

**Information for Physicians on Prescription Products to Treat Depression During Pregnancy** - January 2006

Treatment decisions should be based on patient characteristics and clinical judgment.

Anti-depressants	Advantages During Pregnancy	Disadvantages During Pregnancy	Recommended Dose* (mg/day)	Reported Side Effects to Newborn Infant	Half-Life of Metabolites	FDA Class	Teratogenicity
<b>Sertraline</b> (Zoloft <sup>R</sup> )	<ul style="list-style-type: none"> <li>Expert Consensus Guidelines top choice during pregnancy (if planning to breastfeed)</li> </ul>	<ul style="list-style-type: none"> <li>No behavioral studies in human pregnancy</li> <li>Increased bleeding tendency (rare)</li> </ul>	<ul style="list-style-type: none"> <li>50 – 200 mg (25, 50, 100, 200)</li> </ul>	<ul style="list-style-type: none"> <li>Possible Discontinuation syndrome</li> </ul>	26 hours	C	Morphologic – none Behavioral - unknown
<b>Fluoxetine</b> (Prozac <sup>R</sup> )	<ul style="list-style-type: none"> <li>More studies in human pregnancy, including neurodevelopmental follow-up &amp; meta-analysis</li> <li>Expert Consensus Guidelines top choice during pregnancy (if not planning to breastfeed)</li> </ul>	<ul style="list-style-type: none"> <li>Possible increased risk of neonatal toxicity due to long half-life (tachypnea, respiratory distress, tremors, agitation, motor automatisms)</li> <li>Increased bleeding tendency (rare)</li> </ul>	<ul style="list-style-type: none"> <li>20 – 60 mg (10, 20, 40)</li> </ul>	<ul style="list-style-type: none"> <li>Vomiting, watery stools, excessive crying, difficulty sleeping, tremor, somnolence, hypotonia, decreased weight gain</li> </ul>	9 days	C	None
<b>Bupropion</b> (Wellbutrin <sup>R</sup> , Zyban <sup>R</sup> )	<ul style="list-style-type: none"> <li>No sexual side effects</li> <li>No excess weight gain</li> <li>Helps with smoking cessation</li> </ul>	<ul style="list-style-type: none"> <li>No behavioral studies in human pregnancy</li> <li>Lowers seizure threshold</li> <li>Can cause insomnia</li> <li>Higher rate of spontaneous abortions</li> <li>No benefit in treating anxiety</li> </ul>	<ul style="list-style-type: none"> <li>200 – 300 mg (150XL, 300XL, 100SR, 150 SR, 200SR)</li> </ul>	<ul style="list-style-type: none"> <li>Seizures</li> </ul>	21 hours	B	Morphologic - none Behavioral - unknown
<b>Citalopram</b> (Celexa <sup>R</sup> )	<ul style="list-style-type: none"> <li>Few interactions with other medications</li> </ul>	<ul style="list-style-type: none"> <li>No behavioral studies in human pregnancy</li> <li>Increased bleeding tendency (rare)</li> </ul>	<ul style="list-style-type: none"> <li>20 – 40 mg (10, 20, 40)</li> </ul>	<ul style="list-style-type: none"> <li>Uneasy sleep</li> </ul>	35 hours	C	Morphologic – none Behavioral - unknown
<b>Escitalopram</b> (Lexapro)	<ul style="list-style-type: none"> <li>Few interactions with other medications</li> </ul>	<ul style="list-style-type: none"> <li>No systematic studies in human pregnancy</li> <li>Increased bleeding tendency (rare)</li> </ul>	<ul style="list-style-type: none"> <li>10 mg (5, 10, 20)</li> </ul>	<ul style="list-style-type: none"> <li>Not known</li> </ul>	30 hours	C	Unknown (probably similar to citalopram)
<b>Mirtazapine</b> (Remeron <sup>R</sup> )	<ul style="list-style-type: none"> <li>Helps restore appetite in women who are not gaining weight</li> <li>Less likely to exacerbate nausea and vomiting</li> </ul>	<ul style="list-style-type: none"> <li>No systematic studies in human pregnancy</li> <li>Can cause excessive weight gain</li> <li>Tends to be sedating</li> </ul>	<ul style="list-style-type: none"> <li>15 – 45 mg (15, 30, 45)</li> </ul>	<ul style="list-style-type: none"> <li>Not known</li> </ul>	30 hours	C	Unknown
<b>Venlafaxine</b> (Effexor <sup>R</sup> )	<ul style="list-style-type: none"> <li>Balanced antidepressant; may be effective when selective agents are not</li> </ul>	<ul style="list-style-type: none"> <li>No behavioral studies in human pregnancy</li> </ul>	<ul style="list-style-type: none"> <li>75 – 225 mg (37.5XR, 75XR, 150XR)</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	11 hours	C	Morphologic – none Behavioral - unknown
<b>Desipramine</b> (Norpramin <sup>R</sup> )	<ul style="list-style-type: none"> <li>More studies in human pregnancy, including neurodevelopmental follow-up</li> </ul>	<ul style="list-style-type: none"> <li>Maternal side effects additive to pregnancy effects (sedation, constipation, tachycardia)</li> <li>Orthostatic hypotension, risking decreased placental perfusion</li> <li>Fetal and neonatal side effects: tachycardia, urinary retention</li> </ul>	<ul style="list-style-type: none"> <li>100 – 200 mg (10, 25, 50, 75, 100)</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	17 hours	C	None
<b>Nortriptyline</b> (Pamelor <sup>R</sup> )	<ul style="list-style-type: none"> <li>More studies in human pregnancy, including neurodevelopmental follow up</li> </ul>	<ul style="list-style-type: none"> <li>Maternal side effects additive to pregnancy effects (sedation, constipation, tachycardia)</li> <li>Orthostatic hypotension, risking decreased placental perfusion</li> <li>Fetal and neonatal side effects: tachycardia, urinary retention</li> </ul>	<ul style="list-style-type: none"> <li>50 – 150 mg (10, 25, 50, 75)</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	14 hours	C	None
<b>Paroxetine</b> (Paxil <sup>R</sup> )	<ul style="list-style-type: none"> <li>None (but may be more effective than other antidepressants for some individual patients)</li> </ul>	<ul style="list-style-type: none"> <li>No behavioral studies in human pregnancy</li> <li>Increased bleeding tendency (rare)</li> <li>Possible increased risk of neonatal side effects (respiratory distress, tremor, hypoglycemia, changes in sleep pattern and behavioral state, convulsions, cardiac arrhythmias)</li> </ul>	<ul style="list-style-type: none"> <li>20 – 60 mg</li> </ul>	<ul style="list-style-type: none"> <li>Possible Discontinuation syndrome:</li> </ul>	21 hours	D	Morphologic – Increased risk of cardio vascular malformations based on retrospective review Behavioral - unknown

? Physicians may consider initiating treatment with these agents at half of the lowest recommended therapeutic dose.

? Treatment decisions should primarily be based on patient characteristics and clinical judgment. Tapering of antidepressant in 3<sup>rd</sup> trimester requires thoughtful discussion with mother and close F/U.

? Psychotherapy is also an effective treatment for depression during pregnancy Dosages are from the *Physician's Desk Reference*, 60<sup>th</sup> ed.

Table based on Wisner et al *Postpartum Depression* Article in *N Eng J Med*, Vol. 347, No. 3, July 18, 2002, and MGH Center for Women's Health website.

**Information for Physicians on Prescription Products to Treat Postpartum, Depression** - January 2006  
 Treatment decisions should be based on patient characteristics and clinical judgment.

Anti-depressants	Recommended Dose* (mg/day)	Percent of Dose to Breastfeeding Baby**	Reported Side Effects to Breastfeeding Infants	Detectable Level in Infants?	Half-Life of Metabolites	FDA Class
<b>Sertraline</b> (Zoloft <sup>R</sup> )	• 50 – 200 mg (25,50, 100, 200)	• 0.4% - 1.7%	• None	Not detectable	26 hours	C
<b>Bupropion</b> (Wellbutrin <sup>R</sup> , Zyban <sup>R</sup> )	• 200 – 300 mg (150XL, 300XL, 100SR, 150 SR, 200SR)	• Not known	Seizures	Not detectable	21 hours	B
<b>Citalopram</b> (Celexa <sup>R</sup> )	• 20 – 40 mg (10, 20, 40)	• 0.7% - 9.0%	• Uneasy sleep	Rare report of detectable level.	30 hours	C
<b>Escitalopram</b> (Lexapro)	• 10 mg (5, 10, 20)	• Not known	• Not known	Rare report of detectable level.	30 hours	C
<b>Mirtazapine</b> (Remeron <sup>R</sup> )	• 15 – 45 mg (15, 30, 45)	• Not known	• Not known	Unknown	30 hours	C
<b>Venlafaxine</b> (Effexor <sup>R</sup> )	• 75 – 225 mg (37.5XR, 75XR, 150XR)	• 5.2% - 7.4%	• None	Metabolite present in breast milk, rare in infant serum	11 hours	C
<b>Fluoxetine</b> (Prozac <sup>R</sup> )	• 20 – 60 mg (10, 20, 40)	• 1.2% - 12.0%	• Vomiting, watery stools, excessive crying, difficulty sleeping, tremor, somnolence, hypotonia, decreased weight gain	Serum levels evident given long half-life of fluoxetine and metabolite	9 days	C
<b>Desipramine</b> (Norpramin <sup>R</sup> )	• 100 – 200 mg (10, 25, 50, 75, 100)	• 1.0%	• None	Not detectable	17 hours	C
<b>Noryptiline</b> (Pamelor <sup>R</sup> )	50 – 150 mg (10, 25, 50, 75)	Not known	None	At limit of detectability	14 hours	C
<b>Paroxetine</b> (Paxil <sup>R</sup> )	• 20 – 60 mg (10, 20, 30, 40)	• 0.1% - 4.3%	• None	Not detectable	21 hours	C

- ? In general, a shorter half-life is associated with quicker hepatic metabolism and less likelihood of drug or metabolites entering breast milk.
- ? Physicians may consider initiating treatment with these agents at half of the lowest recommended therapeutic dose.
- ? Treatment decisions should be based on patient characteristics and clinical judgment.
- ? Psychotherapy is also an effective treatment for postpartum depression
- ? Please email us for scientific references list.
- ? Dosages are from the *Physician's Desk Reference*, 60<sup>th</sup> ed.
- ?

Table based on Wisner et al *Postpartum Depression* Article in *N Eng J Med*, Vol. 347, No. 3, July 18, 2002., and MGH Center for Women's Health website.

\*\* These are weight-adjusted estimates.