Date of Approval: August 27, 2015

FREEDOM OF INFORMATION SUMMARY

SUPPLEMENTAL ABBREVIATED NEW ANIMAL DRUG APPLICATION

ANADA 200-509

TILMOVET 90

Tilmicosin

Type A medicated article

Beef and Non-Lactating Dairy Cattle

This supplement provides for addition of the following indication for use in a new species/class: "For the control of bovine respiratory disease (BRD) associated with *Mannheimia haemolytica*, *Pasteurella multocida*, and *Histophilus somni* in groups of beef and non-lactating dairy cattle, where active BRD has been diagnosed in at least 10% of the animals in the group."

Sponsored by:

Huvepharma AD

Table of Contents

I. GENERAL INFORMATION:

A. File Number

ANADA 200-509

B. Sponsor

Huvepharma AD
5th Floor, 3A Nikolay Haytov Str.
1113 Sofia
Bulgaria

Drug Labeler Code: 016592

US Agent Name: Kelly W. Beers, Ph.D.
Huvepharma, Inc.
525 Westpark Drive, Suite 230
Peachtree City, GA 30269

C. Proprietary Name

TILMOVET 90

D. Product Established Name

tilmicosin

E. Pharmacological Category

Antimicrobial

F. Dosage Form

Type A medicated article

G. Amount of Active Ingredient

Tilmicosin (as tilmicosin phosphate) 90.7 g/lb

H. How Supplied

1 kg, 5 kg, 10 kg, and 20 kg bag

I. Dispensing Status

Veterinary Feed Directive (VFD)

J. Dosage Regimen

Tilmicosin is to be fed continuously for a single, 14 day period at 568 grams to 757 grams (626 ppm to 834 ppm) per ton on a 100% dry matter basis of Type C medicated feed as the sole ration to provide 12.5 mg tilmicosin/kg/head/day.

K. Route of Administration

Oral, via complete feed

L. Species/Class

Cattle/beef and non-lactating dairy

M. Indication

Cattle: For the control of bovine respiratory disease (BRD) associated with *Mannheimia haemolytica*, *Pasteurella multocida*, and *Histophilus somni* in groups of beef and non-lactating dairy cattle, where active BRD has been diagnosed in at least 10% of the animals in the group.

N. Reference Listed New Animal Drug

PULMOTIL 90; (tilmicosin); NADA 141-064; Elanco Animal Health, A Division of Eli Lilly & Company

O. Effect of Supplement

This supplement provides for addition of the following indication for use in a new species/class: "For the control of bovine respiratory disease (BRD) associated with *Mannheimia haemolytica*, *Pasteurella multocida*, and *Histophilus somni* in groups of beef and non-lactating dairy cattle, where active BRD has been diagnosed in at least 10% of the animals in the group."

II. BIOEQUIVALENCE:

Under the provisions of the Federal Food, Drug, and Cosmetic Act, as amended by the Generic Animal Drug and Patent Term Restoration Act (GADPTRA) of 1988, an abbreviated new animal drug application (ANADA) may be submitted for a generic version of an approved new animal drug (reference listed new animal drug (RLNAD)). New target animal safety and effectiveness data and human food safety data (other than tissue residue data) are not required for approval of an ANADA.

Ordinarily, 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. If bioequivalence is demonstrated through a clinical endpoint study, then a tissue residue study to establish the withdrawal time for the generic product should also be conducted. For certain dosage forms, the agency will grant a waiver from the requirement of demonstrating bioequivalence (55 FR 24645, June 18, 1990; Fifth GADPTRA Policy Letter; Bioequivalence Guideline, October 9, 2002).

Based on the formulation characteristics of the generic product, Huvepharma AD was granted a waiver from the requirement to demonstrate bioequivalence for the generic product TILMOVET 90 (tilmicosin) Type A medicated article. TILMOVET 90 Type A medicated article is used to manufacture Type B and Type C medicated feeds. The generic product is administered as Type B or Type C medicated feed, 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 PULMOTIL 90 (tilmicosin) Type A medicated article, sponsored by Elanco Animal Health, A Division of Eli Lilly & Co., under NADA 141-064 and was originally approved for use in swine on December 27, 1996, and for use in cattle on August 19, 2011.

III. EFFECTIVENESS:

CVM did not require effectiveness studies for this supplemental approval.

IV. TARGET ANIMAL SAFETY:

CVM did not require target animal safety studies for this supplemental approval.

V. HUMAN FOOD SAFETY:

The following are assigned to this product for cattle:

A. Acceptable Daily Intake and Tolerances for Residues:

The acceptable daily intake (ADI) for total residues of tilmicosin is 25 micrograms per kilogram of body weight per day. The tolerances established for the RLNAD apply to the generic product. The tolerance for parent tilmicosin (the marker residue) in the liver (the target tissue) is 1.2 ppm, and 0.1 ppm in the muscle, under 21 CFR 556.735.

B. Withdrawal Period:

Because a waiver from the requirement to demonstrate bioequivalence was granted, the withdrawal periods are those previously assigned to the RLNAD product. A withdrawal period of 28 days has been established for tilmicosin in cattle.

C. Regulatory Method for Residues:

The validated analytical method for detection of tilmicosin residues in liver is high performance liquid chromatography. The validated regulatory methods for the determination and confirmation of residues of tilmicosin are on file at the Center for Veterinary Medicine, 7500 Standish Place, Rockville, MD 20855.

VI. USER SAFETY:

CVM did not require user safety studies for this supplemental approval.

The product labeling contains the following information regarding safety to humans handling, administering, or exposed to TILMOVET 90:

"Avoid inhalation, oral exposure, and direct contact with skin or eyes. Operators mixing and handling Tilmovet 90 should use protective clothing, impervious gloves, goggles, and a NIOSH-approved dust mask. Wash thoroughly with soap and water after handling. If accidental eye contact occurs, immediately rinse thoroughly with water. If irritation persists, seek medical attention. Not for human consumption. Keep out of reach of children. The Material Safety Data Sheet contains more detailed

occupational safety information. To report adverse effects in users, to obtain more information, or to obtain a material safety data sheet, call 1-877-426-7765."

VII. AGENCY CONCLUSIONS:

This information submitted in support of this ANADA satisfies the requirements of section 512(n) of the Federal Food, Drug, and Cosmetic Act and demonstrates that TILMOVET 90, when used according to the label, is safe and effective. Additionally, data demonstrate that residues in food products derived from species treated with TILMOVET 90 will not represent a public health concern when the product is used according to the label.