



Summary of Studies Supporting USDA Product Licensure

Establishment Name	American Animal Health, Inc.
USDA Vet Biologics Establishment Number	315
Product Code	2760.01
True Name	Mycoplasma Bovis Bacterin
Tradename(s) / Distributor or Subsidiary (if different from manufacturer)	Myco-B One Dose - No distributor specified
Date of Compilation Summary	November 29, 2021

Disclaimer: Do not use the following studies to compare one product to another. Slight differences in study design and execution can render the comparisons meaningless.

Study Type	Efficacy																																																										
Pertaining to	<i>Mycoplasma bovis</i>																																																										
Study Purpose	Efficacy against respiratory diseases caused by <i>M. bovis</i>																																																										
Product Administration	One dose, given subcutaneously																																																										
Study Animals	Calves, 2 months of age, 19 vaccinates and 19 controls																																																										
Challenge Description	<i>M. bovis</i> given 35 days after vaccination																																																										
Interval observed after challenge	Observed daily 2 days prior to and 14 days post-challenge. Lungs evaluated 14 days after challenge.																																																										
Results	<p>The percent of the lung that was abnormal (consolidated) was calculated for every animal. One vaccinate and one control animal died post-challenge and were assigned the highest scores in the analysis but are not shown in the raw data.</p> <p>Five-number summary of lung lesion scores</p> <table border="1"> <thead> <tr> <th>Group</th> <th>Minimum</th> <th>Q1</th> <th>Median</th> <th>Q3</th> <th>Maximum</th> </tr> </thead> <tbody> <tr> <td>Vaccinates</td> <td>0</td> <td>1.3</td> <td>3.8</td> <td>14.4</td> <td>71.7</td> </tr> <tr> <td>Controls</td> <td>2.5</td> <td>9.8</td> <td>13.7</td> <td>20.5</td> <td>53.23</td> </tr> </tbody> </table> <p>Lung lesion scores (%), in order of rank</p> <table border="1"> <thead> <tr> <th>Vaccinate</th> <th>Control</th> </tr> </thead> <tbody> <tr><td>0</td><td>2.45</td></tr> <tr><td>0</td><td>2.9</td></tr> <tr><td>0</td><td>6.15</td></tr> <tr><td>0.14</td><td>6.3</td></tr> <tr><td>1.05</td><td>8.1</td></tr> <tr><td>1.61</td><td>11.4</td></tr> <tr><td>2.04</td><td>12.55</td></tr> <tr><td>3.35</td><td>12.6</td></tr> <tr><td>3.37</td><td>12.7</td></tr> <tr><td>3.82</td><td>13.65</td></tr> <tr><td>5.55</td><td>13.7</td></tr> <tr><td>6.4</td><td>15.95</td></tr> <tr><td>6.45</td><td>16.15</td></tr> <tr><td>9.6</td><td>19.8</td></tr> <tr><td>19.25</td><td>21.25</td></tr> <tr><td>20.9</td><td>21.35</td></tr> <tr><td>26.2</td><td>22.6</td></tr> <tr><td>47.5</td><td>44.2</td></tr> <tr><td>71.7</td><td>53.25</td></tr> </tbody> </table>	Group	Minimum	Q1	Median	Q3	Maximum	Vaccinates	0	1.3	3.8	14.4	71.7	Controls	2.5	9.8	13.7	20.5	53.23	Vaccinate	Control	0	2.45	0	2.9	0	6.15	0.14	6.3	1.05	8.1	1.61	11.4	2.04	12.55	3.35	12.6	3.37	12.7	3.82	13.65	5.55	13.7	6.4	15.95	6.45	16.15	9.6	19.8	19.25	21.25	20.9	21.35	26.2	22.6	47.5	44.2	71.7	53.25
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USDA Approval Date	January 28, 2009																																																										

Study Type	Efficacy
Pertaining to	<i>Mycoplasma bovis</i>
Study Purpose	Efficacy against arthritis caused by <i>M. bovis</i>
Product Administration	One dose, given subcutaneously
Study Animals	Cattle
Challenge Description	<i>M. bovis</i>
Interval observed after challenge	
Results	Study data were evaluated by USDA-APHIS prior to product licensure and met regulatory standards for acceptance at the time of submission. No data are published because this study was submitted to USDA-APHIS prior to January 1, 2007, and APHIS only requires publication of data submitted after that date.
USDA Approval Date	March 7, 2007

Study Type	Safety																						
Pertaining to	All																						
Study Purpose	Demonstrate safety of product under typical use conditions.																						
Product Administration	One dose, given subcutaneously.																						
Study Animals	487 calves total at 4 sites, 56 to 180 days old.																						
Challenge Description	NA																						
Interval observed after challenge	Animals were observed daily for clinical signs of local and systemic adverse reactions throughout the study. Palpation of injection sites was performed 3-6 days and 21-28 days post vaccination.																						
Results	<p>Only injection site reactions were observed as follows:</p> <table border="1"> <thead> <tr> <th rowspan="2">Study Days</th> <th colspan="4">Injection Site Swellings</th> <th rowspan="2">Total Number Animals</th> </tr> <tr> <th>0 cm</th> <th><1.5 cm</th> <th>1.5-5 cm</th> <th>>5 cm</th> </tr> </thead> <tbody> <tr> <td>SD 3-6</td> <td>256</td> <td>58</td> <td>167</td> <td>6</td> <td>487</td> </tr> <tr> <td>SD 21-28</td> <td>418</td> <td>32</td> <td>33</td> <td>0</td> <td>483[#]</td> </tr> </tbody> </table> <p># 4 calves were not palpated.</p>	Study Days	Injection Site Swellings				Total Number Animals	0 cm	<1.5 cm	1.5-5 cm	>5 cm	SD 3-6	256	58	167	6	487	SD 21-28	418	32	33	0	483 [#]
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USDA Approval Date	October 5, 2010																						