AiCuris AIC649 Showed Potential for Functional Cure in Woodchuck Model for Chronic Hepatitis B

- **Preclinical results presented at the AASLD-The Liver Meeting**
- **AIC649 showed to induce a physiologically concerted, reconstituted immune response in woodchuck chronic hepatitis B model**
- **Sustained loss of Woodchuck Hepatitis virus surface antigen (WHsAg) and induction of anti-WHsAg antibodies observed**
- **In combination with standard of care entecavir (ETV) AIC649 dramatically increases efficacy of treatment**
- **Study supports the potential of AIC649 to induce functional cure in HBV-infected patients**

Wuppertal, Germany, October 24, 2017- AiCuris Anti-infective Cures GmbH, a leading company in the discovery and development of drugs against infectious diseases, presented data from a preclinical study on the proprietary immunomodulator AIC649 during the Late-Breaking Abstract Poster Session at the American Association for the Study of Liver Diseases (AASLD) – The Liver Meeting in Washington DC, USA.

The preclinical study was designed to evaluate the potential of AIC649 to cure infections caused by hepatitis B virus (HBV) and to investigate the efficacy and safety of AIC649 when given as monotherapy or in combination with the direct acting antiviral entecavir (ETV).

The data were generated in a study utilizing the Animal Models of Infectious Disease Program, integral part of a suite of preclinical services supported by the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health (NIH) and conducted at the Georgetown University, Washington, DC.

During the study, chronically WHV infected woodchucks were treated over a 36-week period either with AIC649 alone or in combination with ETV given orally in the initial 12 weeks. The efficacy of AIC649 monotherapy, ETV monotherapy, or combination therapy of AIC649 and ETV was compared to a placebo control group. Treatment-induced changes in viremia, antigenemia, immunological parameters, as well as the induction of WHsAg antibody seroconversion were evaluated to determine the antiviral effects.

In this study the treatment with AIC649 alone already led to a clear reduction of WHV DNA as well as WHsAg when comparted to pretreatment levels. A significant and even stronger and sustained antiviral effect was observed in the group treated with the combination therapy of AIC649 and ETV. In this arm, the levels of WHV DNA and WHsAg stayed significantly suppressed or were even undetectable for several months. Cell mediated immune responses, as well as anti-WHsAg antibody response, were observed in the two groups receiving AIC649 but not in the ETV monotherapy group. Furthermore, AIC649 appears to suppress a rise in γ-glutamyltransferase (GGT) activity during the study alone or in

combination with ETV. In addition progression of steatosis was slower in these groups. AIC649 as a combination partner to ETV dramatically increases the efficacy of treatment.

The results, presented on poster LB-22 titled "AIC649 in Combination with Entecavir Leads to WHsAg Loss in the Woodchuck Animal Model of Chronic Hepatitis B" supported the hypothesis of AIC649 inducing a physiologically "concerted", reconstituted immune response to WHV by showing a loss of WHsAg and the induction of anti-WHsAg antibodies accompanied by cell mediated immune responses.

"The positive results observed in this pre-clinical study clearly support the potential of AIC649, a promising candidate from our broad development pipeline of anti-infective compounds, to induce functional cure in HBV-infected patients", said Holger Zimmermann, CEO of AiCuris Anti-infective Cures GmbH. "Moreover, these data underpin the opportunity to use AIC649 as maintenance therapy following ETV, one of today's standards of care in the treatment of chronic HBV infections. We are excited to prepare the next steps and continue to develop this candidate in the clinic."

About hepatitis B

Hepatitis B is a potentially life-threatening liver infection caused by the hepatitis B virus (HBV). The infection represents a major global health issue and is a significant occupational hazard, especially for healthcare workers. According to the World Health Organization (WHO), an estimated 257 million people worldwide are chronically infected with HBV (July 2017), and more than 880,000 people die each year due to complications from hepatitis B, including cirrhosis and liver cancer. Market experts have estimated the HBV market will reach $3.5 billion in 2021 (RnR Market Research, 2015). There is a major medical need for new and innovative therapies to treat chronic infection with HBV as - despite numerous research activities - currently available therapies suppress the virus but cure the disease only in a small percentage of patients.

About AIC649

AIC649 is a proprietary inactivated parapoxvirus particle preparation. It induces a natural, self-limiting immune response, enhancing appropriate immune responses against unrelated viruses. As a novel biological immunomodulator, AIC649 has the potential to be a curative treatment for HBV. AiCuris is currently investigating AIC649 in a clinical phase 1 trial in chronic HBV patients. Results shall be announced in early 2018.

About AiCuris Anti-infective Cures GmbH

AiCuris was founded in 2006 as a spin-off from Bayer and focuses on the discovery and development of drugs against infectious diseases. The Company's majority investor is SANTO Holding. The Company is developing drugs for the treatment of viruses such as human cytomegalovirus (HCMV), herpes simplex virus (HSV), hepatitis B virus (HBV), and adenoviruses. In the field of antibacterials, AiCuris seeks to develop innovative treatment options for life-threatening, (multidrug)-resistant hospital-treated pathogens. In 2012, AiCuris signed a license agreement with Merck & Co (MSD), one of the largest agreements of its kind in the European biotech industry. The agreement covers the development and commercialization of novel drug candidates against HCMV, including letermovir, which met the primary endpoint in a pivotal phase 3 clinical trial in patients undergoing bone marrow transplantation.

Contacts:

AiCuris Anti-infective Cures GmbH

Katja Woestenhemke
Friedrich-Ebert-Str. 475/Geb. 302
42117 Wuppertal

Phone +49 202 317 63 0
Fax +49 202 317 63 1601
Email business@aicuris.com
Web www.aicuris.com

Media Relations

MC Services AG

Anne Hennecke
Kaiser-Friedrich-Ring 5
40545 Düsseldorf

Phone +49 211 529 252 22
Fax +49 211 529 252 29
Email anne.hennecke@mc-services.eu
Web www.mc-services.eu