

## 3 Autogenous/stabulogenic vaccines

### *Optimal vaccination strategies*

The innovation consists of the setting up of a precise diagnostic protocol able to identify pathogens and to set up an autogenous vaccine. The main objective is to contain diarrhoea in piglets without continuing to use antimicrobials. Gilts are vaccinated with double dose and sows with single dose in every pre-farrowing phase.

Increased number of piglets weaned per sow (+0.7) and higher weight of the piglets at weaning (+125 grams) in an Italian intensive farm. In another Italian farm higher price for autogenous vaccine, compared to commercial one (i.e. 1,5 € vs 1 €/dose for colibacillosis) even though the cost depends on the type of pathogen. Piglet mortality in the post weaning phase reduced from 10% to 7% and the use of antibiotics reduced by 70%. Cost for antibiotic therapy reduced as well by 70%. In an Austrian farm the weight of piglets at weaning was increased as well as the number of piglets weaned per sow per year from 27 to 30,3.

The costs is limited. The innovation can be implemented within 60 days considering the time needed to diagnose and develop the autogenous vaccine. The implementation of diagnostics and the use of targeted vaccines is a valid tool for the reduction of the use of antimicrobials. Cost of the intervention covered by better productive performances.