

Ingelvac CircoFLEX[®]

A dose of confidence

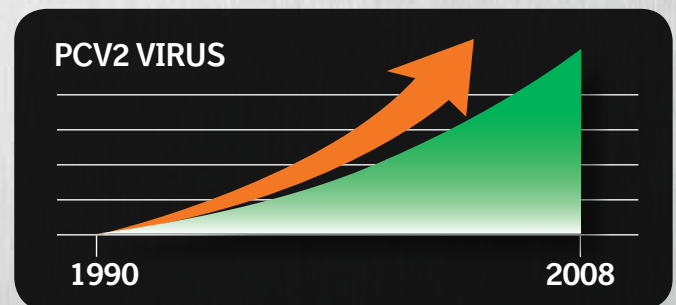
**PCVAD, IT'S OUT THERE AND IT
CAN STRIKE AT ANY MOMENT**

It's one of the most devastating and economically damaging pig diseases in the world: Porcine circovirus associated disease (PCVAD). It can strike early or appear in a late form. And once it strikes, the consequences are never good.

THE PCV2 VIRUS

Since the 1990s, the world has seen a dramatic increase in the porcine circovirus type 2 (PCV2) virus loads in pigs. This prolific virus impairs the immune system and leaves pigs susceptible to other swine diseases. Pneumonia, PMWS, enteritis, respiratory disease, porcine dermatitis and nephropathy syndrome... those are just some of the diseases caused by PCV2 that can affect pigs suddenly and with devastating results:

- Dramatic increase in mortality
- Increased cull rates
- Substantial weight loss
- Increased number of lights
- Reduced profits



EARLY AND LATE FORMS OF PCVAD (CIRCOVIRUS)

Primarily thought of as a grow-finish disease starting three to four weeks postplacement in finishing, PCVAD can also strike two to four weeks following placement in the nursery. Vaccination with Ingelvac CircoFLEX® provides protection for both the early and late forms of PCVAD.¹

3 to 4 wks
postplacement

OR

2 to 4 wks
following nursery placement

TRANSMISSION

The hardy and environmentally stable circovirus can be transmitted:

- Vertically in uterus or during lactation
- Horizontally through nasal and fecal secretions

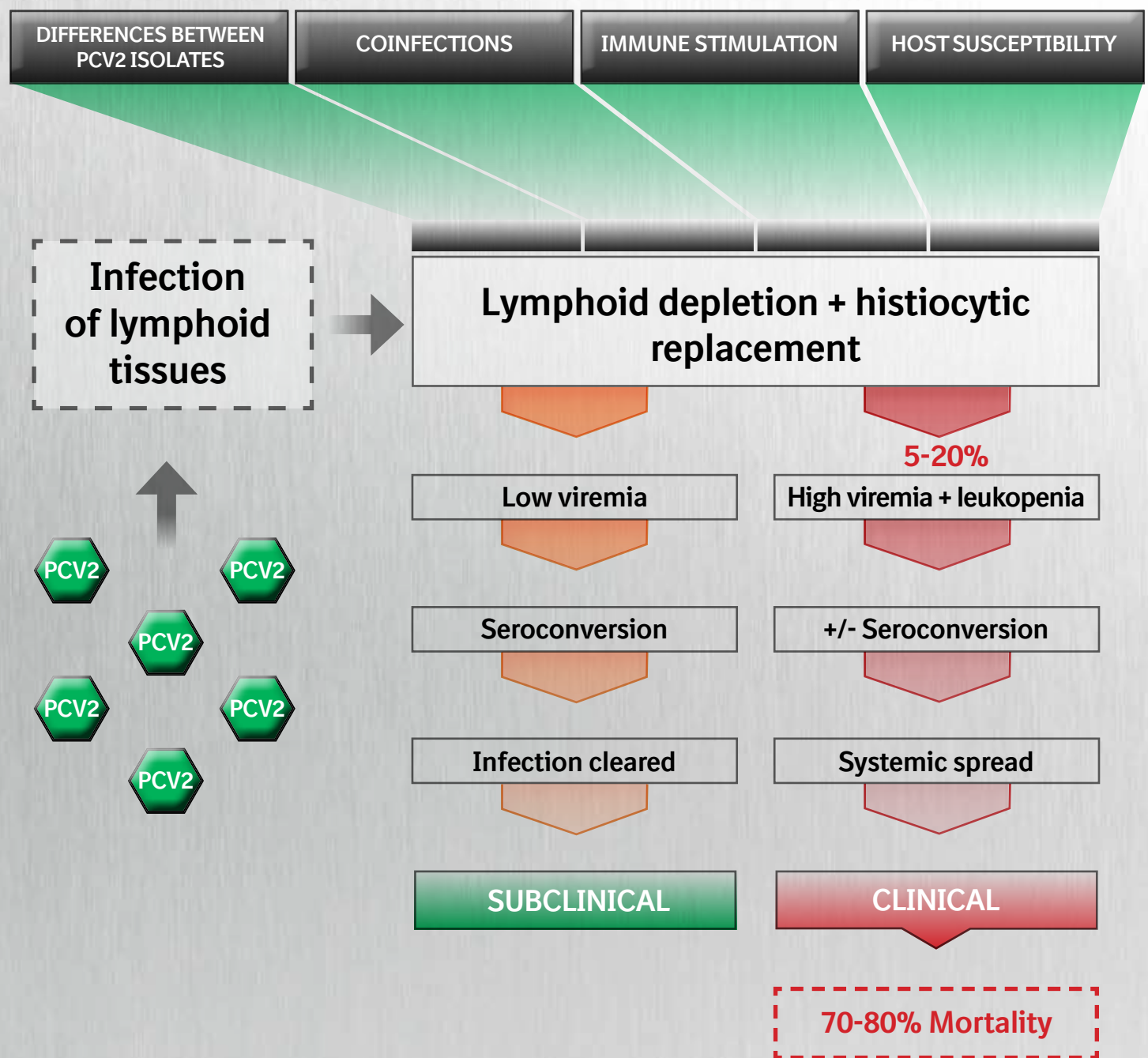
And although replication stimuli are not completely understood, it is believed there is slow replication prior to “stimulus.”

DISEASE FACTORS

Multiple cofactors may increase viral load:

- Infectious cofactors: viral infections like PRRS, SIV and Porcine Parvovirus and bacterial infections like Salmonella and *Mycoplasma hyopneumoniae*
- Non-infectious cofactors like some vaccine adjuvants, especially those with mineral oil, and “stressors” (management, environment, etc)

In addition, viral load can be influenced by PCV2 virus isolate, age, and genetic factors.



CLINICAL PCVAD SYMPTOMS

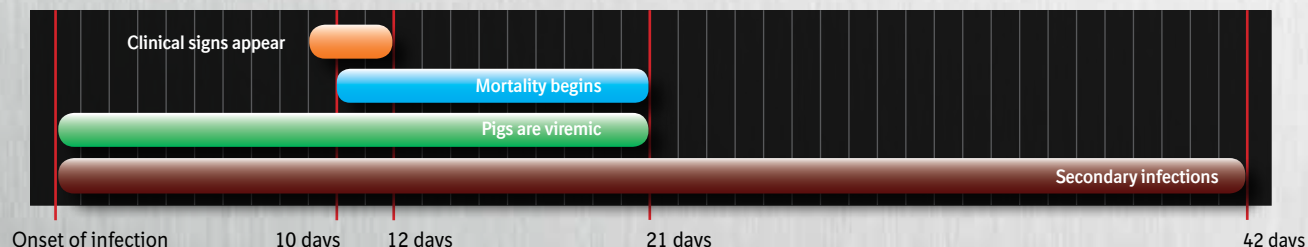
The clinical signs of PCVAD can mimic many diseases, which is why an accurate diagnosis is critical for appropriate control measures. The Boehringer Ingelheim Swine Health Management Center and other veterinary diagnostic laboratories can confirm PCVAD cases with testing.

Common signs include:

- **Weight loss**
- **Jaundice, stressed appearance**
- **Diarrhea, enteritis**
- **Respiratory distress, pneumonia**
- **Porcine dermatitis and nephropathy syndrome**
- **Enlarged, depleted lymph nodes (which look pale on cut surface)**
- **Increased mortality and cull rates**
- **Occasional reproductive disorders (abortions, stillbirths, mummies)**

Clinical signs typically appear in pigs 9 to 12 days post-infection, with mortality beginning 10 to 21 days. Pigs are viremic for 21 days (3 weeks) or more and secondary infections and symptoms can persist for up to 42 days (6 weeks).

INFECTION TIMELINE



INNOVATIVE SOLUTIONS FROM BOEHRINGER INGELHEIM

The best protection against the prevalence of PCV2 is a combination of biosecurity, accurate diagnostics, vaccination and disease management processes.

Boehringer Ingelheim Vetmedica, Inc. is committed to supporting advanced research and diagnostic and product development programs that provide practical solutions to PCVAD and other diseases that impact swine production.

For more information on PCVAD, Ingelvac CircoFLEX and the FLEX program, talk to your veterinarian or call Boehringer Ingelheim Customer Service at 1-800-325-9167.

1. Cline, G., Wilt, V., Diaz, E., Efficacy of Ingelvac CircoFLEX in pigs vaccinated at 3 and 6 weeks of age in a PRRS and *Mycoplasma hyopneumoniae*-negative production system, Leman Conference 2007.

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