



Abivax Presents ABX464 Mechanism of Action Data at the 22nd International AIDS Conference (AIDS 2018)

July 26, 2018

- Latest findings reveal ABX464's mechanism of action in HIV and inflammatory diseases
- Binding of ABX464 to Cap Binding Complex (CBC) enhances RNA splicing of viral and non-translated human RNA, mediating antiviral and anti-inflammatory effects
- ABX464 does not influence the splicing rate of cellular genes

PARIS, July 26, 2018, 8:00 a.m. CEST – ABIVAX (Euronext Paris: FR0012333284 – ABVX), a biotechnology company harnessing the immune system to develop a functional cure for HIV as well as treatments for inflammatory/autoimmune diseases and cancer, presented new data characterizing the mechanism of action of its lead Phase 2 clinical candidate ABX464. The data were presented during a "late-breaker session" at the 22nd IAS Conference (AIDS 2018) on July 24, 2018 in Amsterdam, The Netherlands.

"Our latest results explain why ABX464 binding to CBC triggers both an antiviral and an anti-inflammatory properties," said **Professor Hartmut Ehrlich, MD, Chief Executive Officer of Abivax**. *"Induction of anti-inflammatory miR124 expression by ABX464 is a novel and potentially important therapeutic mechanism. Upregulation of miR124 has been identified as an exciting therapeutic target in research conducted by multiple leaders in the field, with the potential for treating a number of indications where inflammation plays a role. These data provide further support the rationale for our ongoing Phase 2a proof-of-concept study of ABX464 to treat patients with ulcerative colitis. In addition, the presence of novel RNA species in peripheral blood mononuclear cells (PBMCs) infected with the HI-virus and treated with ABX464 supports our hypothesis that the reduction of the HIV reservoir observed in previous clinical trials of ABX464 may be caused by an immune reaction to the putative peptide"*.

The poster presentation, entitled: *"ABX464, by binding the CBC 80/20 complex, enhances pre-mRNA splicing, resulting in the generation of novel HIV-derived RNA species and in increased expression of the anti-inflammatory miR124"* focused on the mechanism of action of ABX464, in both HIV and inflammatory bowel disease.

Presented by **Prof. Jamal Tazi**, Ph.D., Director at the CNRS (National Centre for Scientific Research) in Montpellier, France and Member of both ABIVAX's Executive Committee and Scientific Advisory Board, the data demonstrate that ABX464 binds to the cap binding complex (CBC) and thereby enhances the splicing of two types of RNA: 1) a segment of HIV RNA, which the HIV virus needs in an unspliced form for replication, thus inhibiting replication; and 2) a long non-coding human RNA, which, upon splicing, results in increased expression of miR124, a small microRNA with potent anti-inflammatory properties. Importantly, ABX464 does not modulate the rate of splicing of cellular genes, a key requirement for safe and well tolerated drug. In addition, increased splicing was shown to result in generation of novel viral RNA species, which may trigger immune recognition of HIV-infected cells.

Specifically, deep sequencing data demonstrating that enhanced splicing generates one form of new spliced viral RNA that could potentially trigger immune recognition of HIV-infected cells in the HIV reservoirs. Also demonstrated was enhanced expression and splicing of a single long non-coding human RNA by ABX464, a process that generates the anti-inflammatory miR124 both ex vivo and in HIV patients. Given the critical role of miR124 up-regulation in inflammation, and the ability of ABX464 to produce both novel viral RNA and miR-124 by enhanced splicing, these results provide evidence that targeting of the CBC by ABX464 could be a safe approach to achieve a functional HIV cure as well as a means to treat inflammatory diseases.