

Circumvent® G2 has withstood the toughest test there is...
TIVE

CIRCUMVENT® PCV G2 and CIRCUMVENT® PCV-M G2 vaccines provide the trusted, proven protection your operation needs in the ever-evolving fight against circovirus.





# Get Monumental Protection.

CIRCUMVENT G2 vaccines have been successfully effective against the damaging effects of PCV2 for more than a decade.

CIRCUMVENT PCV G2 and CIRCUMVENT PCV-M G2 (a combination vaccine with *Mycoplasma hyopneumoniae*) are evolutions of the original vaccine.

PROTECTION YOU CAN TRUST.

MORE THAN 1 BILLION PIGS VACCINATED WORLDWIDE.



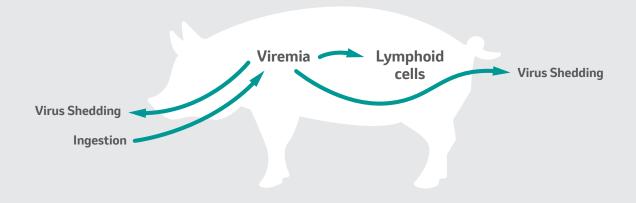


# CIRCUMVENT G2 vaccines aid in prevention of PCV2 viremia. Why does this matter?

Following exposure to the virus, porcine circovirus 2 (PCV2) viremia starts building and circulating in the blood. It's the initial step in the development of the disease within the pig, but it can last up to four or five months post-infection.

#### **PCV2 VIREMIA CAN:**

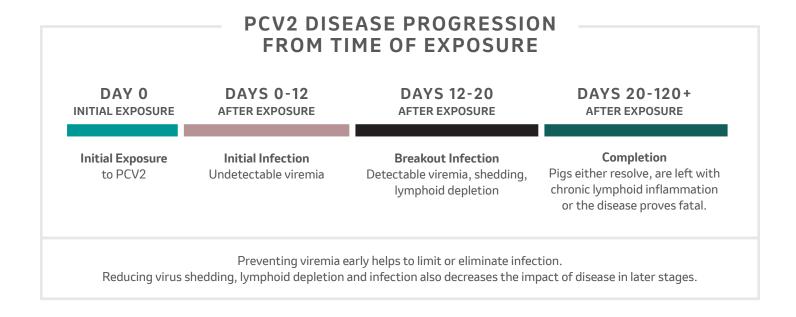
- Prolong virus shedding and increase the risk to other pigs
- Negatively impact average daily gain and feed efficiency, as energy is being re-directed to the immune system
- Increase the risk of coinfection from porcine reproductive and respiratory syndrome (PRRSV), Mycoplasma hyopneumoniae and swine influenza virus (IAV-S)



# CIRCUMVENT G2 vaccines are labeled to be effective against viremia and reduction in viral shedding and lymphoid infection caused by PCV Type 2.

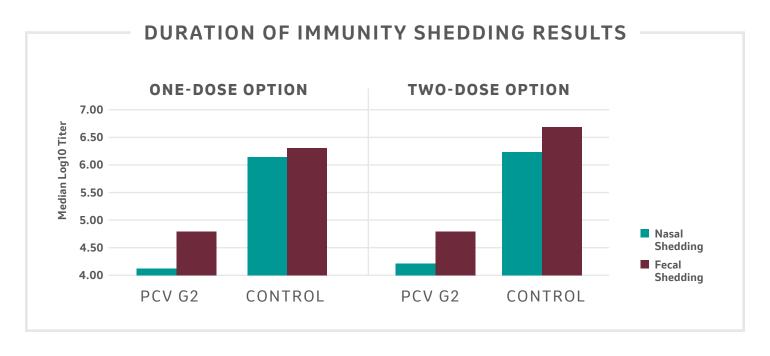


Vaccines that reduce both of these things help stem the impact of infection that occurs later in the disease progression – protecting both productivity and other pigs.



#### CIRCUMVENT PCV G2 significantly reduces virus shedding.

In a study demonstrating its 5-month DOI, CIRCUMVENT PCV G2 significantly reduced virus shedding in pigs during the entire post-challenge monitoring period following a PCV2 and PRRSV challenge **20 weeks** after vaccination.





## Tested and developed under tough, real-world conditions.

Merck Animal Health developed this PCV2 vaccine using a PCV2 and PRRSV coinfection challenge model that mirrors the environment of real-world swine production because it doesn't just introduce a single challenge using chemical stimulants.

Merck Animal Health chose to utilize this model to gain a better understanding of how the vaccine would perform under the stress of real-word conditions – because when PRRSV is co-administered with PCV2, the replication of PCV2 is amplified. In the field, when PCV2 coinfects pigs with PRRSV, the resulting porcine circovirus associated disease (PCVAD) is enhanced.

Because CIRCUMVENT G2 vaccines were created using a co-challenge model, you can be confident they will perform against the everyday disease pressure found in real barns.



#### Monumental protection with the flexibility you want.

CIRCUMVENT G2 vaccines offer convenient dosing options so you can choose how to vaccinate.

#### **One-Dose Option:**

A single 2-mL dose can be administered at 3 weeks of age or older.



#### **Two-Dose Option:**

Administer a 1-mL dose as early as 3 days of age followed by a second 1-mL dose approximately 3 weeks later.



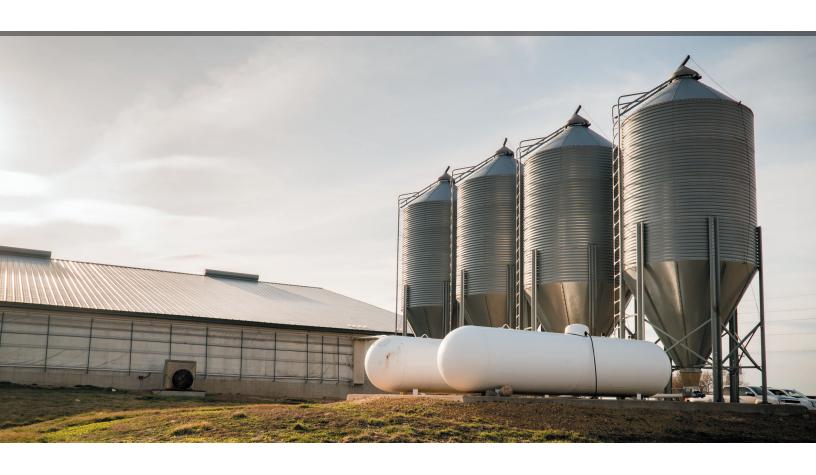
#### For more peace of mind, take out two with one.

CIRCUMVENT PCV-M G2 is the reliable, ready-to-use combo vaccine that protects against both PCV2 and *Mycoplasma hypopneumoniae*. All in one convenient, single-bottle product.

#### An adjuvant designed for pigs provides a burst of protection.

The primary burst, or immuno-inflammatory cascade, is the system's critical response to a new challenge. It's the first chance to create a strong, long-lasting resistance to a disease. All Circumvent G2 vaccines contain Microsol Diluvac Forte® – an adjuvant formulated specifically for pigs to help stimulate a robust primary burst and optimum immune response to keep pigs protected longer.





## The Economics of PCV2

Porcine circovirus type 2 (PCV2) is one of the top-three economically significant swine diseases. If a herd is left unvaccinated against PCV2, losses could be up to \$20 per pig.<sup>1</sup>

#### **VACCINATING FOR PCV2 COULD SAVE YOU**



### Protecting against PCV2 can help protect the bottom line by:



Improving feed efficiency



Providing a long DOI



Increasing feed savings



Reducing late-finishing mortality



#### A long duration of immunity (DOI) can reduce late-finishing mortality.

While many factors affect late-finishing mortality, such as the target market weight, how long it takes to close out a group, the age the vaccine was given and the amount of disease pressure from PCV2 and other cofactors like PRRSV and IAV-S – even small reductions in mortality prior to marketing matter.











## 5-MONTH DOI

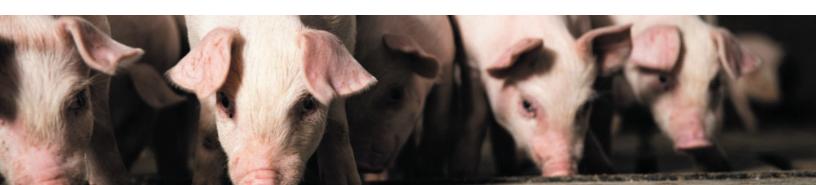
CIRCUMVENT G2's 5-month duration of immunity keeps pigs protected as they near market weight.



For example, in a barn of 1,000 pigs, if just one 280-pound pig is saved – with carcass prices at 72 cents per pound – the benefit is more than \$150, or 15 cents per pig. Vaccines with a longer DOI can provide better protection and potentially reduce mortality just prior to marketing, where the loss of a pig approaches its market value.



- Derald Holtkamp, DVM, MS, associate professor, lowa State University College of Veterinary Medicine





## Time and time again, CIRCUMVENT G2 vaccines provide protection, value and results.

Unfortunately, PCV2 is here to stay. But the good news is, so are CIRCUMVENT G2 vaccines – the monumental protection herds need to stay healthy, productive and profitable.

## For more information visit circumvent-g2.com.





ADMINISTRATION AND DOSAGE OPTIONS: Allow the vaccine to reach an ambient temperature of  $16^{\circ}$ - $27^{\circ}$  C ( $60^{\circ}$ - $80^{\circ}$  F) and shake well prior to use. Use aseptic technique. OPTION 1: Vaccinate pigs intramuscularly at 3 weeks of age or older with a single 2 mL dose. OPTION 2: Vaccinate pigs intramuscularly as early as 3-5 days of age with a 1 mL dose followed by a second 1 mL dose 3 weeks later.

CAUTIONS: Store at 2°-7°C (35°-45°F). Do not freeze. Use entire contents when first opened; do not save partial contents. Burn the container and all unused product. Use only in healthy swine. Do not vaccinate within 21 days before slaughter. The vaccine may induce significant localized adverse reactions, particularly following booster vaccination. Localized reactions resolve 1-35 days following vaccination. If allergic reaction occurs, treat with epinephrine. Caution should be used to avoid injecting your own fingers, hands or other body parts. Accidental injection can cause serious local reactions. Contact a physician immediately.

PRESERVATIVE: Gentamicin and thimerosal.
FOR ANIMAL USE ONLY READ AND FOLLOW LABEL DIRECTIONS U.S. Veterinary License No. 165A
FOR VETERINARY USE ONLY

<sup>1</sup>Gillespie J, Opriessnig T, Meng XJ, Pelzer K, Buechner-Maxwell V. Porcine circovirus type 2 and porcine circovirus-associated disease. *J Vet Intern Med.* 2009;23:1151-1163.

<sup>2</sup>PCV2 and mycoplasma vaccine comparison in a midwest commercial swine herd. 8/11 SW-CIRM-SB01

<sup>3</sup>Evaluation of the economic return of the two vaccination programs in various production systems. Data on file. 8/11 SW-CIRM-4171

