List of current pinkeye vaccines as of March 2022; from the *Compendium of Veterinary Products – US Edition*; accessed on 3-8-2022.

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NOTE: For the links below to work, first access the 'Compendium' from the 'Resources' tab at: https://www.midwestvetsupply.com/products. After that, the links below should work.

Compendium link and product description:

ALPHA-7/MB-1®

Boehringer Ingelheim Animal Health

Clostridium Chauvoei-Septicum-Novyi-Sordellii-Perfringens Types C & D-Moraxella Bovis Bacterin-Toxoid BEEF & DAIRY CATTLE

Indications: This product has been shown to be effective for the vaccination of healthy cattle against *Clostridium chauvoei*, *Cl. septicum*, *Cl. novyi*, *Cl. sordellii*, *Cl. perfringens* types C and D, and against pinkeye (infectious bovine

keratoconjunctivitis) due to *Moraxella bovis*. This product was licensed prior to the requirement to establish a minimum age for use. The duration of immunity against *M. bovis* is at least 4 months. The duration for the remaining organisms has not been determined. For more information regarding efficacy and safety data, go to productdata. aphis.usda.gov.

Although *Cl. perfringens* type B is not a significant problem in the U.S.A., immunity may be provided against the beta and epsilon toxins elaborated by *Cl. Perfringens* type B. This immunity is derived from the combination of types C (beta) and type D (epsilon) fractions.

Composition: Prepared from chemically inactivated cultures of *Cl. chauvoei, Cl. septicum, Cl. novyi, Cl. sordellii, Cl. perfringens* types C and D and *M. bovis* with the special DD-2 adjuvant system to maximize immune response. Gentamicin added as a preservative.

Directions and dosage: Mix well before use. Using aseptic technique, inject a single 2 mL dose subcutaneously prior to the onset of pinkeye season. The presence of maternal antibody is known to interfere with the development of active immunity in cattle and additional boosters will be required in most young animals. Contact your veterinarian or the manufacturer for information on revaccination frequency.

BOVILIS® 20/20 Vision® 7 WITH SPUR®*

Intervet/Merck Animal Health

Clostridium Chauvoei-Septicum-Novyi-Sordellii-Perfringens Types C & D-Moraxella Bovis Bacterin-Toxoid This product has been shown effective for the vaccination of healthy cattle against *Clostridium chauvoei*, *C. septicum*, *C. novyi*, *C. sordellii*, *C. perfringens* Types C & D, and *Moraxella bovis*. This product was licensed prior to the requirement to establish a minimum age for use. Duration of immunity has not been established. For more information regarding efficacy and safety data, go to productdata.aphis.usda.gov.

DOSE: Shake well and administer a single 2.0 mL dose aseptically by subcutaneous route. Repeat the dose in 3 - 4 weeks. For advice on revaccination frequency, contact your veterinarian.

CAUTIONS: Store at 2°-8°C (35°-46°F). Do not freeze. Use entire contents when first opened. Do not mix with other products. Do not vaccinate within 21 days before slaughter. This product has not been tested in pregnant animals. If allergic reaction occurs, treat with epinephrine. In case of human exposure, contact a physician. Contains formaldehyde and polymyxin B as preservatives.

BOVILIS® Piliguard® Pinkeye+7

Intervet/Merck Animal Health

Clostridium Chauvoei-Septicum-Novyi-Sordellii-Perfringens Types C & D-Moraxella Bovis Bacterin-Toxoid

This product has been shown effective for the vaccination of healthy cattle against pinkeye due to *Moraxella bovis* and diseases due to *Clostridium chauvoei, C. septicum, C. novyi* Type B, *C. sordellii* and *C. perfringens* Types C and D. This product was licensed prior to the requirement to establish a minimum age for use. Duration of immunity has not been established. For more information regarding efficacy and safety data, go to productdata.aphis.usda.gov.

DOSAGE: Shake well and administer a single 5.0 mL dose aseptically by the subcutaneous route. Repeat the dose in 3 - 4 weeks. For advice on revaccination frequency, contact your veterinarian.

CAUTION: Store at 2°-8°C (35°-46°F). Do not freeze. Use entire contents when first opened. Do not mix with other products. Do not vaccinate within 21 days before slaughter. This product has not been tested in pregnant animals. Transient local reactions may occur at the injection site. If allergic reaction occurs, treat with epinephrine. In case of human exposure, contact a physician. Contains gentamicin, formaldehyde and thimerosal as preservatives.

MAXI/GUARD® PINKEYE BACTERIN

Addison

MORAXELLA BOVIS BACTERIN

COMPOSITION: This vaccine contains formalin inactivated isolates of Moraxella bovis.

INDICATIONS: This product has been shown to be effective for the vaccination of healthy cattle 2 months of age or older against pinkeye (infectious bovine keratoconjunctivitis). The duration of immunity against *Moraxella bovis* is at least 120 days when administered at 5 months of age. For more information regarding efficacy and safety data, see productdata.aphis.usda.gov.

DOSAGE: <u>Shake well.</u> Administer a 2 mL dose subcutaneously to cattle 2 months of age or older.

CAUTION: Store at 2 to 8°C (35 to 46°F). DO NOT FREEZE. Shake well before and during use. Use entire contents when first opened. Do not mix with other products. In case of anaphylactic reaction, administer epinephrine or atropine. Do not vaccinate within 21 days before slaughter. For use in animals only. In case of human exposure, contact a physician. This product has not been tested in pregnant animals.

MORAXELLA BOVOCULI BACTERIN

Addison

COMPOSITION: This vaccine contains formalin inactivated isolates of Moraxella bovoculi.

INDICATIONS: This product is for use in healthy cattle 14 weeks of age or older against pinkeye (infectious bovine keratoconjunctivitis). This product license is conditional; efficacy and potency have not been fully demonstrated. For more information regarding safety data, see productdata.aphis.usda.gov.

Dosage: <u>Shake well.</u> Administer a 2ml dose subcutaneously to cattle 14 weeks of age or older. Repeat vaccination in 21 days.

CAUTION: Store at not over 45°F or 8°C. DO NOT FREEZE. Shake well before and during use. Transient swelling may occur at the injection site. Use entire contents when first opened. In case of anaphylactic reaction, administer epinephrine or atropine. Do not vaccinate within 21 days before slaughter. For Animal Use Only. Do not mix with other products, except as specified on the label. In case of human exposure, contact a physician. This product has not been tested in pregnant animals. The need for annual booster vaccinations has not been established for this product: consultation with a veterinarian is recommended.

Moraxella Bovoculi Bacterin

Intervet/Merck Animal Health

Cattle Vaccine

COMPOSITION: This vaccine contains formalin inactivated isolates of Moraxella bovoculi.

INDICATIONS: For the vaccination of healthy cattle 14 weeks of age or older against pinkeye (infectious bovine keratoconjunctivitis). This product license is conditional; potency has not been fully demonstrated. For more information regarding safety data, see productdata.aphis.usda.gov.

DOSAGE: <u>Shake well.</u> Administer a 2 mL dose subcutaneously to cattle 14 weeks of age or older. Repeat vaccination in 21 days. For advice on revaccination frequency, contact your veterinarian.

CAUTION: Store at 2 to 8°C (35 to 46°F). DO NOT FREEZE. Shake well before and during use. Use entire contents when first opened. Transient swelling may occur at the injection site. In case of anaphylactic reaction, administer epinephrine or atropine. Do not vaccinate within 21 days before slaughter. This product has not been tested in pregnant animals. Do not mix with other products. In case of human exposure, contact a physician.

Ocu-guard® MB-1

Boehringer Ingelheim Animal Health Moraxella Bovis Bacterin

BEEF & DAIRY CATTLE

Indications: This product has been shown to be effective for the vaccination of healthy cattle 2 months of age or older against pinkeye (infectious bovine keratoconjunctivitis) due to *Moraxella bovis*. The duration of immunity against *M. bovis* is at least 4 months. For more information regarding efficacy and safety data go to productdata.aphis.usda.gov.

Directions and dosage: Mix well before use. Inject a single 2 mL dose subcutaneously prior to the onset of pinkeye season. Contact your veterinarian or the manufacturer for information on revaccination frequency.

Precautions: Store at 35-46°F (2-8°C). Do not freeze. Do not mix with other products. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter. In case of anaphylactoid reaction, administer epinephrine. This product has not been tested in pregnant animals. In case of human exposure, contact a physician.

Piliguard[®] Pinkeye-1 TRIVALENT

Intervet/Merck Animal Health

MORAXELLA BOVIS BACTERIN

For use in healthy cattle to aid in the control of pinkeye associated with infection by *Moraxella bovis* strains expressing pili similar to those expressed by isolates referred to by Intervet Inc. as Strains Epp 63, Fla 64 and SAH 38.

ADMINISTRATION: Shake well before use. The vaccine may be warmed to room temperature prior to injection. Using aseptic technique, inject 2 mL subcutaneously or intramuscularly INTO THE NECK 3 to 6 weeks prior to onset of pinkeye season. Annual revaccination is recommended.

CAUTION: Use may occasionally lead to development of granulomas which may persist for several weeks. Store at 2°-7°C (35°-45°F). Do not freeze. Use entire contents when first opened. Do not vaccinate within 60 days of slaughter. Transient local reaction may occur at the injection site. If anaphylaxis occurs administer epinephrine. Hypersensitivity reactions may occur with a biological product and can cause temporary reduced milk production in lactating cattle. **PRESERVATIVE:** Gentamicin.

WARNING: Extreme caution should be used when injecting any oil emulsion vaccine to avoid injecting your own finger or hand. Accidental injection can cause serious local reaction. *Contact a physician immediately if accidental injection occurs.*

Piliguard[®] Pinkeye + 7

Intervet/Merck Animal Health

CLOSTRIDIUM CHAUVOEI-SEPTICUM-NOVYI-SORDELLII-PERFRINGENS TYPES C & D-MORAXELLA BOVIS BACTERIN-TOXOID

PILIGUARD[®] PINKEYE + 7 injectable is for the vaccination of healthy cattle as an aid in the control of pinkeye caused by *Moraxella bovis* strains expressing pili similar to those expressed by isolates referred to as Strains EPP 63, FLA 64, and SAH 38, and against diseases caused by *Clostridium chauvoei, C. septicum, C. novyi* Type B, *C.*

sordellii and *C. perfringens* Types C and D. Immunity is also provided against the beta and epsilon toxins of an additional clostridial organism, *C. perfringens* Type B. This immunity is derived from the combination of the Type C (beta) and Type D (epsilon) fractions. The Moraxella components are cell-free bacterin containing pili from Moraxella bovis isolates, referred to as strains EPP 63, FLA 64 and SAH 38.

DOSAGE: Using aseptic technique, inject cattle **subcutaneously** with 5 mL. Repeat in 3-4 weeks and annually prior to periods of extreme risk or parturition. For *C. novyi*, revaccinate every 5-6 months. Animals vaccinated under 3 months of age should be revaccinated at weaning or at 4-6 months of age.

CAUTION: Store at 2° to 7°C (35° to 45°F). Do not freeze. Shake well before use. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter. Transient local reactions may occur at the injection site. The incidence and severity of reactions may be higher in calves under 3 months of age. If allergic response occurs, administer epinephrine.

Piliguard[®] Pinkeye TriView[®]

Intervet/Merck Animal Health MORAXELLA BOVIS BACTERIN

For use in healthy cattle four weeks of age or older as an aid in the reduction of disease associated with infection by *Moraxella bovis*.

DOSAGE: Shake well before use. The vaccine may be warmed to room temperature prior to injection. Inject 2 mL **subcutaneously** into the neck 3 to 6 weeks prior to onset of pinkeye season. Annual revaccination is recommended. **CAUTION:** Store at 2° to 7°C (35° to 45°F). Do not freeze. Use entire contents when first opened. Do not vaccinate within 60 days before slaughter. Transient local reaction may occur at the injection site. If allergic response occurs, administer

epinephrine. Use may occasionally lead to development of granulomas which may persist for several weeks. Hypersensitivity reactions may occur and can cause temporary reduced milk production in lactating cattle. **PRESERVATIVE:** Gentamicin.

WARNING: Extreme caution should be used when injecting oil emulsion vaccines to avoid injecting your own finger or hand. Accidental injection can cause serious local reaction. **Contact a physician immediately if accidental injection occurs.**

PINKEYE SHIELD™ XT4

Elanco US (Farm Animal)

Moraxella Bovis Bacterin

For Use In Animals Only

INDICATIONS: This product has been shown to be effective for the vaccination of healthy cattle against pinkeye caused by *Moraxella bovis*. The duration of immunity for this product has not been determined. For more information regarding efficacy and safety data, see *productdata.aphis.usda.gov*.

ADJUVANT: Xtend™ SP.

DIRECTIONS: Shake well before using. Administer 2 mL intramuscularly in the neck. The need for annual booster vaccinations has not been established for this product; consultation with a veterinarian is recommended.

PRECAUTIONS: Store out of direct sunlight at 2° to 8°C (35° to 46°F). DO NOT FREEZE. Do not mix with other products, except as specified on the label. This product has not been tested in pregnant animals. In case of human exposure, contact a physician. Use entire contents when first opened. Do not vaccinate within 60 days prior to slaughter. Transient swelling may occur at the site of the injection. Anaphylactic reactions may occur. Symptomatic treatment: Epinephrine. Contains thimerosal as a preservative.

SOLIDBAC® PINKEYE IR/PR

Zoetis

5 Clips (50 Doses)

Moraxella Bovis Bacterin

COMPOSITION: Each dose contains a combination of immediate release (IR) and programmed release (PR) antigen pellets and includes the antigen equivalent of two (2) doses of Moraxella Bovis Bacterin.

INDICATIONS: For the vaccination of healthy cattle as an aid in the prevention and control of pinkeye (infectious bovine keratoconjunctivitis) caused by *Moraxella bovis*.

DOSAGE AND ADMINISTRATION: Administer the entire contents (2 SoliDose® pellets) of one clip channel subcutaneously in the base of the ear or in the neck of cattle 3 months of age or older using the SoliDoser® delivery system.

CAUTION: Store at 2° to 7° C (35° to 45° F). Disinfect and dry needle between doses. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter. Preservative: Gentamicin. Administer epinephrine if allergic reaction occurs.