UPGRADE YOUR CLOSTRIDIAL DISEASE PROTECTION

10-IN-1 VACCINE. NO OTHER VACCINE OFFERS MORE COMPREHENSIVE CLOSTRIDIAL DISEASE PROTECTION
Clostridial disease: a constant threat to sheep and cattle

Clostridial pathogens are found in every part of the world, present both in the environment and in the normal healthy gut of the animal. Under certain conditions they will multiply, releasing toxins and enzymes which, in the majority of cases, have deadly consequences.

*Fluke can trigger Black Disease.*

Bravoxin 10 provides protection against Black Disease, which affects the liver and almost invariably results in death.

- This year’s high liver fluke threat is predisposing cattle to Black Disease
- The tissue damage caused by fluke migrating through the liver provides an ideal breeding ground for *C. novyi*, the bacteria that causes Black Disease

Bravoxin 10 is proof that thorough protection against clostridial diseases can be easy to administer - and is more versatile than an 8-in-1 vaccine
10-in-1 protection

With additional clostridial bacteria such as C. sordellii and C. perfringens type A identified on UK sheep farms it makes sense to broaden disease cover.

Bravoxin 10 offers sheep and cattle producers unsurpassed clostridial disease protection.

<table>
<thead>
<tr>
<th>Clostridia bacteria</th>
<th>Disease protection</th>
<th>Bravoxin 10</th>
<th>8-in-1 vaccine (C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. sordellii</td>
<td>Sudden death syndrome/abomasitis</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>C. perfringens type A</td>
<td>Enteritis</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>C. perfringens type B</td>
<td>Lamb dysentery</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>C. perfringens type C</td>
<td>Struck</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>C. perfringens type D</td>
<td>Pulpy kidney</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>C. chauvoei</td>
<td>Blackleg</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>C. septicum</td>
<td>Malignant oedema/braxy</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>C. haemolyticum</td>
<td>Bacterial redwater</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>C. novyi type B</td>
<td>Black disease</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>C. tetani</td>
<td>Tetanus</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Simple, cost effective vaccination schedule

Bravoxin 10 is proof that thorough protection against clostridial diseases can be easy to administer - and is more versatile than an 8-in-1 vaccine.

<table>
<thead>
<tr>
<th>Same dose rate for sheep and lambs (from 2 weeks of age)</th>
<th>Bravoxin 10</th>
<th>8-in-1 vaccine (C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheep 1ml + 1ml Cattle 2ml + 2ml</td>
<td>✓</td>
<td>✗</td>
</tr>
</tbody>
</table>

Dosage rate - booster*

<table>
<thead>
<tr>
<th>Bravoxin 10</th>
<th>8-in-1 vaccine (C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheep 1ml</td>
<td>Sheep 2ml</td>
</tr>
<tr>
<td>Cattle 2ml</td>
<td>Cattle 5ml</td>
</tr>
</tbody>
</table>

*A single dose of Bravoxin 10 administered in sheep or cattle previously vaccinated with an 8-in-1 vaccine will only boost their immunity to 8 clostridial diseases, not the full 10. To achieve protection against all 10 diseases a full primary course of 2 doses of Bravoxin 10 must be used.
Advanced technology

As well as being effective against a full range of life-threatening clostridia bacteria, Bravoxin 10 also incorporates the very latest vaccine technology.

It delivers the potency required to induce a consistent, long-lasting immune response in animals, without the need to use a high volume dose.

Low dose volume

Lamb and calf from unvaccinated ewe/cow

1st Vaccination: 4-6 weeks  
2nd Vaccination: 12 months
Booster
Age: 2 weeks 6-8 weeks

Lamb and calf from vaccinated ewe/cow

1st Vaccination: 4-6 weeks  
2nd Vaccination: 12 months
Booster
Age: 8-12 weeks 12-16 weeks

Pregnant ewe/cow

Booster: 8-2 weeks  
Lambing/calving
Bravoxin 10: comprehensive clostridial protection

With the inclusion of 10 different clostridial pathogens, Bravoxin 10 provides comprehensive coverage against clostridial diseases. It delivers the potency required to induce a consistent, long-lasting immune response in animals, without the need to use a high volume dose.

Why upgrade your clostridial protection?

- Clostridial disease is a common cause of sudden death in sheep and cattle
- *C. perfringens* type A and *C. sordellii* are now widely recognised as a threat to many UK farms but traditional 8-in-1 vaccines do not protect against these diseases
- A fat lamb lost to sudden death can cost over £651

What can Bravoxin 10 offer your farm?

- Constant low dose volume: sheep (1ml) and cattle (2ml)
- No other vaccine offers more comprehensive clostridial disease protection
- Pricing of Bravoxin 10 is comparable to a traditional 8-in-1 vaccine
- Greater flexibility with Pre-Lambing booster (8-12 weeks)

Discuss comprehensive clostridial protection with your animal health supplier or vet today

Bravoxin 10 is available in the following presentations:

- 50ml bottle
- 100ml bottle
Use medicines responsibly. Please visit www.noah.co.uk/responsible for more information.

Bravoxin™ 10: Indicated for the active immunisation of sheep and cattle against disease associated with infections due to the below listed bacteria, and the passive immunisation of lambs and calves against infections due to the same (except C. haemolyticum in lambs). Active ingredients: 1ml of Bravoxin 10 contains: ≥0.5 U C. perfringens type A toxoid, ≥18.2 IU C. perfringens type B and C toxoid, ≥5.3 IU C. perfringens type D toxoid, ≥90% protection C. chauvoei whole culture, ≥4.6 IU C. septicum toxoid, ≥17.4 U C. haemolyticum toxoid, ≥3.8 IU C. novyi type B toxoid, ≥4.4 U C. sordellii toxoid, ≥4.9 IU C. tetani toxoid. Special precautions: In the event of an anaphylactic reaction appropriate treatment such as adrenaline should be administered without delay. Do not vaccinate sick or immunodeficient animals. In the case of accidental self-injection by the operator, encourage bleeding and wash the area immediately with water. If a local reaction develops, seek medical advice showing the package insert or the label to the physician. Adverse reactions: 75-100% of animals vaccinated with Bravoxin 10 may experience reactions to vaccination. Most commonly reported adverse reactions are localised swelling or induration at the injection site but may also include mild hyperthermia, abscess or other reaction in the underlying tissues at the injection site. Swelling at the injection site occurs in the majority of animals. This may reach up to a mean value of 6cm in sheep and 15cm diameter in cattle; occasionally reactions of up to 25cm diameter may be seen in cattle. Most local reactions resolve within 3-6 weeks in sheep and in less than 10 weeks in cattle, but may persist longer in a minority of animals. An abscess may develop in some animals. Vaccination may give rise to reactions in the underlying tissues at the injection site. Skin discolouration at the injection site (which returns to normal as the local reaction resolves) may occur. Localised pain at the injection site for 1-2 days post first vaccination may occur. The local reactions do not affect the general health, demeanour, feeding or weight gain of the animals. Withdrawal period: zero days.

Bravoxin™ 10 is only available via your animal prescriber or veterinary surgeon from whom advice should be sought.

Legal category: POM-VPS

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