

**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): November 4, 2021

Arbutus Biopharma Corporation

(Exact name of registrant as specified in its charter)

British Columbia, Canada
(State or Other Jurisdiction of Incorporation)

001-34949
(Commission File Number)

98-0597776
(I.R.S. Employer Identification No.)

701 Veterans Circle
Warminster, Pennsylvania 18974
(Address of Principal Executive Offices) (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:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications 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

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.

Item 2.02. Results of Operations and Financial Condition.

On November 4, 2021, Arbutus Biopharma Corporation (the “Company”) issued a press release announcing its financial results for the third quarter ended September 30, 2021 and certain other information. A copy of the press release is furnished as Exhibit 99.1 hereto.

Item 8.01. Other Events.

On November 4, 2021, the Company posted an updated corporate presentation on its website at www.arbutusbio.com. A copy of the presentation is filed herewith as Exhibit 99.2 and is incorporated by reference herein.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit Number</u>	<u>Description</u>
99.1	Press release dated November 4, 2021
99.2	Corporate Presentation dated November 4, 2021
104	Cover page interactive data file (formatted as inline XBRL).

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: November 4, 2021

By: /s/ David C. Hastings
David C. Hastings
Chief Financial Officer

Arbutus Reports Third Quarter 2021 Financial Results and Provides Corporate Update

On-track for multiple data readouts of AB-729 and AB-836 in Q4 2021

First patient dosed in Phase 2a clinical trial combining AB-729, Peg-IFN α -2a and nucleos(t)ide analog (“NA”) therapy

On-track to initiate several proof-of-concept Phase 2a clinical trials with AB-729 as a cornerstone agent in combination with other approved or investigational compounds

Commenced IND enabling studies for Arbutus’ oral PD-L1 program

Cash runway guidance extended into the second quarter of 2023

Conference call and webcast scheduled today at 8:45 AM ET

WARMINSTER, Pa., Nov. 04, 2021 (GLOBE NEWSWIRE) -- Arbutus Biopharma Corporation (Nasdaq: ABUS), a clinical-stage biopharmaceutical company primarily focused on discovering, developing and commercializing a broad portfolio of wholly-owned assets with different mechanisms of action to provide a cure for people with chronic hepatitis B virus (HBV) infection and to treat coronaviruses (including COVID-19), today reports its third quarter 2021 financial results and provides a corporate update.

William Collier, President and Chief Executive Officer of Arbutus, stated, “We are impressed with the continued development of our proprietary HBV assets that align with our novel three-pronged approach to develop an HBV functional cure by suppressing HBV DNA, reducing HBV surface antigen and boosting the host immune system. We have clinical trials underway assessing our RNAi therapeutic and capsid inhibitor in both healthy subjects and patients with chronic HBV infection and are poised for multiple data readouts in the fourth quarter of this year. We expect these data will further inform the design of future combination clinical trials with AB-729 as a cornerstone agent in HBV treatment.”

Mr. Collier continued, “Importantly, we have now moved forward with IND enabling studies for our internally-discovered oral PD-L1 program intended to address the third arm of our three-prong approach, reawakening the host immune response. In addition, we are continuing to conduct lead optimization activities for our oral RNA destabilizer in HBV and to progress our efforts to identify lead candidates for our pan-coronavirus program. We intend to provide additional updates on these programs early next year.”

Pipeline Update

AB-729 (RNAi Therapeutic)

- Arbutus is conducting a single- and multi-dose Phase 1a/b clinical trial to determine the safety, tolerability, pharmacokinetics, and pharmacodynamics of AB-729 in healthy subjects and patients with chronic HBV infection. Data disclosed to-date show that AB-729 continues to reduce HBsAg across all doses and dosing intervals with a favorable safety and tolerability profile. Additionally, based on 3/5 evaluable patients, long term dosing of AB-729 showed increased HBV-specific immune responses, providing support for combination therapy including immunomodulatory agents.
- Arbutus will be presenting data from additional cohorts in the AB-729 Phase 1a/1b clinical trial at the upcoming AASLD medical conference. The presentation, which was accepted as a late-breaker poster for the conference, will include data in HBV DNA negative patients that received 90 mg dosed every 12 weeks (cohort J) and data in HBV DNA positive patients that received 90 mg dosed every 8 weeks (cohort G). In addition, the company will provide follow-up data from HBV DNA negative patients that received the 60 mg dose every 4 or 8 weeks or the 90 mg dose every 8 weeks (cohort E, F, and I respectively). Key findings include:
 - AB-729 repeat dosing is generally safe and well tolerated.
 - Robust mean declines in HBsAg were sustained with repeat dosing of AB-729, with no meaningful differences observed to date between doses (60 mg or 90 mg) and/or dosing intervals (every 4, 8 or 12 weeks).
 - HBsAg suppression at levels <100 IU/mL is maintained in some patients up to 20 weeks following the last dose of AB-729.
- In-line with our strategy to combine multiple therapies that target different points of the viral replication cycle to develop a curative treatment regimen in HBV, Arbutus has dosed the first patient in its Phase 2a randomized, open-label, proof-of-concept clinical trial designed to evaluate AB-729 in combination with ongoing standard-of-care NA therapy and short courses of Peg-IFN α -2a in 40 patients with chronic HBV infection. The primary objective of the clinical trial is to evaluate the safety and tolerability of AB-729 plus Peg-IFN α -2a in subjects with NA-suppressed chronic HBV infection. After 24-weeks of dosing with AB-729, patients will be randomized into one of four groups to receive either AB-729 plus NA therapy plus Peg-IFN α -2a or NA therapy plus Peg-IFN α -2a for either 24 or 12 weeks. After completion of the assigned interferon treatment period, all patients will remain on NA therapy for the initial 24-week follow-up period, and then discontinue NA treatment, provided they meet certain stopping criteria.
- Also, in line with our strategy, we have entered into separate clinical collaboration agreements with Assembly Biosciences, Inc. (“Assembly”), Vaccitech plc (“Vaccitech”) and Antios Therapeutics, Inc. (“Antios”) to evaluate AB-729 as the cornerstone agent in combination with Assembly’s capsid inhibitor, Vaccitech’s T cell stimulating therapeutic vaccine, and Antios’ active site polymerase inhibitor nucleotide, respectively.
 - Enrollment is on-going in the Phase 2 proof-of-concept triple combination clinical trial evaluating AB-729, vebicorvir (“VBR”), Assembly’s lead HBV core inhibitor (capsid inhibitor), and an NA. Assembly is conducting this clinical trial and expecting initial data in 2022.

- Arbutus is on-track to file a Clinical Trial Application (CTA) in the fourth quarter of 2021 with plans to initiate a triple combination Phase 2 trial in early 2022 to evaluate AB-729, combined with VTP-300, Vaccitech's therapeutic vaccine and a NA.
- In the fourth quarter of 2021, Antios is planning to add a cohort to its on-going Phase 2 clinical trial to evaluate AB-729, ATI-2173, Antios' proprietary active site polymerase inhibitor nucleotide (ASPIN) and Viread (tenofovir disoproxil fumarate), which is currently approved by the FDA for the treatment of chronic hepatitis B.

AB-836 (Oral Capsid Inhibitor)

- AB-836 is Arbutus' novel, next generation oral capsid inhibitor with improved intrinsic potency, activity against resistant variants and an enhanced ability to starve replenishment of cccDNA which is responsible for HBV recurrence.
- Arbutus is conducting a double-blind, randomized, placebo-controlled, single and multiple dose Phase 1a/1b clinical trial evaluating the safety, tolerability, pharmacokinetics and pharmacodynamics of AB-836. The Company is on-track to report initial data from healthy subjects and HBV patients in the fourth quarter of 2021.

HBV Discovery Programs

- Arbutus' drug discovery efforts are focused on developing small molecules to create an all-oral treatment regimen to cure HBV. Research efforts are continuing with the oral RNA-destabilizer program, where Arbutus is currently in late-stage lead optimization.

Oral PD-L1 Program

- Arbutus' oral PD-L1 program is designed to reawaken the immune system, which Arbutus believes is a key component in developing a cure for HBV. Arbutus has commenced IND-enabling studies for its oral PD-L1 program.

Research Efforts to Combat COVID-19 and Future Coronavirus Outbreaks

- Leveraging its extensive antiviral drug discovery experience, Arbutus is focused on the discovery and development of new pan-coronavirus molecular entities to treat COVID-19 and future coronavirus outbreaks by targeting essential viral proteins including the nsp12 viral polymerase and the nsp5 viral protease. Through its discovery research and license agreement with X-Chem, Inc. and Proteros biostructures GmbH, Arbutus is progressing lead candidates to nomination.

Financial Results

Cash, Cash Equivalents and Investments

Arbutus had cash, cash equivalents and investments in marketable securities totaling \$151.9 million as of September 30, 2021, as compared to \$123.3 million as of December 31, 2020. During the nine months ended September 30, 2021, Arbutus used \$47.9 million in operating activities, which was offset by \$75.4 million of net proceeds from the issuance of common shares under Arbutus's "at-the-market" offering program. The Company believes its cash, cash equivalents and investments in marketable securities of \$151.9 million as of September 30, 2021 are sufficient to fund the Company's operations into the second quarter of 2023.

Net Loss

Net loss attributable to common shares for the three months ended September 30, 2021 was \$24.2 million (\$0.24 basic and diluted loss per common share) as compared to \$21.8 million (\$0.27 basic and diluted loss per common share) for the three months ended September 30, 2020. Net loss attributable to common shares for the three months ended September 30, 2021 and 2020 included non-cash expense for the accrual of coupon on the Company's convertible preferred shares of \$5.1 million and \$3.0 million, respectively.

Operating Expenses

Research and development expenses were \$16.3 million for the three months ended September 30, 2021 compared to \$12.1 million for the same period in 2020. The increase in research and development expenses for the three months ended September 30, 2021 versus the same period in 2020 was due primarily to higher expenses for the Company's clinical development and discovery programs, including activities under the collaboration with Assembly and internal research efforts to treat COVID-19 and future coronavirus outbreaks, both of which initiated in mid-2020. General and administrative expenses were \$4.1 million for the three months ended September 30, 2021 compared to \$4.1 million for the same period in 2020.

Outstanding Shares

As of September 30, 2021, the Company had approximately 110.3 million common shares issued and outstanding, approximately 11.4 million stock options outstanding and 1.164 million convertible preferred shares outstanding. On October 18, 2021, all 1.164 million convertible preferred shares (including the annual 8.75% coupon) converted into 22,833,922 common shares. Following the conversion, Roivant owns approximately 29% of the Company's outstanding common shares.

COVID-19 Impact

In December 2019 an outbreak of a novel strain of coronavirus (COVID-19) was identified in Wuhan, China. This virus has been declared a pandemic by the World Health Organization and has spread to nearly every country in the world. The impact of this pandemic has been, and will likely continue to be, extensive in many aspects of society. The pandemic has resulted in and will likely continue to result in significant disruptions to businesses. A number of countries and other jurisdictions around the world have implemented extreme measures to try and slow the spread of the virus. These measures include the closing of businesses and requiring people to stay in their homes, the latter of which raises uncertainty regarding the ability to travel to hospitals in order to participate in clinical trials. Additional measures that have had, and will likely continue to have, a major impact on clinical development, at least in the near-term, include shortages and delays in the supply

chain, and prohibitions in certain countries on enrolling subjects in new clinical trials. While Arbutus has been able to progress with its clinical and pre-clinical activities to date, it is not possible to predict if the COVID-19 pandemic will materially impact its plans and timelines in the future.

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF LOSS
(in thousands, except share and per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Revenue				
Collaborations and licenses	\$ 1,480	\$ 827	\$ 3,819	\$ 2,487
Non-cash royalty revenue	1,860	696	3,963	2,041
Total Revenue	<u>3,340</u>	<u>1,523</u>	<u>7,782</u>	<u>4,528</u>
Operating expenses				
Research and development	16,299	12,065	45,065	32,946
General and administrative	4,146	4,065	12,438	11,184
Depreciation	447	490	1,326	1,491
Change in fair value of contingent consideration	856	120	1,679	348
Site consolidation	—	—	—	64
Loss from operations	<u>(18,408)</u>	<u>(15,217)</u>	<u>(52,726)</u>	<u>(41,505)</u>
Other income (loss)				
Interest income	27	100	97	645
Interest expense	(762)	(1,074)	(2,297)	(3,214)
Foreign exchange (loss) gain	(15)	(19)	—	(84)
Equity investment loss	—	(2,545)	—	(2,545)
Total other loss	<u>(750)</u>	<u>(3,538)</u>	<u>(2,200)</u>	<u>(5,198)</u>
Net loss	<u>(19,158)</u>	<u>(18,755)</u>	<u>(54,926)</u>	<u>(46,703)</u>
Dividend accretion of convertible preferred shares	(5,087)	(3,027)	(11,565)	(9,000)
Net loss attributable to common shares	<u>\$ (24,245)</u>	<u>\$ (21,782)</u>	<u>\$ (66,491)</u>	<u>\$ (55,703)</u>
Loss per share				
Basic and diluted	\$ (0.24)	\$ (0.27)	\$ (0.68)	\$ (0.77)
Weighted average number of common shares				
Basic and diluted	101,286,351	79,487,444	97,174,253	72,342,070

UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands)

	September 30, 2021	December 31, 2020
Cash, cash equivalents and marketable securities, current	\$ 121,403	\$ 123,268
Accounts receivable and other current assets	5,133	4,436
Total current assets	<u>126,536</u>	<u>127,704</u>
Property and equipment, net of accumulated depreciation	6,352	6,927
Investments in marketable securities, non-current	30,534	—
Right of use asset	2,174	2,405
Other non-current assets	—	44
Total assets	<u>\$ 165,596</u>	<u>\$ 137,080</u>
Accounts payable and accrued liabilities	\$ 9,727	\$ 9,151
Lease liability, current	386	390
Total current liabilities	<u>10,113</u>	<u>9,541</u>
Liability related to sale of future royalties	17,883	19,554
Contingent consideration	5,105	3,426
Lease liability, non-current	2,355	2,593
Total stockholders' equity	<u>130,140</u>	<u>101,966</u>
Total liabilities and stockholders' equity	<u>\$ 165,596</u>	<u>\$ 137,080</u>

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOW
(in thousands)

	Nine Months Ended September 30,	
	2021	2020
Net loss	\$ (54,926)	\$ (46,703)
Other non-cash items	7,080	10,365

Changes in working capital	(80)	(90)
Net cash used in operating activities	(47,926)	(36,428)
Net cash (used in) provided by investing activities	(4,557)	35,067
Net cash provided by financing activities	78,115	66,536
Effect of foreign exchange rate changes on cash and cash equivalents	—	(56)
Increase in cash and cash equivalents	25,632	65,119
Cash and cash equivalents, beginning of period	52,251	31,799
Cash and cash equivalents, end of period	77,883	96,918
Investments in marketable securities	74,054	21,378
Cash, cash equivalents and marketable securities, end of period	\$ 151,937	\$ 118,296

Conference Call and Webcast Today

Arbutus will hold a conference call and webcast today, Thursday, November 4, 2021 at 8:45 AM Eastern Time to provide a corporate update. You can access a live webcast of the call through the Investors section of Arbutus' website at www.arbutusbio.com. Alternatively, you can dial (866) 393-1607 or (914) 495-8556 and reference conference ID: 5035306.

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: 5035306.

About AB-729

AB-729 is an RNA interference (RNAi) therapeutic specifically designed to reduce all HBV viral proteins and antigens, including hepatitis B surface antigen, which is thought to be a key prerequisite to enable reawakening of a patient's immune system to respond to the virus. AB-729 targets hepatocytes using Arbutus' novel covalently conjugated N-acetylgalactosamine (GalNAc) delivery technology that enables subcutaneous delivery. Clinical data generated thus far has shown single- and multi-doses of AB-729 to be generally safe and well-tolerated while providing meaningful reductions in hepatitis B surface antigen and hepatitis B DNA.

About AB-836

AB-836 is a next generation oral hepatitis B virus (HBV) capsid inhibitor that interacts with HBV core protein, which in turn is required for viral replication. The current standard-of-care therapy for HBV is primarily nucleos(t)ide analogues that inhibit the viral polymerase and significantly reduce, but do not eliminate viral replication. AB-836 in combination with nucleos(t)ide analogues is designed to completely eliminate viral replication in infected cells by preventing the assembly of functional viral capsids. In addition, AB-836 has been shown to inhibit the replenishment of covalently closed circular DNA (cccDNA), the viral genetic reservoir which the virus needs to replicate itself.

About HBV

Hepatitis B is a potentially life-threatening liver infection caused by the hepatitis B virus (HBV). HBV can cause chronic infection which leads to a higher risk of death from cirrhosis and liver cancer. Chronic HBV infection represents a significant unmet medical need. The World Health Organization estimates that over 250 million people worldwide suffer from chronic HBV infection, while other estimates indicate that approximately 2 million people in the United States suffer from chronic HBV infection. Approximately 900,000 people die every year from complications related to chronic HBV infection despite the availability of effective vaccines and current treatment options.

About Arbutus

Arbutus Biopharma Corporation (Nasdaq: ABUS) is a clinical-stage biopharmaceutical company primarily focused on discovering, developing and commercializing a broad portfolio of wholly-owned assets with different modes of action to provide a cure for people with chronic hepatitis B virus (HBV) infection. The Company is advancing multiple product candidates with distinct mechanisms of action that suppress viral replication, reduce surface antigen and reawaken the immune system. Arbutus believes this three-prong approach is key to transforming the treatment and developing a potential cure for chronic HBV infection. Arbutus' HBV product pipeline includes RNA interference (RNAi) therapeutics, oral capsid inhibitors, oral compounds that inhibit PD-L1 and oral HBV RNA destabilizers. In addition, Arbutus has an ongoing drug discovery and development program directed to identifying orally active agents for treating coronaviruses (including COVID-19). For more information, 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 about our future development plans for our product candidates; the expected cost, timing and results of our clinical development plans and clinical trials with respect to our product candidates; our expectations and goals for our collaborations with third parties and any potential benefits related thereto; the potential for our product candidates to achieve success in clinical trials; our expected financial condition, including the anticipated duration of cash runways and timing regarding needs for additional capital; and our expectations regarding the impact of the COVID-19 pandemic on our business and clinical trials.

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 product 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; Arbutus and its collaborators may never realize the expected benefits of the collaborations; 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.

Contact Information

Investors and Media

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Corporate Presentation

November 4, 2021

NASDAQ: ABUS

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 market opportunity for HBV; Arbutus' ability to meet a significant unmet medical need; the sufficiency of Arbutus' cash and cash equivalents for the anticipated durations; the expected cost, timing and results of Arbutus' clinical development plans and clinical trials, including its clinical collaborations with third parties; the potential for Arbutus' product candidates to achieve their desired or anticipated outcomes; Arbutus' expectations regarding the timing and clinical development of Arbutus' product candidates, including its articulated clinical objectives; the timeline to a combination cure for HBV; Arbutus' coronavirus strategy; Arbutus' expectations regarding its technology licensed to third parties; and other statements relating to Arbutus' future operations, future financial performance, future financial condition, prospects or other future events.

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 including uncertainties and contingencies related to the ongoing COVID-19 pandemic. 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 that warrant future development of the tested drug candidate; changes in Arbutus' 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; the parties may never realize the expected benefits of the collaborations; 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, Quarterly Report on Form 10-Q and Arbutus' periodic disclosure filings which are available at www.sec.gov and at www.sedar.com. 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.

Investment Highlights

Significant Unmet Medical Need in HBV

Global HBV prevalence double that of HCV, **potential for larger market opportunity**

Goal of HBV Functional Cure

Undetectable HBV DNA and HBsAg delivered through finite duration treatment with a **combination of drugs with different modes of action**

Broad HBV Portfolio

HBV assets include:
RNAi
Capsid Inhibitors
PD-L1
HBV RNA Destabilizers

Coronavirus Research Initiative

Focused on direct acting antivirals targeting the **viral polymerase and protease**

Team with Antiviral Expertise & Proven Track Record

Applying knowledge gained from HIV and HCV success to **HBV and Coronaviruses**

16% Ownership in Genevant

Rights to potential future royalties and sublicense revenues for **LNP Technology**

Proven Leadership Team

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



William H. Collier

President and CEO



Michael J. Sofia, PhD

Chief Scientific Officer



Gaston Picchio, PhD

Chief Development Officer



David C. Hastings

Chief Financial Officer



Elizabeth Howard, PhD, JD

EVP, General Counsel and Chief Compliance Officer



Michael J. McElhaugh

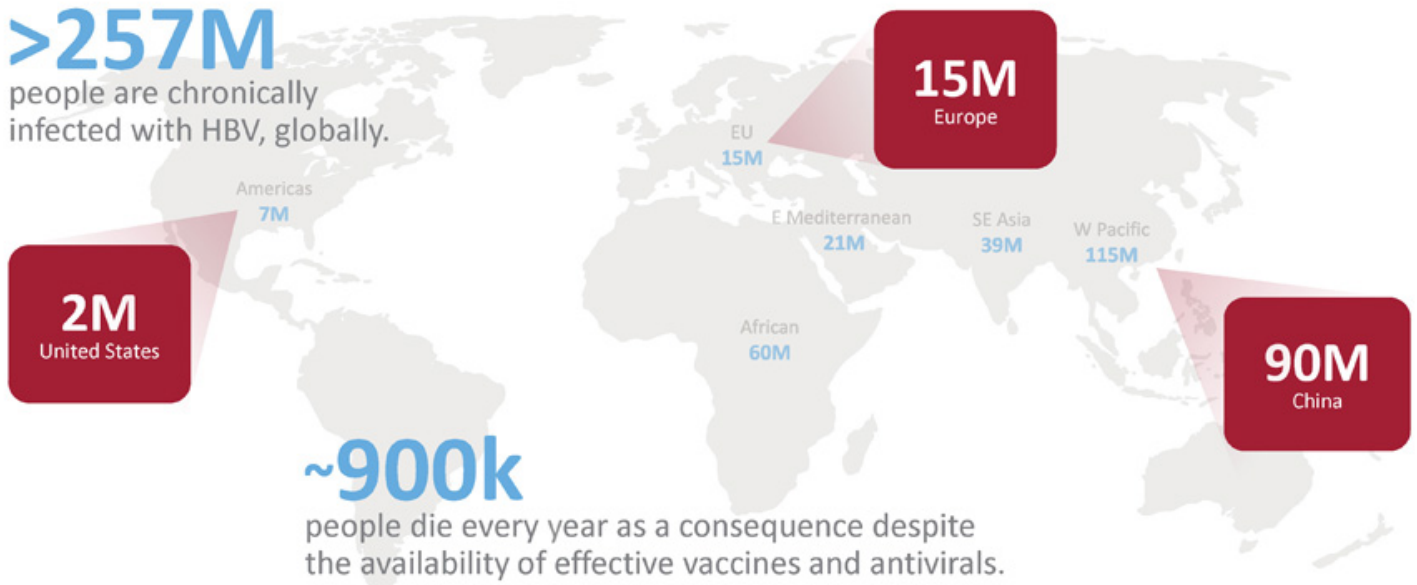
Chief Business Officer



HBV Presents a Significant Unmet Medical Need

>257M

people are chronically infected with HBV, globally.



~900k

people die every year as a consequence despite the availability of effective vaccines and antivirals.

Significant Opportunity to Improve HBV Cure Rates

HBV cures are achievable with today's SOC in **<5% of patients**. Sustained HBsAg and HBV DNA loss after end-of-treatment* is rare.

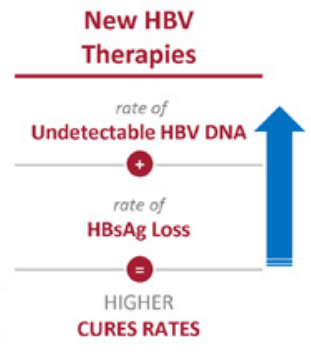
*undetectable HBsAg and HBV DNA 6 months after end-of-treatment accepted as a functional cure.



STANDARD OF CARE THERAPIES FOR CHRONIC HBV

	PegIFN	Entecavir	Tenofovir
Dosing Duration	48-weeks	Chronic	Chronic
HBV DNA Undetectable (<60-80 IU/ml)	7-19%	67-90%	76-93%
HBsAg Loss	~3-7%	~1-2%	~1-3%

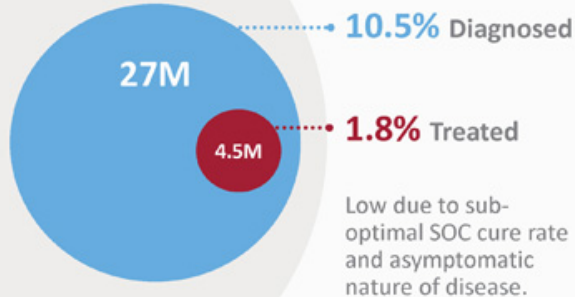
Achievable **HBV Cure Rates** with Current SOC



SOC: Standard Of Care | HBsAg: HBV Surface Antigen | PegIFN: Pegylated Interferon
 Source: EASL HBV Clinical Practice Guidelines, 2017 - Pegasys, PEG-Intron, Baraclude and Viread Package Inserts

Compelling Growth Opportunity in the **HBV Market**

257M
chronic HBV



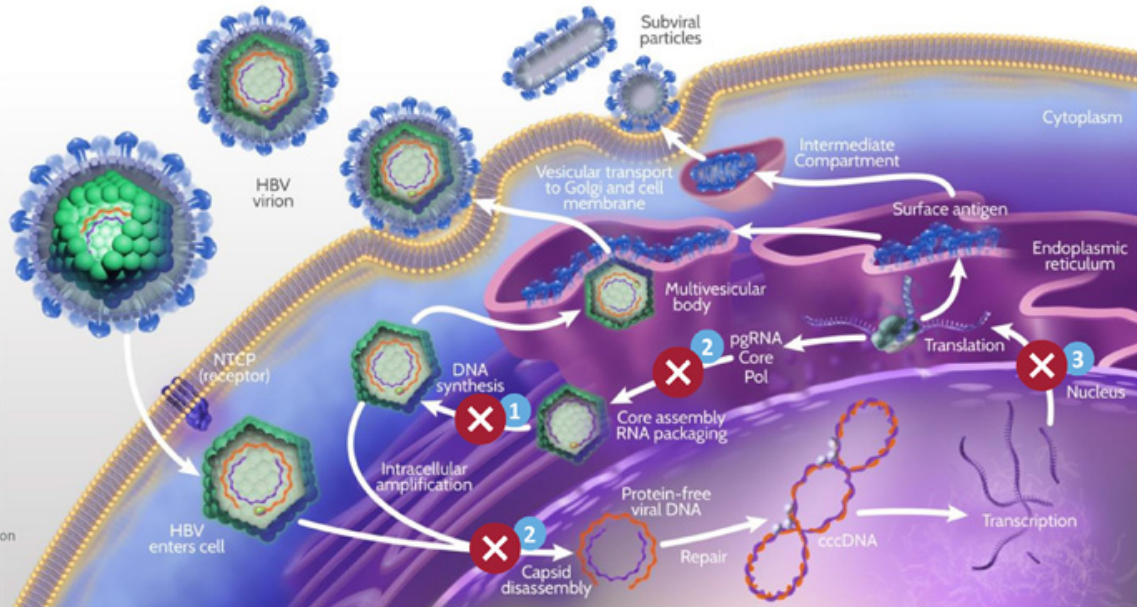
Low due to sub-optimal SOC cure rate and asymptomatic nature of disease.

An HBV curative regimen would substantially increase **diagnosis** and **treatment** rates to unlock significant **market growth opportunities**.

A Combination of Agents with Complementary MOA is Needed for HBV Cure

HBV lifecycle illustrates key points for intervention

1. Nucleoside Analogue
2. Capsid Inhibitor
3. RNAi & RNA Destabilizer



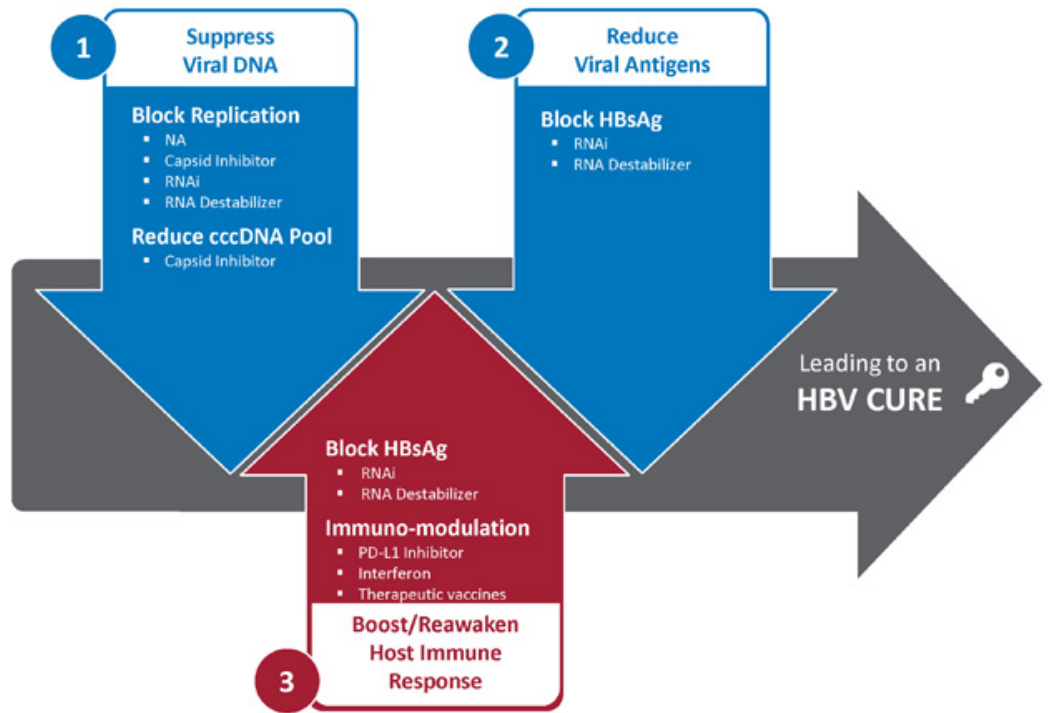
3-Prong Approach to Therapeutic Success

Suppress viral antigens

Reduce HBV DNA

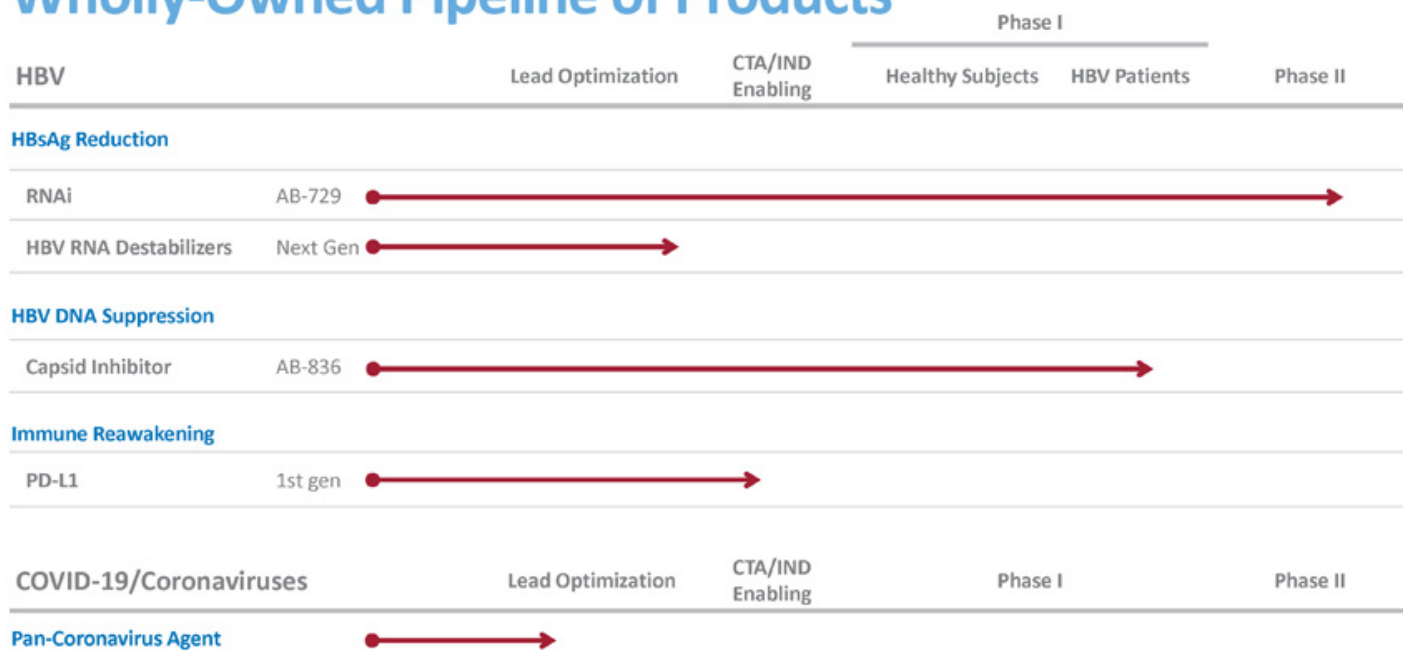
Boost host immune response

Therapeutic success will require a combination of agents with complementary MOAs



MOA: Mechanism of Action | NA: Nucleoside Analogue | HBsAg: HBV Surface Antigen

Wholly-Owned Pipeline of Products



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

Pan-genotypic activity across HBV genotypes

Demonstrated complementarity with capsid inhibitors

Actively targets the liver

Active against cccDNA derived and integrated HBsAg transcripts

Clean profile in long term preclinical safety studies



AB-729-001 Phase 1a/1b Trial

Part 1 & 2: Single-Ascending Dose Dosing Completed

	Healthy Subjects	cHBV Patients
Doses	60 mg / 180 mg / 360 mg	180 mg / 60 mg / 90 mg DNA-/ 90 mg DNA+
n=	6 per cohort	6 per cohort
Results	Up to 180 mg AB-729 was safe and well-tolerated	Single doses of AB-729 result in comparable mean HBsAg declines at week 12 followed by a sustained plateau phase

Part 3: Multiple Doses In cHBV Patients (n=7) - Ongoing

E: 60 mg Q4W
HBV DNA -

F: 60 mg Q8W
HBV DNA -

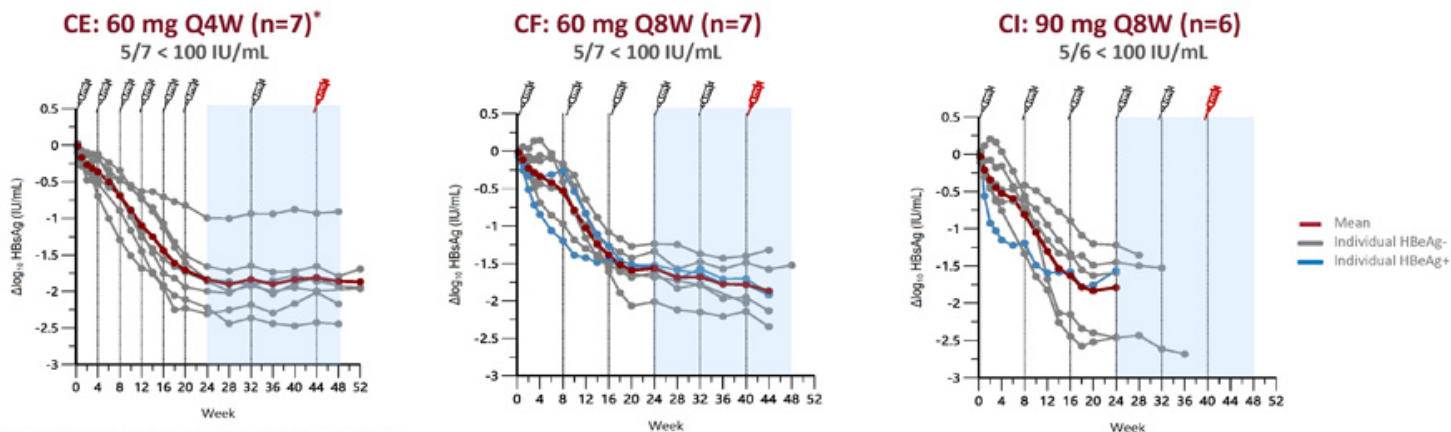
G: 90 mg Q8W
+ TDF
HBV DNA +

I: 90 mg Q8W
HBV DNA -

J: 90 mg Q12W
HBV DNA -

K: 90 mg Q8W
HBV DNA -,
HBeAg+

Repeat dosing of AB-729 60 mg and 90 mg Reduces HBsAg

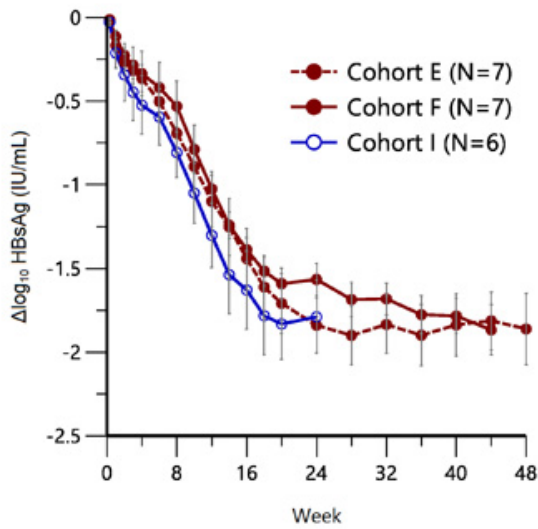


*Due to prolonged PD activity after single dose of AB-729 (Yuen, AASLD 2020), subjects switched to 60mg Q12W after Week 20

Key Findings:

- The magnitude of HBsAg suppression (1.8 log reduction) was similar across both doses explored
- 75% of patients achieved HBsAg <100 IU/mL
- HBsAg reduction is sustained over time

Mean HBsAg response similar regardless of AB-729 dose and dosing intervals to date



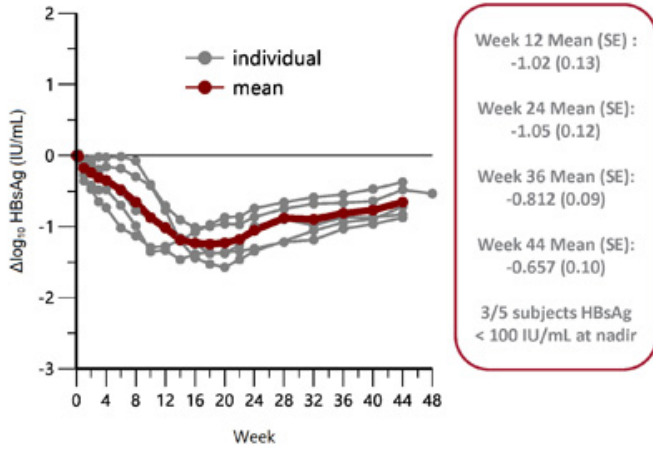
Mean (range) ΔHBsAg with repeat dosing of AB-729

Visit	Cohort E 60 mg Q4W [†]	Cohort F 60 mg Q8W	Cohort I 90 mg Q8W	p value between Cohorts
Week 16	-1.44 (-0.71 to -1.95)	-1.39 (-1.61 to -1.08)	-1.63 (-0.89 to -2.44)	p ≥ 0.4
Week 24	-1.84 (-0.99 to -2.31)	-1.57 (-1.24 to -2.01)	-1.79 (-1.22 to -2.46)	p ≥ 0.2
Week 32	-1.84 (-0.94 to -2.36)	-1.68 (-1.37 to -2.15)	---	p = 0.5
Week 40	-1.84 (-0.88 to -2.47)	-1.78* (-1.40 to -2.14)	---	p = 0.7
Week 44	-1.81* (-0.93 to -2.43)	-1.87* (-1.32 to -2.34) [N=6]	---	p = 0.8
Week 48	-1.89* (-0.91 to -2.44)	---	---	---

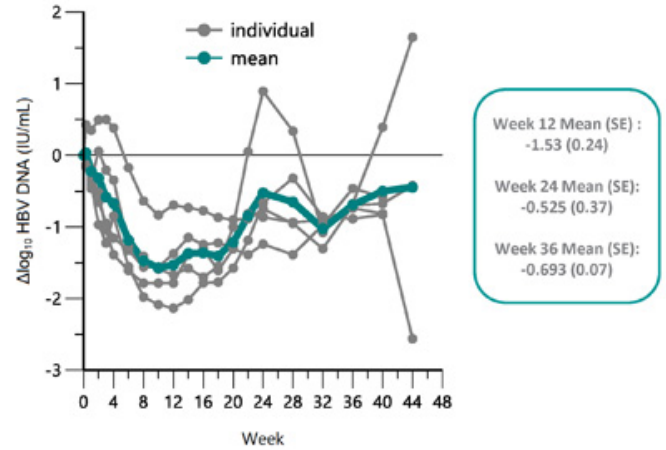
[†] subjects switched to AB-729 60 mg Q12W after Week 20 dose
 *Data updated since EASL 2021 ILC

90mg AB-729 Suppresses HBsAg and Reduces HBV DNA in HBV DNA+ CHB patients

Individual and mean change from baseline HBsAg
Single dose AB-729 90 mg
HBV DNA+ patients



Individual and mean change from baseline HBV DNA
Single dose AB-729 90 mg
HBV DNA+ patients



AB-729 Safe and Well Tolerated After Single and Repeat Doses

- No SAEs or discontinuations due to AEs
- No treatment-related Grade 3 or 4 AEs*
- No Grade 3 or 4 laboratory abnormalities*
 - Grade 1 and Grade 2 ALT elevations have decreased with continued treatment
- Injection site TEAEs were mild (erythema, pain, pruritis, bruising) or moderate (pain) and transient
- No clinically meaningful changes in ECGs or vital signs
- All patients in cohort E and F consented to an additional 6 months of dosing

Key Takeaways

- Clinical data supports evaluating AB-729 60 mg every 8 weeks in Phase 2a combination trials
- Long-term dosing with AB-729 resulted in 75% of patients reaching <100 IU/mL of HBsAg, a clinically relevant threshold which could inform when to stop all therapies
- Preliminary data suggest that long-term suppression of HBsAg with AB-729 results in increased HBV-specific immune response
- AB-729 was safe and well tolerated through 48 weeks of dosing

Next Steps – Combine AB-729 with Different Compounds in Phase 2a to Inform Future Clinical Trials

- First patient dosed in a Phase 2a trial in combination with ongoing NA therapy and short courses of Peg-IFN α -2a in cHBV patients
- Three Phase 2a proof-of-concept clinical collaborations are on-going or expected to initiate shortly to accelerate key combination data
 - Assembly Biosciences, Inc. - Phase 2a enrolling patients
 - Antios Therapeutics, Inc. - collaboration announced in Q2 2021, additional cohort with AB-729 expected to be added to clinical trial in 2H 2021
 - Vaccitech plc - collaboration announced in Q3 2021, clinical trial expected to initiate in early 2022

Phase 2a POC clinical trial

AB-729 in combination with
ongoing NA therapy and
short courses of Peg-IFN α -
in CHB patients



n=40 stably NA-suppressed, HBeAg negative, non-cirrhotic CHB patients

After a 24-week dosing period of AB-729 (60 mg every 8 weeks), patients will be randomized into one of 4 groups:

- A1: AB-729 + NA + weekly Peg-IFN α -2a for 24 weeks (n=12)
 - A2: NA + weekly Peg-IFN α -2a for 24 weeks (n=12)
 - B1: AB-729 + NA + weekly Peg-IFN α -2a for 12 weeks (n=8)
 - B2: NA + weekly Peg-IFN α -2a for 12 weeks (n=8)
-

After completion of the assigned Peg-IFN α -2a treatment period, all patients will remain on NA therapy for the initial 24-week follow up period, and then will discontinue NA treatment if treatment stopping criteria are met

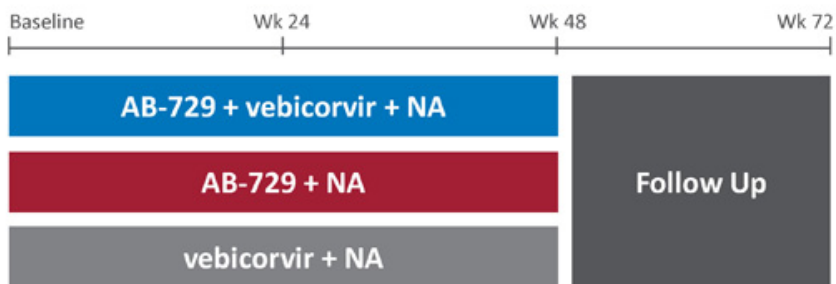
AB-729 Clinical Collaboration



Provides accelerated
**AB-729 combination
proof-of-concept (POC)**
with Assembly's capsid
inhibitor and a NA



NASDAQ: ABUS
www.arbutusbio.com



Phase 2 Clinical Trial enrolling

n= ~60 virologically-suppressed patients with chronic HBV infection

Equal sharing of expertise and costs for this POC open-label trial

NA: Nucleoside Analogue

AB-729 Clinical Collaboration



POC Phase 2a clinical trial

Evaluating AB-729 in combination with Vaccitech's immunotherapeutic, VTP-300, and a NA



Evaluate safety, pharmacokinetics, immunogenicity and anti-viral activity of triple combination - AB-729, VTP-300 and an NA compared to double combinations of AB-729 with an NA and VTP-300 with an NA

Expected to file CTA in the second half of 2021 and initiate clinical trial in early 2022

Full rights retained by the Companies of their respective product candidates and all costs will be split equally

Assuming positive results parties intend to undertake a larger Phase 2b clinical trial

AB-729 Clinical Collaboration



POC Phase 2a clinical trial

AB-729 in combination with Antios' proprietary active site polymerase inhibitor nucleotide (ASPIN), ATI-2173, and a NA



Evaluate AB-729, ATI-2173 and a NA in a single cohort in the ongoing Antios Phase 2a ANTT201 clinical trial

Expected to initiate in the second half of 2021

Trial cohort will include 10 patients with chronic HBV assigned 8:2 to active drug or matching placebos; in combination with an NA

Antios responsible for costs and Arbutus responsible for supply of AB-729

AB-836

Next- Generation Capsid Inhibitor

Potential for increased efficacy and enhanced resistance profile relative to earlier generation capsid inhibitors



NASDAQ: ABUS
www.arbutusbio.com

Novel chemical series differentiated from AB-506 and other competitor compounds in the Class II capsid inhibitor space

Leverages a novel binding site within the core protein dimer-dimer interface

Improved intrinsic potency with $EC_{50} \leq 10$ nM

Active against NA resistant variants

Potential to address known capsid resistant variants T33N and I105T

Provides the potential for low dose and wide therapeutic window

Demonstrates high liver concentrations in multiple species

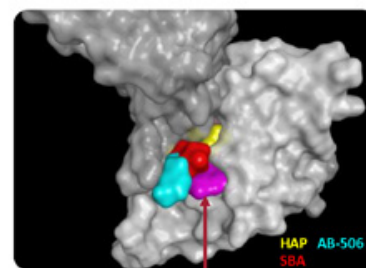
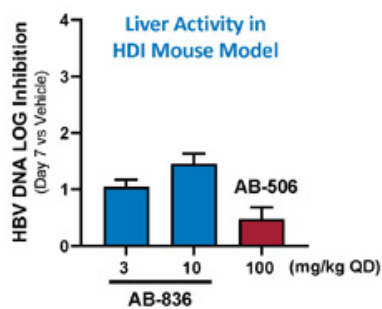
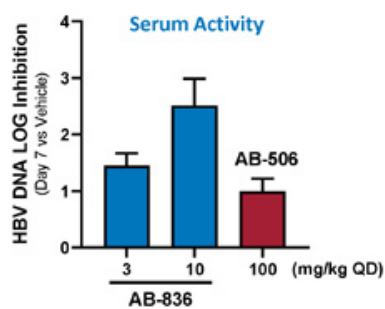
Projected to be once daily dosing

Pangenotypic

Combinable with other MOA agents

AB-836: Next Generation Capsid Inhibitor

Compound	HBV DNA / 1 ^o Mechanism				cccDNA Formation / 2 ^o Mechanism	Human Serum Shift
	HepDE19 (EC ₅₀ μM)	HBV infected PHH (EC ₅₀ μM)	HBV infected HepG2-NTCP-C4 (EC ₅₀ μM)	Core I105T Mutation (EC ₅₀ μM)	HBV infected HepG2-NTCP-C4 (HBsAg EC ₅₀ μM)	(FC in EC ₅₀ in 40% Human Serum)
AB-506	0.077	0.032	0.101	1.26	1.430	6x
AB-836	0.010	0.002	0.012	0.118	0.196	2x

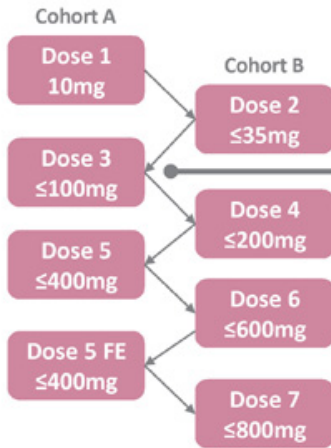


Unique Binding Site

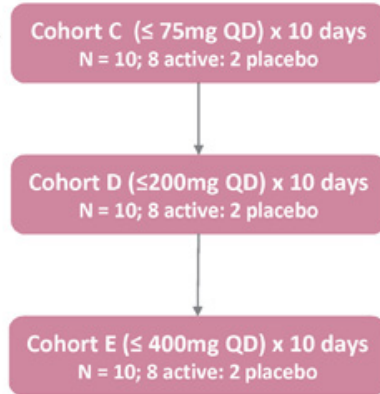
AB-836-001 Trial

Part 1: Single Ascending Dose In Healthy Subjects

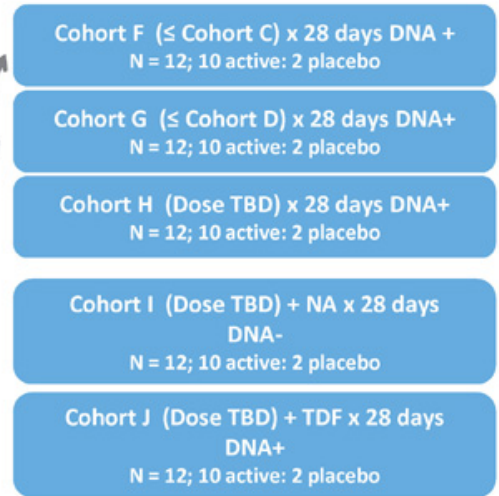
Alternating Cohorts A and B
n=8/cohort; 6 active: 2 placebo



Part 2: Multiple Ascending Dose in Healthy Subjects



Part 3: Multiple Doses In Chronic Hepatitis B Patients



Next Gen Oral RNA Destabilizer Program

Offers a novel mechanism of action to reduce HBsAg and other viral proteins and viral RNA

Continuing active research and development of a next generation small molecule

We believe this approach offers potential for an oral HBsAg reducing agent and all oral combination therapy

Oral PD-L1 Inhibitor Program for HBV Immune Reactivation

Rationale

- PD-L1 expressed by liver parenchymal and non-parenchymal cells
- PD-L1 upregulated during viral hepatitis
- PD-1 upregulated on HBV-specific T- and B-cells
- Inhibition in combination with other DAAs leads to sustained viral suppression in preclinical models of HBV

Small-Molecule Inhibitor Approach

- Allows controlled checkpoint blockade
- Enables oral dosing
- Designed to reduce systemic safety issues seen with Abs

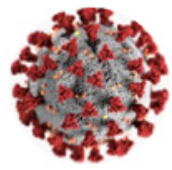
Current Lead Candidates

- Block PD-L1/PD1 interaction at sub-nM concentrations
- Activate HBV-specific immune responses in T-cells from CHB patients *in vitro*
- Novel MOA identified
- Demonstrate a robust checkpoint mediated *in vivo* effect

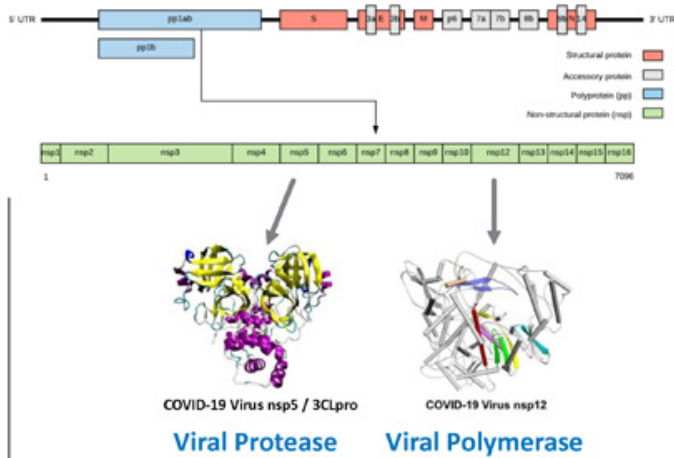
Lead PD-L1 candidate selected and moving forward into IND-Enabling studies

Coronavirus Strategy

Leveraging our proven expertise and capabilities in antiviral drug discovery and development



+RNA Virus
31 kb Genome
nsp5 protease & nsp12 polymerase
 essential enzymes for replication



Long term commitment
Pan-coronavirus focused
Small Molecule Direct-Acting Antivirals

Directed Effort

- nsp12 Viral Polymerase - nucleos(t)ides
- nsp5 Main Viral Protease - de novo design

X-Chem/Proteros

- Proprietary DEL library screening and structural biology for M^{PRO} inhibitor discovery

2021 Key Objectives

Cash balance of \$151.9M as of September 30, 2021, cash runway into Q2 2023

Objective	Anticipated Timing 2021
Additional data from AB-729 90 mg single-dose in HBV DNA positive patients	1H ✓
Initiate a Phase 2 combination clinical trial to evaluate AB-729 in combination with Assembly Biosciences' lead core/capsid inhibitor candidate vebicorvir (VBR) and an NrtI	1H ✓
Initiate a Phase 1a/1b clinical trial of AB-836, our next-generation oral capsid inhibitor	1H ✓
Additional data from AB-729 60 mg multi-dose (4 wk / 8 wk dosing intervals)	1H / 1H ✓
Initial data from AB-729 90 mg multi-dose (8 wk / 12 wk dosing intervals)	1H ✓ / 2H
Initial data from AB-729 90 mg multi-dose (8 wk dosing interval) in HBV DNA positive patients	2H
Initiate two Phase 2a combination clinical trials in HBV patients; both including AB-729, with one or more approved or investigational agents	2H
Initial Phase 1a/1b data for AB-836	2H

Thank You

NASDAQ: ABUS

www.ArbutusBio.com

