Date of Approval: November 22, 2021

FREEDOM OF INFORMATION SUMMARY

ORIGINAL ABBREVIATED NEW ANIMAL DRUG APPLICATION

ANADA 200-695

TIA™ 12.5%

(tiamulin hydrogen fumarate)

Liquid Concentrate

Swine

TIA™ 12.5% (tiamulin hydrogen fumarate), when administered in the drinking water for five consecutive days, is an effective antibiotic for the treatment of swine dysentery associated with *Brachyspira* (formerly *Serpulina* or *Treponema*) *hyodysenteriae* susceptible to tiamulin at a dose level of 3.5 mg tiamulin hydrogen fumarate per pound of body weight daily and for treatment of swine pneumonia due to *Actinobacillus pleuropneumoniae* susceptible to tiamulin when given at 10.5 mg tiamulin hydrogen fumarate per pound of body weight daily.

Sponsored by:

Virbac AH, Inc.

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I. GENERAL INFORMATION

A. File Number

ANADA 200-695

B. Sponsor

Virbac AH, Inc.
PO Box 162059
Fort Worth, TX 76161

Drug Labeler Code: 051311

C. Proprietary Name

TIA™ 12.5%

D. Drug Product Established Name

tiamulin hydrogen fumarate

E. Pharmacological Category

Antibacterial

F. Dosage Form

Liquid concentrate

G. Amount of Active Ingredient

12.5% tiamulin hydrogen fumarate

H. How Supplied

1 Liter bottle

I. Dispensing Status

Over-the-counter (OTC)

J. Dosage Regimen

For swine dysentery (associated with *Brachyspira hyodysenteriae* susceptible to tiamulin): Administer 3.5 mg tiamulin hydrogen fumarate per pound of body weight in drinking water daily for 5 consecutive days.

For swine pneumonia (due to *Actinobacillus pleuropneumoniae* susceptible to tiamulin): Administer 10.5 mg tiamulin hydrogen fumarate per pound of body weight in drinking water daily for 5 consecutive days.

K. Route of Administration

Oral

L. Species/Class

Swine

M. Indications

TIA™ 12.5% (tiamulin hydrogen fumarate), when administered in the drinking water for five consecutive days, is an effective antibiotic for the treatment of swine dysentery associated with *Brachyspira* (formerly *Serpulina* or *Treponema*) *hyodysenteriae* susceptible to tiamulin at a dose level of 3.5 mg tiamulin hydrogen fumarate per pound of body weight daily and for treatment of swine pneumonia due to *Actinobacillus pleuropneumoniae* susceptible to tiamulin when given at 10.5 mg tiamulin hydrogen fumarate per pound of body weight daily.

N. Reference Listed New Animal Drug (RLNAD)

Denagard™ 12.5%; tiamulin hydrogen fumarate; NADA 140-916; Elanco US Inc.

II. BIOEQUIVALENCE

The Federal Food, Drug, and Cosmetic Act (FD&C Act), as amended by the Generic Animal Drug and Patent Term Restoration Act (GADPTRA) of 1988, allows for an abbreviated new animal drug application (ANADA) to be submitted for a generic version of an approved new animal drug (RLNAD). The ANADA sponsor is required to show that the generic product is bioequivalent to the RLNAD, which has been shown to be safe and effective. Effectiveness, target animal safety and human food safety data (other than tissue residue data) are not required for approval of an ANADA. If bioequivalence is demonstrated through a clinical endpoint study in a food-producing animal, then a tissue residue study to establish the withdrawal period for the generic product is also required. For certain dosage forms, the agency will grant a waiver from the requirement to perform *in vivo* bioequivalence studies (biowaiver) (55 FR 24645, June 18, 1990; Fifth GADPTRA Policy Letter; Bioequivalence Guideline, October 9, 2002).

Based on the formulation characteristics of the generic product, Virbac AH, Inc., was granted a biowaiver for the generic product TIA™ 12.5% (tiamulin hydrogen fumarate) Liquid Concentrate. The generic drug product is a liquid concentrate, contains the same active ingredient in the same concentration and dosage form as the RLNAD, and contains no inactive ingredients that may significantly affect the bioavailability of the active ingredient. The RLNAD is Denagard™ 12.5% (tiamulin hydrogen fumarate) Liquid Concentrate, sponsored by Elanco US Inc., under NADA 140-916, and was approved for use in swine on January 29, 1993.

III. HUMAN FOOD SAFETY

The tolerances for residues and withdrawal periods established for the RLNAD apply to the generic product. The following are assigned to this product for swine:

A. Acceptable Daily Intake and Tolerances for Residues

The acceptable daily intake (ADI) for total residues of tiamulin hydrogen fumarate is 25 µg/kg of body weight/day. The tolerances established for the RLNAD apply to the generic product. A tolerance of 0.6 ppm is established for 8-

alpha-hydroxymutilin (the marker residue) in liver (the target tissue), under 21 CFR 556.732.

B. Withdrawal Periods

Because a biowaiver was granted, the withdrawal periods are those previously assigned to the RLNAD product. A withdrawal period of 3 days has been established for tiamulin hydrogen fumarate in swine treated for five consecutive days *via* drinking water at a daily dose of 3.5 mg/lb of body weight. A withdrawal period of 7 days has been established for tiamulin hydrogen fumarate in swine treated for five consecutive days *via* drinking water at a daily dose of 10.5 mg/lb of body weight.

C. Analytical Method for Residues

The validated analytical method for analysis of residues of tiamulin hydrogen fumarate is on file at the Center for Veterinary Medicine, 7500 Standish Place, Rockville, MD 20855. To obtain a copy of the analytical method, please submit a Freedom of Information request to: https://www.accessdata.fda.gov/scripts/foi/FOIRequest/requestinfo.cfm.

IV. USER SAFETY

The product labeling contains the following information regarding safety to humans handling, administering, or exposed to TIA™ 12.5%:

Warning: Keep out of reach of children. Avoid direct contact with the skin. Direct contact with skin or mucous membranes may cause irritation.

Caution: For use in drinking water of swine only – Not for use in humans.

V. AGENCY CONCLUSIONS

The data submitted in support of this ANADA satisfy the requirements of section 512(c)(2) of the FD&C Act. The data demonstrate that TIA™ 12.5%, when used according to the label, is safe and effective for the indications listed in Section I.M. above.

Additionally, data demonstrate that residues in food products derived from swine treated with TIA™ 12.5% will not represent a public health concern when the product is used according to the label.