CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER: 022328Orig1s000

MEDICAL REVIEW(S)



CLINICAL REVIEW

Application Type NDA (Complete Response)

Application Number(s) 022328

Priority or Standard Class 1 Resubmission

Submit Date(s) 9/27/11

Received Date(s) 9/27/11

PDUFA Goal Date 11/27/11

Division / Office DNP / ODE1

Reviewer Name(s) Christopher D Breder, MD PhD

Review Completion Date 25 Oct 2011

Established Name Zolpidem tartrate lozenge

(Proposed) Trade Name Intermezzo

Therapeutic Class Sedative Hypnotic

Applicant Transcept Pharmaceuticals

Formulation(s) sublingual lozenge

Dosing Regimen x 1 qMiddle of the Night

(MOTN) PRN

Indication(s) Treatment of insomnia

following MOTN awakening

Intended Population(s) Insomnia patients

Template Version: March 6, 2009



Clinical Review Christopher D. Breder, MD PhD N022328 / 0046 Intermezzo / zolpidem tartrate lozenge

Table of Contents

1	RE	COMMENDATIONS/RISK BENEFIT ASSESSMENT	5
	1.1 1.2 1.3 1.4	Recommendation on Regulatory Action	5 5
2	INT	RODUCTION AND REGULATORY BACKGROUND	5
	2.1	Summary of Presubmission Regulatory Activity Related to Submission	5
3	SIG	INIFICANT ISSUES RELATED TO OTHER REVIEW DISCIPLINES	8
	3.1.	Pharmacokinetics	8
4	RE	VIEW OF EFFICACY	11
	4.1 4.1 4.1 4.1 4.1	.2 Demographics	11 11 11 11 12 14
5	RE	VIEW OF SAFETY	16
	5.1 5.2		16 16 16 18
6	AP	PENDICES	20
		Analysis of Postdose Zolpidem Concentrations by Gender and Dose	



Clinical Review Christopher D. Breder, MD PhD N022328 / 0046 Intermezzo / zolpidem tartrate lozenge

Table of Tables

Table 1 Mean Intermezzo Pharmacokinetic Parameters after Single Dose of Intermezzo
3.5, 1.75, and 1.0 mg in Females and Males (Study ZI-05-009)
Table 2 Mean (SD) Plasma Concentration at 3, 4, and 5 hours in Females Following the
1.75 mg dose and in males Following the 3.5 mg Dose9
Table 3 The Predictive Probabilities of Exceeding Threshold Plasma Concentration
Values (female subjects)9
Table 4 Predictive Probabilities of Exceeding Threshold Plasma Concentration Values
(male subjects)10
Table 5 Mean (%CV) Intermezzo 3.5 mg Cmax and Plasma Levels at 3, 4, and 5 hours
in males10
Table 6 Adverse Events for Females (1.75 mg) and Males (3.5 mg) from the ZI-10
Study16
Table 7 Adverse Events at the 3.5 mg Dose Level from the ZI-12 Study



Clinical Review Christopher D. Breder, MD PhD N022328 / 0046 Intermezzo / zolpidem tartrate lozenge

Table of Figures

Figure 1 Cumulative % of Patients Asleep (After MOTN Awakening) at Sequential 10-	
Minute Intervals by PSG (Study ZI-06-010)	12
Figure 2 LPS Post MOTN Awakening in Females by Dose Group	13
Figure 3 LPS Post MOTN Awakening in Males by Dose Group	15
Figure 4 Distribution of Plasma Zolpidem Concentrations 3 hours Post-dose by Gende	∍r
and Dose	21
Figure 5 Distribution of Plasma Zolpidem Concentrations 4 hours Post-dose by Gende and Dose	
Figure 6 Distribution of Plasma Zolpidem Concentrations 5 hours Post-dose by Gende and Dose	er



DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

