Erysipelothrix Rhusiopathiae-Mycoplasma Hyopneumoniae Bacterin

For use in swine only

RespiSure® ONE/ER Bac Plus®

PRODUCT DESCRIPTION: RespiSure-ONE/ER Bac Plus is a live vaccination of healthy swine, including pregnant sows and gilts, 3 weeks of age or older as an aid in preventing erysipelas caused by Erysipelothrix rhusiopathiae for a period of 25 weeks and respiratory disease caused by Mycoplasma hyopneumoniae for a period of 25 weeks. RespiSure-ONE/ER Bac Plus is a liquid preparation a vaccine of a chemoautotrophic whole cell culture of M. hyopneumoniae and a serum-free, clarified E. rhusiopathiae, plus Amphigen®, a unique oil-

DISEASE DESCRIPTION: Mycoplasma pneumoniae is a fastidious, slow-growing microorganism that causes chronic respiratory disease in swine. Infection with M. hyopneumoniae results in a chronic, nonproductive cough that can last for weeks to months. The cough is usually intermittent and may be elicited if animals are incubating an infectious disease. A protective immune response may not be elicited if animals are not exposed to the disease, are malnourished or parasitized, are stressed due to environmental conditions, or are exposed to a vaccine that is not administered in accordance with label directions.

REFERENCES:

REVACINACIónES

Erysipelas is caused by the bacterium E. rhusiopathiae and has been isolated as a pathogen in swine since 1878. The disease is worldwide in distribution and is of economic importance throughout Europe, Asia, Australia, and North and South America. Swine 3 months through 3 years of age are most susceptible to erysipelas; outbreaks are usually more severe in herds on soil and during periods of wet weather. Erysipelas can take one of several forms or a combination of the following forms. Acute erysipelas is a general infection by E. rhusiopathiae in the bloodstream. This form often causes sudden death. Abortion may result in some infected during pregnancy. Skin erysipelas manifests as dermatitis shaped patches of swell, purple skin on the affected area. The area is swollen and l breathing. Erysipelas is transmitted to soil and during periods of wet weather. Arthritis erysipelas is a chronic disease occurring in pigs that have survived acute erysipelas. Affected pigs often have swelling and stiff joints. They do not gain weight efficiently, and their carcasses are often trimmed or condemned by inspectors at packing houses. Cardiac erysipelas usually occurs in older pigs raised on farms where the chronic form exists. Cardiac erysipelas may result in growth on the heart valves altering the normal flow of blood.

SAFETY AND EPIDEMIOLOGY: The survey of RespiSure-ONE/ER Bac Plus was demonstrated in 3 field safety studies conducted in different geographic locations. Nine hundred and sixty pigs were vaccinated at approximately 3 and 6 weeks of age. No injection site reactions or serum sickness reactions were observed following vaccination. The efficacy of RespiSure-ONE/ER Bac Plus as an aid in preventing respiratory disease caused by M. hyopneumoniae was demonstrated in 44 animal challenge assays conducted by Zoetis Inc. Duration of immunity studies demonstrated protection against challenge with virulent M. hyopneumoniae for up to 23 weeks after a single vaccination in pigs as young as 2 weeks of age. In all studies, vaccinated pigs had significantly lower lung lesion scores than pigs receiving a placebo.

<table>
<thead>
<tr>
<th>Study</th>
<th>Treatment</th>
<th>Challenge Virus</th>
<th>Percent of animals with clinical signs</th>
<th>Lung Lesion Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placebo</td>
<td>18</td>
<td>E. rhusiopathiae</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>RespiSure-ONE/ER Bac Plus</td>
<td>18</td>
<td>E. rhusiopathiae</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
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Table 1. Mycoplasmal Hypo n pneumoniae Efficacy Studies

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Heat animal studies were also conducted to demonstrate the efficacy of RespiSure-ONE/ER Bac Plus in preventing disease caused by E. rhusiopathiae. Pigs were vaccinated at approximately 3 and 6 weeks of age and revaccinated 40 and 80 days after initial vaccination. Pigs were monitored daily for rectal temperatures and for clinical signs of disease. In both studies, vaccination provided significant protection from challenge.

Table 2. Erysipelothrix Rhusiopathiae Efficacy Studies

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DIRECCIONES:
1. Maximum Dosage: Vaccination of all pigs on the premises is recommended to enhance herd immunity.
2. Primary Vaccination: Administer a single 2-mL dose to healthy swine 3 weeks of age or older, followed by a single dose of ER Bac Plus approximately 3 weeks later. In young pigs, vaccination after maternally derived antibodies to E. rhusiopathiae have declined.
3. Revaccination: Semianual revaccination with a single dose is recommended.
4. Good animal husbandry and herd health management practices should be employed.

PRECAUCIONES:

1. Store at 2°–7°C. Prolonged exposure to higher temperatures may adversely affect potency. Do not freeze.

2. Use only for the animal species and indications stated above. The拌 administered.(a) This product is for veterinary use only. Use in connection with a specific pathogen or disease state should be under the direction of a veterinarian. (b) Use in connection with a specific pathogen or disease state should be under the direction of a veterinarian.
Erysipelothrix Rhusiopathiae-Mycoplasma Hyopneumoniae Bacterin

For use in swine only

RespiSure®/ER Bac Plus®

Product description:
RespiSure®-ONE Bac Plus is a blend of Mycoplasma hyopneumoniae for a period of 25 weeks and respiratory disease caused by Mycoplasma hyopneumoniae for a period of 5 months. RespiSure®-ONE Bac Plus is a liquid preparation in accordance with label directions.

Disease description:
Mycoplasma hyopneumoniae is a widespread, chronic disease characterized by coughing, growth retardation, and reduced feed efficiency. The epizootic agent in M. hyopneumoniae, however, the naturally occurring disease often results from a combination of bacterial and mycoplasmal infections.

Erysipelothrix rhusiopathiae is a widespread, chronic disease caused by E. rhusiopathiae. E. rhusiopathiae is a pathogen in swine since the early 20th century. The disease is widespread in all areas where swine are raised. Surveys conducted at various locations throughout the world indicate that the incidence has been high. However, the disease is most common in regions of the world with high swine densities.

M. hyopneumoniae infection in chronic swine pneumonia has been reported to range from 20%–90%. Pigs of all ages are susceptible to M. hyopneumoniae, but the disease is most common in young and growing swine. Current evidence indicates that M. hyopneumoniae is transmitted by air or direct contact with respiratory tract secretions from infected swine. Transmission from sow to pig during lactation is possible. M. hyopneumoniae occurs in the lungs of infected swine, typically the lobe of the lung. Pathological lesions in M. hyopneumoniae infections include inflammation of the airways, bronchi, and bronchioles. The disease can be diagnosed by polymerase chain reaction (PCR) or by immunohistochemical staining.

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