UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 OR 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): August 9, 2019

Arbutus Biopharma Corporation

(Exact name of registrant as specified in charter)

British Columbia, Canada

(State or other jurisdiction of incorporation)

001-34949 (Commission File Number) **98-0597776** (IRS Employer Identification No.)

701 Veterans Circle Warminster, Pennsylvania (Address of principal executive offices)

18974 (Zip Code)

267-469-0914 Registrant's telephone number, including area code

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

o Written communication pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communication pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communication pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Shares, without par value	ABUS	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company o

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. o

Item 8.01. Other Events.

On August 9, 2019, Arbutus Biopharma Corporation (the "Company") posted an updated corporate presentation on its website at www.arbutusbio.com. A copy of the presentation is filed herewith as Exhibit 99.1 and is incorporated by reference herein.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits.

Exhibit Number	Description
99.1	Corporate presentation dated August 9, 2019.
	2

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Arbutus Biopharma Corporation Date: August 9, 2019 By: /s/ David C. Hastings Name: David C. Hastings Title: Chief Financial Officer 3 3



Singularly Focused on HBV

August 2019

NASDAQ: ABUS w

www.arbutusbio.com

Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and Canadian securities laws. All statements that are not historical facts are hereby identified as forward-looking statements for this purpose and include, among others, statements relating to: the potential for HBV to have a larger market opportunity than HCV; our ability to meet a significant unmet medical need; our path to combination clinical trials with AB-506 and AB-729 in the second half of 2020; the sufficiency of our cash and cash equivalents to extend into the second half of 2020; our ability to develop a curative regimen for HBV and unlock significant market growth opportunities; our expectations to dose additional cohorts for the AB-506 Phase 1a/1b clinical trial and our expectation to make a decision regarding AB-452 clinical development in early 2020; our expectation for AB-729 for preliminary safety and efficacy data from both healthy subjects and several single dose cohorts of subjects with CHB to be available in the first quarter of 2020; and the timeline to a combination cure for HBV.

With respect to the forward-looking statements contained in this presentation, Arbutus has made numerous assumptions regarding, among other things: the timely receipt of expected payments; 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. Forward-looking statements herein involve known and unknown risks, uncertainties and other factors that may cause the actual results, events or developments to be materially different from any future results, events or developments expressed or implied by such forward-looking statements. Such 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 the warrant future development of the tested drug candidate; Arbutus may not receive the necessary regulatory approvals for the clinical development of Arbutus; 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' periodic disclosure filings which are available at www.sec.gov and at www.sec.gov and at www.sec.gov.

The forward-looking statements made in connection with this presentation represent our views only as of the date of this presentation (or any earlier date indicated in such statement). While we may update certain forward-looking statements from time to time, we specifically disclaim any obligation to do so, even if new information becomes available in the future.



Investment Highlights

Singular therapeutic focus - curing chronic Hepatitis B Virus (HBV)

Significant unmet medical need in HBV	Team with antiviral expertise & proven track record	Robust HBV Portfolio	Combination Proof-of- Concept Clinical Trial	Strong Financial Position
Global HBV prevalence double that of HCV, potential for larger market opportunity	Applying knowledge gained from HIV and HCV success to find HBV cure through proprietary drug combinations	HBV assets generating clinical data	AB-506 + AB-729 w/ NA in HBV pts Expected 2H 2020	\$95M cash at 6/30/19 plus \$20M gross proceeds received from Onpattro royalty monetization completed in July 2019 Extends runway into 2H 2020



Proven Leadership Team

Successful track records in both the discovery, development, and commercialization of multiple antivirals: sofosbuvir, etravirine, rilpivirine, telaprevir and simeprevir





HBV Lifecycle Illustrates Key Points for Intervention

A combination of agents with complementary MOA is needed to cure HBV



Keys to Therapeutic Success

Suppress HBV DNA and viral antigens

Reawaken host immune response

Therapeutic success will require a combination of agents with complementary MOAs.





MOA: Mechanism Of Action | NA: Nucleoside Analogue | PegIFN: Pegylated Interferon | HBsAg: HBV Surface Antigen 6

Arbutus HBV Pipeline

Phase I Ithy Subjects HBV







AB-506 Capsid Inhibitor

AB-506 shows preclinical and clinical potency and PK profile consistent with best in class agents

Active against all genotypes & NA resistant variants

Once daily dosing

Complementary with HBsAg reducing agents



Clinical Development: Preliminary Phase 1a/1b Results

Efficacy: 160mg and 400mg Cohorts

- Mean HBV DNA and RNA declines (Day 28) from -2.0 log (160 mg dose) to -2.8 log (400 mg dose) and -2.4 log (both doses), respectively
- One Grade 4 ALT flare (400 mg) was associated with notable declines in HBsAg (-1.4 log) and HBeAg (-2.0 log) and serum IFN gamma increase suggesting an immune mediated response

Safety: 160mg and 400mg Cohorts

- No SAEs or ALT elevations in healthy subjects
- No SAEs in CHB subjects
- Four CHB subjects experienced Grade 4 ALT flares (2 in the 160 mg cohort and 2 in the 400 mg cohort); none met DILI criteria and all occurred while HBV DNA was declining (>2.0 log)
- Two CHB subjects experienced Grade 2 flares in the 160 mg Cohort

PK: Pharmacokinetics | CHB: Chronic Hepatitis B

AB-506 Capsid Inhibitor

Clinical Development Next Steps

Phase 1a healthy subject study investigating dosing of AB-506 for 28 days

Results expected later this year

Continue with **Phase 1b** study in CHB subjects investigating longer dosing of AB-506

Establish longer term safety (with and w/o NA)

Inclusion with AB-729 in a combination regimen

Study initiation expected 2H 2020





AB-729 RNAi Therapeutic

Proprietary GalNAc-conjugate delivery technology provides liver targeting and enables subcutaneous dosing Single trigger RNAi agent targeting all HBV transcripts

Inhibits HBV replication and lowers all HBV antigens

Potent HBsAg reduction in preclinical models

Pan-genotypic activity across HBV genotypes

Duration of HBsAg reduction supports once per month dosing

Demonstrated complementarity with capsid inhibitors

Phase I initiated in July 2019; preliminary results expected Q1 2020





AB-729 In Vivo Single Dose Response & Duration

Clear dose response in AAV mouse model

Achieves maximum HBsAg reduction possible in this model

Duration supports a clinical dosing frequency of **once per month**





AB-729 also reduces HBV RNA, HBV DNA and e-antigen

Lee, A., Et al, EASL 2019, Abstract FRI-184

Small Molecule HBV RNA Destabilizers

HBV RNA reduction leads to interference in viral gene expression, DNA replication, and virion assembly



HARDULUS BIOPHARMA NASDAQ: ABUS www.arbutusbic

Gotchev, D., et al., AASLD, 2017, Abstract 923 Liu, F., et al., Int HBV Meeting 2018, Sicily



Dose-dependent reduction in HBsAg

HBsAg reduction correlates with reductions in liver HBV RNAs

AB-452 and RNA Destabilizer Program

Multiple evaluations underway to support AB-452 and RNA destabilizer program next steps

Completed

- IND enabling studies and 28 day toxicology
- ✓ AB-452 mechanism of action studies demonstrating AB-452 causes
 HBV mRNA poly A tail shortening
- Host protein knock out causes no cellular tox
- ✓ Host gene expression studies indicating that AB-452 has no detectable effect on host cell mRNAs



Ongoing

- In vitro target engagement and target-based cell viability evaluations
- Additional, specialized in vitro and in vivo nonclinical safety assessments
- In depth DMPK evaluations
- 90 day toxicology studies, two species

Multiple small molecule chemotypes under investigation to **maximize program** opportunity

Preclinical Combination In Humanized Mouse Model

RNAi + Capsid inhibitor containing regimens result in HBV DNA and HBsAg reductions



RNAi: ARB-1740 | Capsid Inhibitor: AB-423 n Lee, A, et al., AASLD 2016, Abstract No. 232

TArbutus NASDAC: ABUS

Treatment for 6 weeks

	Dosage	Route	Frequency
Capsid Inhibitor	100 mg/kg	PO	BID
ETV	1.2 µg/kg	PO	QD
PegIFN	30 µg/kg	SQ	2×/wk
RNAi	3 mg/kg	IV	biweekly

Key

RNAi + Capsid Inhibitor + ETV
 RNAi + Capsid Inhibitor + PegIFN

-- Vehicle

🛨 Capsid Inhibitor + PegIFN

Drug Combination Analysis of AB-506 + AB-729

Capsid Inhibitor + Antigen Inhibitor





HBV-infected primary human hepatocytes

Interpretive guidelines as per Prichard & Shipman 1990 Lee, A., Et al, EASL 2019, Abstract FRI-184

Key Catalysts for 2H 2019 - 2020

