

## Antidepressant Medications

Name	Indication, starting dose, target symptoms, and affected neurotransmitters	Half-life (T1/2) CYP450 enzyme	Notes/Notable side effects/Precautions
<b>SSRIs</b>			
<p>Citalopram (Celexa)</p>	<p>serotonin reuptake inhibitor (S-RI)</p> <p>Commonly Prescribed for Depression Premenstrual dysphoric disorder (PMDD) Obsessive-compulsive disorder (OCD) Panic disorder Generalized anxiety disorder (GAD) Posttraumatic stress disorder (PTSD) Social anxiety disorder (social phobia)</p> <p>The goal of treatment is complete remission of current symptoms as well as prevention of future relapses</p> <p>How to Dose Initial 20 mg/day; increase by 20 mg/day after 1 or more weeks; maximum 40 mg/day; single-dose administration, morning or evening</p>	<p>Parent drug has 23–45 hour half- life</p> <p>Weak inhibitor of CYP450 2D6</p> <p>Metabolized by CYP450 3A4 and 2C19</p>	<p><b>Notable Side Effects</b></p> <ul style="list-style-type: none"> <li>• Sexual dysfunction (delayed ejaculation, erectile dysfunction in men and women: decreased libido, anorgasmia)</li> <li>• Gastrointestinal (decreased appetite, nausea, diarrhea, constipation)</li> <li>• Mostly CNS (dose-dependent); also sedation, agitation, headache, dizziness</li> <li>• Activation (short-term, especially in those with diagnosed or undiagnosed bipolar disorder or psychotic disorders may precipitate mania or psychosis to CNS- activating actions)</li> <li>• Sweating (dose-dependent)</li> <li>• Bruising and rare bleeding (mostly in elderly patients; reversible on discontinuation)</li> <li>• SIADH (syndrome of inappropriate antidiuretic hormone secretion)</li> </ul>

			<p><b>Other Warnings/Precautions</b></p> <p>Use with caution in patients w  Use with caution in patients w  unless treated with concomita  agent</p> <p>When treating children, carefu  benefits of pharmacological tr  risks and benefits of nontreatr  antidepressants and make sur  the patient’s chart. Whenever  and their caregivers about the  side effects, and advise them t  symptoms immediately. Moni  activation of suicidal ideation,  adolescents</p>
Escitalopram (Lexapro)	<p>SSRI (selective serotonin reuptake inhibitor)</p> <p>Commonly Prescribed for Major depressive disorder (ages 12 and older) Generalized anxiety disorder (GAD) Panic disorder Obsessive-compulsive disorder (OCD) Posttraumatic stress disorder (PTSD) Social anxiety disorder (social phobia) Premenstrual dysphoric disorder (PMDD)</p>	<p>Mean terminal half-life 27–32 hours</p> <p>Substrate for CYP450 2C19 and 3A4 No significant actions on CYP450 enzymes</p>	<p><b>Notable Side Effects</b></p> <ul style="list-style-type: none"> <li>• Sexual dysfunction (male: decreased libido, decreased ejaculation, erectile dysfunction; female: decreased sexual desire, decreased sexual arousal, anorgasmia)</li> <li>• Gastrointestinal (decreased appetite, nausea, diarrhea, constipation)</li> <li>• Mostly central nervous system effects (drowsiness, fatigue) but also sedation, agitation, headache, dizziness)</li> <li>• <b>Note:</b> patients with dia</li> </ul>

	<p>Boosts neurotransmitter serotonin Blocks serotonin reuptake pump (serotonin transporter) Desensitizes serotonin receptors, especially serotonin 1A autoreceptors</p> <p>Treatment most often reduces or even eliminates symptoms, but not a cure since symptoms can recur after medicine stopped</p> <p>Initial 10 mg/day; increase to 20 mg/day if necessary; single- dose administration, morning or evening</p>		<p>bipolar or psychotic disorder vulnerable to CNS-acting agents. Autonomic (sweating), bleeding Rare hyponatremia in elderly patients and generally avoid discontinuation of escitalopram (syndrome of inappropriate hormone secretion)</p> <p><b>Other Warnings/Precautions</b>  Use with caution in patients with bleeding disorders  Use with caution in patients with renal impairment unless treated with concomitant dialysis agent  When treating children, carefully weigh the benefits of pharmacological treatment against the risks and benefits of nontreatment and make sure to document in the patient's chart  Whenever possible, warn patients and caregivers about the possibility of suicidal thoughts and effects, and advise them to report any suicidal ideation immediately Monitor patients for suicidal ideation, especially children</p>
<p>Fluoxetine (Prozac)</p>	<p>SSRI (selective serotonin reuptake inhibitor)</p> <p>Commonly Prescribed for Major depressive disorder (ages 8 and older) Obsessive-compulsive</p>	<p>Active metabolite (norfluoxetine) has 2 week half- life Parent drug has 2–3</p>	<p><b>Notable Side Effects</b></p> <ul style="list-style-type: none"> <li>Sexual dysfunction (male: decreased ejaculation, erectile dysfunction; women: decreased sexual interest, anorgasmia)</li> <li>Gastrointestinal (decreased appetite, weight loss)</li> </ul>

	<p>disorder (OCD) (ages 7 and older) Premenstrual dysphoric disorder (PMDD) Bulimia nervosa Panic disorder Bipolar depression [in combination with olanzapine (Symbyax)] Treatment-resistant depression [in combination with olanzapine (Symbyax)] Social anxiety disorder (social phobia) Posttraumatic stress disorder (PTSD)</p> <p>Boosts neurotransmitter serotonin Blocks serotonin reuptake pump (serotonin transporter) Desensitizes serotonin receptors, especially serotonin 1A receptors</p> <p>Treatment most often reduces or even eliminates symptoms, but not a cure since symptoms can recur after medicine stopped</p> <p>How to Dose Depression and OCD: initial dose 20 mg/day in morning, usually wait a few weeks to assess drug effects before increasing dose; maximum dose generally 80</p>	<p>day half- life Inhibits CYP450 2D6 Inhibits CYP450 3A4</p>	<p>diarrhea, constipation, (insomnia but also sedation) tremors, headache, dizziness</p> <ul style="list-style-type: none"> <li><b>Note:</b> patients with dia... bipolar or psychotic dis... vulnerable to CNS- acti... Autonomic (sweating) bleeding SIADH (syndr... antidiuretic hormone s...</li> </ul> <p>Life-Threatening or Dangerous... seizures Rare induction of man... suicidal ideation and behavior... studies did not show an increa... suicidality with antidepressant... beyond age 24)</p> <p>Other Warnings/Precautions A... antidepressants with caution f... discontinuing fluoxetine Use w... with history of seizure</p> <p>Use with caution in patients w... unless treated with concomita... agent When treating children... risks and benefits of pharmaco... against the risks and benefits o... antidepressants and make sur... the patient's chart</p>
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	<p>mg/day</p> <p>Bulimia: initial dose 60 mg/day in morning; some patients may need to begin at lower dose and titrate over several days</p>		<p>Whenever possible, warn patients and caregivers about the possibility of side effects, and advise them to report symptoms immediately. Monitor patients for suicidal ideation, especially children.</p>
<p>Fluvoxamine (Luvox)</p>	<p>SSRI (selective serotonin reuptake inhibitor)</p> <p>Commonly Prescribed for Obsessive-compulsive disorder (OCD)(fluvoxamine and fluvoxamine CR) Social anxiety disorder (fluvoxamine CR) Depression Panic disorder Generalized anxiety disorder (GAD) Posttraumatic stress disorder (PTSD)</p> <p>How the Drug Works Boosts neurotransmitter serotonin Blocks serotonin reuptake pump (serotonin transporter) Desensitizes serotonin receptors, especially serotonin 1A receptors</p> <p>Fluvoxamine also binds at sigma 1 receptors</p> <p>Treatment most often reduces</p>	<p>Parent drug has 9–28 hour half-life Inhibits CYP450 3A4 Inhibits CYP450 1A2</p> <p>Inhibits CYP450 2C9/2C19</p>	<p><b>Notable Side Effects</b></p> <ul style="list-style-type: none"> <li>Sexual dysfunction (male: decreased libido, delayed ejaculation, erectile dysfunction; female: decreased sexual interest, anorgasmia)</li> <li>Gastrointestinal (decreased appetite, nausea, diarrhea, constipation)</li> <li>Mostly CNS (insomnia, drowsiness, sedation, agitation, tremor, dizziness)</li> <li><b>Note:</b> patients with diabetes, bipolar or psychotic disorders are more vulnerable to CNS-acting side effects. Autonomic (sweating, dry mouth, constipation, bleeding. Rare hyponatremia)</li> </ul> <p>Life-Threatening or Dangerous</p> <ul style="list-style-type: none"> <li>Rare seizures Rare induction of CYP450 3A4</li> <li>Rare activation of suicidal behavior (suicidality) (not show an increase in suicidal ideation)</li> </ul>

	<p>or even eliminates symptoms, but not a cure since symptoms can recur after medicine stopped</p> <p>How to Dose For immediate-release, initial 50 mg/day;</p> <p>increase by 50 mg/day in 4–7 days; usually wait a few weeks to assess drug effects before increasing dose further, but can increase by 50 mg/day every 4–7 days until desired efficacy is reached; maximum 300 mg/day</p>		<p>with antidepressants (beyond age 24)</p> <p>Other Warnings/Precautions A antidepressants with caution t discontinuing fluvoxamine Use patients with history of seizure patients with bipolar disorder concomitant mood-stabilizing photosensitivity When treating weigh the risks and benefits o treatment against the risks an nontreatment with antidepres document this in the patient's</p> <p>Whenever possible, warn pati caregivers about the possibility effects, and advise them to re immediately Monitor patients suicidal ideation, especially ch</p>
<p>Paroxetine (Paxil)</p>	<p>SSRI (selective serotonin reuptake inhibitor)</p> <p>Commonly Prescribed for Major depressive disorder (paroxetine and paroxetine CR) Obsessive-compulsive disorder (OCD) Panic disorder (paroxetine and paroxetine CR) Social anxiety disorder (social phobia) (paroxetine and paroxetine CR)</p>	<p>Inactive metabolites</p> <p>Half- life approximately 24 hours</p> <p>Inhibits CYP450 2D6</p>	<p><b>Notable Side Effects</b></p> <ul style="list-style-type: none"> <li>• Sexual dysfunction (delayed ejaculation, er men and women: decre anorgasmia)</li> <li>• Gastrointestinal (decre nausea, diarrhea, cons</li> <li>• Mostly CNS (insomnia</li> </ul>

	<p>Posttraumatic stress disorder (PTSD) Generalized anxiety disorder (GAD) Premenstrual dysphoric disorder (PMDD) (paroxetine CR) Vasomotor symptoms (Brisdelle)</p> <p>How the Drug Works Boosts neurotransmitter</p> <p>serotonin</p> <p>Blocks serotonin reuptake pump (serotonin transporter)</p> <p>Desensitizes serotonin receptors, especially serotonin 1A autoreceptors</p> <p>Some patients may experience relief of insomnia or anxiety early after initiation of treatment</p> <p>How to Dose Depression: initial 20 mg (25 mg CR); usually wait a few weeks to assess drug effects before increasing dose, but can increase by 10 mg/day (12.5 mg/day CR) once a week; maximum generally 50 mg/day (62.5 mg/day CR); single dose Panic disorder: initial 10 mg/day (12.5 mg/day CR); usually wait a</p>		<p>agitation, dose-dependent dizziness)</p> <ul style="list-style-type: none"> <li>• Weight gain Activation with diagnosed or undiagnosed psychotic disorders may have CNS-activating actions</li> <li>• Autonomic (dose-dependent) Bruising and rare bleeding inappropriate antidiuretic</li> </ul> <p><b>Life-Threatening or Dangerous</b></p> <ul style="list-style-type: none"> <li>• Rare seizures</li> <li>• Rare induction of mania</li> <li>• Rare activation of suicidal behavior (suicidality) (do not show an increase in suicidal thoughts with antidepressants beyond age 24)</li> </ul> <p>Other Warnings/Precautions A antidepressants with caution for discontinuing paroxetine Use with history of seizures Use with bipolar disorder unless concomitant mood-stabilizing children, carefully weigh the r</p>
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