

As a science-based company, Merck Animal Health believes in validating our products with meaningful data. Therefore, our researchers conducted this study to evaluate the performance of our NOBIVAC® Canine 1-DAPPv+L₄ Vaccine.





INTRODUCTION

Leptospirosis is a zoonotic disease that can cause serious disease in dogs.

Therefore, validating the efficacy of a modern combination vaccine against core infectious diseases and leptospirosis caused by four serovars is important.

Parameters for the validation of efficacy were:

- Prevention of leptospiremia
- Prevention of shedding

STUDY **DESIGN**¹

Four separate studies were conducted. In each study:

- Twenty-four 7- to 8-week-old dogs were vaccinated twice, 3 weeks apart, with a distemper, adenovirus type 2, parainfluenza, parvovirus lyophilized vaccine resuspended in the L canicola, L icterohaemorrhagiae, L pomona, and L grippotyphosa diluent
- Twelve dogs were injected with placebo

Vaccinates and control dogs were evaluated for leptospiruria and leptospiremia following challenge with *Leptospira* serovars *canicola*, *icterohaemorrhagiae*, *grippotyphosa*, and *pomona* 2 weeks past the last vaccination.

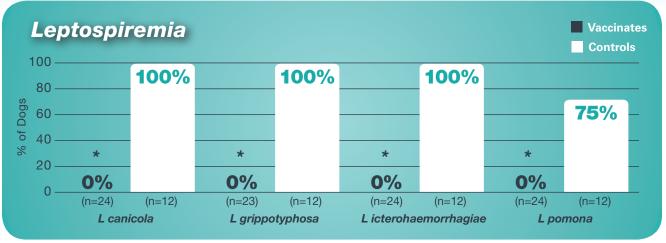
STUDY RESULTS¹

Leptospiremia

Number of dogs in which Leptospira was isolated from blood (leptospiremia)

Serovar	Treatment Group	Day Post-challenge			
		3	5	7	10
L canicola	Vaccinates	0/24	0/24	0/24	0/24
	Controls	12/12	9/11	6/11	3/11
L icterohaemorrhagiae	Vaccinates	0/24	0/24	0/24	0/24
	Controls	12/12	6/12	2/10	0/10
L grippotyphosa	Vaccinates	0/23	0/23	0/23	0/23
	Controls	12/12	8/12	4/11	0/11
L pomona	Vaccinates	0/24	0/24	0/24	0/24
	Controls	9/12	0/12	0/12	0/12



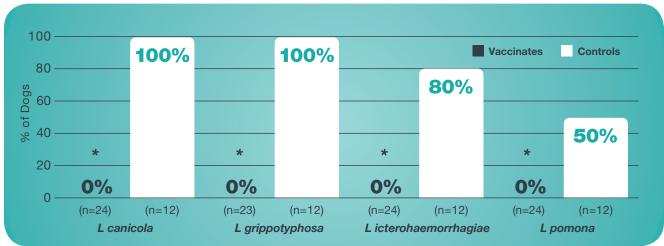


*P<0.0001

- None of the dogs vaccinated with Nobivac® Canine 1-DAPPv+L₁ developed leptospiremia
- 100% of the control dogs challenged with L canicola, L grippotyphosa, L icterohemorrhagiae and 75% of the control dogs challenged with L pomona showed leptospiremia, indicating the severe challenge model

STUDY RESULTS¹

Urinary Shedding



*P<0.0001

- None of dogs vaccinated with Nobivac® Canine 1-DAPPv+L₄ developed leptospiruria
- 100% of the control dogs challenged with *L canicola* and *L grippotyphosa*, 80% of control dogs challenged with *L icterohaemorrhagiae*, and 50% of control dogs challenged with *L pomona* developed leptospiruria

CONCLUSIONS

Nobivac® Canine 1-DAPPv+L, prevents leptospiruria associated with:

- L canicola
- L grippotyphosa
- L icterohaemorrhagiae

Nobivac® Canine 1-DAPPv+L₄ aids in the prevention of leptospiruria associated with:

L pomona



NOBIVAC® CANINE 1-DAPPv+L

- Prevented leptospiremia in the study
- Prevents/aids in the prevention of leptospiruria of all four serovars
- Is shown to be safe in clinical studies and in the field

Featuring

VacciPure[™] FILTRATION

for a higher level of vaccine quality

CONTACT US

To learn more, contact your Merck Animal Health sales representative or your distributor representative, visit **www.merck-animal-health-usa.com**, or give us a call.

Customer Service **1-800-521-5767**

(Monday-Friday, 9:00AM-6:00PM ET)

Technical Service **1-800-224-5318**

(Monday-Friday, 8:30AM-5:00PM ET)

Vaccine Protocol Help Line

1-866-437-7955

(Monday-Friday, 8:00AM-5:00PM ET)

Visit **stoplepto.com** for more information.

References: 1. LaFleur RL, Dant JC, Wasmoen TL, et al. Prevention of leptospiremia and leptospiruria following vaccination with a DAPPv + 4-way *Leptospira* combination vaccine. ISCAID Symposium Proceedings, October 2016, Bristol, UK.

