



## Uniferon Best Practice Recommendation

### Clinical signs of anaemia

Despite most piglets being iron-supplemented by injection in the first days after birth, the risk of iron deficiency anaemia increases during lactation, as long as the diet consists of milk. Although some oral supplementation may occur e.g. creep feeding, the actual iron uptake may be low and variable due to a variety of contributing factors.

#### When are piglets at risk of anaemia?

Before weaning, the piglet has been on an all-milk-diet. The period around weaning will therefore be a high-risk period for iron deficiency and anaemia – ages around 21-35 days. The iron deficiency anaemia is either a sub-clinical or clinical manifest anaemia.

#### How do you know if a piglet is suffering from anaemia?

Early iron deficiency often goes unnoticed. However, first signs of anaemia are:

- Poor growth
- Paleness of the mucous membranes

More severe signs are listlessness, rough hair coat and wrinkled skin. A characteristic sign of severe anaemia is labored breathing, increased heart rates and respiratory rates or spasmodic movement of the diaphragm muscles following exercise.

Subclinical and clinical signs of anaemia can be verified by testing (pen-side or at laboratory) of the haemoglobin level in a blood sample taken from a vein. The haemoglobin value will determine whether the pig suffers from iron deficiency anaemia. Severe anaemia has been defined as a blood haemoglobin concentration below 90 g/l in piglets. However, this cut-off value is under debate.

Reaching haemoglobin levels above 90g/l are known to further benefit oxygen transport, immune function, vitality and metabolism in piglets. Therefore an optimal haemoglobin blood concentration may be defined as 110 g/l.

Herd level prevention in new-born piglets with parental iron treatment and subsequent treatment based on observations or Hb testing of sick individuals is recommended standard practice.

Instigation of effective methods of diagnosis and treatment of anaemia at herd level poses a big challenge to clinicians. It requires a deeper understanding of sub-clinical symptoms and testing of multiple pigs. It further necessitates a focus on herds at weaning, for diagnosis and control of anaemia with maximum treatment outcome and minimal practical intervention.

Sincerely  
The Uniferon Team

