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PM02063 EXCRETION OF NEFAZODONE AND SERTRALINE INTO BREAST MILK — DETERMINED BY HPLC

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In women who are also being treated for postpartum depression the issue of the passage of drugs into breast milk and the exposure of the child to drug arise. Presently there is almost no systematic scientific data to inform clinical practice for newer antidepressant drugs. The data in this report show that for women receiving the antidepressants nefazodone and sertraline, the breast fed infant is exposed to less than 2% of the maternal dose. The long term consequences of this exposure over a period of 3–6 months are not known, but there do not appear to be any immediate detrimental effects.

Drugs and their metabolites were extracted from plasma or milk after adding an internal standard, trazodone for nefazodone and clomipramine for sertraline. Nefazodone and its metabolites mCPP, hydroxynefazodone and a diode BMS-180492 were extracted by solid phase extraction using Bond Elut® Certify columns activated with methanol, washed, and extracted with 80:20:2 methylene chloride, acetic acid and ammonia. Sertraline and desmethylsertraline were extracted from alkaline plasma into hexane, backextracted into 0.1 M HCl, and re-extracted into hexane after adding 8 M NaOH. All extracts were dried and reconstituted in mobile phase. Nefazodone and sertraline assays were run under the same HPLC conditions. Analysis was carried out on a μ-Bondapak C18
column and UV detection at 205 nm. The mobile phase was 40% acetonitrile: 60% 50 mM phosphate buffer.

Data for sertraline showed the mean milk to plasma ratio to be 1.27 with a range of 0.69 to 2.08. While infant exposure may be low in adult terms difficulties such as sedation and hyper-reflexia may be apparent in some infants exposed to psychotropic medications in the breast milk. Further studies are necessary to address this aspect.

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