilizer warnings/precautions: 1) Increased risk of death related to psychosis and behavioral problems in elderly patients with dementia, 2) Increased risk of QTc prolongation and risk of sudden death (especially in combination with other drugs that are known to prolong the QTc).

po = by mouth; prn = as needed; qday = 1x/day; bid = 2x/day; tid = 3x/day; qid = 4x/day; qod = every other day; qhs = at bedtime; qac = before meals. P = pregnancy risk category L = lactation. ☹ = <\$20. \$ = \$20-\$50. \$\$ >\$50. SSRI = Selective Serotonin Reuptake Inhibitor. SNRI = Serotonin Norepinephrine Reuptake Inhibitor. Initially developed by Stephen Thilke, MD, MPH & Alex Thompson, MD, MPH in 2008. Subsequent revisions by David A. Harrison, MD, PhD & Anna Ratzliff, MD, PhD ©University of Washington V3.2 Sept 2013.  
**NOTICE: This guide, updated September 2013, is a reference tool. It is the provider's responsibility to verify the information is current before use in a clinical setting. FDA labeling information available at [www.accessdata.fda.gov/scripts/cder/drugsatfda/](http://www.accessdata.fda.gov/scripts/cder/drugsatfda/).**

# Major Depressive Disorder: Limited or No Response to Treatment

## Considerations

### Is the patient taking the medication?

Poor adherence is common with all medications and antidepressants are no exception. Are there side effects that are limiting adherence (e.g., sexual side effects) or other concerns (e.g., cost, getting addicted)?

### Is the dosage high enough?

One of the most frequent causes of lack of efficacy of antidepressants is under-dosing. If the patient has showed some response but has not achieved remission to an adequate initial dosage (see guidelines in this document) after 4-6 weeks then increase the dosage. The usual maximum dosages are listed below.

### Is the diagnosis correct?

Other causes of depression requiring potentially different approaches include:

**Bipolar depression.** In bipolar depression antidepressants frequently do not work and can trigger a manic episode.

**Depression secondary to a general medical condition.** Causes include hypothyroidism, cerebrovascular accident, sleep apnea, and Parkinson's Disease.

**Substance induced mood disorder.**

- Is the patient taking medications that could be triggering depressive symptoms? Examples include steroids, interferon, and hormonal therapy.
- Is the patient withdrawing from medications that could cause depression? Examples include withdrawal from cocaine, methamphetamine, anxiolytics.
- Is the patient abusing alcohol or other CNS depressants?

### Are there untreated co-morbid conditions that are exacerbating the symptoms?

Examples include anxiety disorders (PTSD, Panic D/O & OCD), personality disorders, and somatoform disorders.

## Maximum Therapeutic Doses (mg/day) of Commonly Used Antidepressants

|                        |        |
|------------------------|--------|
| Bupropion (Wellbutrin) | 450 mg |
| Citalopram (Celexa)    | 40 mg  |
| Duloxetine (Cymbalta)  | 120 mg |
| Escitalopram (Lexapro) | 30 mg  |
| Fluoxetine (Prozac)    | 60 mg  |
| Mirtazapine (Remeron)  | 60 mg  |
| Paroxetine (Paxil)     | 60 mg  |
| Sertraline (Zoloft)    | 200 mg |
| Venlafaxine (Effexor)  | 375 mg |

## Good Reasons to Stop a Medication

- Intolerable side effects
- Dangerous interactions with other necessary medications
- It was never "indicated" to begin with (wrong diagnosis or wrong medicine for correct diagnosis)
- It has been at the maximum therapeutic dosage for 4-8 weeks with no response.