Arbutus Announces Presentation of Phase 1a/1b Clinical Trial Results for AB-729 in Chronic Hepatitis B Subjects at The Liver Meeting Digital Experience™, The American Association for the Study of Liver Diseases Meeting

November 15, 2020

Across all single-dose cohorts, mean HBsAg concentrations continuously declined up to week 12 before reaching a plateau, suggesting dosing of AB-729 less frequently than every 4 weeks may be warranted

In the 60 mg every 4 weeks multi-dose cohort, HBsAg concentrations continued to decline steadily beyond week 12 with no plateau in response observed to date

Both HBV RNA and HBcrAg concentrations declined after single- and multi-dose administration of AB-729

AB-729 was generally safe and well tolerated

Conference Call and Webcast Scheduled for Monday, November 16, 2020 at 8:00 am ET

WARMINSTER, Pa., Nov. 15, 2020 (GLOBE NEWSWIRE) -- Arbutus Biopharma Corporation (Nasdaq: ABUS), a clinical-stage biopharmaceutical company primarily focused on developing a cure for people with chronic hepatitis B virus (HBV) infection as well as therapies to treat coronaviruses (including COVID-19), today announced the presentation of updated clinical data from an ongoing Phase 1a/1b clinical trial (AB-729-001) with AB-729, its proprietary GalNAc delivered RNAi compound. The presentation, entitled *Safety and pharmacodynamics of the GalNAc-siRNA AB-729 in subjects with chronic hepatitis B infection*, was presented by Professor Man-Fung Yuen, D.Sc., M.D., Ph.D., Chief of Division of Gastroenterology and Hepatology, Department of Medicine, The University of Hong Kong, Hong Kong, during a virtual oral session: *Hepatitis B: Therapeutics (New)* at The Liver Meeting Digital Experience™, The American Association for the Study of Liver Diseases Meeting.

Summary of presented data

Single-doses of AB-729 studied to date, 60 mg, 90 mg and 180 mg, resulted in comparable mean HBsAg declines at week 12, followed by a sustained plateau phase. During the multiple-dose portion of the trial, 60 mg of AB-729 dosed every 4 weeks resulted in continuous declines in HBsAg, reaching a mean of –1.44 log10 IU/ML at week 16. Data beyond week 16 demonstrate further declines in HBsAg with no plateau seen to date. AB-729 also resulted in meaningful decreases in both HBV RNA and HBcrAg. AB-729 was generally safe and well tolerated. The presentation can be accessed through the Investors section under Events & Presentations of Arbutus' website at www.arbutusbio.com.

Repeat dosing of AB-729 60 mg every 4 weeks results in continuous HBsAg declines beyond week 12

	Mean (SE) Week 12 N=7	Mean (SE) Week 16 N=7	Mean (SE) Week 20 N=3
Δlog10 HBsAg (IU/mL)	**-1.10 (0.15)**	**-1.44 (0.18)**	**-1.73 (0.12)**

Professor Yuen stated “These are the first multi-dose data for AB-729 and show continuous decline of HBsAg throughout the dosing period. Importantly, AB-729 was generally safe and well tolerated. These encouraging data support the continued development of AB-729 as a potential cornerstone of future combination regimens for the treatment of chronic hepatitis B infection.”

Summary of clinical trial design

AB-729-001 is an ongoing first-in-human clinical trial consisting of three parts:

In Part 1, three cohorts of healthy subjects were randomized 4:2 to receive single-doses (60 mg, 180 mg or 360 mg) of AB-729 or placebo.

In Part 2, non-cirrhotic, HBeAg positive or negative, chronic HBV subjects (N=6) on a background of nucleos(t)ide therapy with HBV DNA below the limit of quantitation received single-doses (60 mg to 180 mg) of AB-729. An additional cohort in Part 2 included 90 mg single-dose of AB-729 in HBV DNA positive chronic HBV subjects.

In Part 3, chronic HBV subjects, HBV DNA negative first and HBV DNA positive later, are receiving multi-doses of AB-729 for up to six months.

About AB-729

AB-729 is an RNA interference (RNAi) therapeutic targeted to hepatocytes using Arbutus’ novel covalently conjugated N-acetylgalactosamine (GalNAc) delivery technology that enables subcutaneous delivery. AB-729 inhibits viral replication and reduces all HBV antigens, including hepatitis B surface antigen in preclinical models. Reducing hepatitis B surface antigen is thought to be a key prerequisite to enable reawakening of a patient’s immune system to respond to the virus. In an ongoing single- and multi-dose Phase 1a/1b clinical trial, AB-729 demonstrated positive safety and tolerability data and meaningful reductions in hepatitis B surface antigen.

About HBV

Chronic hepatitis B virus (HBV) infection is a debilitating disease of the liver that afflicts over 250 million people worldwide with up to 90 million people in China, as estimated by the World Health Organization. HBV is a global epidemic that affects more people than hepatitis C virus (HCV) and HIV

infection combined—with a higher morbidity and mortality rate. HBV is a leading cause of chronic liver disease and need for liver transplantation, and up to one million people worldwide die every year from HBV-related causes.

The current standard of care for patients with chronic HBV infection is life-long suppressive treatment with medications that reduce, but do not eliminate, the virus, resulting in very low cure rates. There is a significant unmet need for new therapies to treat HBV.

Conference Call and Webcast

Arbutus will hold a conference call and webcast on Monday, November 16, 2020 at 8:00 am Eastern Time to provide an AB-729 clinical update. You can access a live webcast of the call, which will include presentation slides, through the Investors section of Arbutus' website at www.arbutusbio.com or directly at Live Webcast. Alternatively, you can dial (866) 393-1607 or (914) 495-8556 and reference conference ID 7791835.

An archived webcast will be available on the Arbutus website after the event. Alternatively, you may access a replay of the conference call by calling (855) 859-2056 or (404) 537-3406, and reference conference ID 7791835.

About Arbutus

Arbutus Biopharma Corporation is a publicly traded (Nasdaq: ABUS) biopharmaceutical company primarily dedicated to discovering, developing and commercializing a cure for people with chronic hepatitis B virus (HBV) infection. The Company is advancing multiple drug product candidates that may be combined into a potentially curative regimen for chronic HBV infection. Arbutus has also initiated a drug discovery and development effort for treating coronaviruses (including COVID-19). For more information, please visit www.arbutusbio.com.

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 regarding the Company's expectation that AB-729 could be the cornerstone of future combination regimens for the treatment of chronic hepatitis B 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 preclinical studies and clinical trials, and the usefulness of the data; the timeliness of regulatory approvals; 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, including uncertainties and contingencies related to the ongoing COVID-19 pandemic.

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 pre-clinical studies and 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 elect to change its strategy regarding its product candidates and clinical development activities; Arbutus may not receive the necessary regulatory approvals for the clinical development of Arbutus' products; economic and market conditions may worsen; market shifts may require a change in strategic focus; and the ongoing COVID-19 pandemic could significantly disrupt Arbutus' clinical development programs.

A more complete discussion of the risks and uncertainties facing Arbutus appears in Arbutus' Annual Report on Form 10-K, Arbutus' Quarterly Reports on Form 10-Q and Arbutus' continuous and periodic disclosure filings, which are available at www.sedar.com and at www.sec.gov. 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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