Protecting calves against major respiratory diseases.

Pyramid® 5 + Presponse® SQ Vaccines for Calves

- Provides five-way viral and respiratory bacterial protection in one easy dose.
- Reduces the severity of pneumonic pasteurellosis caused by *Mannheimia haemolytica*.
- Two BVD strains, Type 1 and Type 2, specifically selected for broad antigenic diversity.
- Protects against BVD Type 1b, the most common subtype of BVD in persistently infected (PI) calves, for at least 217 days.
- Protects against post-challenge viremia and leukopenia caused by BVD Type 1b.
- Approved for use in cows or calves nursing pregnant cows, provided the cows were properly vaccinated pre-breeding with either Express® FP or select PYRAMID vaccines according to label directions. (Consult product label.)
- Unique MetaStim® adjuvant enhances immune response.
- Single-dose protection against BRSV.
## Vaccine Guide

<table>
<thead>
<tr>
<th></th>
<th>Pyramid® 5</th>
<th>Pyramid® 5 + Presponse® SQ</th>
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<tbody>
<tr>
<td>Adjuvant</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Administration</td>
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<td>SQ</td>
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<tr>
<td>mLs/dose</td>
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<tr>
<td>IBR</td>
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<tr>
<td>BVD Type 1</td>
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<tr>
<td>BVD Type 2</td>
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<td>M</td>
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<tr>
<td>PI₃</td>
<td>M</td>
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<td>BRSV</td>
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<td>M. haemolytica</td>
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<td>Contains Leukotoxoid</td>
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</tr>
<tr>
<td>One-dose Technology</td>
<td>Y</td>
<td>Y</td>
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</tbody>
</table>

Y = Yes  
SQ = Subcutaneously  
K = Killed Antigen  
M = Modified-Live Virus
Express® FP

Specifically designed for protection against key reproductive diseases.

Express® FP Vaccines

- Because every calf counts, EXPRESS FP is the first vaccine line licensed to prevent BVD persistently infected (PI) calves, including BVD Type 1b, with a money-back guarantee.
- A 12-month duration of immunity (DOI) has been demonstrated against IBR-induced abortion and against disease, including in PI calves, caused by BVD Types 1 (including BVD Type 1b) and 2.
- Prevention of disease comes standard. EXPRESS FP combinations with Leptospira prevent urinary shedding of L. borgpetersenii serovar hardjo (type hardjo-bovis).*
- Rapid onset of immunity.
- EXPRESS FP can be used in pregnant cattle provided they were vaccinated with any EXPRESS FP vaccine within the previous 12 months according to label direction.

*Excludes Express FP 10-HS and Express 5-HS.
<table>
<thead>
<tr>
<th>Adjvant</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
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<tbody>
<tr>
<td>Administration</td>
<td>SQ</td>
<td>SQ</td>
<td>SQ</td>
<td>SQ</td>
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<td>mLs/dose</td>
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<td>BVD Type 2</td>
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<tr>
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<td>K</td>
<td>K</td>
<td>K</td>
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<tr>
<td>C. fetus (Vibriosis)</td>
<td>Y</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI Claim</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Approved for pregnant cows/ nursing calves</td>
<td>Y</td>
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</tr>
</tbody>
</table>

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Triangle® Vaccines

- Safe for all ages and stages, and gives you the confidence of proven protection.
- Unique dual-adjuvant system enhances immune responses to IBR, BVD, PI3 and BRSV.
- Two specifically chosen BVD strains for broad viral protection.
- Contains the same BVD strains as Pyramid® (MLV) vaccines.
- Increased flexibility:
  - 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.

Broad protection for the entire herd.
## Vaccine Guide

<table>
<thead>
<tr>
<th></th>
<th>Triangle® 5</th>
<th>Triangle® 10</th>
</tr>
</thead>
<tbody>
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<td>PI₃</td>
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<tr>
<td>BRSV</td>
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<tr>
<td>5-Way Lepto</td>
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<td>K</td>
</tr>
<tr>
<td>Ready-to-Use</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

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Reducing the spread of trichomoniasis in your herd.

TrichGuard® Vaccines

- Reduce economic losses that come with a trichomoniasis outbreak.
  - A peer-reviewed study showed that vaccinated cows are more likely to stay pregnant, reducing the financial losses that come with open cows and late-born calves.2

- Trichomoniasis isn’t geographically limited anymore.
  - Even though trich used to be known as a “western disease,” that’s far from reality now.

- You can’t control everything.
  - Vaccinating cows and maintaining fencing may help protect your herd from new trich infections that could be introduced by neighboring cattle.3

- Aids in the reduction of shedding of the disease-causing organism — and then some.
  - TRICHGUARD V5L also protects against vibrio and five-way leptospirosis.

- The investment is worth it.
  - A veterinarian has said that a vaccination with TRICHGUARD pre-breeding can be the difference between an 80 to 85 percent pregnancy rate and a 60 to 70 percent pregnancy rate.*4

*Individual results may vary.
Protecting your herd from costly, devastating clostridial disease.

Alpha™ Vaccines
- Alpha-7® is the only single-dose, seven-way clostridial vaccine on the market, and with Alpha-7/MB-1,® you also get single-dose pinkeye protection.
- ALPHA-7/MB-1 has demonstrated a 120-day duration of immunity (DOI) against pinkeye (*Moraxella bovis*).
- Low-dose and subcutaneous administration aligns with Beef Quality Assurance recommendations.
- Contains the DD-2™ adjuvant system.
- In a study, calves vaccinated with ALPHA-7 survived a *Clostridium chauvoei* challenge.5
Minimize parasite problems that may reduce immune response.

**Cydectin® (moxidectin) Portfolio**

- **Unique active ingredient:**
  - Moxidectin has a different molecular structure, allowing for greater distribution in the fat and extended activity.

- **Increased persistency against specific key species**:  
  - Fewer parasite eggs shed.  
  - Reduced pasture parasite levels.  
  - Increased opportunities for weight gain.

- **Dung beetle friendly:**
  - Little or no impact on the dung beetle, providing positive environmental and economic benefits.

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**Comparison of Dewormer Labels**

<table>
<thead>
<tr>
<th>Mange Control</th>
<th>Cydectin®</th>
<th>Ivomec®</th>
<th>Eprinex®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chorioptic “Tail Head” Mange</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Psoroptic “Scabies” Mange</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Sarcoptic Mange</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Persistent Activity Against Key Species</th>
<th>Cydectin®</th>
<th>Ivomec®</th>
<th>Eprinex®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lungworm</td>
<td>42 days</td>
<td>21 days</td>
<td></td>
</tr>
<tr>
<td>Brown Stomach Worm</td>
<td>28 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nodular Worm</td>
<td>28 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barberpole Worm</td>
<td>14 days</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Cydectin® Injectable

- Outstanding weight gains:
  - In a study, CYDECTIN Injectable performed numerically better than its competitors and provided an additional $34.93 when compared to the non-treated controls.\(^8\)
- Reaches peak levels in just 27 hours.\(^9,10\)
- Shorter withdrawal period:
  - 21-day withdrawal for CYDECTIN Injectable vs. 35-day withdrawal for Dectomax® Injectable and Ivomec® Injection.\(^11\)

**SAFETY WARNING** Do not treat cattle within 21 days of slaughter. Do not use in female dairy cattle of breeding age, veal calves or calves less than 8 weeks of age.
You may have more to gain.

– University study shows calves treated with CYDECTIN Pour-On significantly outperformed calves treated with Ivomec Pour-On and untreated control calves, gaining:
  • 30 pounds more than calves treated with Ivomec Pour-On.
  • 57 pounds more than untreated calves.
– Based on these results and a calf price of $150/cwt., calves treated with CYDECTIN Pour-On could be worth:
  • $45 more per head than those treated with Ivomec Pour-On.\(^{12}\)
  • $85 more per head than untreated calves.\(^{13}\)

Easy to use:
– Purple dye helps identify treated cattle.
– Oil-based – rain won’t wash away your investment.

SAFETY WARNING When used according to label directions, neither a pre-slaughter drug withdrawal period nor a milk discard time is required. Meat and milk from cattle treated with CYDECTIN (moxidectin) Pour-On may be used for human consumption at any time following treatment. A withdrawal period has not been established for this product in pre-ruminating calves. Do not use in calves to be processed for veal.
Synanthic® Dewormer

- **Fast-acting:**
  - SYNANTHIC reaches peak blood concentrations in approximately 20 hours. When compared to Safe-Guard® administered at 1.5 times the label dosage, SYNANTHIC remained at higher concentration levels for a longer period of time.\(^1\)

- **Low dose:**
  - Five mL/550 pounds of body weight dose reduces product waste, provides more accurate dosing, allows for less processing time, and reduces stress.

- **Effective:**
  - Demonstrated efficacy against major intestinal parasites including L4, inhibited L4 *Ostertagia ostertagi* and tapeworms.

- **Economical:**
  - Unlike Safe-Guard, SYNANTHIC controls L4, inhibited L4 *O. ostertagi* and tapeworms without the need for doubling the label dosage (and the cost).

- **Convenient**

**SAFETY WARNING** Cattle must not be slaughtered until 7 days after treatment. Because a withdrawal time in milk has not been established, do not use in female dairy cattle of breeding age.
References


4 DePaul R, Modoc Veterinarian Center, testimonial.


9 Data on file, Boehringer Ingelheim Vetmedica, Inc.


11 Label information.

12 Based on a calf price of $150/cwt. and a 30-lb. weight gain per calf.

13 Based on a calf price of $150/cwt. and a 57-lb. weight gain per calf.

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