

## **Summary of Studies Supporting USDA Product Licensure**

Establishment Name	Elanco US Inc.
USDA Vet Biologics Establishment Number	196
Product Code	4466.20
True Name	Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza 3- Respiratory Syncytial Virus Vaccine, Killed Virus, Leptospira Canicola-Grippotyphosa-Hardjo-Icterohaemorrhagiae- Pomona Bacterin
Tradename(s) / Distributor or Subsidiary (if different from manufacturer)	Vira Shield 6+ L5 - Elanco US Inc.
Date of Compilation Summary	June 09, 2020

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.

196 4466.20 Page 1 of 11

Study Type	Efficacy
Pertaining to	Bovine Virus Diarrhea (BVD)
Study Purpose	To demonstrate effectiveness against Bovine Virus Diarrhea
, ,	Type 1b
<b>Product Administration</b>	
Study Animals	Bovine
Challenge Description	BVD isolate NY-1, BVD1b
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 require publication of data submitted after that date.
<b>USDA Approval Date</b>	July 16, 2003

196 4466.20 Page 2 of 11

Study Type	Efficacy
Pertaining to	Bovine Virus Diarrhea (BVD)
Study Purpose	To demonstrate effectiveness against Bovine Virus Diarrhea
	Type 2a
<b>Product Administration</b>	
Study Animals	Bovine
Challenge Description	BVD isolate 890, Type BVD2a
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 require publication of data submitted after that date.
<b>USDA Approval Date</b>	November 3, 1998

196 4466.20 Page 3 of 11

Study Type	Efficacy
Pertaining to	Bovine Virus Diarrhea
Study Purpose	To demonstrate effectiveness against Bovine Virus Diarrhea
	Type 2a at 11 months post-vaccination
<b>Product Administration</b>	
Study Animals	Bovine
<b>Challenge Description</b>	BVD Isolate 890, Type BVD2a
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 require publication of data submitted after that date.
<b>USDA Approval Date</b>	September 24, 1996

196 4466.20 Page 4 of 11

Study Type	Efficacy
Pertaining to	Bovine Rhinotracheitis
Study Purpose	To demonstrate effectiveness against Bovine Rhinotracheitis.
<b>Product Administration</b>	
Study Animals	Bovine
Challenge Description	
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 require publication of data submitted after that date.
<b>USDA Approval Date</b>	October 22, 1986

196 4466.20 Page 5 of 11

Study Type	Efficacy
Pertaining to	Leptospira canicola, Leptospira grippotyphosa, Leptospira icterohaemorrhagiae, Leptospira pomona
Study Dumoso	To demonstrate effectiveness against <i>Leptospira spp</i> .
Study Purpose	To demonstrate effectiveness against Leptospira spp.
Product Administration	
Study Animals	Bovine, swine
Challenge Description	
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 require publication of data submitted after that date.
<b>USDA Approval Date</b>	March 18, 1983

196 4466.20 Page 6 of 11

Study Type	Efficacy
Pertaining to	Leptospira Hardjo (type Hardjoprajitno)
<b>Study Purpose</b>	To demonstrate effectiveness against <i>Leptospira</i> Hardjo
<b>Product Administration</b>	
Study Animals	Bovine, Swine
Challenge Description	
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 require publication of data submitted after that date.
USDA Approval Date	March 18, 1983

196 4466.20 Page 7 of 11

Study Type	Efficacy
Pertaining to	Bovine Parainfluenza Type 3
Study Purpose	To demonstrate effectiveness against Bovine Parainfluenza Type
	3.
<b>Product Administration</b>	
Study Animals	Bovine
<b>Challenge Description</b>	
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 require publication of data submitted after that date.
<b>USDA Approval Date</b>	March 12, 1987 (License Issued)

196 4466.20 Page 8 of 11

Study Type	Efficacy
Pertaining to	Bovine Respiratory Syncytial Virus
Study Purpose	To demonstrate effectiveness against Bovine Respiratory
	Syncytial Virus
<b>Product Administration</b>	
Study Animals	Bovine
<b>Challenge Description</b>	
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 require publication of data submitted after that date.
<b>USDA Approval Date</b>	December 18, 1987

196 4466.20 Page 9 of 11

Study Type	Safety
Pertaining to	All
Study Purpose	To demonstrate safety under typical field conditions
Product	
Administration	
<b>Study Animals</b>	Bovine
Challenge	
Description	
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 require publication of data submitted after that date.
USDA	April 16, 2003
<b>Approval Date</b>	

196 4466.20 Page 10 of 11

Study Type	Safety
Pertaining to	All fractions
Study Purpose	To demonstrate safety under field conditions
<b>Product Administration</b>	
Study Animals	Bovine, including pregnant cows and heifers
Challenge Description	
Interval observed after	
challenge	
Results	Scientific data were evaluated by USDA-APHIS prior to product licensure and met regulatory standards for acceptance at the time of submission. However, study data are not available.

196 4466.20 Page 11 of 11