



January 10, 2016

## Arbutus Provides a Corporate Update and Outlines 2016 Milestones

*Phase II Multidose Study of ARB-1467 in HBV Patients Was Initiated in 2015*

*Phase II Single Dose HBsAg Reduction Data Expected in 3Q16*

*Four HBV Products in Clinical Development by Year-End*

VANCOUVER, British Columbia and DOYLESTOWN, Pa., Jan. 10, 2016 (GLOBE NEWSWIRE) -- Arbutus Biopharma Corporation (Nasdaq:ABUS), an industry-leading therapeutic solutions company focused on developing a cure for chronic hepatitis B virus (HBV) infection, today issued an update on recent company progress as well as a review of expected 2016 milestones.

"2015 was a very important year for Arbutus as we transitioned into a focused HBV therapeutic solutions company, with a broad pipeline of therapeutic agents which will ultimately be developed in combination regimens to cure HBV," said Dr. Mark J. Murray, Arbutus' President and CEO. "In 2016, we look forward to delivering pipeline progress, including the recently initiated Phase II study of ARB-1467 (TKM-HBV, RNAi) in HBV-infected patients, for which we expect to report HBsAg reduction results from single dose in 3Q16 and from the multiple dose portion of the study in 4Q16."

### HBV Pipeline Update

**ARB-1467 (TKM-HBV, RNAi) Phase II study.** The Phase II study of ARB-1467 was initiated in December 2015. This trial will evaluate at least two doses of ARB-1467 (0.2 mg/kg and 0.4 mg/kg) in HBV infected patients. In the multiple ascending dose portion study, HBV infected patients who are on a stable background of nucleot(s)ide analog therapy will receive three monthly doses of ARB-1467. Eight subjects will be enrolled in each cohort with six subjects receiving ARB-1467, and two receiving placebo. ARB-1467, which comprises three RNAi triggers that target all four HBV transcripts, has been shown in preclinical studies to reduce all viral antigen levels as well as cccDNA. In 3Q16, Arbutus plans to release the HBsAg reduction results obtained with a single ARB-1467 dose from both the 0.2mg/kg and 0.4mg/kg dose cohorts followed by the full multi-dose data from both cohorts in 4Q16.

**Phase I study of ARB-1467.** The original Phase I single ascending dose (SAD) study has been completed, with healthy adult subjects having received a maximum dose of 0.4mg/kg. The study protocol was recently amended to enable testing of two higher doses of ARB-1467, which could also be evaluated in the Phase II multiple ascending dose (MAD) study in HBV infected patients. Final results of this Phase I study are expected in 1H16.

**ARB-1740.** Arbutus continues to work on developing follow-on RNAi products for HBV. This includes ARB-1740, a product candidate that is significantly more potent than ARB-1467 in preclinical studies and has the potential to be effective at lower clinical doses than the current sub-milligram dose range ARB-1467. ARB-1740 employs the same LNP formulation as ARB-1467 (with a different set of three RNAi triggers). Arbutus expects to file an IND (or equivalent) for ARB-1740 in 2H16.

### Additional HBV products entering clinical development in 2016.

- | Arbutus will file an IND (or equivalent) in 2H16 for the lead compound from its small molecule cccDNA formation inhibitor program. In 2015, Arbutus presented preclinical data showing synergistic activity between cccDNA formation inhibitors and approved nucleot(s)ide analogs. Results of additional preclinical studies including combinations of agents with different mechanisms will be presented in 2016.
- | Arbutus will file an IND (or equivalent) in 2H16 for the lead compound from its small molecule capsid/core protein inhibitor program. Arbutus will be presenting results of preclinical studies including combinations of agents with different mechanisms at scientific meetings in 1H16.
- | In 2016, Arbutus will initiate clinical evaluation of ARB-1598 (formerly known as CYT-003), a TLR9 agonist, in immune biomarker induction. ARB-1598 is also being evaluated in preclinical studies including combinations of agents with different mechanisms, the results of which will be presented in 2016. Clinical combination studies with two or more

proprietary pipeline candidates will be initiated in 2017.

## Non-HBV Assets

- | Arbutus' ongoing Phase II study of TKM-PLK1 in hepatocellular carcinoma is fully enrolled, with results expected in 1H16.
- | Alnylam's LNP-enabled patisiran is currently in Phase III for the treatment of transthyretin-mediated amyloidosis (ATTR amyloidosis). Alnylam has announced that it expects to submit a New Drug Application (NDA) for patisiran in 2017. Under the license agreement between the two companies, Alnylam will pay Arbutus a low-single digit royalty on future patisiran net sales.
- | In December 2015, Dicerna announced the start of a Phase I study in healthy volunteers for its LNP-enabled DCR-PH1 for the treatment of primary hyperoxaluria type 1 (PH1). Dicerna also announced that it expects to begin the first Phase I study of DCR-PH1 in patients with PH1 in early 2016. Under the license agreement between the two companies, Dicerna will pay Arbutus up to \$22 million in development milestones plus a mid-single digit royalty on future DCR-PH1 sales.
- | Arbutus continues to explore opportunities to generate value from its LNP platform technology, which is well suited to deliver therapies based on RNAi, mRNA, gene editing, as well as other technologies.

## Financial Update

Arbutus ended 3Q15 with \$206 million in cash, which is expected to fund company operations into late 2018.

## Upcoming Arbutus Pipeline Milestones

- | 2016: Initiate clinical immune biomarker study for TLR9 agonist ARB-1598 in chronically infected HBV patients
- | 2016: Preclinical data release on multiple pipeline programs, including results from preclinical combination studies of proprietary pipeline candidates
- | 1H16: Phase II results for TKM-PLK1 in HCC
- | 3Q16: Single dose HBsAg reduction data from the ARB-1467 (RNAi) Phase II trial in HBV-infected patients
- | 4Q16: HBsAg reduction data from the multiple dose portion of the Phase II trial testing ARB-1467 in HBV-infected patients
- | 2H16: File IND (or equivalent) for cccDNA formation inhibitor
- | 2H16: File IND (or equivalent) for core protein/capsid assembly inhibitor
- | 2H16: File IND (or equivalent) for ARB-1740 (RNAi)
- | 2017: Initiate clinical combination studies with two or more proprietary product candidates

## About Arbutus

Arbutus Biopharma Corporation is a biopharmaceutical company dedicated to discovering, developing and commercializing a cure for patients suffering from chronic HBV infection. Our strategy is to target the three pillars necessary to develop a curative regimen for HBV: suppressing HBV replication within liver cells, stimulating and reactivating the body's immune system so that it can mount an effective defense against the virus and, eliminating the reservoir of viral genomic material known as covalently closed circular DNA, or cccDNA that is the source of HBV persistence. Our portfolio of assets includes a broad pipeline of drug candidates for use in combination to develop a cure for HBV. To support continuous discovery of potential novel drug candidates and technologies, Arbutus has a research collaboration agreement with the Baruch S. Blumberg Institute that provides exclusive rights to in-license any intellectual property generated through the collaboration. The Baruch S. Blumberg Institute was established in 2003 by the Hepatitis B Foundation.

Arbutus is headquartered in Vancouver, BC, Canada with offices in Doylestown, PA, USA. For more information, visit [www.arbutusbio.com](http://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 about delivering tangible HBV pipeline progress; developing and commercializing a cure for patients suffering from chronic HBV infection; the implementation and design of the Phase II study of ARB-1467 (RNAi); the ability of ARB-1467 to reduce all viral antigen levels as well as cccDNA; reporting HBsAg reduction results for the Phase II study of ARB-1467 from single dose in 3Q16 and from the multiple dose portion of the study in 4Q16; receiving final results of the Phase I study of ARB-1467 in 1H16; continuing development of follow-on RNAi products for HBV, including ARB-1740; the potential for ARB-1467 to be effective at even lower clinical doses than the current sub-milligram dose range; filing an IND (or equivalent) for ARB-1740 in 2H16; filing an IND (or equivalent) in 2H16 for the lead compound from Arbutus' small molecule

cccDNA formation inhibitor program; presenting results of additional preclinical studies including combinations of agents with different mechanisms in 2016; filing an IND (or equivalent) in 2H16 for the lead compound from Arbutus' small molecule capsid/core protein inhibitor program; presenting results of preclinical studies including combinations of agents with different mechanisms at scientific meetings in 1H16; initiating the clinical evaluation of TLR9 agonist ARB-1598 in immune biomarker induction in 2016; presenting the results of ARB-1598 in preclinical studies including combinations of agents with different mechanisms; initiating combination studies with two or more of the proprietary pipeline candidates in 2017; receiving results for Arbutus' Phase II study of TKM-PLK1 in hepatocellular carcinoma in 1H16; Alnylam submitting a New Drug Application (NDA) for their LNP-enabled patisiran in 2017; Alnylam paying Arbutus a low single digit royalty on future patisiran net sales; Dicerna beginning the first Phase I study of DCR-PH1 in patients with PH1 in early 2016; Dicerna paying Arbutus up to \$22 million in development milestones plus a mid-single-digit royalty on future DCR-PH1 sales; continued exploration of opportunities to generate value from Arbutus' LNP platform technology; the expectation for Arbutus' cash to fund company operations into late 2018; initiating a clinical immune biomarker study for TLR9 agonist ARB-1598 in chronically infected HBV patients in 2016; releasing preclinical data on multiple pipeline programs, including results from preclinical combination studies of proprietary pipeline candidates; receiving Phase II results for TKM-PLK1 in HCC in 1H16; receiving single dose HBsAg reduction data from the ARB-1467 (RNAi) Phase II trial in HBV-infected patients in 3Q16; receiving HBsAg reduction data from the multiple dose portion of the ARB-1467 (RNAi) Phase II trial testing ARB-1467 in HBV-infected patients in 4Q16; filing an IND (or equivalent) for cccDNA formation inhibitor in 2H16; filing an IND (or equivalent) for core protein/capsid assembly inhibitor in 2H16; filing an IND (or equivalent) for ARB-1740 (RNAi) in 2H16; initiating clinical combination studies with two or more proprietary product candidates in 2017; and a strategy to target the three pillars necessary to develop a curative regimen for HBV.

With respect to the forward-looking statements contained in this press release, Arbutus has made numerous assumptions regarding, among other things: the effectiveness of preclinical and clinical trials, and the usefulness of the data; the ability to file, and subsequent approval of, drug applications; the successful sale of drug products; the continued demand for Arbutus' assets; the lack of unforeseen expenses; the stability of economic and market conditions; and the consistency of Arbutus' strategy. 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 pre-clinical 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 not receive the necessary regulatory approvals for the clinical development of Arbutus' products; Arbutus and its partners may not be able to sell the products; unforeseen expenses may deplete Arbutus' cash reserves quicker than anticipated; 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 [www.sedar.com](http://www.sedar.com) and at [www.sec.gov](http://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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