Approval Date: September 3, 2003

FREEDOM OF INFORMATION SUMMARY

SUPPLEMENTAL ABBREVIATED NEW ANIMAL DRUG APPLICATION

ANADA 200-221

Trenbolone Acetate and Estradiol

COMPONENT TE-IS
Ear Implant

A generic copy of Intervet, Inc.'s REVALOR-IS (NADA 140-897)

For increased rate of weight gain and improved feed efficiency for steers fed in confinement for slaughter.

Sponsored by:

Ivy Laboratories
Division of Ivy Animal Health, Inc.
8857 Bond Street
Overland Park, KS 66214

FREEDOM OF INFORMATION SUMMARY

COMPONENT TE-IS Ear Implant for Steers Fed in Confinement for Slaughter

1. GENERAL INFORMATION:

a. File Number:	ANADA 200-221
b. Sponsor:	Ivy Laboratories Division of Ivy Animal Health, Inc. 8857 Bond Street Overland Park, KS 66214 Drug Labeler Code: 021641
c. Established Names:	Trenbolone acetate and estradiol
d. Proprietary Name:	COMPONENT TE-IS
e. Dosage Form:	Implantation (ear implant)
f. How Supplied:	As an implant made up of 4 pellets with each pellet containing 20 mg trenbolone acetate and 4 mg estradiol
g. How Dispensed:	OTC
h. Amount of Active Ingredients:	Trenbolone acetate: 80 mg trenbolone acetate activity Estradiol: 16 mg estradiol activity
i. Route of Administration:	Subcutaneous ear implant
j. Species/Class:	Steers fed in confinement for slaughter
k. Recommended Dosage:	One implant containing 80 mg trenbolone acetate and 16 mg estradiol per animal.
l. Pharmacological Category:	Steroid hormone
m. Indications:	For increased rate of weight gain and improved feed efficiency for steers fed in confinement for slaughter.

n. Pioneer Product:	REVALOR-IS Trenbolone acetate and estradiol NADA 140-897 Intervet, Inc.
o. Effect of Supplement:	The supplement provides for the use of a generic copy of Intervet, Inc.'s REVALOR-IS, a 4-pellet ear implant containing 80 mg trenbolone acetate and 16 mg estradiol.

2. TARGET ANIMAL SAFETY AND DRUG 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.

Approval of COMPONENT TE-IS is granted as a supplement to the original ANADA for COMPONENT TE-S. COMPONENT TE-IS is a reduced dose of COMPONENT TE-S with each pellet in COMPONENT TE-IS (total of 4 pellets) containing 20 mg trenbolone acetate (TBA) and 4 mg estradiol in the same formulation as each pellet in COMPONENT TE-S (total of 6 pellets). Likewise, the pioneer product, REVALOR-IS, is a reduced dose of REVALOR S with each pellet in REVALOR-IS (total of 4 pellets) containing 20 mg trenbolone acetate and 4 mg estradiol in the same formulation as each pellet in REVALOR S (total of 6 pellets). COMPONENT TE-S has been shown to be bioequivalent to REVALOR S in an adequate and well controlled blood level bioequivalence study in steers fed in confinement for slaughter, which was previously submitted in support of ANADA 200-221, approved March 20, 1997. Since COMPONENT TE-S has been shown to be bioequivalent to REVALOR S (each composed of six pellets) in feedlot steers, the release (rate and extent) of trenbolone acetate and estradiol from the individual pellets in REVALOR-IS and COMPONENT TE-IS in each animal should be bioequivalent to each other in feedlot steers.

3. HUMAN SAFETY:

- **Allowable Incremental Increases and Acceptable Daily Intake (ADI) of Total Residues:**
  The allowable incremental increases established for the pioneer product apply to the generic product. Allowable incremental increases for estradiol in uncooked edible tissues of steers are established under 21 CFR 556.240: 120 ppt for muscle, 240 ppt for liver, 360 ppt for kidney, and 480 ppt for fat.

  The Acceptable Daily Intake (ADI) established for the pioneer product applies to the generic product. An ADI for total residues of trenbolone in uncooked edible

tissues of cattle is established under 21 CFR 556.739: 0.4 micrograms per kilogram of body weight per day.

- **Withdrawal Time**
  When a generic product demonstrates bioequivalence to the pioneer product in a blood level study where the duration of the study exceeds the withdrawal time assigned to the pioneer product, the generic product is assigned the withdrawal time established for the pioneer product. A zero withdrawal is established for implants containing trenbolone acetate and estradiol.

- **Regulatory Method for Residues**
  A regulatory method is not required because one was not required for the pioneer product.

4. AGENCY CONCLUSIONS:

This ANADA submitted 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 trenbolone acetate and estradiol (COMPONENT TE-IS), 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:

Box Label (Generic - Steers)
Foil Pouch Label (Generic - Steers)
Package Insert (Generic - Steers)
Box Label (Pioneer - Steers)
Cartridge Label (Pioneer - Steers)
Package Insert (Pioneer - Steers)