

ATLANTIC SALMON - *VIBRIO SP.*

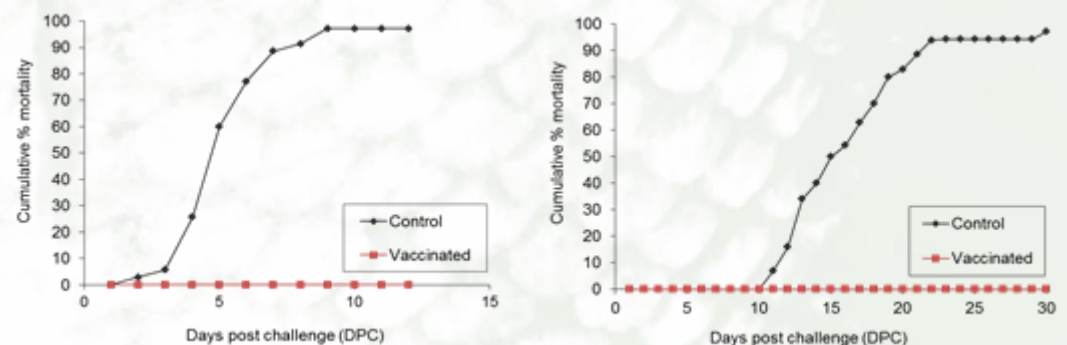
Introduction

Bacteria belonging to the genus *Vibrio* are the causative agents of vibriosis. Vibriosis can cause significant mortality once an outbreak is in progress and vaccination is used to minimize the impact of the disease. VESO Vikan offers challenge models in salmon with:

- *Vibrio salmonicida* (causative agent of cold-water vibriosis or Hitra-disease)
- *Vibrio anguillarum*, serotype O1 and O2a (causative agents of vibriosis)
- *Vibrio ordalii* (causative agent of vibriosis)

Challenge models to evaluate the effect of vaccination

Salmon parr (pre-smolts) are acclimatized for a minimum of one week before vaccination. After the immunization period fish are challenged by i.p. injection or immersion in fresh water or sea water. After challenge, mortality is recorded during an observation period of two to four weeks. Evaluation of the potency of the vaccine is based on differences in mortality in vaccinated and unvaccinated fish.



Mortality in groups of vaccinated and unvaccinated salmon i.p. injected with *Vibrio anguillarum* (left) and *Vibrio ordalii* (right).

Available models

Salmon			Water			Challenge		
Fry	Parr	Smolt	FW	SW	°C	Ip	Bath	Cohab
	X	X	X	X	12/15*	X	X	

*12°C: *Vibrio anguillarum* and *Vibrio salmonicida*, 15°C: *Vibrio ordalii*