ABIVAX

ABIVAX expands its antiviral portfolio with compounds targeting Zika virus

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New data published in Science support ABIVAX's small molecule approach in the development of antiviral therapies

Paris, March April 11th, 2017 at 6:00pm (CEST) – ABIVAX (Euronext Paris: FR0012333284 – ABVX), an innovative biotechnology company targeting the immune system to eliminate viral diseases, today announced the expansion of its portfolio of antiviral drug candidates with a program for the treatment of Zika virus infections. In an initial round of phenotypic screening, several small molecules from its antiviral library containing more than 1.000 compounds showed activity against the Zika virus. These compounds will be analyzed for their ability to inhibit Zika virus induced damage of neuronal stem cells, the mechanism that has been suggested to lead to microcephali and the Guillain-Barre syndrome observed in patients with Zika virus infections.

ABIVAX's small molecule approach to develop new antivirals for flaviviruses (e.g. Dengue and Zika) has been supported by new scientific research published in the March 30, 2017 issue of Science. In the article, <u>Enhancement of Zika virus pathogenesis by preexisting antiflavivirus</u> <u>immunity</u> (Bardina et al) the authors observed an antibody-dependent enhancement (ADE) of Zika infection in vitro which was mediated through the engagement of Dengue or West Nile virus specific IgG with the Fcy receptor. The administration of plasma from individuals previously infected with Dengue or West Nile Virus to Zika Virus susceptible mice resulted in an aggravation of morbidity (including fever, viremia, and viral loads in spinal cords and testes) and increased mortality. These data led the authors of the study to conclude that flavivirus vaccines (e.g. Dengue, West Nile or Zika) might carry the risk of a disease-enhancing effect and therefore need to be designed with great caution.

"These data strongly support our approach to develop novel antiviral treatments for these types of viruses based on small molecules. Antibodydependent disease enhancement is a phenomenon observed with flaviviruses, leading to a more severe clinical course of the disease. With the new program of recently identified compounds from our antiviral platform we believe we have the opportunity to develop a drug for the treatment of both Zika and Dengue infections that avoid the potential risk of ADE associated with vaccines," said Prof. Hartmut J. Ehrlich, M.D., Chief Executive Officer of ABIBAX