Date of Approval: December 18, 2008

FREEDOM OF INFORMATION SUMMARY

SUPPLEMENTAL ABBREVIATED NEW ANIMAL DRUG APPLICATION

ANADA 200-387

FLUNAZINE
(flunixin meglumine)
Injectable Solution

Horses and Cattle

Effect of the Supplement: addition of a new indication for the control of pyrexia associated with acute bovine mastitis that is no longer protected by marketing exclusivity

Sponsored by:

Cross Vetpharm Group, Ltd.

FREEDOM OF INFORMATION SUMMARY

1. GENERAL INFORMATION:

a. File Number:	ANADA 200-387
b. Sponsor:	Cross Vetpharm Group Ltd. Broomhill Rd. Tallaght, Dublin 24, Ireland Drug Labeler Code: 061623 U.S. Agent: Linda M. Duple Director, North American Regulatory Affairs Bimeda, Inc. 2836 Dolliver Park Avenue Lehigh, IA 50557
c. Established Name:	Flunixin meglumine
d. Proprietary Name:	FLUNAZINE
e. Dosage Form:	Injectable solution
f. How Supplied:	100 and 250 mL multiple dose vials
g. How Dispensed:	Rx
h. Amount of Active Ingredient:	Each mL contains flunixin meglumine equivalent to 50 mg of flunixin.
i. Route of Administration:	For intramuscular or intravenous use in horses and intravenous use in beef and dairy cattle
j. Species/Class:	Horses, not intended for human consumption; beef cattle; dairy cattle; calves, excluding veal calves. Not intended for use in dry dairy cows.
k. Recommended Dosage:	Horses: For musculoskeletal disorders is 0.5 mg/lb (1 mL/100 lbs) body weight once daily. Treatment may be given by intravenous or intramuscular injection and repeated for up to 5 days. For the alleviation of pain associated with equine colic is 0.5 mg per pound of body weight.

	Intravenous administration is recommended for prompt relief. Cattle: For control of pyrexia associated with bovine respiratory disease and endotoxemia and control of inflammation in endotoxemia is 1.1 to 2.2 mg/kg (0.5 to 1 mg/lb; 1 to 2 mL per 100 lbs) body weight given by slow intravenous administration either once a day as a single dose or divided into two doses at 12-hour intervals for up to 3 days. The total daily dose should not exceed 2.2 mg/kg (1.0 mg/lb) of body weight. For acute bovine mastitis it is 2.2 mg/kg (1.0 mg/lb; 2 mL per 100 lbs) of body weight given once by intravenous administration.
l. Pharmacological Category:	Anti-inflammatory, anti-pyretic
m. Indications:	Horses: FLUNAZINE Injectable Solution is recommended for the alleviation of inflammation and pain associated with musculoskeletal disorders in the horse. It is also recommended for the alleviation of visceral pain associated with colic in the horse. Cattle: FLUNAZINE Injectable Solution is indicated for the control of pyrexia associated with bovine respiratory disease, endotoxemia, and acute bovine mastitis. FLUNAZINE Injectable Solution is also indicated for control of inflammation in endotoxemia.
n. Pioneer Product:	BANAMINE Injectable Solution; flunixin meglumine; NADA 101-479; Schering-Plough Animal Health Corp.
o. Effect of Supplement:	The supplement requests the addition of a new indication, “for the control of pyrexia associated with acute bovine mastitis”, that is no longer protected by marketing exclusivity.

2. TARGET ANIMAL SAFETY AND DRUG EFFECTIVENESS:

Refer to the original Freedom of Information (FOI) Summary dated March 2, 2006 (A-200387-E-0003).

3. HUMAN SAFETY:

The following are assigned to this product for cattle:

- **Tolerances for Residues:**
  The tolerances established for the pioneer product apply to the generic product. A tolerance of 125 parts per billion (ppb) is established for flunixin free acid residues (the marker residue) in the uncooked edible tissues of the liver (the target tissue), 25 ppb in the muscle, and 2 ppb in milk under 21 CFR 556.286.

- **Withdrawal Times:**
  Under the CVM Bioequivalence Guidelines, when a generic product is granted a waiver of the *in vivo* bioequivalence testing, the withdrawal period established for the pioneer product is also assigned to the generic product.

  For this reason, a withdrawal period of 4 days has been established for flunixin meglumine in cattle (21 CFR 522.970), and milk that has been taken during treatment and for 36 hours after the last treatment must not be used for food. A withdrawal period has not been established for this product in preruminating calves.

- **Regulatory Method for Residues:**
  The analytical method for the determination of flunixin meglumine in bovine liver is a high performance liquid chromatography (HPLC) method. The validated methods are on file at the Center for Veterinary Medicine, 7500 Standish Place, Rockville, MD 20855.

4. AGENCY CONCLUSIONS:

This ANADA submitted under section 512(b)(2) of the Federal Food, Drug, and Cosmetic Act satisfies the requirements of section 512(n) of the act and demonstrates that FLUNAZINE Injectable Solution, when used under its proposed conditions of use, is safe and effective for its labeled indications.

5. ATTACHMENTS:

Facsimile generic labeling and currently approved pioneer labeling are attached as indicated below:

<u>Generic Labeling for ANADA 200-124</u>
FLUNAZINE Injectable Solution- 100 mL and 250 mL vial labels; and package outserts

<u>Pioneer Labeling for NADA 101-479:</u>
BANAMINE Injectable Solution- 100 mL and 250 mL vial labels, package insert, and 100 mL and 250 mL carton labels