We claim:

1. A method for preventing nasal shedding, reducing mortality, or increasing average daily weight gain comprising administering a porcine circovirus type 2 antigen to a pig.

2. The method of claim 1, wherein said antigen comprises a protein encoded by a DNA sequence having at least 80% sequence identity with ORF2 of a porcine circovirus type 2 virus.

3. The method of either of claims 1 and 2, wherein said porcine circovirus type 2 antigen is a recombinant baculovirus expressed ORF2 antigen.

4. The method of any one of claims 1 to 3, wherein said porcine circovirus type 2 antigen is formulated and administered in one (1) mL per dose.

5. The method of any one of claims 1 to 4, wherein said clinical symptoms are selected from the group consisting of lymphadenopathy, lymphoid depletion, and multinucleated or giant histiocytes.

6. The method of claim 5, wherein said lymphadenopathy, lymphoid depletion, and/or multinucleated or giant histiocytes is in combination with another symptom selected from the group consisting of interstitial pneumonia with interlobular edema, cutaneous pallor or icterus, mottled atrophic livers, gastric ulcers , nephritis, pia like lesions, and reproductive disorders.

7. The method of any one of claims 1 to 6, wherein said administration occurs in pigs less than 15 weeks of age.

8. The method of any one of claims 1 to 7, wherein said administration occurs in pigs not older than 3 weeks of age, preferably not older than 2 weeks of age.

9. The method of any one of claims 1 to 8, wherein said administration occurs within about 3 weeks of exposure to a virulent porcine circovirus type 2 antigen.

10. The method of any one of claims 1 to 9, wherein said composition further comprises at least one additional component selected from the group consisting of veterinary-acceptable carriers, pharmaceutical-acceptable carriers, and immunomodulatory agents.

11. The method of any one of claims 1 to 10, wherein said administration is selected from the group consisting of intradermal, intratracheal, intravaginal, intramuscular, intranasal, intravenous, intravascular, intraarterial,

intraperitoneal, oral, intrathecal, subcutaneous, intracutaneous, intracardial, intralobal, intramedullar, or intrapulmonar.

12. The method of any one of claims 1 to 11, wherein the administration of said porcine circovirus type 2 antigen does not show adverse events or injection site reactions.

13. A method for improving the level of general disease resistance of pigs comprising administering a porcine circovirus type 2 antigen to a pig.

14. A process for the production of a medicament for preventing nasal shedding, reducing mortality, or increasing average daily weight gain, said process comprising the steps of obtaining a porcine circovirus antigen, and combining said antigen with veterinary-acceptable carriers, pharmaceutical-acceptable carriers, or immunomodulatory agents.

15. The process of claim 14, wherein said antigen comprises a polypeptide encoded by ORF2 of porcine circovirus type 2.

16. The use of a porcine circovirus type 2 antigen for the preparation of a medicament for

preventing nasal shedding, reducing mortality, or increasing average daily weight gain, wherein said medicament is administered to a pig.

17. The use according to claim 16, wherein said antigen comprises a protein encoded by a DNA sequence having at least 80% sequence identity with ORF2 of a porcine circovirus type 2 virus.

18. The use according to either of claims 16 and 17, wherein said porcine circovirus type 2 antigen is a recombinant baculovirus expressed ORF2 antigen.

19. The use according to any one of claims 16 to 18, wherein said porcine circovirus type 2 antigen is formulated and administered in one (1) mL per dose.

20. The use according to any one of claims 16 to 19, wherein said clinical symptoms are selected from the group consisting of lymphadenopathy, lymphoid depletion, and multinucleated or giant histiocytes.

21. The use according to claim 20, wherein said lymphadenopathy, lymphoid depletion, and/or multinucleated or giant histiocytes is in combination with another symptom selected from the group consisting of interstitial pneumonia with interlobular edema, cutaneous pallor or icterus, mottled atrophic livers, gastric ulcers , nephritis, pia like lesions, and reproductive disorders.

22. The use according to any one of claims 16 to 21, wherein said administration occurs in pigs less than 15 weeks of age.

23. The use according to any one of claims 16 to 22, wherein said administration occurs in pigs not older than 3 weeks of age, preferably not older than 2 weeks of age.

24. The use according to any one of claims 16 to 23, wherein said administration is within about 3 weeks of exposure to a virulent porcine circovirus type 2 antigen.

25. The use according to any one of claims 16 to 24, wherein said composition further comprises at least one additional component selected from the group consisting of veterinary-acceptable carriers, pharmaceutical-acceptable carriers, and immunomodulatory agents.

26. The use according to any one of claims 16 to 25, wherein said administration is intradermal, intratracheal, intravaginal, intramuscular, intranasal, intravenous, intravascular, intraarterial, intraperitoneal, oral, intrathecal, subcutaneous, intracutaneous, intracardial, intralobal, intramedullar, or intrapulmonar.

27. The use according to one of claims 16 to 26, wherein the administration of said porcine circovirus type 2 antigen does not show adverse events or injection site reactions.

28. The use of a porcine circovirus type 2 antigen for the preparation of a medicament for improving the level of general disease resistance of pigs.

CLAIMS

1. Use of an immunogenic composition capable of eliciting or enhancing an immune response against porcine circovirus type 2 (PCV) and comprising recombinantly produced PCV2 ORF2 protein in the manufacture of a medicament for preventing one or more of the following symptoms associated with PCV2 infection:
nasal shedding, increased mortality rate, decreased average daily weight gain,
wherein the PCV2 ORF2 protein is to be administered once to a pig.

2. The use according to claim 1, wherein the recombinantly produced PCV2 ORF2 protein is baculovirus expressed PCV2 ORF2 protein.

3. The use according to claim 1 or 2, wherein the recombinantly produced PCV2 ORF2 protein has been obtained by a method, wherein
- susceptible cells are infected with a recombinant baculovirus vector containing PCV2 ORF2 DNA coding sequences,
- PCV2 ORF2 polypeptide is expressed by the recombinant baculovirus, and
- the expressed PCV2 ORF2 polypeptide is recovered from the supernate by filtration and inactivated.

4. The use according to any one of claims 1 to 3, wherein the recombinantly produced PCV2 ORF2 protein has been recovered from the supernate of *in vitro* cultured cells, wherein said cells were infected with a recombinant baculovirus vector containing PCV2 ORF2 DNA and expressing PCV2 ORF2 protein, and wherein said cell cultire was treated with 2 to 8 mM binary ethylenimine (BEI) to

inactivate the baculovirus vector, and an equivalent concentration of a neutralization agent.

5. The use according to any one of claims 1 to 4, the composition further comprising at least a portion of recombinant baculovirus vector expressing said PCV2 ORF2 protein.

6. The use according to claim 5, the composition further comprising a portion of cell culture supernate.

7. The use according to any one of claims 1 to 6, wherein the composition is a vaccine.

8. The use according to any one of claims 1 to 7, the composition comprising from 0.3 to 200 μg of the recombinantly produced PCV2 ORF2 protein per dose.

9. The use according to any one of claims 1 to 8, wherein the pigs are pigs of 2 weeks of age or older, but not older than 15 weeks of age.

10. The use according to any one of claims 1 to 9, wherein the composition further comprises an adjuvant.

11. The use according to claim 10, wherein the adjuvant can include aluminum hydroxide and aluminum phosphate, saponins, water-in-oil emulsion, oil-in-water emulsion, water-in-oil-in-water emulsion, or wherein the adjuvant is a compound

chose from the polymers of acrylic or methacrylic acid and the copolymers of maleic anhydride and alkenyl derivative.

12. The use according to claim 10 or 11, the composition comprising 100 µg to 10 mg of adjuvant per dose.

13. The use according to any one of claims 1 to 12, wherein the immunogenic composition is substantially free of antigens or polypeptides from PCV2 other than PCV2 ORF2 protein.

14. The use according to claim 4, wherein the immunogenic composition further comprises an adjuvant listed in claim 11 and is stable over a period of 24 months.

15. The use according to any one of claims 1 to 14, wherein the medicament is to be administered intramuscularly.