

Project: Consumer Friendly Ag Retail—CATTLE Vaccines

**20/20 VISION® 7 with Spur®**

*Product description*

20/20 VISION® 7 is for use in healthy cattle as an aid in preventing disease caused by Clostridial organisms commonly referred to as “Blackleg” and to prevent pinkeye infection caused by *Moraxella bovis*.

*Product bullets*

- 2mL dose. Inject subcutaneously. Repeat in 3 to 4 weeks
- Vaccination recommended 3 to 6 weeks prior to onset of pinkeye season
- Powered by SPUR adjuvant which utilizes the Antigen Purge System to help ensure a uniform solution that stays in suspension
- Low injection-site reactions

Do not vaccinate within 21 days before slaughter. Anaphylactoid reactions may occur. Antidote: Epinephrine.

*Key words*

Clostridial vaccine, Blackleg, Malignant edema, *Sordelli*, Black disease, Enterotoxemia, Pinkeye, Vision 20/20, Vision

**COVEXIN® 8**

*Product description*

COVEXIN® 8 is for the vaccination of healthy cattle and sheep as an aid in the prevention of Blackleg, Malignant Edema, Black Disease, Red Water, Enterotoxemia, and Tetanus.

*Product bullets*

- Cattle-5mL dose. Inject subcutaneously or intramuscularly. Repeat in 6 weeks
- Revaccinate annually with 5mL prior to periods of extreme risk or parturition

Do not vaccinate within 21 days before slaughter. Anaphylactoid reactions may occur following use. Antidote: Epinephrine.

*Key words*

Clostridial organisms, Blackleg, Malignant edema, Black disease, Red Water, Enterotoxemia, Tetanus, Covexin 8, Covexin

**GUARDIAN®**

*Product description*

Guardian® vaccine provides broad-spectrum protection against the leading contributors to scours and is the only pregnant cow and heifer vaccine labeled for subcutaneous (SQ) administration. Guardian

protects calves from the leading causes of scours including rotavirus, coronavirus, *Clostridium perfringens*, and *E. coli* through vaccination of pregnant cows and heifers. Guardian is recommended for use in healthy pregnant heifers and cows 3 months prior to calving as an aid in the prevention of neonatal calf diarrhea caused by enterotoxigenic *E. coli* pilus type K99, bovine Group A Serotype G6 rotaviruses, enterotoxemia caused by *Cl. perfringens* Types C and D

*Product bullets*

- Use with healthy pregnant cattle
- 2mL injected subcutaneously
- First year use: 3 months prior to calving. Repeat 3-6 weeks later
- For subsequent calvings, revaccinate with 2mL dose 5 to 7 weeks before calving

Do not vaccinate within 60 days before slaughter. Transient local reaction may occur at the injection site. If allergic response occurs, administer epinephrine.

*Key words*

Scours vaccine, neonatal calf diarrhea, *E. coli*, scours, Guardian, rotavirus, coronavirus, scours

## **L5 SQ**

*Product description*

L5 SQ is for the vaccination of healthy cattle, 6 months of age and older, as an aid in preventing leptospirosis and as an aid in prevention of urinary shedding of *L. hardjo* organisms.

*Product bullets*

- Shake vial well and inject 2mL subcutaneously to healthy cattle
- Annual revaccination is recommended

Do not vaccinate within 21 days before slaughter. If allergic reaction occurs, treat with epinephrine.

*Key words*

Lepto cattle vaccine, leptospirosis, L5 SQ, lepto

## **NASALGEN® IP**

*Product description*

Nasalgen® IP vaccine is for the vaccination of healthy cattle as an aid in the prevention of disease caused by IBR and PI3 virus.

*Product bullets*

- Nasalgen® IP vaccine is safe for use in pregnant cows or in calves nursing pregnant cows.
- Calves vaccinated under 5 months of age should be revaccinated at 5 months of age or weaning.
- Cattle-2mL dose. Inject intranasally, see label for complete instructions

Do not vaccinate within 21 days before slaughter. If allergic reaction occurs, treat with epinephrine.

*Key words*

IBR, PI3 virus, Nasalgen IP, Nasalgen

**ONCE PMH® IN**

*Product description*

ONCE PMH® IN is for the vaccination of healthy cattle, 1 week of age or older, as an aid in the control of respiratory disease caused by *Mannheimia haemolytica* and as an aid in the prevention of disease caused by *Pasteurella multocida*.

*Product bullets*

- First and only intranasal vaccine that delivers dual bacterial pneumonia protection for healthy cattle of all ages
- Approved for healthy cattle 1 week of age or older
- Cattle-2mL dose. Administer intranasally, see label for complete instructions
- Annual revaccination is recommended

Do not vaccinate within 21 days before slaughter. If allergic reaction occurs, treat with epinephrine.

*Key words*

BRD, ONCE PMH® IN, intranasal cattle vaccine, pneumonia, *Pasteurella multocida*, *Mannheimia haemolytica*, ONCE PMH IN

**ONCE PMH® SQ**

*Product description*

ONCE PMH® SQ is used as an aid in the control of respiratory disease cause by *Pasteurella multocida* and *Mannheimia haemolytica*.

*Product bullets*

- For the vaccination of healthy cattle, 3 months of age or older.
- Provides industry leading 16-week duration of immunity against *Mannheimia haemolytica* and *Pasteurella multocida*
- Cattle-2mL dose. Inject subcutaneously
- Annual revaccination is recommended

Do not vaccinate within 21 days before slaughter. If allergic reaction occurs, treat with epinephrine.

*Key words*

Respiratory disease, ONCE PMH SQ, *Pasteurella multocida*, *Mannheimia haemolytica*, BRD, pneumonia

## **PILIGUARD® Pinkeye-1 Trivalent**

### *Product description*

PILIGUARD® Pinkeye-1 Trivalent is for use in healthy cattle to aid in the control of pinkeye associated with infection by *Moraxella bovis*.

### *Product bullets*

- Use 3 to 6 weeks prior to onset of pinkeye season
- Cattle-2mL dose. Inject subcutaneously or intramuscularly
- Annual revaccination is recommended

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.

### *Key words*

PILIGUARD® Pinkeye-1 Trivalent, cattle vaccine, pinkeye, *Moraxella bovis*, Piliguard, Piliguard Pinkeye, Piliguard Trivalent

## **PILIGUARD® Pinkeye + 7**

### *Product description*

PILIGUARD® Pinkeye + 7 is for use in healthy cattle to aid in the control of pinkeye associated with infection by *Moraxella bovis* and against diseases caused by *Clostridium chauvoei*, *C. septicum*, *C. novyi* Type B, *C. sordellii* and *C. perfringens* Types C and D.

### *Product bullets*

- For the vaccination of healthy cattle
- Cattle-5mL dose. Repeat in 3-4 weeks. Inject subcutaneously
- Annual revaccination is recommended

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.

### *Key words*

PILIGUARD® Pinkeye + 7; Piliguard Pinkeye, cattle vaccine, pinkeye, *Moraxella bovis*, Piliguard

## **VISION® 7 with Spur®**

### *Product description*

VISION® 7 is for use in healthy cattle and sheep as an aid in preventing disease caused by Clostridial organisms (Blackleg, Malignant edema, Black disease, Sord, and Enterotoxemia).

### *Product bullets*

- Cattle and sheep-2mL dose. Inject subcutaneously. Repeat in 3 to 4 weeks
- Annual revaccination is recommended.
- Powered by SPUR adjuvant which utilizes the Antigen Purge System to help ensure a uniform solution that stays in suspension
- Low injection-site reactions

Do not vaccinate within 21 days before slaughter. If allergic reaction occurs, treat with epinephrine.

*Key words*

Clostridial vaccine, Blackleg, Malignant edema, *Sordelli*, Black disease, Enterotoxemia, Vision 7, Vision

**VISION® 7 Somnus with Spur®**

*Product description*

VISION® 7 Somnus is for use in healthy cattle as an aid in preventing disease caused by Clostridial organisms (Blackleg, Malignant edema, Black disease, *Sord*, *perfringens* Types C & D Enterotoxemia) and *Haemophilus somnus*.

*Product bullets*

- Cattle-2mL. Inject subcutaneously. Repeat in 3 to 4 weeks
- Annual revaccination is recommended.
- Powered by SPUR adjuvant which utilizes the Antigen Purge System to help ensure a uniform solution that stays in suspension
- Low injection-site reactions

Do not vaccinate within 21 days before slaughter. If allergic reaction occurs, treat with epinephrine.

*Key words*

Clostridial vaccine, Blackleg, Malignant edema, Black disease, *Sordellii*, Enterotoxemia and *Haemophilus somnus*, Vision 7, Vision 7 Somnus

**VISION® 8**

*Product description*

VISION® 8 is for use in healthy cattle and sheep as an aid in preventing disease caused by Blackleg, Malignant edema, *Sord*, Red Water, Black disease, Enterotoxemia.

*Product bullets*

- Cattle-2mL dose. Inject subcutaneously. Repeat in 3 to 4 weeks
- In animals subject to re-exposure to *Cl. haemolyticum* revaccinate every 5 to 6 months.
- Annual revaccination is recommended
- Powered by SPUR adjuvant which utilizes the Antigen Purge System to help ensure a uniform solution that stays in suspension
- Low injection-site reactions

Do not vaccinate within 21 days before slaughter. If allergic reaction occurs, treat with epinephrine.

*Key words*

Vision 8, Blackleg, Malignant edema, Sord, Red Water, Black disease, Enterotoxemia

**VISION® 8 Somnus**

*Product description*

VISION® 8 Somnus is for use in healthy cattle as an aid in preventing disease caused by Blackleg, Malignant edema, Bacillary hemoglobinuria/Red Water, Black disease, *sordellii*, Enterotoxemia and *Haemophilus somnus*.

*Product bullets*

- Cattle-2mL. Inject subcutaneously. Repeat in 3 to 4 weeks.
- In animals subject to re-exposure to *Cl. haemolyticum* revaccinate every 5 to 6 months.
- Annual revaccination is recommended.
- Powered by SPUR adjuvant which utilizes the Antigen Purge System to help ensure a uniform solution that stays in suspension
- Low injection-site reactions

Do not vaccinate within 21 days before slaughter. If allergic reaction occurs, treat with epinephrine.

*Key words*

Blackleg, Malignant edema, Red Water, Black disease, Sord, Enterotoxemia and *Haemophilus somnus*, Vision 8, Vision, Vision 8 Somnus

**VISION® CD + T**

*Product description*

VISION® CD + T is for use in healthy cattle, sheep and goats as an aid in preventing disease caused by Enterotoxemia and Tetanus.

*Product bullets*

- Cattle-2mL dose. Inject subcutaneously. Repeat in 3 to 4 weeks
- Annual revaccination is recommended
- Powered by SPUR adjuvant which utilizes the Antigen Purge System to help ensure a uniform solution that stays in suspension
- Low injection-site reactions

Do not vaccinate within 21 days before slaughter. If allergic reaction occurs, treat with epinephrine.

*Key words*

VISION® CD + T, cattle, sheep, goats, Enterotoxemia, Tetanus, Vision

**VISION® CD with Spur®**

*Product description*

VISION® CD with Spur is for use in healthy cattle, sheep and goats as an aid in the prevention of Enterotoxemia caused by *Clostridium perfringens* Types C and D.

*Product bullets*

- Cattle, sheep and goat-2mL dose. Inject subcutaneously. Repeat the dose in 3 to 4 weeks
- Annual vaccination is recommended
- Powered by SPUR adjuvant which utilizes the Antigen Purge System to help ensure a uniform solution that stays in suspension
- Low injection-site reactions

Do not vaccinate within 21 days before slaughter. If allergic reaction occurs, treat with epinephrine.

*Key words*

VISION® CD W/Spur, Vision vaccine, cattle, sheep, goats, Enterotoxemia, Vision

**VISTA® 3 SQ**

*Product description*

VISTA® 3 SQ is for vaccination of healthy cattle, 3 months of age or older, as an aid in the prevention of disease caused by IBR and BVD Type 2, as well as an aid in the control of disease caused by BVD Type 1. For vaccination of healthy cows and heifers prior to breeding as an aid in reduction of abortion due to IBR and as an aid in prevention of fetal infection, including persistently infected calves caused by BVD (Types 1 and 2). Duration of immunity has been demonstrated to be at least 1 year for IBR virus and BVD viruses (Types 1 & 2).

*Product bullets*

- Safe for use in pregnant heifers and cows or calves nursing pregnant cows provided the cows and heifers in the herd are vaccinated prior to breeding, within the previous 12 months, with any of the modified live IBR and BVD containing vaccine(s) in this product line.
- 2 mL administered subcutaneously
- Annual revaccination is recommended

Do not vaccinate within 21 days before slaughter. Fetal health risks associated with vaccination of pregnant animals with modified live vaccines cannot be unequivocally determined by clinical trials conducted for licensure. Management strategies based on vaccination of pregnant animals with modified live vaccines should be discussed with a veterinarian. If allergic reaction occurs, treat with epinephrine.

*Key words*

Cattle vaccine, IBR, BVD, Type 2, Type 1, VISTA® 3 SQ, cattle respiratory disease, abortion, Vista, Vista 3 SQ

**VISTA® 3 VL5 SQ**

*Product description*

VISTA® 3 VL5 SQ is for the vaccination of healthy cows and heifers prior to breeding as an aid in the reduction of abortion due to IBR; as an aid in the prevention of fetal infection, including persistently infected calves caused by BVD (Types 1 and 2). Can be used as an aid in reducing infertility caused by *Campylobacter fetus*, and as an aid in preventing leptospirosis and urinary shedding of *L. hardjo* organisms.

*Product bullets*

- Safe for use in pregnant heifers and cows or calves nursing pregnant cows provided the cows and heifers in the herd are vaccinated prior to breeding, within the previous 12 months, with any of the modified live IBR and BVD containing vaccine(s) in this product line.
- 2 mL administered subcutaneously 14 to 60 days prior to breeding.
- Annual revaccination is recommended.

Do not vaccinate within 21 days before slaughter. Fetal health risks associated with vaccination of pregnant animals with modified live vaccines cannot be unequivocally determined by clinical trials conducted for licensure. Management strategies based on vaccination of pregnant animals with modified live vaccines should be discussed with a veterinarian. If allergic reaction occurs, treat with epinephrine.

*Key words*

VISTA® 3 VL5 SQ, cattle vaccine, IBR, BVD, Types 1 and 2, PI calf, fetal infection, leptospirosis, Vista, Vista 3 VL5 SQ

## **VISTA® 5 L5 SQ**

*Product description*

VISTA® 5 L5 SQ is for the vaccination of healthy cows and heifers, 6 months of age or older, prior to breeding as an aid in the reduction of abortion due to IBR; as an aid in the prevention of fetal infection, including persistently infected calves caused by BVD (Types 1 and 2). Can be used as an aid in preventing leptospirosis and as an aid in prevention of urinary shedding of *L. hardjo* organisms.

*Product bullets*

- Safe for use in pregnant heifers and cows or calves nursing pregnant cows provided the cows and heifers in the herd are vaccinated prior to breeding, within the previous 12 months, with any of the modified live IBR and BVD containing vaccine(s) in this product line
- 2 mL administered subcutaneously 14 to 60 days prior to breeding to healthy cattle 6 months of age or older
- Annual revaccination is recommended

Do not vaccinate within 21 days before slaughter. Fetal health risks associated with vaccination of pregnant animals with modified live vaccines cannot be unequivocally determined by clinical trials conducted for licensure. Management strategies based on vaccination of pregnant animals with modified live vaccines should be discussed with a veterinarian. If allergic reaction occurs, treat with epinephrine.

*Key words*

VISTA® 5 L5 SQ, cattle vaccine, IBR, PI calf, fetal infection, BRSV, BVD Types 1 and 2, leptospirosis, Vista, Vista 5 L5 SQ

## **VISTA® 5 SQ**

### *Product description*

VISTA® 5 SQ is for vaccination of healthy cattle, 3 months of age or older, as an aid in prevention of disease caused by IBR, BVD (Type 2) and BRSV, and as an aid in control of disease caused by BVD (Type 1) and PI3. For vaccination of healthy cows and heifers prior to breeding as an aid in reduction of abortion due to IBR and as an aid in prevention of fetal infection, including persistently infected calves caused by BVD (Types 1 and 2)

### *Product bullets*

- Safe for use in pregnant heifers and cows or calves nursing pregnant cows provided the cows and heifers in the herd are vaccinated prior to breeding, within the previous 12 months, with any of the modified live IBR and BVD containing vaccine(s) in this product line
- Cattle-2mL dose. 3 months of age or older. Inject subcutaneously
- Annual revaccination recommended

Do not vaccinate within 21 days before slaughter. Fetal health risks associated with vaccination of pregnant animals with modified live vaccines cannot be unequivocally determined by clinical trials conducted for licensure. Management strategies based on vaccination of pregnant animals with modified live vaccines should be discussed with a veterinarian. If allergic reaction occurs, treat with epinephrine.

### *Key words*

VISTA® 5 SQ, cattle vaccine, IBR, BVD, Type 2, BRSV, Type 1, PI3, fetal infection, PI calf, persistently infected, Vista, Vista 5 SQ

## **VISTA® 5 VL5 SQ**

### *Product description*

VISTA® 5 VL5 SQ is for the vaccination of healthy cows and heifers prior to breeding as an aid in the reduction of abortion due to IBR; as an aid in the prevention of fetal infection, including persistently infected calves caused by BVD (Types 1 and 2). Can be used as an aid in reducing infertility caused by *Campylobacter fetus*, and as an aid in preventing leptospirosis and as an aid in prevention of urinary shedding of *L. hardjo* organisms.

### *Product bullets*

- Use in healthy cows and heifers 14-60 days prior to breeding
- Safe for use in pregnant heifers and cows or calves nursing pregnant cows provided the cows and heifers in the herd are vaccinated prior to breeding, within the previous 12 months, with any of the modified live IBR and BVD containing vaccine(s) in this product line
- Cattle - 2mL dose. Inject subcutaneously
- Annual revaccination is recommended

Do not vaccinate within 21 days before slaughter. Fetal health risks associated with vaccination of pregnant animals with modified live vaccines cannot be unequivocally determined by clinical trials conducted for

licensure. Management strategies based on vaccination of pregnant animals with modified live vaccines should be discussed with a veterinarian. If allergic reaction occurs, treat with epinephrine.

*Key words*

VISTA® 5 VL5 SQ, cattle vaccine, IBR, BVD, Types 1 and 2, leptospirosis, PI calf, persistently infected, Vista, Vista 5 VL5 SQ

## **VISTA® Once SQ**

*Product description*

VISTA® Once SQ is for the vaccination of healthy cattle, 3 months of age or older, as an aid in the prevention of respiratory disease caused by IBR, BVD (Type 2), and BRSV and as an aid in the control of disease caused by BVD (Type 1), PI3, *Mannheimia haemolytica* and *Pasteurella multocida*. For the vaccination of healthy cows and heifers prior to breeding as an aid in the prevention of fetal infection, including persistently infected calves caused by BVD (Types 1 and 2).

*Product bullets*

- Safe for use in pregnant heifers and cows or calves nursing pregnant cows provided the cows and heifers in the herd are vaccinated prior to breeding, within the previous 12 months, with any of the modified live IBR and BVD containing vaccine(s) in this product line
- Cattle-2mL dose. 3 months of age or older. Inject subcutaneously
- Annual revaccination is recommended

Do not vaccinate within 21 days before slaughter. Fetal health risks associated with vaccination of pregnant animals with modified live vaccines cannot be unequivocally determined by clinical trials conducted for licensure. Management strategies based on vaccination of pregnant animals with modified live vaccines should be discussed with a veterinarian. If allergic reaction occurs, treat with epinephrine.

*Key words*

VISTA® Once SQ, cattle vaccine, IBR, BVD (Type 2), BRSV, BVD (Type 1), PI3, *Mannheimia haemolytica* and *Pasteurella multocida*, cattle respiratory disease, persistently infected, Vista, Vista Once SQ

## **VL5 SQ**

*Product description*

VL5 SQ is for use in the vaccination of healthy cattle as an aid in reducing infertility caused by *Campylobacter fetus*, and as an aid in preventing leptospirosis and urinary shedding of *L. hardjo* organisms.

*Product bullets*

- For use in healthy cows and heifers 14-60 days prior to breeding
- Cattle-2mL dose. Inject subcutaneously
- Annual revaccination is recommended

Do not vaccinate within 21 days before slaughter. If allergic reaction occurs, treat with epinephrine.

*Key words*

VL5 SQ, cattle vaccine, infertility, leptospirosis, urinary shedding

**Bovilis® Coronavirus**

*Product description*

Bovilis Coronavirus is recommended for use in healthy calves as an aid in the reduction of enteric disease caused by bovine coronavirus

*Product bullets*

- Safe for use in calves as young as 1 day of age<sup>1</sup>
- Efficacy demonstrated in calves 3 days of age and older
- Administer 2 mL intranasally
- Modified live virus

<sup>1</sup>Data on file, Merck Animal Health

Do not vaccinate within 21 days before slaughter. Anaphylactoid reactions may occur following use, treat with epinephrine.

*Key words*

Bovilis, coronavirus (BVC), Bovilis coronavirus, coronavirus, bovine coronavirus

**Bovilis® J-5 (Escherichia Coli Bacterin)**

*Product description*

Bovilis J-5 (Escherichia coli bacterin) is intended for use in healthy dairy cattle as an aid in the reduction of mastitis due to *Escherichia coli*.

*Product bullets*

- Use in healthy cows to reduce the risk of mastitis caused by *Escherichia coli*
- Three doses given at 4 to 6-week intervals are recommended
- Do not vaccinate within 2 weeks of due date
- The product is a bacterin that has a low endotoxin level

Do not vaccinate within 60 days of slaughter. If an anaphylactic reaction occurs, appropriate therapy with epinephrine or other anti-anaphylactic drugs should be instituted immediately.

*Key words*

Escherichia coli, E coli, mastitis, bacterin, Bovilis

**Cavalry® 9**

*Product description*

Cavalry 9 is a convenient, low-dose clostridial vaccine that offers protection against nine clostridial diseases including red water and tetanus.

*Product bullets*

- Recommended for the vaccination of cattle 3 months of age and older as an aid in the prevention of disease caused by *Clostridium tetani*, *C. chauvoei*, *C. septicum*, *C. novyi* Type B, *C. haemolyticum*, *C. sordellii*, and *C. perfringens* Types C & D
- Cattle-2mL dose. Inject subcutaneously
- Two doses given three weeks apart

Do not vaccinate within 21 days before slaughter. Anaphylactoid reactions may occur following use, treat with epinephrine.

*Key words*

Cavalry 9, *Clostridium tetani*, *C. chauvoei*, *C. septicum*, *C. novyi* Type B, *C. haemolyticum*, *C. sordellii*, and *C. perfringens* Types C and D, Cavalry