

VANGUARD VACCINES OVERVIEW




RABIES

Vanguard 1 Year
Vanguard 3 Years
Vanguard 3 Years CA

Reliable, extensively tested cell line; contains a highly immunogenic, fixed strain of rabies virus that originated from Louis Pasteur's original 1882 isolate

Labeled for cats, dogs, ferrets, sheep, and cattle

Why do we have a Vanguard Rabies 3 years California? Because California requires specific titer levels and does not allow ferrets, we need a specific label for California

 Most states require all dogs, cats, and ferrets to be vaccinated on a routine basis. Whether a 1-year or 3-year vaccine is approved in your area depends on state or county laws.


CIV

Vanguard CIV H3N2
Vanguard CIV H3N2/H3N8

Decreases viral shedding^{3,4}

Reduces or prevents pathological lung lesions and clinical signs of CIV infection^{3,4}

Killed vaccine so it cannot transmit CIV. Safe for administration around immunocompromised pet owners/veterinary staff

 Canine immune response to CIV can be severe and result in suppurative pneumonia and death. Vaccination prevents coinfections and worsening clinical morbidity.

LEPTOSPIROSIS


Vanguard L4

Can be administered as early as 6 weeks of age

5x microfiltration to help reduce extraneous protein

Efficacy confirmed against the 4 known canine leptospirosis serovars recognized in the United States

ACVIM recommends all dogs be vaccinated against leptospirosis

 Leptospirosis continues to infiltrate suburbs and cities, appearing in places and patients you wouldn't expect. Left untreated, it may be fatal. And because it's also zoonotic, vaccination is critical.

LYME DISEASE

Vanguard crLyme

First and only chimeric recombinant Lyme vaccine that helps provide broad-spectrum protection against OspA found in the tick and many diverse OspC types (of different Lyme strains) that infect dogs in the United States⁷

Innovative technology minimizes extraneous proteins, resulting in a safe and minimally reactive vaccine

First and only Lyme vaccine proven to last 15 months, providing extra coverage to patients who are late for their annual vaccination

 1 in 30 dogs tested positive for Lyme disease in 2023.¹⁰ CAPC data is only estimated to capture 30% of positive cases. That puts Lyme-positive cases at nearly 1.2 million annually.⁹

BORDETELLA

INTRANASAL

Vanguard Rapid Resp

Offers rapid onset of innate mucosal immunity^{14,15}

Fast and comfortable intranasal administration via syringe or syringe-free applicator

Single-nostril (0.5 mL) respiratory vaccine for all antigen combinations

Bb, Bb+CPiV, Bb+CPiV+CAV-2 options also available

Vanguard B Intranasal

Approved for use in puppies as young as 3 weeks of age

ORAL

Vanguard B Oral

Offers rapid onset of innate mucosal immunity^{14,15}

Convenient and easy to administer for veterinary staff

Syringe-free applicator also available


INJECTABLE

Vanguard Recombishield™

The first canine vaccine developed with recombinant pertactin protein to optimize immune response¹⁶

Non-adjuvanted vaccine that helps provide a well-tolerated administration experience¹⁷

Killed vaccine, safe for administration around immunocompromised pet owners and veterinary staff

 In one study, 49% of dogs with community-acquired pneumonia were infected with Bordetella bronchiseptica. Use these customizable options to support any veterinarian protocol!¹⁸

FELINE FeLV

Vanguard FeLV

Includes FeLV subgroups A, B, and C

Only FeLV vaccine that induces anti-FOCMA (feline oncornavirus-associated cell membrane antigen) antibodies

Anti-FOCMA antibodies have been shown to help confer immunity to FeLV-related neoplasia and aid in successful resistance to tumor development¹

Contains a patented Gentle Safe-Quil™ adjuvant that is plant-based and aluminum-free and helps stimulate an optimal antibody response²

 FeLV is considered a core vaccine for kittens and young adults <1 year old.


FELINE FIP

Vanguard FIP

Non-adjuvanted intranasal vaccine

Vaccinates against feline infectious peritonitis (FIP) caused by feline infectious peritonitis virus (FIPV)

Contains a temperature-sensitive vaccine strain, which replicates in the upper respiratory tract but does not spread systemically at 39°C (typical feline body temperature)⁵

 AAHA/AAFP Feline Vaccination Guidelines list the feline infectious peritonitis (FIP) vaccine as not generally recommended.

FELINE RCP

Vanguard RCP

Non-adjuvanted

Trusted protection because adverse events are "Very Rare" (<1/10,000 doses distributed or <0.01% AE)⁶

Antibodies in cats lasted up to 4 years after vaccination in multiyear serological study⁷

Vanguard RC

Non-adjuvanted intranasal vaccine

Perfect for kittens and/or cats in shelters, catteries, or in high contact with other cats

Significantly reduces clinical disease when used in a Prime Boost protocol with Vanguard Feline RCP⁸

 Vanguard RCP+CH also available.

DISTEMPER

Vanguard DAPP

Antibodies in dogs existed up to 4 years after vaccination in multiyear serological study¹¹

Puppies developed antibodies for parvovirus significantly faster (p<0.05) than other vaccines tested^{12,13}

Also available in combination with leptospirosis and coronavirus vaccines

 Over the last decade, reports of CDV outbreaks have increased around the world, leaving wildlife species like giant pandas and lions devastated. Outbreaks in domestic dogs have also been reported.

REFERENCES

1. Cotter SM, Hardy WD Jr, Essex M. Association of feline leukemia virus with lymphosarcoma and other disorders in the cat. *J Am Vet Med Assoc.* 1975;166(5):449-454.
2. Data on file, Study Report No. 3982R-60-05-199, Zoetis Inc.
3. Data on file, Study Report No. B862R-US-16-266, Zoetis Inc.
4. Data on file, Study Report No. 3161R-60-09-383, Zoetis Inc.
5. Data on file, Study Report No. TI-06272, Zoetis Inc.
6. Data on file, Study Report No. TI-03936, Zoetis Inc.
7. Mouzin DE, Lorenzen MJ, Haworth JD, King VL. Duration of serologic response to three viral antigens in cats. *JAVMA.* 2004;224(1):61-55.
8. Reagan KL, Hawley JH, Lappin MR. Concurrent administration of an intranasal vaccine containing feline herpesvirus-1 (FHV-1) with a parenteral vaccine containing FHV-1 is superior to parenteral vaccination alone in an acute FHV-1 challenge model. *Vet J.* 2014;201(2):202-20
9. Camire AC, Hatke AL, King VL, et al. *Vet J.* 2021;273:105676.
10. Companion Animal Parasite Council. Parasite Prevalence Maps. CAPC. Accessed May 9, 2024. <https://capcvet.org/maps/#/2023/all-year/lymedisease/dog/united-states>
11. Mouzin DE, Lorenzen MJ, Haworth JD, King VL. Duration of serologic response to five viral antigens in dogs. *J Am Vet Med Assoc.* 2004;224(1):55-60.
12. Coyne MJ. Seroconversion of puppies to canine parvovirus and canine distemper virus: a comparison of two combination vaccines. *J Am Anim Hosp Assoc.* 2000;36(2):137-142.
13. Coyne MJ. Efficacy of two canine parvovirus vaccines for inducing seroconversion in Rottweiler and Doberman pinscher pups with various levels of maternally derived antibodies. *Veterinary Ther.* 2000;1(1):35-42.
14. Mitchell JA, Brownlie J. The challenges in developing effective canine infectious respiratory disease vaccines. *J Pharm Pharmacol.* 2015 Mar;67(3):372-81.
15. Bradley A, Kinyon J, Frana T, Bolte D, Hyatt DR, Lappin MR. Efficacy of intranasal administration of a modified live feline herpesvirus 1 and feline calicivirus vaccine against disease caused by *Bordetella bronchiseptica* after experimental challenge. *J Vet Intern Med.* 2012 Oct;26(5):1121-5.
16. Data on file, Study Report No. B862R-US-21-519, Zoetis Inc.
17. Data on file, Study Report No. B961R-US-21-523, Zoetis Inc.
18. Radhakrishnan A, Drobatz KJ, Culp WTN, King LG. Community-acquired infectious pneumonia in puppies: 65 cases (1993-2002). *J Am Vet Med Assoc.* 2007;230(10):1493-1497.