

NEWS RELEASE

Enanta Pharmaceuticals Presents New Data for EDP-721, an Oral Hepatitis B Virus RNA Destabilizer, at the European Association for the Study of the Liver (EASL) International Liver Congress™

6/23/2021

WATERTOWN, Mass.--(BUSINESS WIRE)-- Enanta Pharmaceuticals, Inc. (NASDAQ: ENTA), a clinical-stage biotechnology company dedicated to creating small molecule drugs for viral infections and liver diseases, today reported new preclinical data for EDP-721, a novel, oral hepatitis B virus (HBV) RNA destabilizer being developed for use in an all-oral combination regimen for HBV. The data demonstrate potent, selective and pangenotypic inhibition of HBV surface antigen (HBsAg), with up to a 3-log drop in the AAV-HBV mouse model. The research on EDP-721 was presented in a poster titled Discovery and Characterization of EDP-721, a Novel Hepatitis B Virus RNA Destabilizer, during the EASL International Liver Congress™ 2021.

"The data presented today strongly support the continued development of EDP-721 for use in an all-oral regimen to provide a functional cure for HBV," said Jay R. Luly, Ph.D., President and Chief Executive Officer of Enanta Pharmaceuticals. "While existing therapies for chronic HBV are moderately effective at suppressing HBV DNA, high levels of HBsAg present a key barrier to enduring viral clearance. These new preclinical data demonstrate that EDP-721 significantly reduced HBsAg production up to 3 logs and exhibited additive to synergistic activity with antivirals that target different mechanisms. We look forward to initiating a Phase 1 trial evaluating EDP-721 in mid-2021 and subsequently studying the compound in combination with other mechanisms, including our core inhibitor, EDP-514, and nucleoside reverse transcriptase inhibitors."

EDP-721 was shown to be a selective inhibitor of the non-canonical poly(A) polymerases, PAPD5 and PAPD7, host factors critical to the post-transcriptional stabilization of HBV RNA. Inhibition of PAPD5/7 results in potent and

pangenotypic reduction in HBsAg production with minimal effects on the host transcriptome in uninfected primary human hepatocytes. Oral administration of EDP-721 demonstrated HBsAg reductions of up to 3 logs following 14 days of once-daily dosing in the AAV-HBV mouse model. EDP-721 was also shown to exhibit synergistic antiviral activity in vitro when combined with nucleos(t)ide reverse transcriptase inhibitors or the HBV core inhibitor EDP-514.

Enanta expects to initiate a Phase 1 single ascending dose (SAD) and multiple ascending dose (MAD) study to evaluate the safety and tolerability of EDP-721 in healthy volunteers in mid-2021.

About Hepatitis B Virus

Hepatitis B is a viral infection that attacks the liver and can cause both acute and chronic disease. The virus is most commonly transmitted from mother to child during birth and delivery, as well as through contact with blood or other body fluids. It is estimated that over 290 million people worldwide have chronic HBV infection.1 Current approaches to treatment include interferon therapy and/or nucleos(t)ide reverse transcriptase inhibitors.

Treatment with interferon offers poor cure rates and is accompanied by serious side effects.2 Nucleos(t)ide reverse transcriptase inhibitors can be very effective at suppressing the virus but rarely result in full eradication of the virus from the liver.3

About Enanta

Enanta is using its robust, chemistry-driven approach and drug discovery capabilities to become a leader in the discovery and development of small molecule drugs for the treatment of viral infections and liver diseases. Enanta's research and development efforts have produced clinical candidates for the following disease targets: respiratory syncytial virus (RSV), hepatitis B virus (HBV) and non-alcoholic steatohepatitis (NASH). Enanta is also conducting research in SARS-CoV-2 (COVID-19) and human metapneumovirus (hMPV).

Enanta's research and development activities are funded by royalties from hepatitis C virus (HCV) products developed under its collaboration with AbbVie. Glecaprevir, a protease inhibitor discovered by Enanta, is sold by AbbVie in numerous countries as part of its leading treatment for chronic HCV infection under the tradenames MAVYRET® (U.S.) and MAVIRET® (ex-U.S.) (glecaprevir/pibrentasvir). Please visit www.enanta.com for more information.

Forward Looking Statements Disclaimer

This press release contains forward-looking statements, including statements with respect to the prospects for further development of EDP-721 for HBV. Statements that are not historical facts, are based on management's

current expectations, estimates, forecasts and projections about Enanta's business and the industry in which it operates and management's beliefs and assumptions. The statements contained in this release are not guarantees of future performance and involve certain risks, uncertainties and assumptions, which are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed in such forward-looking statements. Important factors and risks that may affect actual results include: the development risks of early stage discovery efforts in the disease areas in Enanta's research and development pipeline, such as HBV; the impact of development, regulatory and marketing efforts of others with respect to competitive treatments for HBV; Enanta's limited clinical development experience; Enanta's need to attract and retain senior management and key scientific personnel; Enanta's need to obtain and maintain patent protection for its product candidates and avoid potential infringement of the intellectual property rights of others; and other risk factors described or referred to in "Risk Factors" in Enanta's most recent Form 10-Q for the quarter ended March 31, 2021 and other periodic reports filed more recently with the Securities and Exchange Commission. Enanta cautions investors not to place undue reliance on the forward-looking statements contained in this release. These statements speak only as of the date of this release, and Enanta undertakes no obligation to update or revise these statements, except as may be required by law.

1https://pubmed.ncbi.nlm.nih.gov/29599078/

2https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5401664/

3https://pubmed.ncbi.nlm.nih.gov/30342034/

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