

# **CENTER FOR DRUG EVALUATION AND RESEARCH**

***APPLICATION NUMBER:***

**50-684 / S-045**

**50-750 / S-012**

**APPROVAL LETTER**



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
Rockville, MD 20857

NDA 50-684/S-045

NDA 50-750/S-012

Wyeth Pharmaceuticals, Inc.  
Attention: Sanjay Sehgal, Ph.D.  
Director, CMC, Worldwide Regulatory Affairs  
P.O. Box 8299  
Philadelphia, Pennsylvania 19101-8299

Dear Dr. Sehgal:

Please refer to your supplemental new drug applications dated May 27, 2005, received May 31, 2005, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for Zosyn® (piperacillin and tazobactam injection) (NDA 50-684), and Zosyn® (piperacillin and tazobactam injection) in Galaxy® Containers (NDA 50-750). We note that these applications are subject to the exemption provisions contained in section 125(d)(2) of Title I of the FDA Modernization Act of 1997.

We acknowledge receipt of your submissions dated September 23, 27, and 30, 2005.

These supplements provide for reformulation of the drug product and labeling changes.

We completed our review of these applications as amended, and they are approved, effective on the date of this letter, for use as recommended in the agreed-upon labeling text dated September 30, 2005. Additionally, the following changes were agreed to in a teleconference on September 30, 2005 for NDA 50-750 and must be incorporated, as a condition of this approval.

#### DOSAGE AND ADMINISTRATION

Due to the *in vitro* inactivation of the aminoglycoside by beta-lactam antibiotics, Zosyn and the aminoglycoside are recommended for separate administration. Zosyn and the aminoglycoside should be reconstituted, ~~and~~ diluted, and administered separately when concomitant therapy with aminoglycosides is indicated. (See **PRECAUTIONS, Drug Interactions.**)

In circumstances where co-administration is ~~preferred~~ via Y-site is necessary, the reformulated Zosyn containing EDTA supplied in Galaxy® containers is compatible for simultaneous co-administration via Y-site infusion only with the following aminoglycosides under the following conditions:

**After Table 4, following the footnote, insert the following text:**

Zosyn Galaxy® containers are available as 2.25 g per 50 mL, 3.375 g per 50 mL, and 4.5 g per 100 mL. Zosyn 3.375 g per 50 mL Galaxy® containers are NOT compatible with gentamicin for co-administration via a Y-site due to the higher concentrations of piperacillin and tazobactam.

The final printed labeling (FPL) must include the revisions indicated. These revisions are terms of the approval of these applications. Please submit an electronic version of the FPL according to the guidance for industry titled *Providing Regulatory Submissions in Electronic Format - NDA*. Alternatively, you may submit 20 paper copies of the FPL as soon as it is available but no more than 30 days after it is printed. Individually mount 15 of the copies on heavy-weight paper or similar material. For administrative purposes, designate these submissions "**FPL for approved supplements NDA 50-684/S-045, NDA 50-750/S-012.**" Approval of these submissions by FDA is not required before the labeling is used.

If you issue a letter communicating important information about this drug product (i.e., a "Dear Health Care Professional" letter), we request that you submit a copy of the letter to this NDA and a copy to the following address:

MEDWATCH, HFD-410  
FDA  
5600 Fishers Lane  
Rockville, MD 20857

We remind you that you must comply with the reporting requirements for an approved NDA (21 CFR 314.80 and 314.81).

If you have any questions, call Susmita Samanta, M.D., Regulatory Project Manager, at (301) 796-1400.

Sincerely,

*{See appended electronic signature page}*

Janice M. Soreth, M.D.  
Director  
Division of Anti-Infective and Ophthalmology Products  
Office of Antimicrobial Products  
Center for Drug Evaluation and Research

Enclosure: Package Insert