

Summary of Studies Supporting USDA Product Licensure

Establishment Name	Elanco US Inc.
USDA Vet Biologics Establishment Number	196
Product Code	44M5.20
True Name	Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza 3-Respiratory Syncytial Virus Vaccine, Killed Virus, Campylobacter Fetus- Haemophilus Somnus-Leptospira Canicola-Grippotyphosa-Hardjo- Icterohaemorrhagiae-Pomona Bacterin
Tradename(s) / Distributor or Subsidiary (if different from manufacturer)	Vira Shield 6+VL5 Somnus - Elanco US Inc. Vira Shield 6+VL5 Somnus - No distributor specified
Date of Compilation Summary	June 26, 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.

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Study Type	Efficacy
Pertaining to	Bovine Virus Diarrhea (BVD)
Study Purpose	To demonstrate effectiveness against Bovine Virus Diarrhea
	Type 1b
Product Administration	
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.
USDA Approval Date	July 16, 2003

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Study Type	Efficacy
Pertaining to	Bovine Virus Diarrhea (BVD)
Study Purpose	To demonstrate effectiveness against Bovine Virus Diarrhea
	Type 2a
Product Administration	
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.
USDA Approval Date	November 3, 1998

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Study Type	Efficacy
Pertaining to	Bovine Virus Diarrhea
Study Purpose	To demonstrate effectiveness against Bovine Virus Diarrhea
	Type 2a at 11 months post-vaccination
Product Administration	
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.
USDA Approval Date	September 24, 1996

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Study Type	Efficacy
Pertaining to	Campylobacter fetus
Study Purpose	To demonstrate effectiveness against Campylobacter fetus
Product Administration	
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.
USDA Approval Date	January 14, 1986

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Study Type	Efficacy
Pertaining to	Campylobacter fetus
Study Purpose	To demonstrate effectiveness against <i>Campylobacter fetus</i> for
_	one year duration of immunity
Product Administration	
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.
USDA Approval Date	March 15, 1989

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Study Type	Efficacy
Pertaining to	Bovine Rhinotracheitis
Study Purpose	To demonstrate effectiveness against Bovine Rhinotracheitis.
Product Administration	
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.
USDA Approval Date	October 22, 1986

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Study Type	Efficacy
Pertaining to	Haemophilus somnus
Study Purpose	To demonstrate effectiveness against <i>Haemophilus somnus</i>
Product Administration	
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.
USDA Approval Date	August 2, 1988

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Study Type	Efficacy
Pertaining to	Leptospira canicola, Leptospira grippotyphosa, Leptospira icterohaemorrhagiae, Leptospira pomona
Study Purpose	To demonstrate effectiveness against <i>Leptospira spp</i> .
Product Administration	
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.
USDA Approval Date	March 18, 1983

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Study Type	Efficacy
Pertaining to	Leptospira Hardjo (type Hardjoprajitno)
Study Purpose	To demonstrate effectiveness against <i>Leptospira</i> Hardjo
Product Administration	
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.
USDA Approval Date	March 18, 1983

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Study Type	Efficacy
Pertaining to	Bovine Parainfluenza Type 3
Study Purpose	To demonstrate effectiveness against Bovine Parainfluenza Type
	3.
Product Administration	
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.
USDA Approval Date	March 12, 1987 (License Issued)

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Study Type	Efficacy
Pertaining to	Bovine Respiratory Syncytial Virus
Study Purpose	To demonstrate effectiveness against Bovine Respiratory
	Syncytial Virus
Product Administration	
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.
USDA Approval Date	December 18, 1987

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Study Type	Safety
Pertaining to	All
Study Purpose	To demonstrate safety under typical field conditions
Product	
Administration	
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.
USDA Approval Date	December 19, 2000

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Study Type	Safety
Pertaining to	All fractions
Study Purpose	To demonstrate safety under field conditions
Product Administration	
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.

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