### Information for Physicians on Prescription Products to Treat Perinatal Depression - February 2006

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

For questions call the Perinatal Depression Project at 1800-573-6121

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<th>Anti-depressants</th>
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| **Bupropion** (Wellbutrin®, Zyban®) | • No sexual side effects  
• No excess weight gain  
• Helps with smoking cessation | • No behavioral studies in human pregnancy  
• Lowers seizure threshold  
• Can cause insomnia  
• Higher rate of spontaneous abortions | Not known | Seizures | Morphologic - none  
Behavioral - unknown |
| **Citalopram** (Celexa®) | • Few interactions with other medications | • No behavioral studies in human pregnancy  
• Increased bleeding tendency (rare)  
• Possible risk of pulmonary hypertension | 0.7% - 9.0% | Uneasy sleep | Morphologic - none  
Behavioral - unknown |
| **Desipramine** (Norpramin®) | • More studies in human pregnancy, including neurodevelopmental follow-up | • Maternal side effects additive to pregnancy effects (sedation, constipation, tachycardia)  
• Orthostatic hypotension, risk decreased placental perfusion  
• Fetal and neonatal side effects: tachycardia, urinary retention | 1.0% | None | None |
| **Escitalopram** (Lexapro®) | • Few interactions with other medications | • No systematic studies in human pregnancy  
• Increased bleeding tendency (rare) | Not known | Not known | Unknown  
(probably similar to citalopram) |
| **Fluoxetine** (Prozac®) | • More studies in human pregnancy, including neurodevelopmental follow-up & meta-analysis  
• Expert Consensus Guidelines top choice during pregnancy (if not planning to breastfeed) | • Possible increased risk of neonatal toxicity due to long half-life (tachycardia, respiratory distress, tremors, agitation, motor automatisms)  
• Increased bleeding tendency (rare)  
• Possible risk of pulmonary hypertension | 1.2% - 12.0% | Vomiting, watery stools, excessive crying, difficulty sleeping, tremor, somnolence, hypotonia, decreased weight gain | None |
| **Mirtazapine** (Remeron®) | • Helps restore appetite in women who are not gaining weight  
• Less likely to exacerbate nausea and vomiting | • No systematic studies in human pregnancy  
• Can cause excessive weight gain  
• Tends to be sedating | Not known | Not known | Unknown |
| **Nortriptyline** (Pamelor®) | • More studies in human pregnancy, including neurodevelopmental follow-up | • Maternal side effects additive to pregnancy effects (sedation, constipation, tachycardia)  
• Orthostatic hypotension, risk decreased placental perfusion  
• Fetal and neonatal side effects: tachycardia, urinary retention | Not known | None | None |
| **Paroxetine** (Paxil®) | • None (but may be more effective than other antidepressants for some individual patients) | • No behavioral studies in human pregnancy  
• Increased bleeding tendency (rare)  
• Possible increased risk of neonatal side effects (respiratory distress, tremor, hypoglycemia, changes in sleep pattern and behavioral state, convulsions, cardiac arrhythmias)  
• Possible risk of pulmonary hypertension | 0.1% - 4.3% | None | Morphologic - increased risk of cardio vascular malformations based on retrospective review  
Behavioral - unknown |
| **Sertraline** (Zoloft®) | • Expert Consensus Guidelines top choice during pregnancy (if planning to breastfeed) | • No behavioral studies in human pregnancy  
• Increased bleeding tendency (rare)  
• Possible risk of pulmonary hypertension | 0.4% - 1.7% | None | Morphologic - none  
Behavioral - unknown |
| **Venlafaxine** (Effexor®) | • Balanced antidepressant, may be effective when selective agents are not | • No behavioral studies in human pregnancy | 5.2% - 7.4% | None | Morphologic - none  
Behavioral - unknown |

* = 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 judgement. Recommended dosages can be found in the Physician's Desk Reference, 60th ed. Table based on Wisner et al Postpartum Depression Article in N Eng J Med, Vol. 347, No. 3, July 18, 2002, pg 196 & related articles (for other references, call Perinatal Depression Project at # above).

** These are weight-adjusted estimates.

General notes:  
• About 70% of women with recurrent major depression relapse during pregnancy if they discontinue antidepressant medication.  
• Untreated major depression during pregnancy is associated with increased risk of preterm birth, lower birth weight, pre-eclampsia and neonatal irritability.  
• All antidepressants, if abruptly discontinued during pregnancy or at the time of birth, can lead to discontinuation signs in the fetus or neonate. These signs can include irritability, excessive crying, difficulty sleeping, difficulty feeding, increased tone, hyperreflexia, shivering, tachycardia, and convulsions. Discontinuation side effects can be minimized by a partial dose taper during the last month of pregnancy, if the patient is asymptomatic, with a return to full dose after delivery to prevent postpartum recurrence.  
• Pharmacokinetic changes during pregnancy can affect antidepressant dosing. For SSRIs (citalopram, escitalopram, fluoxetine, paroxetine, sertraline) and tricyclic (desipramine, norbupramine, norbupramine) antidepressants, many women need increased doses towards the second half of pregnancy to maintain a therapeutic effect.