

November 14, 2016

# Arbutus Presents HBV Drug Combination Studies at AASLD

#### Combinations of Arbutus RNAi and Capsid Assets and Approved Drugs Show Complementary Action Capsid Inhibitor AB-423 Has Dual Mode of Action; Inhibits HBV DNA and cccDNA Synthesis Second Generation RNAi Agent ARB-1740 Improves Upon Potency of Lead RNAi Program

VANCOUVER, B.C. and DOYLESTOWN, Pa., Nov. 14, 2016 (GLOBE NEWSWIRE) -- Arbutus Biopharma Corporation (Nasdaq:ABUS), an industry-leading hepatitis B virus (HBV) therapeutic solutions company, today presented results from preclinical studies of HBV drugs in two oral presentations and one poster presentation at the 2016 Annual Meeting of the American Association for the Study of Liver Diseases (AASLD) being held on November 11-15, 2016, in Boston. These presentations feature two Arbutus pipeline programs and highlight the potential of Arbutus' combination development strategy with robust preclinical data showing complementary action when combining Arbutus assets with approved HBV therapies.

"We are very excited to present, for the first time, results from the triple combination of HBV targeting drugs in preclinical models. These *in vivo* study results demonstrate the promise of our proprietary compounds individually and, more importantly, in combination," said Dr. Michael Sofia, Arbutus' Chief Scientific Officer. "Our strategy is based on the concept that combining multiple drugs with complementary mechanisms of action will provide the best chance to produce HBV cures. Our *in vivo* preclinical study results preview the complementary action that we expect to demonstrate clinically when we combine multiple Arbutus product candidates with approved HBV therapies."

# <u>Oral Presentation #233:</u> "The HBV Capsid inhibitor AB-423 Exhibits a Dual Mode of Action and Displays Additive/Synergistic Effects in *In Vitro* Combination Studies"

AB-423 is a pan-genotypic, HBV selective agent with a dual mechanism of action. It inhibits pgRNA encapsidation resulting in potent and highly selective inhibition of HBV replication. AB-423 also inhibits cccDNA formation via inhibition of the capsid uncoating step. Combination of AB-423 with ARB-1467 results in additive or synergistic activity compared to each agent alone.

## Poster # 1865: "Development of Second Generation RNA Interference Therapy for Hepatitis B Virus Infection"

ARB-1740 (a pan-genotypic second-generation siRNA therapeutic) suppresses multiple elements of HBV including: HBsAg, HBeAg, DNA, core antigen, and all RNAs including the HBx transcript, as demonstrated *in vivo*. ARB-1740 also shows significant potency advantages compared to ARB-1467 as well as an extended duration of action. ARB-1740 complements standard-of-care NUC and inhibits NUC-resistant virus variants.

# <u>Oral Presentation #232</u>: "Exploring Combination Therapy for Curing HBV: Preclinical Studies with Capsid Inhibitor AB-423 and a siRNA Agent, ARB-1740"

In preclinical studies, a combination of AB-423 with ARB-1740 shows synergistic activity against HBV rcDNA *in vitro*, as well as inhibition of HBV DNA and serum HBsAg in *in vivo* models. Triple combinations consisting of AB-423+ARB-1740 with ETV or PegIFN provide the greatest reduction in serum HBV DNA. ARB-1740 further increases host response when added to AB-423+PegIFN, and supports the hypothesis that HBV antigen removal promotes immune recognition and viral clearance.

### About Arbutus

Arbutus Biopharma Corporation is a biopharmaceutical company dedicated to discovering, developing and commercializing a cure for patients suffering from chronic HBV infection. Arbutus is headquartered in Vancouver, BC, Canada with facilities in Doylestown, PA, USA. For more information, visit <u>www.arbutusbio.com</u>.

### Forward-Looking Statements and Information

This press release contains forward-looking statements within the meaning of the Section 27A of the Securities Act of 1933

and Section 21E of the Securities Exchange Act of 1934, and forward looking information within the meaning of Canadian securities laws (collectively, "forward-looking statements"). Forward-looking statements in this press release include statements about two oral presentations and one poster presentation at the 2016 Annual Meeting of the American Association for the Study of Liver Diseases; clinically demonstrating complementary action when combining Arbutus assets with approved HBV therapies; the ability of HBV antigen removal to promote immune recognition and viral clearance; and discovering, developing and commercializing a cure for patients suffering from chronic HBV infection.

With respect to the forward-looking statements contained in this press release, Arbutus has made numerous assumptions regarding, among other things: the effectiveness and timeliness of clinical trials, and the usefulness of the data; the continued demand for Arbutus' assets; and the stability of economic and market conditions. While Arbutus considers these assumptions to be reasonable, these assumptions are inherently subject to significant business, economic, competitive, market and social uncertainties and contingencies.

Additionally, there are known and unknown risk factors which could cause Arbutus' actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements contained herein. Known risk factors include, among others: anticipated clinical trials may be more costly or take longer to complete than anticipated, and may never be initiated or completed, or may not generate results that warrant future development of the tested drug candidate; Arbutus may not receive the necessary regulatory approvals for the clinical development of Arbutus' products; economic and market conditions may worsen; and market shifts may require a change in strategic focus.

A more complete discussion of the risks and uncertainties facing Arbutus appears in Arbutus' Annual Report on Form 10-K and Arbutus' continuous disclosure filings, which are available at <u>www.sedar.com</u> and at <u>www.sec.gov</u>. All forward-looking statements herein are qualified in their entirety by this cautionary statement, and Arbutus disclaims any obligation to revise or update any such forward-looking statements or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments, except as required by law.

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