

Medical Officer Labeling Review
Division of Gastroenterology and Inborn Error Products

NDA#: 22,210

Sponsor: Eurand

Drug: Zenpep

Drug Classes: Pancreatic Enzyme Product (PEP)

Dose and Form: 3,000 lipase units / oral

Proposed Indication: The treatment of exocrine pancreatic insufficiency
(b) (4) to cystic fibrosis and other conditions

Date Review Completed: June 15, 2011

Clinical Reviewer: Marjorie F. Dannis MD

Team Leader: Anil Rajpal MD

The mutually agreed (between Eurand and FDA) upon labeling changes which represent the new dosage strength of 3,000 lipase units are shown below:

Labeling - Package Insert

A. Highlights of Prescribing Dosage Section - Infants (up to 12 months)

Revise first bullet to read as follows: 'Infants may be given 3,000 lipase units (one capsule) per 120 mL of formula or per breast-feeding'.

B. Full Prescribing Information (Dosage Section 2.1)

1. Paragraph 3 should be revised as follows:

Dosage recommendations for pancreatic enzyme replacement therapy were published following the Cystic Fibrosis Foundation Consensus Conferences.^{1, 2, 3} ZENPEP should be administered in a manner consistent with the recommendations of the Conferences provided in the following paragraphs, with one exception. (b) (4)
(b) (4) the Conferences recommend doses of 2,000 to 4,000 lipase units in infants up to 12 months. ZENPEP is available (b) (4) in a 3,000 lipase unit capsule. (b) (4) the recommended dose of ZENPEP in infants up to 12 months is 3,000 lipase units. Patients may be dosed on a fat ingestion-based or actual body weight-based dosing scheme.

2. **Dosage - Infants (up to 12 months):** Revise the usual dosage to read as follows:

Infants (up to 12 months)

(b) (4) infants may be given 3,000 lipase units (one capsule) per 120 mL of formula or breast-feeding. Do

not mix ZENPEP capsule contents directly into formula or breast milk prior to administration [see *Dosage and Administration (2.2)*].

C. Full Prescribing Information (Administration Section 2.2)

Change dose listed for infants up to 12 months of age from 2,000 to 4,000 lipase units to '**3,000 lipase units per 120 mL of formula or per breast-feeding**'. The paragraph should read as follows:

Infants (up to 12 months)

ZENPEP should be administered to infants immediately prior to each feeding, using a dosage of (b)(4) **3,000** lipase units (one capsule) per 120 mL of formula or per breast-feeding. Contents of the capsule may be administered with a small amount of applesauce, or other acidic food with a pH of 4.5 or less (e.g., commercially available preparations of bananas, or pears). Contents of the capsule may also be administered directly to the mouth. Administration should be followed by breast milk or formula. Contents of the capsule **should not** be mixed directly into formula or breast milk as this may diminish efficacy. Care should be taken to ensure that ZENPEP is not crushed or chewed or retained in the mouth, to avoid irritation of the oral mucosa.

Additional Comments

PERC was convened on February 22, 2011 to discuss this supplement. It was their conclusion that Eurand had satisfied the post-marketing requirement that an age appropriate formulation be developed for the youngest patients. DGIEP is in agreement with PERC that this PMR has been satisfied. In addition, DGIEP agrees with the labeling changes as presented above.

This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.

/s/

MARJORIE F DANNIS
06/15/2011

ANIL K RAJPAL
06/15/2011
I concur with Dr. Dannis.