



PROJECT TITLE	Development of a new Nab based strategy to produce a universal HIV vaccine – Refª. VIH/SAU/0008/2011
BRIEF DESCRIPTION	One of the most pursuit goals is the creation of an HIV vaccine. Although many studies on an HIV-1 vaccine are developed, no such work is done to HIV-2 that infects almost two million people. We have shown that a potent and broad HIV-2 neutralizing response can be elicited in mice using a vaccinia virus vector-prime/rpC2- C3-polypeptide-boost vaccination strategy [MBR10]. The antibody response to the C2, V3, and C3 envelope regions in HIV-2 envelope was important for the elicitation of high levels of broadly reactive Nabs. This is a new approach of inducing the immune system to produce antibodies against both HIV-1 and HIV-2. This work will be a strong contribution to the development of a really universal HIV vaccine.
OBJECTIVES	New approach of inducing the immune system to produce antibodies against both HIV-1 and HIV-2
IMPLEMENTATION	Chimeric env surface glycoprotein containing the regions of HIV-2 and the remaining regions of HIV-1 might elicit a broadly neutralizing response against both HIV-1 and HIV-2. To investigate this hypothesis, we will insert regions of HIV-2 into the env of HIV-1. This new env will be expressed in vaccinia virus and should elicit the production of broadly neutralizing antibodies targeting the regions of HIV-1 and HIV-2 and broadly neutralizing antibodies.
FUNDING AGENCY	Fundação para a Ciência e a Tecnologia (FCT)
DURATION	2014-2016
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