



<b>PROJECT TITLE</b>	TickVac: a proteomic and functional genomic insight into the Rhipicephalus sanguineus-Ehrlichia canis interactome towards disease control Refª PTDC/CVT-WEL/1807/2014
<b>BRIEF DESCRIPTION</b>	Many diseases of companion animals have impact on public health. R. sanguineus, the brown dog tick, is the vector of several pathogens including E. canis a potential zoonotic pathogen responsible for monocytotropic ehrlichiosis (ME). Despite the high prevalence and severity of the disease there is no commercial vaccine against ME. Tick control through vaccination has the advantages of being cost-effective, reducing environmental contamination, preventing the selection of drug-resistant ticks and can target both vector and pathogen.
<b>OBJECTIVES</b>	The selection of potential anti-tick vaccine candidates. The focus will be on the evaluation of protein differential expression/ representation between two Rhipicephalus sanguineus populations and the functional characterization of R. sanguineus-tick genes and proteins affected in response to E. canis-pathogen infection.
<b>IMPLEMENTATION</b>	The findings of this project will contribute greatly to the control of tick infestations and the transmission of tick borne diseases (TTBDs). Development of these vaccines may provide a mean of controlling TTBDs through immunization of the vertebrate reservoir in order to reduce pathogen transmission to humans and animals.
<b>FUNDING AGENCY</b>	Fundação para a Ciência e Tecnologia (FCT)
<b>DURATION</b>	2016-2019
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