

1 SAFE FOR ALL AGES AND STAGES, GIVING YOU THE CONFIDENCE OF PROVEN PROTECTION

- Contains only killed antigens
- Safe for use in pregnant animals regardless of previous vaccination history

(2) KILLED VIRAL VACCINE WITH DUAL-STRAIN BYDY PROTECTION

- Diversity of strains specifically chosen for optimal BVDV protection
- Demonstrated protection against BVDV Type 1 and Type 2 challenges¹
- Contains the same BVDV strains as the Pyramid® modified-live virus (MLV) vaccine family

TRIANGLE® 10 HB NOW OFFERS PROTECTION AGAINST LEPTO HARDJO-BOVIS

- Additional leptospira protection that you can count on
- Prevented urinary shedding against rigorous challenge with Strain 203
 Leptospira borgpetersenii serovar hardjo (type hardjo-bovis)



TRIANGLE® UTILIZES ENHANCE™ DUAL ADJUVANT SYSTEM

- Multiple adjuvants optimize immune system recognition of vaccine antigens
- Significantly higher immunity in cow and colostrum when used at dry-off after a pre-breeding MLV vaccine²
- Demonstrated advantages when used with PYRAMID pre-breeding protocol³
- Improves the colostral quality² for newborn calves



INCREASED FLEXIBILITY

- Triangle® 5 and TRIANGLE 10 HB can be administered subcutaneously (Sub-Q) or intramuscularly (IM)
- Short meat withhold (21 days)
- Ready to use no mixing required
- No label precautions on milk reduction and transient depression

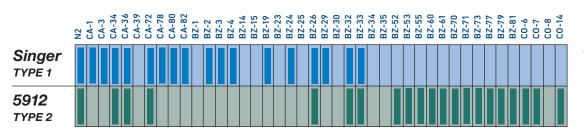
¹ Data on file, licensing Trial.

² Smith BI, Rieger RH, Dickens CM, et al. Anti-bovine herpesvirus and anti-bovine viral diarrhea virus antibody responses in pregnant Holstein dairy cattle following administration of a multivalent killed virus vaccine. Am J Vet Res 2015;76(10):913-920.

³ Dubovi EJ, Gröhn YT, Brunner MA, Hertl JA. Response to modified-live and killed multivalent viral vaccine in regularly vaccinated, fresh dairy cows. Vet Ther 2000;1(1):49–58.

	Triangle [®] 4 + PH-K	Triangle [®] 5	Triangle® 10 HB
Infectious bovine rhinotracheitis virus (IBR)	X	X	X
Bovine viral diarrhea virus (BVDV) Type 1	X	X	X
BVDV Type 2		X	X
Parainfluenza 3 virus (PI ₃)	X	X	X
Bovine respiratory syncytial virus (BRSV)	Χ	X	Х
Mannheimia haemolytica	X		
Pasteurella multocida	X		
5-way Leptospira			X
Lepto hardjo-bovis urinary shedding protection			Χ

Choose your combination.

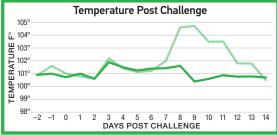


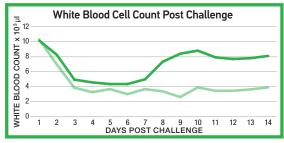
Of 52 BVD strains tested, 42 showed an interaction between the antibodies in TRIANGLE and the tested strain. This high occurrence of interactions means that, with TRIANGLE, you're getting a broad range of BVDV protection.

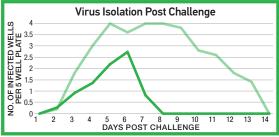
Virulent BVDV Type 2 challenge with TRIANGLE 10 HB 13 months post vaccination.¹

TRIANGLE 10 HB — CONTROLS





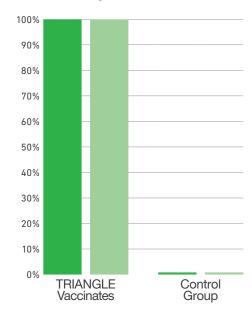




In the hardjo-bovis challenge studies against the NADC challenge strain 203, TRIANGLE 10 HB vaccinates tested negative on weekly cultures, and urinary shedding was completely prevented.

One hundred percent of the heifers vaccinated with TRIANGLE 10 HB had negative kidney tissue cultures for leptospires eight weeks post challenge.

Prevention of Urinary SheddingNo Renal Infections After Eight Weeks



For more information about TRIANGLE vaccines and other Boehringer Ingelheim products, visit **TriangleVaccines.com**.

