

## Summary of Studies Supporting USDA Product Licensure

Establishment Name	Ceva Animal Health, LLC
USDA Vet Biologics Establishment Number	368
Product Code	16L1.06
True Name	Marek's Disease Vaccine, Serotype 3, Live Virus
Tradename(s) / Distributor or Subsidiary (if different from manufacturer)	Biomune Company CEVA Salud Animal S.A.CPeru CEVAC MD HVT - Biomune Company CEVAC MD HVT - Ceva Saude Animal LTDA CEVAC MD HVT - No distributor specified
Date of Compilation Summary	February 10, 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	Marek's Disease Virus (MDV)					
Study Purpose	To demonstrate efficacy against MDV					
Product Administration	In ovo route and Subcutaneous route					
Study Animals	Chickens					
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 requires publication of data submitted after that date.					
USDA Approval Date	March 14, 2002					

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Study Type	Efficacy					
Pertaining to	Marek's Disease Virus (MDV)					
Study Purpose	To demonstrate efficacy against MDV GA strain					
Product Administration	In ovo and subcutaneous					
Study Animals	Chickens					
<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 requires publication of data submitted after that date.					
USDA Approval Date	March 14, 2002					

Study Type	Safety					
Pertaining to	ALL					
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Study Purpose		te safety under f				
Product	One dose by the subcutaneous (SQ) route					
Administration						
Study Animals	Commercial chicks at day of age at one site					
Challenge Description	Not Applicable					
Interval observed	Commercial chickens were observed daily through 21 days of age.					
Results						
		Treatment Group		Mo	rtality	
	Location		Number of Chickens			
				Total	Percent	
	1	Vaccinate	25,800	331	1.28%	
		Control*	25,800	688	2.67%	
	*Other commercially available vaccine					
	No adverse reactions or clinical signs of Marek's disease were noted in either group during post-challenge observation. Raw data found below.					
USDA Approval Date	November 19.	2000				

Study Type	Safety						
Pertaining to	ALL						
Study Purpose	To demon	strate safety	under fiel	ld conditi	ons		
Product		by the <i>in ove</i>					
Administration		5					
Study Animals	Commercial chicken embryos at 18 to 19 days of incubation at three independent sites						
Challenge Description	Not Appli	Not Applicable					
Interval observed after challenge		No challenge. Commercial chickens were observed daily through 21 days of age.					
Results							
			Hatchability			Mortality	
	Location	Treatment Group	No. hatched/ embryos set	Percent	Number of Chickens	Total No.	Percent
	1	Vaccinate	19,400/ 21,870	88.71%	19,400	144	0.74%
		Control	16,000 / 17,674	90.53%	16,000	172	1.08%
	2	Vaccinate	21,559 / 24,300	88.72%	21,559	257	1.19%
		Control	46,871 / 53,460	87.67%	17,071	168	0.98%
	3	Vaccinate	24,700 / 27,317	90.41%	24,700	1,075	4.35%
		Control	24,100 / 32,079	75.12%	24,100	583	2.42%
	No advers	e reactions v	were noted	l in either	group at a	ny loca	tion.
USDA Approval Date	October 1	9, 2009					

Study Type	Safety						
Pertaining to	ALL						
Study Purpose	To demonstrate safety under field conditions						
Product Administration	One dose administered via the subcutaneous (SQ) route						
Study Animals	Commercial chicks at day of age						
Challenge Description	Not Applicable						
Interval observed after	No challeng	ge. Animals were obs	erved daily fo	or 21 days for			
challenge	clinical signs of Marek's disease, adverse events, and mortality.						
Results							
	Location	ocation Treatment Number of Birds		% Mortality			
	1	SQ Vaccinate	25,800	1.28			
	1	Control	25,800	2.67			
	2	SQ Vaccinate	13,000	1.27			
	2	Control	13,000	1.51			
	3	SQ Vaccinate	20,907	3.01			
	5	Control	20,778	4.62			
	No adverse reactions or clinical signs of Marek's disease were noted in any group during post-challenge observation.						
USDA Approval Date	October 8, 2	2009					