

PYRAMID[®] 5
+ PRESPONSE[®] SQ

SETTING YOUNG CALVES UP FOR SUCCESS



Bovine respiratory disease complex (BRD) is a collection of cattle respiratory diseases caused by viruses and bacteria. BRD has been shown to affect up to a quarter of suckling beef calves, and is the most common cause of death in nursing calves older than three weeks of age.^{1,2} The United States Department of Agriculture (USDA) estimates that BRD costs the cattle industry more than \$640 million annually.³

PREVENTION WORKS.

BRD costs the U.S. cattle industry more than \$640 million annually.³

BRD is the leading cause of death for beef calves older than three weeks.²

Pyramid[®] 5 + Presponse[®] SQ can be administered at branding or spring turnout to help stop BRD preweaning.

What causes BRD?

BRD IS CAUSED BY FIVE PRIMARY VIRUSES AND BACTERIA:

Bovine viral diarrhea (BVD), Types 1 and 2

Infectious bovine rhinotracheitis (IBR)

Parainfluenza 3 (PI₃)

Bovine respiratory syncytial virus (BRSV)

Mannheimia haemolytica



BRD can be transferred through fluids (e.g., nose-to-nose contact, shared water and feed) or through the air. Additionally, animals persistently infected (PI) with BVD spread virus throughout their lives, even if they show no visible signs of infection.

How does BRD affect young calves?

When calves are affected by BRD, they face the challenges of the primary disease and, in many cases, have a hard time fighting off secondary infections due to a compromised immune system.

Common symptoms of BRD are fever, coughing, labored breathing and nasal discharge, leading to reduced feed intake and slower growth. Studies have shown that calves challenged by BRD could weigh up to 36 pounds less at weaning than their healthy herd mates.^{1,4}

Vaccination to Help Stop BRD

Even with maternal antibodies, vaccination helps protect calves against BRD months after administration.^{5,6} Vaccination reduces the likelihood that treatment will be needed and helps prepare the immune system for a better vaccine response at weaning.⁷

Producers should consider vaccinating calves at 30–90 days of age. (Branding/Turnout is often a convenient time.) Research shows that calves vaccinated with a five-way modified-live virus (MLV)-*M. haemolytica* combination product at 62 days old (branding) have higher BVD Type 1a antibody levels and greater cell-mediated immunity than those that were vaccinated at 188 days of age (preweaning vaccination), suggesting greater protection throughout the summer, when BRD is especially a challenge (summer pneumonia).⁸

How does Pyramid® 5 + Presponse® SQ fit in a young-calf vaccination program?

Pyramid® 5 + Presponse® SQ helps protect calves against BVD Types 1 and 2, IBR, PI₃, BRSV and *M. haemolytica*. With both viral and bacterial protection in a single syringe, plus the enhanced immune response provided by the MetaStim® adjuvant system, PYRAMID 5 + PRESPONSE SQ has been demonstrating results for nearly 20 years on ranches and feedlots across the country.

SAMPLE CALF HEALTH PROTOCOL*

Birth – Clostridial vaccination (Caliber® 7 or Alpha-7®)

30–90 days (branding) – Viral-bacterial combination respiratory vaccine (Pyramid® 5 + Presponse® SQ)

~120–190 days (preconditioning/weaning) – Booster respiratory and clostridial

FOR MORE INFORMATION ON PYRAMID 5 + PRESPONSE SQ, TALK WITH YOUR VETERINARIAN OR BOEHRINGER INGELHEIM VETMEDICA, INC. REPRESENTATIVE. YOU CAN ALSO FIND PRODUCT DETAILS AT BI-VETMEDICA.COM/PYRAMID.

*See label for complete product directions. Consult your veterinarian when developing herd health protocols.



TOP REASONS TO CHOOSE PYRAMID[®] 5 + PRESPONSE[®] SQ

1

Protection against leading
viral and bacterial agents
in a single syringe

2

Diverse BVD strains
specifically chosen to provide
broad protection

3

Approved to use in nursing
calves — no age restrictions
(Follow label directions.)

4

MetaStim[®] adjuvant system
provides enhanced
immune response

5

2 mL Sub-Q dose is compliant
with BQA standards



KEEPCALVESHEALTHY

¹ Snowder GD, Van Vleck LD, Cundiff LV, Bennett GL. Influence of breed, heterozygosity and disease incidence on estimates of variance components of respiratory disease in preweaned beef calves. *J Animal Sci* 2005;83(6):1247–1261.

² USDA. Beef 2007–08, Part IV: Reference of beef cow-calf management practices in the United States, 2007–08. No. 523.0210. Fort Collins, CO: USDA APHIS Veterinary Services Centers for Epidemiology and National Animal Health Monitoring System.

³ USDA, Ag Stats, 2011.

⁴ Wittum TE and Perino LJ. Passive immune status at postpartum hour 24 and long-term health and performance of calves. *Am J Vet Res* 1996;59(9): 1149–1154.

⁵ Zimmerman AD, Boots RE, Valli JL, Chase CC. Evaluation of protection against virulent bovine viral diarrhea virus Type 2 in calves that had maternal antibodies and were vaccinated with a modified-live vaccine. *J Am Vet Med Assoc* 2006;228(11):1757–1761.

⁶ Zimmerman AD, Buterbaugh RE, Schnackel JA, Chase CC. Efficacy of a modified-live virus vaccine administered to calves with maternal antibodies and challenged seven months later with a virulent bovine viral diarrhea type 2 virus. *Bovine Pract*, 2009;43:35–43.

⁷ Macartney JE, Bateman KG, Ribble CS. Health performance of feeder calves sold at conventional auctions versus special auctions of vaccinated or conditioned calves in Ontario. *J Am Vet Med Assoc* 2003;223(5):677–683.

⁸ Powell JG, Richeson JT, Kegley EB, et al. Immunologic, health and growth responses of beef calves administered pentavalent modified-live virus respiratory vaccine during the presence of maternal antibody versus a traditional vaccination regimen. *Bovine Pract* 2012;46(2):122–130.

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