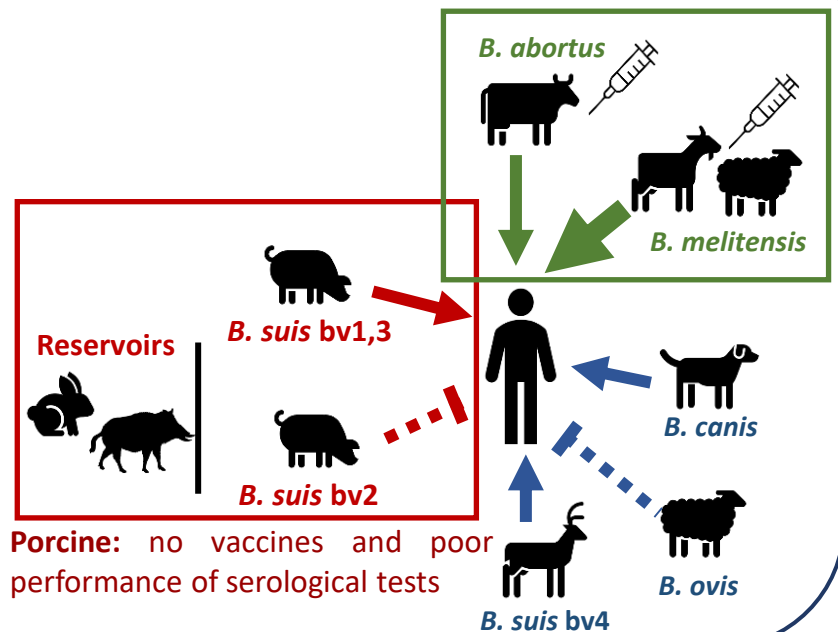


Brucella genus consist of gram-negative intracellular bacteria grouped in different species with wide range of hosts (domestic ruminants, pigs & wild-life)

Porcine brucellosis, produced by different biovars of *Brucella suis*, is a worldwide distributed disease that causes serious reproductive problems and economical losses in pig farms. *B. suis* biovars 1 and 3 are highly zoonotic and widespread in South America and Asia, while EU is mainly affected by the rarely zoonotic biovar 2. Contacts between wild-life and domestic pigs cause frequent *B. suis* outbreaks.

Ruminants: control and eradication achieved by vaccination + test & slaughter



There is no effective vaccine for porcine brucellosis and the only tools currently available to control the disease are full depopulation or antibiotic treatments (not recommended by health authorities) combined with test & slaughter.

Surveillance programs in pigs are based on the use of **serological tests** highly sensitive but prone to **false positive serological reactions (FPSR)**. This generates cumbersome and costly retesting schedules and trade restrictions in EU.



REPRODIVAC solutions

To develop a *B. suis* live vaccine based on genetically engineered *B. suis* bv2 (non-zoonotic) attenuated mutants.

To improve the specificity of diagnostics to avoid problems generated by FPSR