

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

Anti-depressants	Advantages During Pregnancy	Disadvantages During Pregnancy	Percent of Dose to Breastfeeding Baby**	Reported Side Effects to Breastfeeding Infants	Teratogenicity
Bupropion (Wellbutrin <sup>®</sup> , Zyban <sup>®</sup> )	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 <sup>®</sup> )	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 <sup>®</sup> )	More studies in human pregnancy, including neurodevelopmental follow-up	Maternal side effects additive to pregnancy effects (sedation, constipation, tachycardia) Orthostatic hypotension, risking decreased placental perfusion Fetal and neonatal side effects: tachycardia, urinary retention	1.0%	None	None
Escitalopram (Lexapro <sup>®</sup> )	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 <sup>®</sup> )	More studies in human pregnancy, including neurodevelopmental follow-up & meta-analysis <b>Expert Consensus Guidelines top choice during pregnancy (if not planning to breastfeed)</b>	<b>Possible increased risk of neonatal toxicity due to long half-life (tachypnea, respiratory distress, tremors, agitation, motor automatisms)</b> Increased bleeding tendency (rare) Possible risk of pulmonary hypertension	<b>1.2% - 12.0%</b>	<b>Vomiting, watery stools, excessive crying, difficulty sleeping, tremor, somnolence, hypotonia, decreased weight gain</b>	<b>None</b>
Mirtazapine (Remeron <sup>®</sup> )	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
Nortryptiline (Pamelor <sup>®</sup> )	More studies in human pregnancy, including neurodevelopmental follow up	Maternal side effects additive to pregnancy effects (sedation, constipation, tachycardia) Orthostatic hypotension, risking decreased placental perfusion Fetal and neonatal side effects: tachycardia, urinary retention	Not known	None	None
Paroxetine (Paxil <sup>®</sup> )	<b>None</b> (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 <sup>®</sup> )	<b>Expert Consensus Guidelines top choice during pregnancy (if planning to breastfeed)</b>	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 <sup>®</sup> )	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

\* Developed by the University of Illinois at Chicago (UIC) Perinatal Depression Project. Treatment decisions should be based on patient characteristics and clinical judgment.

\* = 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*, 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, pg. 196 & related articles

\*\* 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, tachypnea, 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 SSRI (citalopram, escitalopram, fluoxetine, paroxetine, sertraline) and tricyclic (desipramine, nortryptiline) antidepressants, many women need increased doses towards the second half of pregnancy to maintain a therapeutic effect.