Date of Approval: April 19, 2006

FREEDOM OF INFORMATION (FOI) SUMMARY

ORIGINAL ABBREVIATED NEW ANIMAL DRUG APPLICATION

ANADA 200-427

HEIFERMAX 500 (melengestrol acetate) plus TYLAN (tylosin phosphate)

Type A Medicated Articles

Indication for use: For increased rate of weight gain, improved feed efficiency, suppression of estrus (heat) and reduced incidence of liver abscesses caused by *Fusobacterium necrophorum* and *Actinomyces* (*Corynebacterium*) *pyogenes* in heifers being fed in confinement for slaughter.

Sponsored by:
Ivy Laboratories,
Div. of Ivy Animal Health, Inc.

FREEDOM OF INFORMATION SUMMARY

1. GENERAL INFORMATION:

a. File Number:	ANADA 200-427
b. Sponsor:	Ivy Laboratories, Div. of Ivy Animal Health, Inc. 8857 Bond Street Overland Park, KS 66214 Drug Labeler Code: 021641
c. Established Names:	Melengestrol acetate, tylosin phosphate
d. Proprietary Names:	HEIFERMAX 500, TYLAN
e. Dosage Form:	Type A medicated articles for use in combination for the manufacture of two-way Type C medicated feeds
f. How Supplied:	HEIFERMAX 500 – liquid premix TYLAN – dry premix
g. How Dispensed:	OTC
h. Amount of Active Ingredients:	HEIFERMAX 500: 500 mg of melengestrol acetate activity per pound of premix TYLAN: 10, 40 or 100 grams of tylosin phosphate activity per pound of premix
i. Route of Administration:	Orally in feed
j. Species/Class:	Beef cattle; heifers fed in confinement for slaughter
k. Recommended Dosage:	Feed to heifers at a rate of 0.5 to 2.0 pounds Type C medicated feed per day to provide 0.25 to 0.5 mg melengestrol acetate per head per day in combination with 60 to 90 mg tylosin per head per day.
l. Pharmacological Category:	Hormone/antimicrobial

m. Indications:	For increased rate of weight gain, improved feed efficiency, suppression of estrus (heat) and reduced incidence of liver abscesses caused by *Fusobacterium necrophorum* and *Actinomyces* (*Corynebacterium) pyogenes* in heifers being fed in confinement for slaughter.
n. Generic Product:	HEIFERMAX 500 plus TYLAN; melengestrol acetate, tylosin phosphate; ANADA 200-427; Ivy Laboratories, Div. of Ivy Animal Health, Inc.
o. Pioneer Product/Listed Product:	MGA 500; melengestrol acetate; NADA 039-402; Pharmacia & Upjohn Co., a Division of Pfizer, Inc. TYLAN; tylosin phosphate; NADA 012-491; Elanco Animal Health, A Division of Eli Lilly & Co. MGA plus TYLAN; melengestrol acetate, tylosin phosphate; NADA 139-192; Pharmacia & Upjohn Co., a Division of Pfizer, Inc.

2. TARGET ANIMAL SAFETY AND EFFECTIVENESS:

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 (pioneer product). 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 shows the generic product is bioequivalent to the pioneer, 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 an in vivo bioequivalence study. (55 FR 24645, June 18, 1990; Fifth GADPTRA Policy Letter; Bioequivalence Guidance, revised October 9, 2002).

This approval is for the use of HEIFERMAX 500 (melengestrol acetate) in combination with TYLAN (tylosin phosphate) for the manufacture of two-way Type C medicated feeds. This combination feed use product is a generic copy of MGA 500 (melengestrol acetate) in combination with TYLAN, NADA 139-192, sponsored by Pharmacia & Upjohn Co., a Division of Pfizer, Inc.

According to CVM's fourth policy letter issued on November 2, 1989, with regard to the implementation of GADPTRA, after the approval of an ANADA for a generic Type A medicated article, the generic sponsor is entitled to approval for all the feed-mixed combinations for which the pioneer is approved. Bioequivalence and tissue residue studies are not required for the approval of the generic feed use combinations (Type B or C medicated feeds). Melengestrol acetate is codified under 21 CFR 558.342. Tylosin is codified under 21 CFR 558.625. The combination of melengestrol acetate and tylosin is codified under 21 CFR 558.342(e).

3. HUMAN SAFETY:

- **Tolerances for Residues:**
  The tolerances established for the pioneer product apply to the generic product. A tolerance of 25 ppb is established for residues of the parent compound, melengestrol acetate, in fat of cattle under 21 CFR 556.380.

  A tolerance of 0.2 ppm is established for negligible residues of tylosin in uncooked fat, muscle, liver, and kidney in cattle as codified under 21 CFR 556.740.

- **Withdrawal Times:**
  The withdrawal times for the generic product are those previously assigned to the pioneer product.

  No withdrawal times are assigned.

- **Regulatory Method for Residues**
  Withdrawal times are not assigned for any of the drug ingredients in this combination product. Therefore, regulatory methods for residues are not available.

4. AGENCY CONCLUSIONS:

This ANADA filed under section 512(b) of the Federal Food, Drug, and Cosmetic Act satisfies the requirements of section 512(n) of the Act and demonstrates that the medicated feed use combination product HEIFERMAX 500 and TYLAN, when used under its proposed conditions of use, is safe and effective for its labeled indications.

5. ATTACHMENTS:

Facsimile generic labeling is attached as indicated below:

Generic Labeling for ANADA 200-427:
Blue Bird labeling for Type C medicated feeds – liquid and dry