

## Comparison of Commonly Used Antidepressants

Choice of antidepressant is influenced by adverse effect profile, drug interactions, and cost. Despite their differences, some information applies to all antidepressants. Most antidepressants, unless otherwise noted below, can be given once-daily. It is prudent to dose antidepressants cautiously in elderly or debilitated patients, patients with renal or hepatic dysfunction, or those with multiple medical problems. Combining MAOIs with other antidepressants is contraindicated and best left to specialists who have experience with these combinations due to the risk of hypertensive crisis or serotonin syndrome. In addition, combining serotonergic antidepressants with other serotonergic agents (e.g., lithium, triptans) may cause serotonin syndrome. Discontinuation symptoms can occur when an antidepressant is stopped abruptly, but is least likely with fluoxetine. See our article or *Detail-Document* “How to Switch Antidepressants” for tips on discontinuing and switching antidepressants. Sexual side effects are common with most antidepressants. Bupropion and mirtazapine may be least problematic. Many antidepressants are substrates of CYP450 enzymes. See our *Cytochrome P450 Drug Interactions* chart to help check for interactions.

--absent or rare to ++++ relatively common

Drug	FDA-Approved Indications (Unapproved, common uses)	Dosing <sup>a</sup>	Adverse Effects <sup>b,18-20</sup>				CYP450 Inhibition	Comments	Cost <sup>c</sup>
			Anti-cholinergic	Arrhythmia	Sedation	Weight Gain			
<b>Dopamine Reuptake Blocking Agent</b>									
Bupropion (Wellbutrin)	Depression (ADHD, bipolar disorder)	<u>Wellbutrin:</u> <u>Initial:</u> 100 mg twice daily <sup>1</sup> <u>Usual:</u> 100 mg three times daily <sup>1</sup> <u>Max:</u> 150 mg three times daily <sup>1</sup>	--	+	--	--	CYP2D6 inhibitor <sup>1</sup>	Contraindicated in patients with seizure risk <sup>1</sup>  Heed dosing instructions to minimize risk of seizures.  Allow at least six hours between successive doses <sup>1</sup>	Bupropion 100 mg three times daily \$86.40

More . . .

Drug	FDA-Approved Indications (Unapproved, common uses)	Dosing <sup>a</sup>	Adverse Effects <sup>b,18-20</sup>				CYP450 Inhibition	Comments	Cost <sup>c</sup>
			Anti-cholinergic	Arrhythmia	Sedation	Weight Gain			
<b>Dopamine Reuptake Blocking Agent, continued</b>									
Bupropion sustained release and extended-release ( <i>Wellbutrin SR</i> , <i>Wellbutrin XL</i> , <i>Zyban</i> )	Depression, seasonal affective disorder, smoking cessation ( <i>ADHD</i> , bipolar disorder)	<p><u>Wellbutrin XL</u>: Initial: 150 mg<sup>2</sup> Usual: 300 mg<sup>2</sup> Max: 450 mg<sup>2</sup></p> <p><u>Wellbutrin SR</u>: Initial: 150 mg<sup>3</sup> Usual: 150 mg twice daily<sup>3</sup> Max: 200 mg twice daily</p> <p><u>Zyban</u>: Usual: 150 mg twice daily<sup>4</sup> Max: 150 mg twice daily<sup>4</sup></p>	--	+	--	--	CYP2D6 inhibitor <sup>2-4</sup>	<p>Contraindicated in patients with seizure risk<sup>2-4</sup></p> <p>Heed dosing instructions to minimize risk of seizures.</p> <p>Allow at least eight hours between successive doses of <i>Zyban</i> or <i>Wellbutrin SR</i>, and at least 24 hrs between successive doses of <i>Wellbutrin XL</i><sup>2,3,4</sup></p>	<p><i>Wellbutrin XL</i> 300 mg daily \$164.04</p>

Drug	FDA-Approved Indications (Unapproved, common uses)	Dosing <sup>a</sup>	Adverse Effects <sup>b,18-20</sup>				CYP450 Inhibition	Comments	Cost <sup>c</sup>
			Anti-cholinergic	Arrhythmia	Sedation	Weight Gain			
<b>Noradrenergic Antagonist</b>									
Mirtazapine (Remeron)	Depression	Initial: 15 mg <sup>5</sup> Max: 45 mg <sup>5</sup>	+	+	++++	++++	Not significant <sup>5</sup>	Best taken at bedtime due to sedation <sup>2</sup>	Remeron 45 mg daily \$109.57
<b>Selective Serotonin Reuptake Inhibitors</b>									
Citalopram (Celexa)	Depression (OCD, panic disorder)	Initial: 20 mg <sup>6</sup> Usual: 40 mg <sup>6</sup> Max: 60 mg <sup>6</sup>	--	--	+	--	Weak CYP1A2, 2D6, & 2C19 inhibitor; modest 2D6 inhibitor at ≥40 mg <sup>6,7</sup>	Contraindicated with pimozide <sup>6</sup>  Maximum dose 40 mg in elderly or hepatic impairment <sup>6</sup>	Citalopram 40 mg daily \$79.20
Escitalopram (Lexapro)	Depression, GAD	Initial: 10 mg <sup>7</sup> Usual: 10 mg <sup>7</sup> Max: 20 mg <sup>7</sup>	--	--	+	--	Modest CYP2D6 inhibition with 20 mg dose <sup>7</sup>	Maximum dose 10 mg in elderly or hepatic impairment <sup>7</sup>	Lexapro 10 mg once daily \$80.81

Drug	FDA-Approved Indications (Unapproved, common uses)	Dosing <sup>a</sup>	Adverse Effects <sup>b,18-20</sup>				CYP450 Inhibition	Comments	Cost <sup>c</sup>
			Anti-cholinergic	Arrhythmia	Sedation	Weight Gain			
<b>Selective Serotonin Reuptake Inhibitors, continued</b>									
Fluoxetine (Prozac, Sarafem, Prozac Weekly)	Depression, OCD, bulimia, panic disorder, premenstrual dysphoric disorder (Anorexia nervosa, bipolar disorder, premenstrual syndrome) <u>Pediatrics:</u> Depression, OCD	<u>Initial:</u> 20 mg (10 mg pediatrics; can use 20 mg for depression in heavier kids) <sup>8</sup> <u>Usual:</u> 20 mg <sup>8</sup> <u>Max:</u> 80 mg (minimal experience with doses >20 mg in pediatrics) <sup>8</sup> <u>Bulimia:</u> 60 mg (can start lower to improve tolerability) <sup>8</sup>  <u>Prozac Weekly:</u> 90 mg once weekly (depression)	--	--	+	+	CYP2D6 and CYP3A4 (weak) inhibitor <sup>8</sup>	Contraindicated with pimozide or thioridazine <sup>8</sup>  Start Prozac Weekly 7 days after last fluoxetine dose <sup>8</sup>	Fluoxetine 20 mg once daily \$79.92

Drug	FDA-Approved Indications (Unapproved, common uses)	Dosing <sup>a</sup>	Adverse Effects <sup>b,18-20</sup>				CYP450 Inhibition	Comments	Cost <sup>c</sup>
			Anti-cholinergic	Arrhythmia	Sedation	Weight Gain			
<b>Selective Serotonin Reuptake Inhibitors, continued</b>									
Fluvoxamine (Luvox)	OCD	<u>Luvox</u> <u>Initial:</u> 50 mg (25 mg pediatrics) <sup>9</sup> <u>Usual:</u> 100 mg to 300 mg; divide doses >100 mg (50 mg to 200 mg pediatrics; divide doses >50 mg) <sup>9</sup> <u>Max:</u> 300 mg; divide doses >100 mg (200 mg child <12 years; divide doses >50 mg) <sup>9</sup>	--	--	+	--	CYP1A2 (strong), CYP3A4, 2C9, and CYP2C19 inhibitor <sup>9</sup>	Contraindicated with alosetron (Lotronex), tizanidine (Zanaflex), thioridazine, pimozide <sup>9</sup>  Bedtime administration recommended <sup>9</sup>	Fluvox- amine 100 mg once daily \$79.19

Drug	FDA-Approved Indications (Unapproved, common uses)	Dosing <sup>a</sup>	Adverse Effects <sup>b,18-20</sup>				CYP450 Inhibition	Comments	Cost <sup>c</sup>
			Anti-cholinergic	Arrhythmia	Sedation	Weight Gain			
<b>Selective Serotonin Reuptake Inhibitors, continued</b>									
Fluvoxamine extended-release ( <i>Luvox CR</i> )	Social anxiety disorder, OCD	<u>Luvox CR:</u> <u>Initial:</u> 100 mg <sup>10</sup> <u>Usual:</u> 100 mg to 300 mg <sup>10</sup> <u>Max:</u> 300 mg <sup>10</sup>	--	--	+	--	CYP1A2 (strong), CYP3A4, 2C9, and CYP2C19 inhibitor <sup>9</sup>	Contraindicated with alosetron ( <i>Lotronex</i> ), tizanidine ( <i>Zanaflex</i> ), thioridazine, pimozide <sup>10</sup>  Bedtime administration recommended <sup>10</sup>	<i>Luvox CR</i> 100 mg once daily \$121.88
Paroxetine ( <i>Paxil, Paxil CR</i> )	Depression, panic disorder, social anxiety disorder, PMDD, OCD, GAD, PTSD	<u>Paxil CR:</u> <u>Initial:</u> 12.5 mg; 25 mg for depression <sup>11</sup> <u>Max:</u> 75 mg <sup>11</sup>  <u>Paxil:</u> <u>Initial:</u> 20 mg (10 mg for panic disorder) <sup>12</sup> <u>Usual:</u> 20 mg to 40 mg <sup>12</sup> <u>Max:</u> 60 mg <sup>12</sup>	--/+	--	+	++	Significant CYP2D6 inhibitor <sup>11,12</sup>	Start with 10 mg (12.5 mg <i>Paxil CR</i> ) and do not exceed 40 mg (50 mg <i>Paxil CR</i> ) in the elderly, debilitated, or patients with hepatic or renal impairment <sup>12</sup>  Contraindicated with pimozide or thioridazine <sup>11,12</sup>	Paroxetine 40 mg once daily \$57

Drug	FDA-Approved Indications <i>(Unapproved, common uses)</i>	Dosing <sup>a</sup>	Adverse Effects <sup>b,18-20</sup>				CYP450 Inhibition	Comments	Cost <sup>c</sup>
			Anti-cholinergic	Arrhythmia	Sedation	Weight Gain			
<b>Selective Serotonin Reuptake Inhibitors, continued</b>									
Sertraline <i>(Zoloft)</i>	Depression, OCD, panic disorder, PTSD, PMDD, social anxiety disorder <u>Pediatrics:</u> OCD	<u>Initial:</u> 50 mg once daily (25 mg for panic, PTSD, children ages six to 12, & social anxiety) <sup>13</sup> <u>Max:</u> 200 mg <sup>13</sup>	--	--	+	+	Dose-dependent CYP2D6 inhibition; weak CY3A4 inhibition <sup>13</sup>	Contraindicated with pimozide <sup>13</sup>	Sertraline 50 mg once daily \$81.37
<b>Serotonin Norepinephrine Reuptake Inhibitors</b>									
Desvenlafaxine <i>(Pristiq)</i>	Depression	<u>Initial:</u> 50 mg <sup>14</sup> <u>Usual:</u> 50 mg <sup>14</sup> <u>Max:</u> 400 mg (no additional benefit of doses >50 mg) <sup>14</sup>	--	--	--	--	CYP2D6 inhibition not clinically significant at doses ≤100 mg <sup>14</sup>	Monitor blood pressure <sup>14</sup>  Doses >50 mg not recommended in hepatic impairment <sup>14</sup>	<i>Pristiq</i> 50 mg once daily \$73.57

More . . .

Drug	FDA-Approved Indications (Unapproved, common uses)	Dosing <sup>a</sup>	Adverse Effects <sup>b,18-20</sup>				CYP450 Inhibition	Comments	Cost <sup>c</sup>
			Anti-cholinergic	Arrhythmia	Sedation	Weight Gain			
<b>Serotonin Norepinephrine Reuptake Inhibitors, continued</b>									
Duloxetine ( <i>Cymbalta</i> )	Depression, GAD, diabetic peripheral neuropathy ( <i>Fibromyalgia</i> )	<u>Initial (optional):</u> 30 mg <sup>15</sup> <u>Usual:</u> 60 mg <sup>15</sup> <u>Max:</u> 120 mg (no evidence of benefit compared to 60 mg) <sup>15</sup>	--	--	+	--	Moderate CYP2D6 inhibitor <sup>15</sup>	Avoid with potent CYP1A2 and CYP2D6 inhibitors <sup>15</sup>  Monitor blood pressure <sup>15</sup>	<i>Cymbalta</i> 60 mg once daily \$121.08
Venlafaxine extended-release ( <i>Effexor XR</i> )	Depression, GAD, social anxiety disorder, panic disorder ( <i>Neuropathic pain, hot flashes</i> )	<u>Initial:</u> 75 mg (37.5 mg for panic) <sup>16</sup> <u>Max:</u> 225 mg <sup>16</sup>	+	+	+	--	Not significant <sup>16</sup>	Monitor blood pressure <sup>16</sup>  Reduce dose by 25% for GFR <70 mL/min, and by 50% for hemodialysis or mild to moderate hepatic impairment <sup>16</sup>	<i>Effexor XR</i> 75 mg once daily \$110.35



Drug	FDA-Approved Indications (Unapproved, common uses)	Dosing <sup>a</sup>	Adverse Effects <sup>b,18-20</sup>				CYP450 Inhibition	Comments	Cost <sup>c</sup>
			Anti-cholinergic	Arrhythmia	Sedation	Weight Gain			
<b>Serotonin Norepinephrine Reuptake Inhibitors, continued</b>									
Venlafaxine ( <i>Effexor</i> )	Depression ( <i>Neuropathic pain, hot flashes</i> )	<u>Initial:</u> 75 mg divided two or three times daily <sup>17</sup> <u>Usual:</u> 150 mg to 225 mg divided two or three times daily <sup>17</sup> <u>Max:</u> 375 mg divided three times daily <sup>17</sup>	+	+	+	--	Not significant <sup>17</sup>	Monitor blood pressure <sup>17</sup>  Reduce dose by 25% for GFR <70 mL/min, and by 50% for hemodialysis or mild to moderate hepatic impairment <sup>17</sup>	Venlafaxine 75 mg twice daily \$131.10
<b>Tricyclic Antidepressants</b>									
Amitriptyline ( <i>Elavil</i> )	Depression ( <i>Neuropathic pain</i> )	<u>Initial:</u> 50 mg to 100 mg <sup>23</sup> <u>Usual:</u> 75 mg to 150 mg <sup>23</sup> <u>Max:</u> 300 mg <sup>23</sup>	++++	+++	++++	++++	None <sup>24</sup>	Contraindicated in acute post-MI period <sup>23</sup>  If given once daily, bedtime is preferred <sup>23</sup>	Amitriptyline 75 mg once daily \$21.09

Drug	FDA-Approved Indications (Unapproved, common uses)	Dosing <sup>a</sup>	Adverse Effects <sup>b,18-20</sup>				CYP450 Inhibition	Comments	Cost <sup>c</sup>
			Anti-cholinergic	Arrhythmia	Sedation	Weight Gain			
<b>Tricyclic Antidepressants, continued</b>									
Desipramine (Norpramin)	Depression (Neuropathic pain)	<u>Usual:</u> 100 mg to 200 mg <sup>25</sup> <u>Max:</u> 300 mg (150 mg elderly and teens) <sup>25</sup>	++	++	++	++	CYP2D6 inhibitor <sup>24</sup>	Contraindicated in acute post-MI period <sup>25</sup>	Desipramine 100 mg once daily \$39.99
Doxepin (Adapin, Sinequan)	Depression (Anxiety, neuropathic pain)	<u>Initial:</u> 75 mg <sup>21</sup> <u>Usual:</u> 75 mg to 150 mg <sup>21</sup> <u>Max:</u> 300 mg <sup>21</sup>	++++	++	++	+++	None <sup>24</sup>		Doxepin 75 mg once daily \$20.88

Drug	FDA-Approved Indications (Unapproved, common uses)	Dosing <sup>a</sup>	Adverse Effects <sup>b,18-20</sup>				CYP450 Inhibition	Comments	Cost <sup>c</sup>
			Anti-cholinergic	Arrhythmia	Sedation	Weight Gain			
<b>Tricyclic Antidepressants, continued</b>									
Imipramine (Tofranil, Tofranil PM)	Depression (Pediatric enuresis, neuropathic pain, panic disorder, ADHD)	<u>Initial:</u> 75 mg (100 mg inpatient; 25 mg or 50 mg elderly and teens) <sup>26,27</sup> <u>Usual:</u> 75 mg to 150 mg (100 mg elderly and teens) <sup>26,27</sup> <u>Max:</u> 300 mg <sup>26,27</sup>	+++	+++	+++	++++	None <sup>24</sup>	Contraindicated in acute post-MI period <sup>26,27</sup>  If given once daily, bedtime is preferred <sup>26,27</sup>	Tofranil PM 75 mg once daily \$312.54
Nortriptyline (Aventyl, Pamelor)	Depression (Neuropathic pain, smoking cessation)	<u>Usual:</u> 75 mg (30 mg to 50 mg elderly and teens) <sup>22</sup> <u>Max:</u> 150 mg <sup>22</sup>	++	++	++	+++	None <sup>24</sup>	Contraindicated in acute post-MI period <sup>22</sup>  For daily doses >100 mg, monitor plasma levels (target 50 ng/mL to 100 ng/mL) <sup>22</sup>	Nortriptyline 75 mg once daily \$64.53

Drug	FDA-Approved Indications (Unapproved, common uses)	Dosing <sup>a</sup>	Adverse Effects <sup>b,18-20</sup>				CYP450 Inhibition	Comments	Cost <sup>c</sup>
			Anti-cholinergic	Arrhythmia	Sedation	Weight Gain			
<b>Serotonin-2 Receptor Antagonist</b>									
Trazodone (Desyrel)	Depression (Insomnia)	Usual: 150 mg in divided doses <sup>28</sup> Max: 400 mg (600 mg inpatient) in divided doses. <sup>28</sup>	--	+	++++	+	None <sup>24</sup>	Has been associated with priapism <sup>28</sup>	Trazodone 150 mg daily \$31.14

ADHD – attention-deficit/hyperactivity disorder, GAD - generalized anxiety disorder, GFR – glomerular filtration rate, LFT – liver function test, OCD - obsessive compulsive disorder, PMDD - premenstrual dysphoric disorder, PTSD – post-traumatic stress disorder

- a. Adult dose, unless otherwise noted. Max dose is maximum daily **adult** dose for any indication, unless otherwise specified. Can be given as single daily dose unless otherwise noted.
- b. FDA-approved labeling
- c. Average Wholesale Price (AWP) for 30-day supply of lowest cost generic (if available)

*Users of this document are cautioned to use their own professional judgment and consult any other necessary or appropriate sources prior to making clinical judgments based on the content of this document. Our editors have researched the information with input from experts, government agencies, and national organizations. Information and Internet links in this article were current as of the date of publication.*

**Project Leader in preparation of this Detail-Document:** Beth A. Leshner, Pharm.D., BCPS (original author 2004); Melanie Cupp, Pharm.D., BCPS (May 2008 update)

### References

1. Product information for *Wellbutrin*. GlaxoSmithKline. Research Triangle Park, NC 27709. August 2007.
2. Product information for *Wellbutrin XL*. GlaxoSmithKline. Research Triangle Park, NC 27709. August 2007.
3. Product information for *Wellbutrin SR*. GlaxoSmithKline. Research Triangle Park, NC 27709. August 2007.
4. Product information for *Zyban*. GlaxoSmithKline. Research Triangle Park, NC 27709. August 2007.
5. Product information for *Remeron SolTab*. Organon USA Inc. Roseland, NJ 07068. July 2007.
6. Product information for *Celexa*. Forest Pharmaceuticals, Inc. St. Louis, MO 63045. July 2007.
7. Product information for *Lexapro*. Forest Pharmaceuticals, Inc. St. Louis, MO 63045. May 2007.
8. Product information for *Prozac*. Eli Lilly and Company. Indianapolis, IN 46285. January 2008.
9. Product information for *Luvox*. Jazz Pharmaceuticals, Inc. Palo Alto, CA 94304. December 2007.
10. Product information for *Luvox CR*. Jazz Pharmaceuticals, Inc. Palo Alto, CA 94304. February 2008.
11. Product information for *Paxil CR*. GlaxoSmithKline. Research Triangle Park, NC 27709. January 2008.
12. Product information for *Paxil*. GlaxoSmithKline. Research Triangle Park, NC 27709. January 2008.
13. Product information for *Zoloft*. Pfizer Inc. New York, NY 10017. January 2008.
14. Product information for *Pristiq*. Wyeth Pharmaceuticals Inc. Philadelphia, PA 19101. February 2008.
15. Product information for *Cymbalta*. Eli Lilly and Company. Indianapolis, IN 46285. December 2007.
16. Product information for *Effexor XR*. Wyeth Pharmaceuticals Inc. Philadelphia, PA 19101. February 2008.
17. Product information for *Effexor*. Wyeth Pharmaceuticals Inc. Philadelphia, PA 19101. February 2008.
18. Depression Guideline Panel. Depression in Primary Care: Treatment of Major Depression: Clinical Practice Guideline. US Dept of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research. AHCPR publication 93-0551, Rockville, MD 1993
19. Finely PR, Laird LK, Benefield WH. Mood disorders I: major depressive disorders. In: Koda-Kimble MA, Young LY, Kradjan WA, et al., eds. Applied Therapeutics: the clinical use of drugs. 8<sup>th</sup> ed. Philadelphia: Lippincott Williams & Wilkins, 2005.
20. Drugs associated with weight gain. *Pharmacist's Letter/Prescriber's Letter* 2007;23(3):230312.
21. Product information for doxepin. Watson Laboratories, Inc. Corona, CA 92880. August 2007.
22. Product information for nortriptyline. Watson Laboratories, Inc. Corona, CA 92880. August 2007.
23. Product information for *Elavil*. AstraZeneca Pharmaceuticals LP. Wilmington, DE 19850. February 2003.
24. Cytochrome P450 drug interactions. *Pharmacist's Letter/Prescriber's Letter* 2006;22(2):220233.
25. Product information for *Norpramin*. Sanofi-Aventis U.S. LLC. Bridgewater, NJ 08807. July 2007.
26. Product information for *Tofranil-PM*. Mallinckrodt Inc. Hazelwood, MO 63042. May 2007.
27. Product information for imipramine. Mallinckrodt Inc. Hazelwood, MO 63042. May 2007.
28. Product information for *Desyrel*. Bristol-Myers Squibb Company. Princeton, NJ 08543. January 2005.

Cite this Detail-Document as follows: Comparison of commonly used antidepressants. *Pharmacist's Letter/Prescriber's Letter* 2008;24(5):240509.



Evidence and Advice You Can Trust...



3120 West March Lane, P.O. Box 8190, Stockton, CA 95208 ~ TEL (209) 472-2240 ~ FAX (209) 472-2249  
Copyright © 2008 by Therapeutic Research Center

Subscribers to *Pharmacist's Letter* and *Prescriber's Letter* can get *Detail-Documents*, like this one, on any topic covered in any issue by going to [www.pharmacistsletter.com](http://www.pharmacistsletter.com) or [www.prescribersletter.com](http://www.prescribersletter.com)