

Clinical Pharmacology/Biopharmaceutics Review

BPCA Summary Review

PRODUCT (Generic Name):	Olanzapine
PRODUCT (Brand Name):	Zyprexa
DOSAGE FORM:	Tablets
DOSAGE STRENGTHS:	2.5, 5,7.5, 10 and 20 mg
NDA:	20-592/040,041(SE5)
NDA TYPE:	Supplement for Schizophrenia and Bipolar disorder in adolescents in response to FDA Pediatric Written Request Letter
SUBMISSION DATE:	October 30, 2006
SPONSOR:	Eli Lilly
OND DIVISION:	HFD

EXECUTIVE SUMMARY

Olanzapine is currently indicated in the treatment of schizophrenia or bipolar I in adults. Previous studies in children and adolescents have shown a progressive increase in olanzapine concentrations with corresponding increases in dose. The data also suggested that pediatric patients generally have olanzapine plasma concentrations similar to those for adults for a given weight-adjusted dose. This sNDA provides information on the clearance of olanzapine in adolescents age 13-17 years with varying doses of 2.5 to 20 mg/day.

This sNDA includes a population pharmacokinetic study done in adolescents using flexible doses between 2.5mg/day to 20 mg/day.

The population pharmacokinetic study was done in 105 patients (Study F1D-MC-HGMF) . Study duration was 4 and ½ weeks and the study population consisted of 64 males and 41 females .

The overall conclusions from the pharmacokinetic study in adolescents were:

- The exposure at steady-state in adolescents was 30-63% higher than in adults.
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- Clearance in female adolescents was found to be 28% lower than in male adolescents.

RECOMMENDATION

From a Clinical Pharmacology/Biopharmaceutics perspective this sNDA is acceptable with the labeling changes suggested by the reviewer.

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/s/

Raman Baweja

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