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Pre-breeding:

Cows/Heifers/Bulls - Post-calving but 30-60 days prior to breeding

- 1. IBR, PI3, BVD, BRSV Modified live (Use Fetal Protection (FP) Products)
- 2. Lepto 5 and/or L. hardjo bovis—(Vibrio Optional)
- 3. 7-way Clostridial (Yearling Replacement Heifers)
- 4. Pinkeye (Optional)
- 5. Deworm yearling heifers—Cows/Bulls optional depending upon body condition

<u>Calves</u>

- 1. IBR, PI3, BVD, BRSV Modified live (BVD optional in spring)
 (Three intra nasals, Zoetis Inforce 3 or TSV-2 and Schering –Plough Nasalgen IP, are acceptable)
- 2. 7-way Clostridial
- 3. Pasteurella multocida and Mannheimia haemolytica (Optional)
- 4. Pinkeye (Optional)

Pre-vaccination/Weaning:

<u>Calves</u> – Three to four weeks prior to weaning

- 1. IBR, PI3, BVD, BRSV Modified live
- 2. Lepto 5 and/or L. hardjo bovis ***
- 3. 7-way Clostridial
- 4. Pasteurella (Pasteurella multocida and/or Mannheimia haemolytica)
- 5. Deworm (White wormers are working best)

<u>Calves</u> – Booster at Weaning

- 1. IBR, PI3, BVD, BRSV Modified live
- 2. Lepto 5 and/or L. hardjo bovis ***
- 3. 7- way Clostridial
- 4. Deworm (White wormers are working best)
- 5. All other products used at pre-vaccination that label requires booster

Preg-Check:

- 1. Vibrio, Lepto 5 and/or L. hardjo bovis (Optional)
- 2. Deworm thin cows and heifers

- 1. Rotavirus, Coronavirus, Clostridium perfringens Type C, K99 E. coli. (Optional)
 - a. Cows—One month prior to calving
 - b. Bred Heifers—Two months prior to calving w/ booster one month prior to calving
- 2. De-lice w/ non-generic pour-on

^{***} Pregnancy protection vaccines are only necessary for replacement heifers and bulls.

^{***} Vibrio is optional for pregnancy protection; however, if using vaccines containing Vibrio and Lepto 5, they must be administered separately from Pasteurella vaccines to minimize the risk of endotoxemia.

^{***} All vaccinations (boosters) must have been administered at least 30 days prior to shipment.

2016 Vaccination Protocol—Boehringer Ingelheim

Pre-breeding:

Cows/Bulls (Post-calving but 30-60 days prior to breeding)

- 1. Express FP10
- 2. Ocu-guard MB-1
- 3. Deworm first calvers w/ Synanthic—Older Cows not necessary

Yearling Replacement Heifers (30-60 days prior to breeding)

- 1. Express FP10
- 2. Alpha 7/MB-1 or Alpha 7
- 3. Ocu-guard MB-1 (not necessary if using Alpha 7/MB-1)
- 4. Deworm w/ Synanthic

Calves

- 1. Express 5 or Pyramid 5 + Presponse SQ
- 2. Alpha 7/MB-1 or Caliber 7
- 3. Ocu-guard MB-1 (not necessary if using Alpha 7/MB-1)

Pre-Weaning/Weaning:

Calves – Three to four weeks prior to weaning

- 1. Express FP10 (Pyramid 10 can be used for non-breeding animals)
- 2. Alpha 7/MB-1 or Caliber 7
- 3. Presponse HM
- 4. Deworm w/ Synanthic

Calves – Booster at Weaning

- 1. Express FP10 (Pyramid 10 can be used for non-breeding animals)
- 2. Caliber 7 (Booster required only for Caliber 7 not Alpha 7/MB-1)
- 3. Presponse HM (Optional—if given Pyramid 5 + Presponse SQ in spring)

Preg-Check:

- 1. TriVib 5L or Citadel VL5
- 2. Deworm thin cows and heifers w/ Synanthic and/or Cydectin

- 1. ScourGuard 4KC, Scour Bos 9, or Guardian
 - a. Cows—One month prior to calving (6 weeks for Guardian)
 - b. Bred Heifers—Two months prior to calving w/ booster one month prior to calving
- 2. De-lice w/ non-generic pour-on (Ultra Boss, Saber, Cylence, StandGuard)

^{***} If Alpha 7 or Alpha 7/MB-1 is used in calves in the spring, only one booster of Alpha 7/MB-1 or Caliber 7 is required for pre-weaning/weaning vaccination. Caliber 7 is recommended to reduce the occurrence of knots.

2016 Vaccination Protocol—Merck

Pre-breeding:

Cows/Bulls (Post-calving but 30-60 days prior to breeding)

- 1. Vista 5 L5 SQ
- 2. Piliguard Pinkeye TriView
- 3. Deworm first calvers w/ Safeguard—Older cows not necessary

Yearling Replacement Heifers

- 1. Vista 5 L5 SQ
- 2. 20/20 Vision 7 with Spur or Vision 7/8 with Spur
- 3. Piliguard Pinkeye TriView (not necessary if using 20/20 Vision 7 with Spur)
- 4. Deworm w/ Safeguard

Calves

- 1. Vista Once SQ
- 2. 20/20 Vision 7 with Spur or Vision 7/8 with Spur
- 3. Piliguard Pinkeye TriView (not necessary if using 20/20 Vision 7 with Spur)

Pre-Weaning/Weaning:

Calves – Three to four weeks prior to weaning

- 1. Vista 5 L5 SQ
- 2. Once PMH SQ or Once PMH IN
- 3. 20/20 Vision 7 with Spur or Vision 7/8 with Spur
- 4. Safeguard

Calves - Booster at Weaning

- 1. Vista 5 L5 SQ
- 2. Once PMH SQ or Once PMH IN
- 3. 20/20 Vision 7 with Spur or Vision 7/8 with Spur

Preg-Check:

- 1. Spirovac VL5 or StayBred VL5 (Pfizer products—Merck does not offer a pregnancy protection vaccine.)
- 2. Deworm thin cows and heifers w/ Safeguard

- 1. Guardian
 - a. Cows—Six weeks prior to calving
 - b. Bred Heifers—Three months prior to calving w/ booster six weeks prior to calving
- 2. De-lice w/ non-generic pour-on (Ultra Boss, Saber, Cylence, StandGuard)
- *** 20/20 Vision 7 with Spur offers pinkeye protection. Vision 7/8 with Spur can be used as a substitute but does not offer pinkeye protection.

2016 Vaccination Protocol—Zoetis

Pre-breeding:

Cows/Bulls (Post-calving but 30-60 days prior to breeding)

- 1. Bovi-shield Gold FP5 L5 or Bovi-shield Gold FP5 L5 HB
- 2. SolidBac Pinkeye IR/PR Implants (Pfizer) or Piliguard Pinkeye TriView (Merck)
- 3. Deworm first calvers w/ Valbazen—Older Cows not necessary

Yearling Replacement Heifers

- 1. Bovi-shield Gold FP5 L5 or Bovi-shield Gold FP5 L5 HB
- 2. UltraChoice 8
- 3. SolidBac Pinkeye IR/PR Implants (Pfizer) or Piliguard Pinkeye TriView (Merck)
- 4. Deworm w/ Valbazen

Calves

- 1. Bovi-shield Gold 5 or Bovi-Shield Gold One Shot
- 2. One Shot Ultra 8 or UltraChoice 8
- 3. SolidBac Pinkeye IR/PR Implants (Pfizer) or Piliguard Pinkeye TriView (Merck)

NOTE: Use UltraChoice 8 with Bovi-Shield Gold One Shot and One Shot Ultra 8 with Bovi-Shield Gold 5

Pre-Weaning/Weaning:

Calves – Three to four weeks prior to weaning

- 1. Bovi-shield Gold FP5 L5 or Bovi-shield Gold FP5 L5 HB
- 2. One Shot Ultra 8
- 3. Deworm w/ Valbazen

Calves - Booster at Weaning

- 1. Bovishield Gold FP5 L5 or Bovishield Gold FP5 L5 HB
- 2. One Shot Ultra 8

Preg-Check:

- 1. Spirovac VL5 or StayBred VL5
- 2. Deworm thin cows and heifers w/ Valbazen and/or Dectomax

- 1. ScourGuard 4KC
 - c. Cows—One month prior to calving
 - d. Bred Heifers—Two months prior to calving w/ booster one month prior to calving
- 2. De-lice w/ non-generic pour-on (Ultra Boss, Saber, Cylence, StandGuard)

Vaccination Tips

To maximize vaccine efficacy, always do the following:

- 1. Always:
 - Read product labels prior to use
 - Follow BQA Guidelines
 - Follow withdrawal times
- 2. Keep vaccines cool at all times—shipment, storage, and during use.
- 3. Change needles frequently (10 or less cows/needle)
- 4. Use subcutaneous (SQ) route of administration when possible.
- 5. Administer vaccines only when temperature is less than 86° F.
 - Early morning or late evening on hot days
- 6. Never put a used needle in a clean bottle of vaccine.
- 7. Do not reuse disposable needles and syringes.
- 8. Use both sides of the neck when giving multiple vaccines.
- 9. Use 16 18 gauge needles.
 - Subcutaneous (SQ)—5/8 3/4 in.
 - Intramuscular (IM)—1 in.
- 10. When using Modified Live Vaccines (MLV), only mix amount of vaccine that can be used within one hour or less.
- Modified live virus (MLV) programs must be initiated in open cows, and MLV vaccines cannot be used in calves suckling cows not previously administered a MLV vaccine.
- 12. Avoid administering more than two (2) gram negative vaccines at one time. Gram negative vaccines include:
 - Lepto
 - Vibrio
 - Pastuella/Mannheimia
 - Pinkeye
 - Salmonella
 - E. coli
- 13. Record vaccine name, lot number, serial number, expiration date, date administered, and withdrawal time.