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0988 '00 OCT 31 P12:51

October 27, 2000

SUITABILITY PETITION

Dockets Management Branch
HFA-305, Room 4-62
Food and Drug Administration
5600 Fishers Lane
Rockville, MD 20857

RE: Suitability Petition

Dear Sir/Madam:

Enclosed are four copies of a suitability petition we are filing on behalf of Highland Vet-Pharma, LLC, St. Louis, MO. The petition requests the Commissioner to permit Highland to file an abbreviated new animal drug application (ANADA) for ivermectin having a different dosage form (palatable, chewable bolus) than that of the listed approved new animal drug (Eqvalan® Paste, Merial, NADA 134-314).

We point out that although Merial is codified as the sponsor of Eqvalan, all Eqvalan labeling currently available in the market appears to retain the originally-approved sponsor name of Merck. Thus, the enclosed pioneer labeling reflects Merck as the sponsor. We trust this will be acceptable.

Please do not hesitate to contact us if additional information is required at this time.

Sincerely,



Mark L. Shepard, M.S.
Vice President

Enclosure

Cc: Highland VetPharma, LLC

MLS:pbh

H:\users\common\239\ivermectinbolus

00P-1594

CPI

SUITABILITY PETITION

Petition Filed By:

**Highland VetPharma, LLC
11960 Westline Drive, Suite 180
St. Louis, Missouri 63146**

Proposed Product:

**A Palatable, Chewable Bolus Form
of Ivermectin for Horses**

Date: October 25, 2000



SUITABILITY PETITION

The undersigned submits this petition under 512(n)(3) of the Federal Food, Drug, and Cosmetic Act, to request that the Commissioner of Food and Drugs permit Highland VetPharma to file an abbreviated new animal drug application having a dosage form which differs from that of the listed approved new animal drug.

Name: *Jamie M. Bausch* Date: October 25, 2000
Title: President and Chief Operating Officer

I. Action Requested

The requested action is for the Commissioner to permit the filing of an abbreviated new animal drug application (ANADA) for our proposed product which differs from the approved pioneer product as follows:

Pioneer Product (Reference Drug)

Eqvalan® (ivermectin) Paste 1.87%, NADA 134-314, originally approved by the Center for Veterinary Medicine on May 29, 1984, and sponsored by Merial Ltd., is an oral paste indicated for the treatment of large and small strongyles, pinworms, ascarids, hairworms, large-mouth stomach worms, bots, lungworms, intestinal threadworms, and summer sores in horses. It is offered in an oral paste formulation containing 1.87% ivermectin. The paste is administered via an oral syringe having a plunger calibrated for administering doses sufficient to treat animal body weight increments of 250 lb., up to 1250 lb.

Proposed Product

The proposed product is a palatable, chewable bolus, each containing 22.75 mg ivermectin, which will be indicated for use in horses for the same claim(s) and will utilize the same incremental oral dosage directions as the pioneer product. The proposed boluses are individually packaged in a blister pack, with five boluses so packaged per box. Each bolus will treat 250 lbs. of body weight.

II. Statement of Grounds

Parasitic states for which ivermectin is prescribed require administration of the drug on a regular parasite control program.

Parasite control schedules require routine treatments, repeated as necessary. It is sometimes difficult to administer oral pastes to horses due to their reluctance to accept and swallow the medication. Thus, even though the drug may be properly prescribed, if the horse owner meets resistance in administering the drug then doses may be spit out or missed and the animal will receive insufficient medication. The approval of this petition and the ultimate approval of a generic animal drug application for a palatable, chewable bolus form of ivermectin would provide the horse owner with an alternative product which is more readily administered, and is accepted by the horse as a "treat". Hence, the horse owner is more likely to be able to assure the animal is receiving the proper dose of medication as specified in product labeling.

The legal basis under which this application proceeds is as promulgated in the FD&C Act which allows the Commissioner to accept a generic drug application for an animal drug product which differs in dosage form from the pioneer or reference drug product. The dosage form for the proposed generic product described in this petition is similar to that of the pioneer drug in that

both products are oral dosage forms. The difference is that this proposed generic product is in a palatable, chewable form whereas the pioneer drug is an oral paste.

The petitioner is not aware of any information which would be unfavorable to the granting of the requested action.

III. Environmental Impact

Highland VetPharma, LLC hereby requests a categorical exclusion from the requirements of preparing an environmental assessment based on 21 CFR 25.30(h). This subparagraph provides for categorical exclusions for actions such as the issuance, amendment, or revocation of procedural or administrative regulations and guidelines, including procedures for submission of applications for product development, testing and investigational use, and approval. To the best of petitioner's knowledge, no extraordinary circumstances exist which may significantly affect the human environment as discussed under 21 CFR 25.21.

IV. Economic Impact

An economic impact statement pertaining to (1) Cost (and price) increases to industry, government, and consumers; (2) productivity of wage earners, businesses, or government; (3) competition; (4) supplies of important materials, products, or services; (5) employment; and (6) energy supply or

demand has not been prepared for this petition. Highland VetPharma will provide such an analysis if so requested by the Commissioner.

V. Identification of Single Listed Pioneer Drug

NADA NO.	NAME OF DRUG	COMPANY	APPROVAL DATE
134-314	Eqvalan®	Merial Ltd.	05/29/1984

VI. Labeling

The following pages provide copies of the proposed generic product labeling and the reference drug labeling.

Differences between the proposed generic product labeling and the pioneer product labeling:

A. Carton Front Panel

1. Changed "EQVALAN®" to "Brand Name®".
2. Changed "Paste 1.87%" to "Chewable Boluses 22.75 mg."
3. Changed Net Weight from "0.21 oz (6.08 g)" to "1.41 oz (40 g)."
4. Product number will be changed.

B. Carton Side Panels

1. Panel 1

- a. Changed drawing of packaged syringe to drawing of blister packed boluses.
- b. U. S. patent number is changed to "U.S. Patent Pending."
- c. "EQVALAN® and Horse Head Logo REG TMs MERCK & CO., INC." is removed.
- d. "EQVALAN®" changed to "Brand Name®"; horse head logo removed; "Paste 1.87%" changed to "Chewable Boluses 22.75 mg."

2. Panel 2

- a. "EQVALAN (ivermectin) Paste" changed to "Brand Name Chewable Boluses" throughout.
- b. Under "Note to User" the first sentence has been changed from, "Swelling and itching reactions... **have occurred...**" to "Swelling and itching reactions **may occur...**" The second sentence has been changed from, "These reactions **were** most likely..." to "These reactions **are** most likely..."

C. Carton Back Panel

1. "EQVALAN®" and "Paste" have been changed throughout to "Brand Name®" and "Chewable Boluses."
2. Dosage and Administration
 - a. The first two sentences have been revised to provide for the difference between a paste product and a chewable bolus, as follows:

"EQVALAN" Label

DOSAGE AND ADMINISTRATION: This syringe contains sufficient paste to treat one 1250 lb horse at the recommended dose rate of 91 mcg ivermectin per lb (200 mcg/kg) body weight. Each weight marking on the syringe plunger delivers enough paste to treat 250 lb body weight.

"BRAND NAME" Label

DOSAGE AND ADMINISTRATION: This carton contains sufficient chewable boluses to treat one 1250 lb horse at the recommended dose rate of 91 mcg ivermectin per lb (200 mcg/kg) body weight. Each chewable bolus delivers enough ivermectin to treat 250 lb body weight.

- b. Dosing directions have been changed from those pertaining to calibrating a syringe and administering a paste, to those reflecting administration of a palatable, chewable bolus. Refer to labeling.

- 3. The bar code will be different.
- 4. The sponsor's name and address have been changed to those for Highland VetPharma.

D. Blister Pack Label vs. Syringe Label

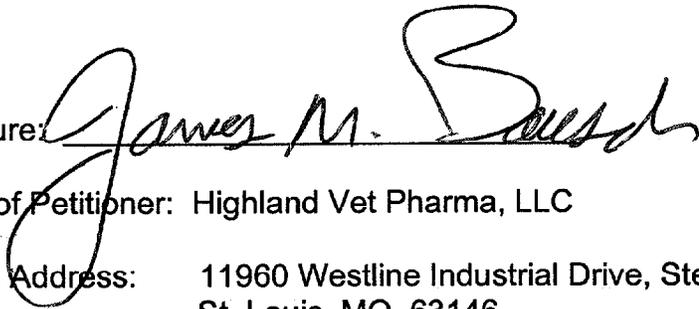
- 1. "EQVALAN" and "Paste 1.87%" are changed throughout to "Brand Name" and "Chewable Boluses 22.75 mg."

2. Net weight is changed from "0.21 oz (6.08 g)" to "1.41 oz (40 g)."
3. The sponsor's name and address are changed from Merck to Highland VetPharma.
4. Product number will be changed.

VII. Certification

The undersigned certifies that to the best knowledge and belief of the undersigned, this petition includes all information and views on which the petition relies, and that it includes representative data and information known to the petitioner which are unfavorable to this petition.

Signature:



Name of Petitioner: Highland Vet Pharma, LLC

Mailing Address: 11960 Westline Industrial Drive, Ste. 180
St. Louis, MO 63146

Telephone Number: (314) 205-9666

PROPOSED DRUG LABELING

CARTON FRONT PANEL

BRAND NAME[®]

(ivermectin)

Chewable Boluses 22.75 mg

Anthelmintic and Boticide

Net Wt. 1.41 oz (40 g)

Product xxxxx

**Removes worms and bots with
a single dose.**

**Contents will treat up to 1250
lb. body weight**

For Oral Use In Horses Only

For Sale to Licensed Veterinarians

CARTON BACK PANEL

INDICATIONS: Consult your veterinarian for assistance in the diagnosis, treatment, and control of parasitism. Brand Name (ivermectin) chewable boluses provide effective control of the following parasites in horses. **Large Strongyles** (adults) – *Strongylus vulgaris* (also early forms in blood vessels), *S. edentatus* (also tissue stages), *S. equinus*, *Triodontophorus* spp; **Small Strongyles** including those resistant to some benzimidazole class compounds (adults and fourth-stage larvae) – *Cyathostomum* spp, *Cylicocycclus* spp, *Cylicostephanus* spp, *Cylicodontophorus* spp, **Pinworms** (adults and fourth-stage larvae) – *Oxyuris equi*; **Ascarids** (adults and third- and fourth-stage larvae) – *Parascaris equorum*; **Hairworms** (adults) – *Trichostrongylus axei*; **Large-mouth Stomach Worms** (adults) – *Habronema muscae*; **Bots** (oral and gastric stages)-*Gastrophilus* spp; **Lungworms** (adults and fourth-stage larvae)-*Dictyocaulus arnfieldi*; **Intestinal Threadworms** (adults)-*Strongyloides westeri*; **Summer sores** caused by *Habronema* and *Draschia* spp cutaneous third-stage larvae: Dermatitis caused by neck threadworm microfilariae, *Onchocerca* sp.

DOSAGE AND ADMINISTRATION: This carton contains sufficient chewable boluses to treat one 1250 lb horse at the recommended dose rate of 91 mcg ivermectin per lb (200 mcg/kg) body weight. Each chewable bolus delivers enough ivermectin to treat 250 lb body weight.

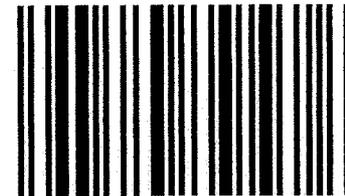
Remove from the carton a sufficient number of chewable boluses to treat the horse (each bolus will treat 250 lbs body weight). To administer by hand, open one blister pack at a time by peeling off the foil seal and dropping the chewable bolus into your hand. Offer the bolus to the horse – the boluses have an appealing odor and flavor and are usually readily accepted. Additional boluses should then be offered one-at-a-time until the appropriate number of boluses have been consumed. As an alternative to hand-feeding, the appropriate number of boluses can be opened all at once and placed on a small portion of grain. Observe the horse until all boluses have been consumed.

PARASITE CONTROL PROGRAM: All horses should be included in a regular parasite control program with particular attention being paid to mares, foals and yearlings. Foals should be treated initially at 6 to 8 weeks of age, and routine treatment repeated as appropriate. Consult your veterinarian for a control program to meet your specific needs. BRAND NAME (ivermectin) chewable boluses effectively control gastrointestinal nematodes and bots of horses. Regular treatment will reduce the chances of verminous arteritis caused by *Strongylus vulgaris*.

PRODUCT ADVANTAGES: *Broad-spectrum Control* – Brand Name Chewable Boluses kill important internal parasites, including bots and the arterial stages of *S. vulgaris*, with a single dose. BRAND NAME is a potent antiparasitic agent that is neither a benzimidazole nor an organophosphate.

Safety – BRAND NAME (ivermectin) chewable boluses may be used in horses of all ages, including mares at any stage of pregnancy. Stallions may be treated without adversely affecting their fertility.

Lot No. & Exp. Date ▼

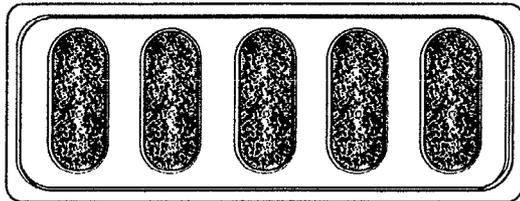


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HIGHLAND VETPHARMA
St. Louis, MO 63146 U.S.A

CARTON SIDE PANELS



U.S. Patent Pending

BRAND NAME[®]
(ivermectin) Chewable Boluses 22.75 mg

SEALED FOR SECURITY. IF BROKEN, DO NOT ACCEPT.

Made in U.S.A.

► **WARNING:** Do not use in horses intended for food purposes. ◀

CAUTION: BRAND NAME (ivermectin) chewable boluses have been formulated for use in horses only. This product should not be used in other animal species as severe adverse reactions, including fatalities in dogs, may result.

Refrain from smoking and eating when handling. Wash hands after use. Avoid contact with eyes. **Keep this and all drugs out of the reach of children.**

Ivermectin and excreted ivermectin residues may adversely affect aquatic organisms. Do not contaminate ground or surface water. Dispose of the blister packs in an approved landfill or by incineration.

NOTE TO USER: Swelling and itching reactions after treatment with Brand Name (ivermectin) chewable boluses may occur in horses carrying heavy infections of neck threadworm (*Onchocerca* sp) microfilariae. These reactions are most likely the result of microfilariae dying in large numbers. Symptomatic treatment may be advisable. Consult your veterinarian should any such reactions occur. Healing of summer sores involving extensive tissue changes may require other appropriate therapy in conjunction with treatment with Brand Name chewable boluses. Re-infection, and measures for its prevention, should also be considered. Consult your veterinarian if the condition does not improve.

BLISTER PACK LABEL

Product xxxxx **For Oral Use in Horses Only**

BRAND NAME

(ivermectin) Chewable Boluses 22.75 mg

Anthelmintic and Boticide

For Treatment of Large Strongyles, Small Strongyles, Pinworms, Roundworms (Ascarids), Hairworms, Neck Treadworms, Large-mouth Stomach Worms, Bots. See carton or attached labeling for complete indications and use directions. Consult your veterinarian for assistance in the diagnosis, treatment, and control of parasitism.

Net wt. 1.41 oz (40 g) Made in U.S.A.

WARNING: Do not use in horses intended for food purposes.

CAUTION: Refrain from smoking or eating when handling. Wash hands after use. Avoid contact with eyes. **Keep this and all drugs out of the reach of children.**

Lot. No. &
Exp. Date



Highland Vet Pharma, LLC
St. Louis, MO 63146 USA

REFERENCE DRUG LABELING

CARTON FRONT PANEL

Eqvalan[®]
(ivermectin)

Paste 1.87%

Anthelmintic and Boticide

Net Wt 0.21 oz (6.08 g)

Product 25874

**Removes worms and bots
with a single dose.**

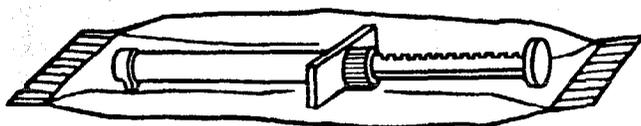
Contents will treat up
to 1250 lb body weight

**For Oral Use In
Horses Only**

For Sale to Licensed
Veterinarians



CARTON SIDE PANELS



SEALED FOR SECURITY. IF BROKEN, DO NOT ACCEPT.

U.S. Pat. 4,199,569

EQVALAN and Horse Head Logo
REG TMs MERCK & CO., Inc.

Made in U.S.A.



Eqvalan[®] [®]
(ivermectin) Paste 1.87%

WARNING: Do not use in horses intended for food purposes.

CAUTION: EQVALAN[®] (ivermectin) Paste has been formulated specifically for use in horses only. This product should not be used in other animal species as severe adverse reactions, including fatalities in dogs, may result.

Refrain from smoking and eating when handling. Wash hands after use. Avoid contact with eyes. **Keep this and all drugs out of the reach of children.**

Ivermectin and excreted ivermectin residues may adversely affect aquatic organisms. Do not contaminate ground or surface water. Dispose of the syringe in an approved landfill or by incineration.

NOTE TO USER: Swelling and itching reactions after treatment with EQVALAN (ivermectin) Paste have occurred in horses carrying heavy infections of neck threadworm (*Onchocerca* sp) microfilariae. These reactions were most likely the result of microfilariae dying in large numbers. Symptomatic treatment may be advisable. Consult your veterinarian should any such reactions occur. Healing of summer sores involving extensive tissue changes may require other appropriate therapy in conjunction with treatment with EQVALAN Paste. Reinfection, and measures for its prevention, should also be considered. Consult your veterinarian if the condition does not improve.

CARTON BACK PANEL

INDICATIONS: Consult your veterinarian for assistance in the diagnosis, treatment, and control of parasitism. EQVALAN® (ivermectin) Paste provides effective control of the following parasites in horses. **Large Strongyles** (adults)—*Strongylus vulgaris* (also early forms in blood vessels), *S. edentatus* (also tissue stages), *S. equinus*, *Triodontophorus* spp.; **Small Strongyles** including those resistant to some benzimidazole class compounds (adults and fourth-stage larvae)—*Cyathostomum* spp., *Cylicocyclus* spp., *Cylicostephanus* spp., *Cylicodontophorus* spp.; **Pinworms** (adults and fourth-stage larvae)—*Oxyuris equi*; **Ascarids** (adults and third- and fourth-stage larvae)—*Parascaris equorum*; **Hairworms** (adults)—*Trichostrongylus axei*; **Large-mouth Stomach Worms** (adults)—*Habronema muscae*; **Bots** (oral and gastric stages)—*Gastrophilus* spp.; **Lungworms** (adults and fourth-stage larvae)—*Dictyocaulus arnfieldi*; **Intestinal Threadworms** (adults)—*Strongyloides westeri*; **Summer Sores** caused by *Habronema* and *Draschia* spp cutaneous third-stage larvae; Dermatitis caused by neck threadworm microfilariae, *Onchocerca* sp.

DOSAGE AND ADMINISTRATION: This syringe contains sufficient paste to treat one 1250 lb horse at the recommended dose rate of 91 mcg ivermectin per lb (200 mcg/kg) body weight. Each weight marking on the syringe plunger delivers enough paste to treat 250 lb body weight.

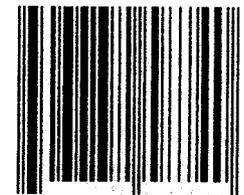
(1) While holding plunger, turn the knurled ring on the plunger 1/4 turn to the left and slide it so the side nearest the barrel is at the prescribed weight marking. (2) Lock the ring in place by making a 1/4 turn to the right. (3) Make sure that the horse's mouth contains no feed. (4) Remove the cover from the tip of the syringe. (5) Insert the syringe tip into the horse's mouth at the space between the teeth. (6) Depress the plunger as far as it will go, depositing paste on the back of the tongue. (7) Immediately raise the horse's head for a few seconds after dosing.

PARASITE CONTROL PROGRAM: All horses should be included in a regular parasite control program with particular attention being paid to mares, foals and yearlings. Foals should be treated initially at 6 to 8 weeks of age, and routine treatment repeated as appropriate. Consult your veterinarian for a control program to meet your specific needs. EQVALAN (ivermectin) Paste effectively controls gastrointestinal nematodes and bots of horses. Regular treatment will reduce the chances of verminous arteritis caused by *Strongylus vulgaris*.

PRODUCT ADVANTAGES: Broad-spectrum Control—EQVALAN Paste kills important internal parasites, including bots and the arterial stages of *S. vulgaris*, with a single dose. EQVALAN Paste is a potent anti-parasitic agent that is neither a benzimidazole nor an organophosphate.

Safety — EQVALAN (ivermectin) Paste may be used in horses of all ages, including mares at any stage of pregnancy. Stallions may be treated without adversely affecting their fertility.

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Lot No & Exp Date ▼

EBK 044
OCT 00



Merck & Co., Inc.
Rahway, New Jersey 07065-0912, U.S.A.

SYRINGE PANEL

<p>Product 25874 For Oral Use in Horses Only</p> <p>Eqvalan[®] (ivermectin) Paste 1.87%</p> <p>Anthelmintic and Boticide For Treatment of Large Strongyles, Small Strongyles, Pinworms, Roundworms (Ascarids), Hairworms, Neck Threadworms, Large-mouth Stomach Worms, Bots. See carton or attached labeling for complete indications and use directions. Consult your veterinarian for assistance in the diagnosis, treatment, and control of parasitism.</p> <p>NET WT 0.21 OZ (6.08 g) Made in U.S.A.</p>	<p>WARNING: Do not use in horses intended for food purposes.</p> <p>CAUTION: Refrain from smoking or eating when handling. Wash hands after use. Avoid contact with eyes. Keep this and all drugs out of the reach of children.</p> <p>Lot No & Exp Date ▶ EBK 044 OCT00</p> <p> MERCK AgVet Division Merck & Co., Inc. Rahway, New Jersey 07065-0912, U.S.A.</p> <p>8610304</p>
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PLEASE FOLD THIS SHIPPING DOCUMENT IN HALF AND PLACE IT IN A WAYBILL POUCH AFFIXED TO YOUR SHIPMENT SO THAT THE BAR-CODE PORTION OF THE LABEL CAN BE READ AND SCANNED.
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Shotwell & Carr
3535 Firewheel Drive
A
Flower Mound, TX 750282628

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Federal Express

TO: Dockets Management Branch (301)827-3125
HFA-305, Room 4-62
Food and Drug Administration
5600 Fishers Lane

SHIP DATE: 27OCT00
MAN-WGT: 1 LBS

REF: #239
Rockville, MD 20857-



DELIVERY ADDRESS BARCODE (FEDEX-EDR)

CAD # 3437738

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IAD

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30OCT00

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