

HFA-305  
div. of Dockets mgf.

Date of Approval: 1998

## **FREEDOM OF INFORMATION SUMMARY**

### **ORIGINAL ABBREVIATED NEW ANIMAL DRUG APPLICATION (ANADA)**

**ANADA 200-317**

**DEXIUM-SP**

(dexamethasone sodium phosphate injection)

4 mg/mL Injection

Horses

Indications: It is indicated as a rapid adrenal glucocorticoid and/or an anti-inflammatory agent in horses.

Sponsored by:  
Cross Vetpharm Group Ltd.  
Tallaght, Dublin 24, Ireland

FOIS

## FREEDOM OF INFORMATION SUMMARY

1. **GENERAL INFORMATION**

- a. File Number: ANADA 200-317
- b. Sponsor: Cross Vetpharm Group Ltd.  
Broomhill Road  
Tallaght, Dublin 24, Ireland  
  
Drug Labeler Code: 061623
- c. Established Name: Dexamethasone sodium phosphate injection  
4 mg/mL
- d. Proprietary Name: DEXIUM-SP
- e. Dosage Form: Injectable solution
- f. How Supplied: 100mL multiple dose vial
- g. How Dispensed: Rx
- h. Amount of Active Ingredients: Each mL contains 4 mg dexamethasone  
sodium phosphate
- i. Route of Administration: Intravenously
- j. Species/Class: Horses
- k. Recommended Dosage: 2.5 to 5 mg intravenously  
(based on 3 mg/mL dexamethasone content)
- l. Pharmacological Category: Anti-inflammatory
- m. Indications: For use as a rapid adrenal glucocorticoid  
and/or anti-inflammatory agent in horses.

- n. Pioneer Product: Dexamethasone Sodium Phosphate Injection, USP (dexamethasone sodium phosphate injection); Steris Laboratories, Inc., NADA 104-606

## **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 drug 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 conducting an *in vivo* bioequivalence study (55 FR 24645, June 18, 1990; Fifth GADPTRA Policy Letter; Bioequivalence Guideline, October 2002).

Based on the formulation characteristics of the generic product, Cross Vetpharm Group Ltd. was granted a waiver from the requirement for *in vivo* bioequivalence study for the generic product DEXIUM-SP (dexamethasone sodium phosphate injection). The generic product is administered as an injectable solution, contains the same active ingredient in the same concentration and dosage form as the pioneer product, and contains no inactive ingredients that may significantly affect the absorption of the active ingredients. The pioneer product, Dexamethasone Sodium Phosphate Injection, USP (dexamethasone sodium phosphate injection), the subject of Steris Laboratories, Inc., NADA 104-606, was approved on May 13, 1977.

## **3. HUMAN SAFETY:**

This drug is indicated for use only in horses, which are non-food animals. Because this new animal drug is not intended for use in food-producing animals, data on human safety pertaining to drug residues in food were not required for approval of this ANADA.

Human warnings are provided on the product label as follows: **“For Animal Use Only”**  
**“Keep Out of Reach of Children.”**  
**“Not For Use in Horses Intended For food”**

**4. AGENCY CONCLUSIONS:**

This ANADA submitted under section 512(b)(2) of the Federal Food, Drug, and Cosmetic Act satisfies the requirements of section 512(n) of the Act and demonstrates that DEXIUM-SP, 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:

Pioneer Labeling for NADA 104-606:

Dexamethasone Sodium Phosphate Injection, USP- 100mL vial size and insert

Generic Labeling for ANADA 200-317

DEXIUM-SP-100mL vial size and insert

**Folded Outsert Label**

LOT:  
EXP:

Dexium-SP  
ANADA 200-317  
Cross Vetpharm Group.  
October 23, 2003

NON PRINTING AREA  
GLUE PANEL

<p><b>WARNINGS:</b> Clinical and experimental data have demonstrated that corticosteroids administered orally or by injection to animals may induce the first stage of parturition if used during the last trimester of pregnancy and may precipitate premature parturition followed by dystocia, fetal death, retained placenta and metritis. Additionally, corticosteroids administered to dogs, rabbits, and rodents during pregnancy have produced cleft palate. Other congenital anomalies including deformed forelegs, phocomelia, and anasarca have been reported in offspring of dogs which received corticosteroids during pregnancy.</p>	<p><b>PRECAUTIONS:</b> Because of the anti-inflammatory action of corticosteroids, signs of infection may be hidden and it may be necessary to stop treatment until diagnosis is made. Overdosage of some glucocorticoids may result in sodium retention, fluid retention, potassium loss and weight gains. In infections characterized by overwhelming toxicity, dexamethasone sodium phosphate therapy, in conjunction with indicated antibacterial therapy, is effective in reducing mortality. It is essential that the causative organism be known and an effective antibacterial agent be administered concurrently. The</p>	<p>injudicious use of adrenal hormones in animals with infections can be hazardous. Use of corticosteroids, depending on dose, duration and specific steroid, may result in inhibition of endogenous steroid production following drug withdrawal. In patients presently receiving or recently withdrawn from systemic corticosteroid treatments, therapy with a rapidly acting corticosteroid should be considered in unusually stressful situations.  <b>ADVERSE REACTIONS:</b> The therapeutic use of dexamethasone sodium phosphate injection is unlikely to cause undesired accentuation of</p>	<p>metabolic effects. However, if continued corticosteroid therapy is anticipated, a high protein intake should be provided to keep the animal in positive nitrogen balance. A retardant effect on wound healing should be considered when it is used in conjunction with surgery. Euphoria or an improvement of attitude, and increased appetite are the usual manifestations. Side effects such as glycosuria, hyperglycemia, diarrhea, polydipsia and polyuria have been observed in some species. Side effects such as SAP and SGPT enzyme elevations, eosinopenia, and vomiting have occurred following use of synthetic corticosteroids in dogs.</p>	<p>Cushing's Syndrome association with prolonged Corticosteroids reported  <b>DOSAGE AND ADMINISTRATION:</b> For Intravenous Use Only Horses: The usual intravenous dose is 3 mg per mL of dexamethasone sodium phosphate. If permanent corticosteroid therapy is required, dexamethasone should be administered on a daily basis over a number of days, in</p>
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**NOTE**

pH range meets USP 26 monograph

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Dexamethasone Sodium Phosphate Injection USP 4 mg/mL (equivalent to dexamethasone 3 mg/mL) with Benzyl Alcohol 1.5% and Hydrochloric Acid may have

(59° and 86° F)

OBSCURE LABEL DIRECTIONS

80FX017

10%  
18929 4

**Dexium-SP™**

**DEXAMETHASONE SODIUM PHOSPHATE INJECTION, USP 4 MG/ML (equivalent to dexamethasone 3 mg/mL) FOR INTRAVENOUS USE IN HORSES ONLY**  
**WARNING: DO NOT USE IN HORSES INTENDED FOR FOOD FOR VETERINARY USE ONLY**

**DESCRIPTION:**

Dexamethasone sodium phosphate (a synthetic adrenocortical steroid), is a white or slightly yellow crystalline powder. It is freely soluble in water and is exceedingly hygroscopic.

Each mL of sterile aqueous solution contains Dexamethasone Sodium Phosphate 4 mg (equivalent to dexamethasone 3 mg), Sodium Citrate 10 mg, Sodium Bisulfite 2 mg, Benzyl Alcohol 1.5% as preservative, in Water for Injection q.s. Sodium Hydroxide and/or Hydrochloric Acid to adjust pH to between 7.0 and 8.5.

**CLINICAL PHARMACOLOGY:**

Dexamethasone is a synthetic corticosteroid and possesses glucocorticoid activity. Dexamethasone sodium phosphate is a salt of dexamethasone that is particularly suitable for intravenous administration because it is highly water soluble, permitting administration of relatively large doses in

a small volume of diluent.

Dexamethasone, as a steroid, is equivalent in potency to some established steroids while being considerably more potent than others. In the case of the dog, dexamethasone is found to be about equivalent in dosage to prednisone but about 30 to 40 times more potent than prednisolone.

**INDICATIONS AND USAGE:**

Dexamethasone Sodium Phosphate Injection is indicated as a rapid adrenal glucocorticoid and/or anti-inflammatory agent in horses.

**CONTRAINDICATIONS:**

Do not use in viral infections. Except when used for emergency therapy, dexamethasone sodium phosphate is contraindicated in animals with tuberculosis and chronic nephritis. Existence of congestive heart failure, osteoporosis and diabetes are relative contraindications.

In the presence of infection appropriate antibacterial agents should also be administered and should be continued for at least 3 days after discontinuance of the hormone and disappearance of all signs of infection.

PANTONE 877 CVC

PANTONE BLACK CVC

PANTONE 199 CVC

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Euphoria or an  
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Cushing's Syndrome in dogs has been reported in association with prolonged or repeated steroid therapy. Corticosteroids reportedly cause laminitis in horses.

**DOSAGE AND ADMINISTRATION:**

For Intravenous Use Only.

Horses: The usual intravenous dosage is 2.5 to 5 mg (based on 3 mg per mL of dexamethasone content). If permanent corticosteroid effect is required, oral therapy with dexamethasone may be substituted. When therapy is to be withdrawn after prolonged corticosteroid administration, the daily dose should be reduced gradually over a number of days, in stepwise fashion.

**HOW SUPPLIED:**

Dexium-SP, dexamethasone sodium phosphate injection 4mg/mL (equivalent to 3mg/mL dexamethasone) is available in 100mL multiple dose vials.

Store between 15°C and 30°C (59° - 86°F). Do not freeze.

**CAUTION:** Federal law restricts this drug to use by or on the order of a licenced veterinarian.

Iss.10.03

**NOTE**

PER CVM "Protect From Light" storage not required. Product is in Amber vials

**Dosage:**

Usual intravenous dose for horses is 2.5 - 5 mg (based on 3 mg/mL dexamethasone content)

See package insert for full information.

Warning: Do not use in horses intended for use in food.

**FOR ANIMAL USE ONLY**  
**KEEP OUT OF REACH OF CHILDREN**  
Dexium-SP is a Trademark of Bimeda Inc.

Manufactured by: Bimeda-MTC Animal Health Inc.  
Cambridge, Ontario, Canada N3C 2W4

**Dexium-SP™**

DEXAMETHASONE SODIUM PHOSPHATE INJECTION USP

4 mg per mL

Equivalent to dexamethasone 3 mg/mL

FOR INTRAVENOUS USE IN HORSES ONLY

CAUTION: Federal (U.S.A.) law restricts this drug to use by or on the order of a licenced veterinarian.

ANADA #200-317 Approved by FDA

Net Contents: 100 mL

Manufactured for: Bimeda, Inc.  
Riverside, MO 64150

Sterile

EACH mL CONTAINS: Dexamethasone Sodium Phosphate 4 mg (equivalent to dexamethasone 3 mg), Sodium Citrate 10 mg, Sodium Bisulfite 2 mg with Benzyl Alcohol 1.5% as preservative in Water for Injection q.s. Sodium Hydroxide and/or Hydrochloric Acid may have been used to adjust pH.

Store between 15° and 30° C (59° and 86° F). Do not freeze.

Product No. 10EX029 80FX017

UPC 80%  
0 61133 08929 4



# STERIS™

## LABORATORIES INC

520 North 51st Avenue  
Phoenix, Arizona 85043-4705

TELEPHONE

FAX

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900319A5

### DEXAMETHASONE SODIUM PHOSPHATE INJECTION, USP

equivalent to dexamethasone 3 mg/mL

FOR INTRAVENOUS USE IN HORSES ONLY

**WARNING: DO NOT USE IN HORSES  
INTENDED FOR FOOD**

FOR VETERINARY USE ONLY

**DESCRIPTION:** Dexamethasone sodium phosphate (a synthetic adrenocortical steroid), is a white or slightly yellow crystalline powder. It is freely soluble in water and is exceedingly hygroscopic.

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**CLINICAL PHARMACOLOGY:** Dexamethasone is a synthetic corticosteroid and possesses glucocorticoid activity. Dexamethasone sodium phosphate is a salt of dexamethasone that is particularly suitable for intravenous administration because it is highly water soluble, permitting administration of relatively large doses in a small volume of diluent.

Dexamethasone as a steroid is equivalent in potency to some established steroids while being considerably more potent than others. In the case of the dog, dexamethasone is found to be about equivalent in dosage to prednisone but about 30 to 40 times more potent than prednisolone.

**INDICATIONS AND USAGE:** Dexamethasone Sodium Phosphate Injection is indicated for use in situations in which a rapid and intense glucocorticoid and/or anti-inflammatory effect is desired.

**CONTRAINDICATIONS:** Do not use in viral infections. Except when used for emergency therapy, dexamethasone sodium phosphate is contraindicated in animals with tuberculosis and chronic nephritis. Existence of congestive heart failure, osteoporosis and diabetes are relative contraindications.

In the presence of infection, appropriate antibacterial agents should also be administered and should be continued for at least 3 days after discontinuance of the hormone and disappearance of all signs of infection.

**WARNINGS:** Clinical and experimental data have demonstrated that corticosteroids administered orally or by injection to animals may induce the first stage of parturition if used during the last trimester of pregnancy and may precipitate premature parturition followed by dystocia, fetal death, retained placenta, and metritis.

Additionally, corticosteroids administered to dogs, rabbits, and rodents during pregnancy have produced cleft palate. Other congenital anomalies including deformed forelegs, phocomelia, and anasarca have been reported in offspring of dogs which received corticosteroids during pregnancy.

**PRECAUTIONS:** Because of the anti-inflammatory action of corticosteroids, signs of infection may be hidden and it may be necessary to

stop treatment until diagnosis is made. Overdosage of some glucocorticoids may result in sodium retention, fluid retention, potassium loss and weight gains.

In infections characterized by overwhelming toxicity, dexamethasone sodium phosphate therapy in conjunction with indicated antibacterial therapy is effective in reducing mortality. It is essential that the causative organism be known and an effective antibacterial agent be administered concurrently. The injudicious use of adrenal hormones in animals with infections can be hazardous.

Use of corticosteroids, depending on dose, duration, and specific steroid, may result in inhibition of endogenous steroid production following drug withdrawal. In patients presently receiving or recently withdrawn from systemic corticosteroid treatments, therapy with a rapidly acting corticosteroid should be considered in unusually stressful situations.

**ADVERSE REACTIONS:** The therapeutic use of Dexamethasone Sodium Phosphate Injection is unlikely to cause undesired accentuation of metabolic effects. However, if continued corticosteroid therapy is anticipated, a high protein intake should be provided to keep the animal in positive nitrogen balance. A retardant effect on wound healing should be considered when it is used in conjunction with surgery. Euphoria or an improvement of attitude, and increased appetite are the usual manifestations.

Side effects such as glycosuria, hyperglycemia, diarrhea, polydipsia and polyuria have been observed in some species.

Side effects such as SAP and SGPT enzyme elevations, eosinopenia, and vomiting have occurred following use of synthetic corticosteroids in dogs.

Cushing's Syndrome in dogs has been reported in association with prolonged or repeated steroid therapy.

Corticosteroids reportedly cause laminitis in horses.

**DOSE AND ADMINISTRATION:** For Intravenous Use Only.

Horses — The usual intravenous dosage is 2.5 to 5 mg (based on 3 mg per mL of dexamethasone content).

If permanent corticosteroid effect is required, oral therapy with dexamethasone may be substituted. When therapy is to be withdrawn after prolonged corticosteroid administration, the daily dose should be reduced gradually over a number of days, in stepwise fashion.

**HOW SUPPLIED:** Dexamethasone Sodium Phosphate Injection, USP (equivalent to 3 mg/mL dexamethasone) is available in 50 mL and 100 mL multiple dose vials, individually boxed.

Store at 15° - 30° C (59° - 86° F). **PROTECT FROM LIGHT.**

**CAUTION:** Federal law restricts this drug to use by or on the order of a licensed veterinarian.

Literature revised: March 1990

Product Nos.: 9202-50, 9202-70

Mfd. by Steris Laboratories, Inc.  
Phoenix, Arizona 85043 USA

Steris Laboratories, Inc.  
620 North 51st Avenue  
Phoenix, AZ 85043-4705

Tel. 602 278-1400  
Fax 602 447-3537



**EACH mL CONTAINS:** Dexamethasone Sodium Phosphate 4 mg (equivalent to Dexamethasone 3 mg), Sodium Citrate 10 mg, Sodium Bisulfite 2 mg, with Benzyl Alcohol 1.5% as preservative, in Water for Injection q.s. Sodium Hydroxide and/or Hydrochloric Acid may have been used to adjust pH.  
**CAUTION:** Federal law restricts this drug to use by or on the order of a licensed veterinarian.

**STERIS™**  
LABORATORIES/INC.

NDC 0402-  
9202-70

**DEXAMETHASONE  
SODIUM PHOSPHATE  
INJECTION, USP  
4 mg/mL**

(equivalent to dexamethasone 3 mg/mL)  
**FOR INTRAVENOUS USE IN HORSES ONLY**  
100 mL Sterile Solution  
Multiple Dose Vial

**WARNING: DO NOT USE IN HORSES  
INTENDED FOR FOOD.**

Store at controlled room temperature  
15° - 30° C (59° - 86° F).

**PROTECT FROM LIGHT.**

**DOSAGE:** Usual intravenous dose for horses is 2.5 to 5 mg (based on 3 mg per mL dexamethasone content). See package insert for full information.

604192020402\*A  
STERIS LABORATORIES, INC.  
Phoenix, Arizona 85043 USA

Lot No.  
Exp. Date

**EACH 1**  
Sodium Phosphate 4 mg (equivalent to Dexamethasone 3 mg), Sodium Citrate 10 mg, Sodium Bisulfite 2 mg, with Benzyl Alcohol 1.5% as preservative, in Water for Injection q.s. Sodium Hydroxide and/or Hydrochloric Acid may have been used to adjust pH.  
**CAUTION:** Federal law restricts this drug to use by or on the order of a licensed veterinarian.

**STERIS™**  
LABORATORIES/INC.

NDC 0402-  
9202-70

**DEXAMETHASONE  
SODIUM PHOSPHATE  
INJECTION, USP  
4 mg/mL**

(equivalent to dexamethasone 3 mg/mL)  
**FOR INTRAVENOUS USE IN HORSES ONLY**  
100 mL Sterile Solution  
Multiple Dose Vial

**WARNING: DO NOT USE IN HORSES  
INTENDED FOR FOOD.**

Store at controlled room temperature  
15° - 30° C (59° - 86° F).

**PROTECT FROM LIGHT.**

**DOSAGE:** Usual intravenous dose for horses is 2.5 to 5 mg (based on 3 mg per mL dexamethasone content). See package insert for full information.

604192020402\*A  
STERIS LABORATORIES, INC.  
Phoenix, Arizona 85043 USA

Lot No.  
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