

**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): December 1, 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 8.01. Other Events.

On December 1, 2021, Arbutus Biopharma Corporation (the "Company") issued a press release announcing preliminary data from its on-going Phase 1a/1b clinical trial demonstrating that its next generation capsid inhibitor, AB-836, is generally safe and well-tolerated in both healthy subjects and patients with cHBV and provides robust antiviral activity. A copy of the press release is filed herewith as Exhibit 99.1 hereto and is incorporated by reference herein.

On December 1, 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 December 1, 2021
99.2	Corporate Presentation dated December 1, 2021
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

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: December 1, 2021

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

Preliminary Data Shows that Arbutus' Capsid Inhibitor, AB-836 is Generally Safe and Well-Tolerated and Provides Robust Antiviral Activity

WARMINSTER, Pa., Dec. 01, 2021 (GLOBE NEWSWIRE) -- Arbutus Biopharma Corporation (Nasdaq: ABUS), a clinical-stage biopharmaceutical company primarily focused on discovering, developing and commercializing a broad portfolio of assets with different modes of action to provide a cure for people with chronic hepatitis B virus (cHBV) infection and to treat coronaviruses (including COVID-19), today announced preliminary data from its on-going Phase 1a/1b clinical trial demonstrating that its next generation capsid inhibitor, AB-836, is generally safe and well-tolerated in both healthy subjects and patients with cHBV and provides robust antiviral activity.

Gaston Picchio, Ph.D., Chief Development Officer at Arbutus, commented, "These preliminary results demonstrate that AB-836 is generally safe and well-tolerated in both single- and multiple-doses in healthy subjects and at doses up to 100mg administered once daily for 28 days in cHBV patients. In addition, the mean Day 28 drop in HBV DNA observed to date with a relatively low dose suggests that AB-836 is a very potent inhibitor of HBV replication making it an ideal candidate to potentially completely suppress viral replication. We look forward to continuing to evaluate the safety and efficacy of AB-836 in Part 3 of this trial."

The Phase 1a/1b clinical trial is designed to evaluate the safety, tolerability, pharmacokinetics and antiviral activity of single and multiple doses of AB-836 in healthy subjects and patients with cHBV. The trial consists of three parts. Part 1 evaluated alternating single doses of AB-836 or placebo ranging from 10mg to 175mg in a fasted or fed state in healthy subjects. Part 2 evaluated multiple ascending doses of 50mg, 100mg or 150mg of AB-836 or placebo once daily for 10 days in healthy volunteers. Part 3, which is still on-going, is currently randomizing HBV DNA positive cHBV patients who are HBeAg positive or negative to receive either 50mg or 100mg of AB-836 or placebo once daily for 28 days.

In Parts 1 and 2, a total of 47 healthy subjects were enrolled and dosed. There were no deaths or serious adverse events (SAEs) observed. One healthy subject that received 50mg once daily discontinued after treatment on day 13 due to an adverse event (AE) of agitation. All but three AEs were mild (Grade 2 headache, agitation and bronchitis), and only one was assessed as related to AB-836 (Grade 1 rash). There were no clinically significant abnormalities in clinical laboratory tests, ECGs, vital signs or physical exams noted.

In Part 3, 16 cHBV patients have been dosed thus far with enrollment continuing. Among those who received 100mg once daily for the full 28 days (n=4), robust antiviral activity was observed at Day 28 of treatment with a mean (SE) \log_{10} change from baseline of -3.1 (0.5). There have been no deaths or AEs. One cHBV patient that received 100mg of AB-836 had a transient increase in ALT from baseline Grade 1 to Grade 3 at a single visit that resolved with continued dosing and had no associated symptoms. There were no clinically significant abnormalities in ECGs, vital signs or physical exams noted.

Arbutus is continuing to enroll and dose cHBV patients in Part 3 of the clinical trial and anticipates presenting additional data at a medical conference in 2022.

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 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; and the potential for our product candidates to achieve success in 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, 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

December 1, 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



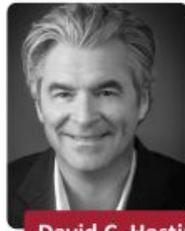
Michael J. Sofia, PhD

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

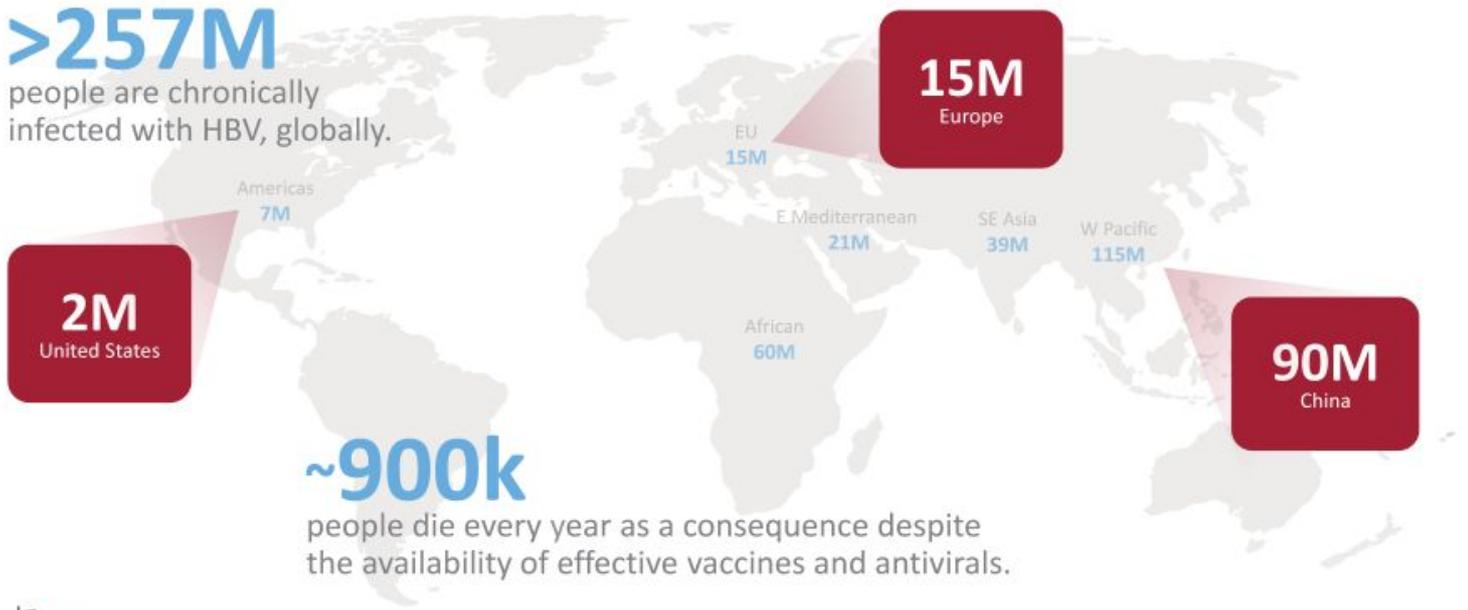
Chief Business Officer



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.



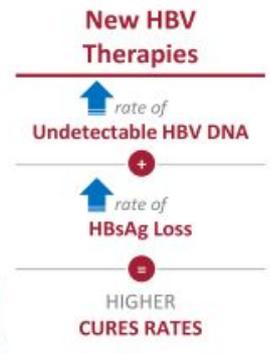
NASDAQ: ABUS
www.arbutusbio.com

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%

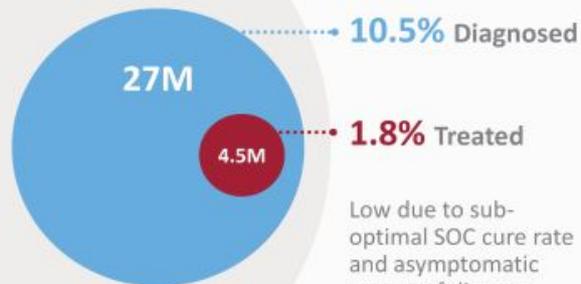
Achievable **HBV Cure Rates** with Current SOC

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



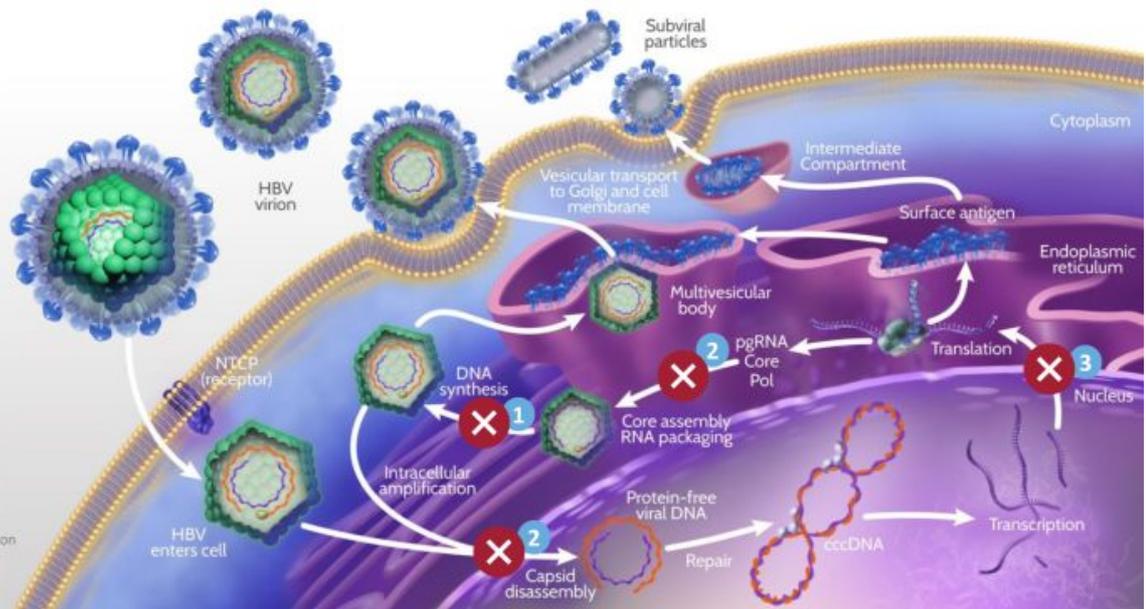
Low due to sub-optimal SOC cure rate and asymptomatic nature of disease.

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



MOA: Mechanism of Action
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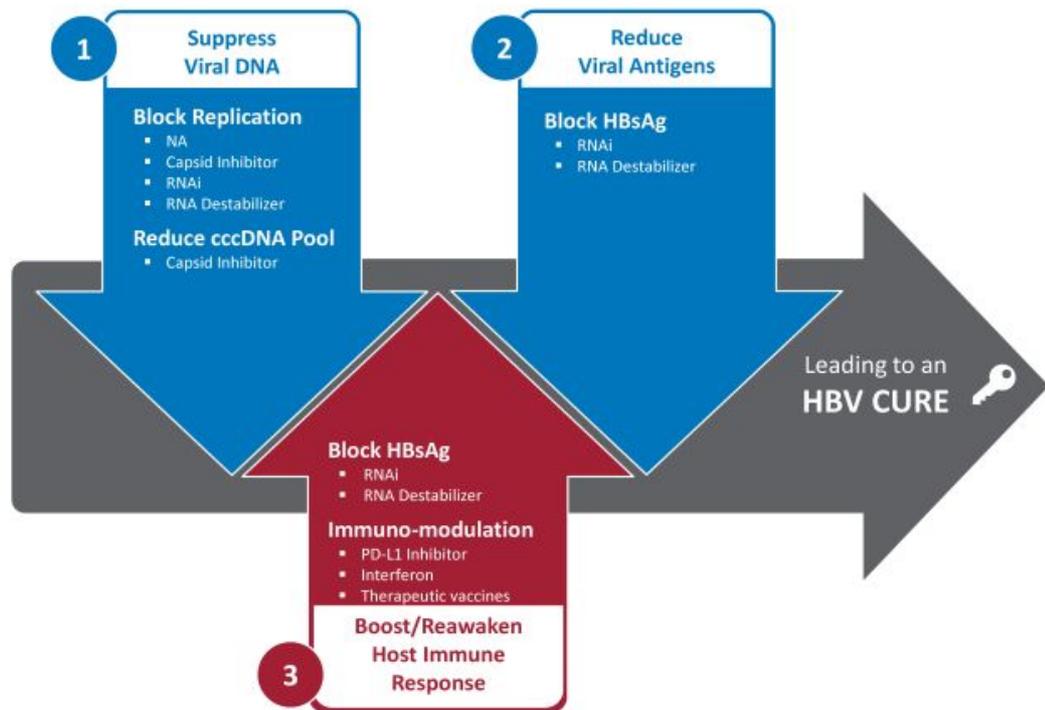
3-Prong Approach to Therapeutic Success

Suppress viral antigens

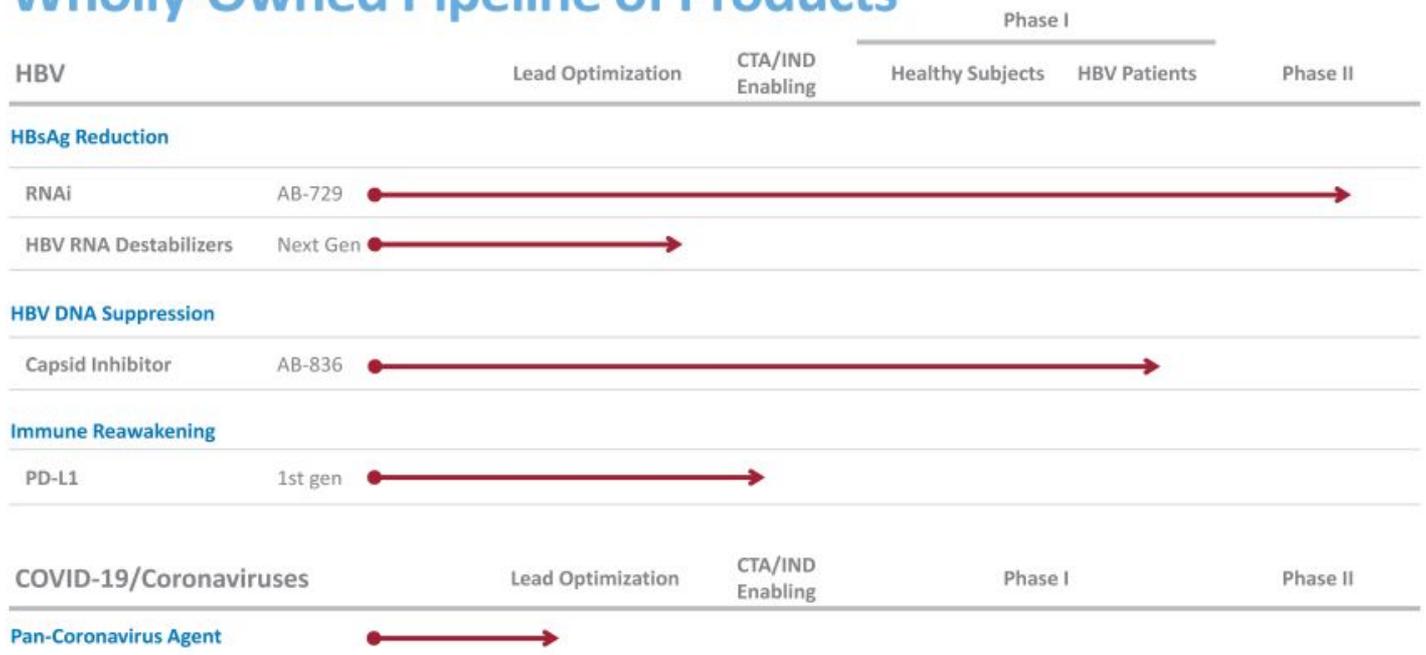
Reduce HBV DNA

Boost host immune response

Therapeutic success will require a combination of agents with complementary MOAs



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

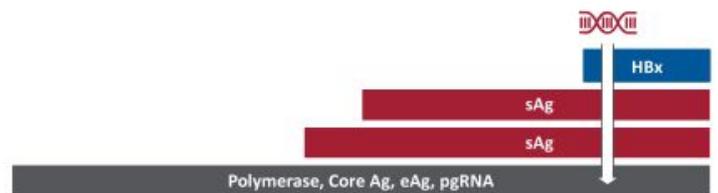
Pan-genotypic activity across HBV genotypes

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



Clinical Trial Key Takeaways

- Clinical data continues to support evaluating AB-729 60 mg every 8 weeks in Phase 2a combination trials
- Long-term dosing with AB-729 resulted in 74% of patients reaching <100 IU/mL of HBsAg, a clinically relevant threshold which could inform when to stop all therapies
 - HBsAg suppression at levels of <100 IU/mL maintained up to 28 weeks off AB-729 treatment
- Preliminary data suggest that long-term suppression of HBsAg with AB-729 results in increased HBV-specific immune response*
- AB-729 monotherapy (90 mg single-dose) resulted in robust HBsAg and HBV DNA declines in HBV DNA + patients
- AB-729 was safe and well-tolerated through 40-48 weeks of dosing

AB-729-001 Phase 1a/1b Clinical 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+ only

Baseline Characteristics

Baseline Measure [#]	HBV DNA-				HBV DNA+
	Cohort E [‡] (N=7)	Cohort F (N=7)	Cohort I (N=6) [^]	Cohort J (N=7)	Cohort G (N=7)
Age in years, mean (range)	45.1 (33 – 63)	44.0 (31 – 59)	45.7 (38 – 54)	44.3 (35 – 61)	43.9 (34 – 50)
Male gender, n (%)	4 (57%)	4 (57%)	4 (67%)	5 (71%)	3 (43%)
BMI, mean (SD)	27.7 (5.0)	23.7 (2.2)	25.5 (3.1)	28.7 (4.8)	23.8 (4.0)
Race, n (%)					
Asian	1 (14%)	5 (71%)	5 (83%)	4 (57%)	6 (86%)
Black	0	1 (14%)	0	0	0
White	6 (86%)	1 (14%)	1 (17%)	3 (43%)	1 (14%)
ALT (U/L), mean (SD)	22.4 (10.5)	23.4 (15.2)	26.0 (10.2)	20.1 (7.2)	32.7 (15.8)
HBV eAg negative, n (%)	7 (100%)	6 (71%) [°]	5 (83%)	4 (57%)	7 (100%)
HBsAg (IU/mL), mean (range)	5,372 (584 – 11,761)	5,354 (667 – 18,605)	4,691 (338 – 19,017)	6,911 (309 – 25,345)	1,818 (277 – 4,723)

[#] Genotype not determined; [‡] Subjects switched to AB-729 60 mg Q12W for the extension phase; [^] N = 6 due to one subject meeting exclusion criteria on Day 1 and a replacement subject receiving an incorrect dose on Day 1; both entered follow up and were excluded from the analysis; [°] One subject counted as HBeAg negative was identified as "HBeAg borderline" (baseline HBeAg = 0.18 IU/mL, LLOQ = 0.11 IU/mL)

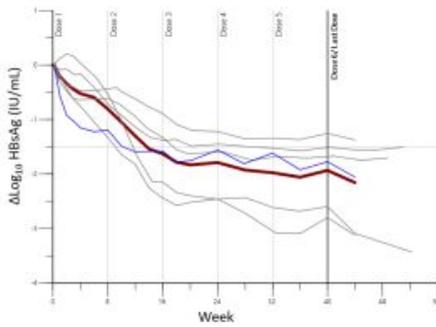
Mean (SE) Baseline HBsAg Response Similar Regardless of AB-729 Dose and Dosing Intervals to Date

Visit	HBV DNA-				HBV DNA+
	Cohort E 60mg Q4W [†] (n=7)	Cohort F 60mg Q8W (n=7)	Cohort I 90mg Q8W (n=6)	Cohort J 90mg Q12W (n=7)	Cohort G 90mg Q8W (n=7)
Baseline	3.51 (0.20)	3.53 (0.17)	3.36 (0.23)	3.37 (0.28)	3.14 (0.14)
Week 12	-1.10 (0.15)	-1.02 (0.11)	-1.30 (0.19)	-1.06 (0.31)	-1.56 (0.32)
Week 24	-1.84 (0.16)	-1.57 (0.09)	-1.79 (0.22)	-1.56 (0.25)	-1.82 [‡] (0.29)
Week 40	-1.84 (0.19)	-1.78 (0.10)	-1.93 (0.25)	-1.89 [‡] (0.35)	-2.03 [‡] (0.33)
Week 44	-1.81 (0.17)	-1.88 (0.13)	-2.16 (0.31)	-1.86 [‡] (0.38)	---
Week 48	-1.89 (0.18)	-1.90 (0.14)	---	---	---
Off Treatment (# weeks post last dose)					
Week 16	-1.74 (0.20)	-1.76 (0.19)	---	---	---
Week 20	-1.61 (0.20)	-1.55 [*] (0.28)	---	---	---
Week 24	-1.54 (0.19)	---	---	---	---

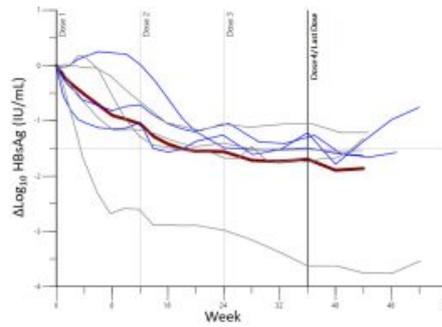
NOTE: Mean (SE) values presented only if n>3; there are no statistically significant differences between cohorts (data not shown); *n=5; [†]n=6, one patient in Cohort J chose not to extend treatment; [‡]6 of 7 patients had HBV DNA <LLOQ by Week 8, the 7th patient became <LLOQ at Week 16; [‡]n=6
Data Presented at AASLD 2021

AB-729 dosed at 90mg Q8W or Q12W Reduces HBsAg in both DNA- and DNA+ Patients

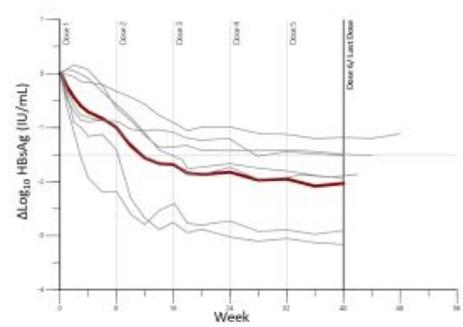
Cohort I: 90mg Q8W DNA- (n=6)
6/6 < 100 IU/mL*



Cohort J: 90mg Q12W DNA- (n=7)
4/7 < 100 IU/mL*



Cohort G: 90mg Q8W DNA+ (n=7)
5/7 < 100 IU/mL*



*at time of last visit

Key Findings:

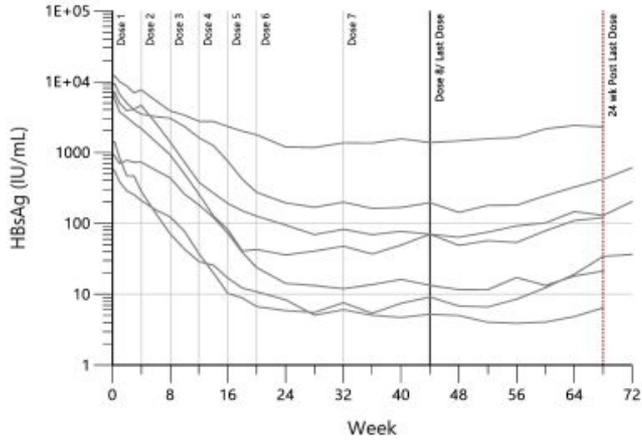
- The magnitude of HBsAg suppression (1.8-2.0 log reduction at wk 40) was similar across both dosing intervals
- Some patients achieved HBsAg <100 IU/mL
- HBsAg reduction is sustained over time

— Mean
— Individual HBeAg-
— Individual HBeAg+

HBsAg Suppression at levels <100 IU/mL Maintained up to 28 Weeks Off AB-729 Treatment

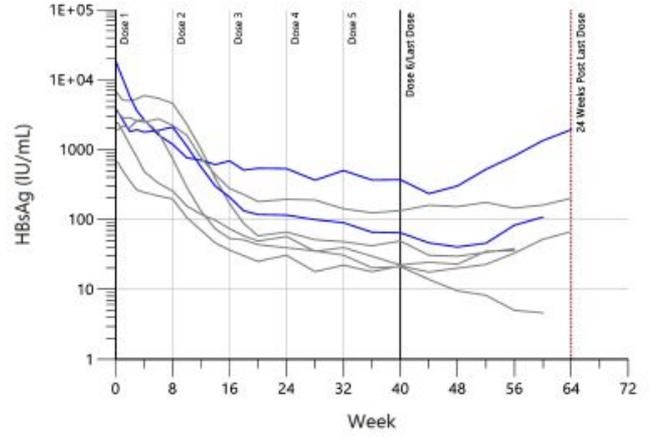
Cohort E

AB-729 60 mg every 4 Wks[†]
HBV DNA- patients



Cohort F

AB-729 60 mg every 8 Wks
HBV DNA- patients



[†] patients switched to AB-729 60 mg Q12W after Week 20 dose
*Data presented at AASLD 2021

— Individual HBeAg-
— Individual HBeAg+

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

- No treatment-related SAEs or discontinuations due to AEs
- No treatment-related Grade 3 or 4 AEs*
- No treatment-related Grade 3 or 4 laboratory abnormalities*
 - Grade 1 and Grade 2 ALT elevations have improved or stabilized with continued treatment
- Injection site TEAEs were mostly mild (erythema, pain, bruising, pruritis)
- No clinically meaningful changes in ECGs or vital signs
- All but 1 patient to date has consented to an additional 6 months of dosing in the Extension period

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 -2a 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

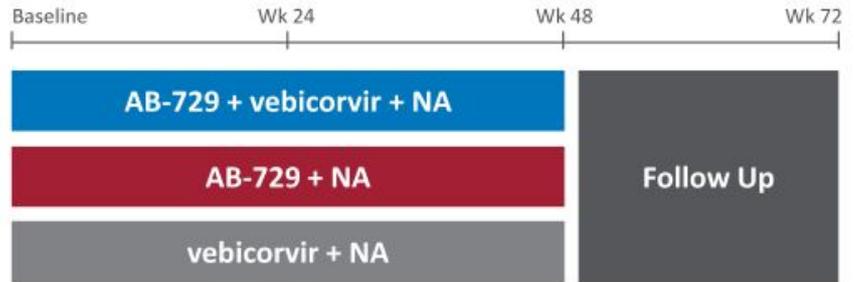
AB-729 Clinical Collaboration



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

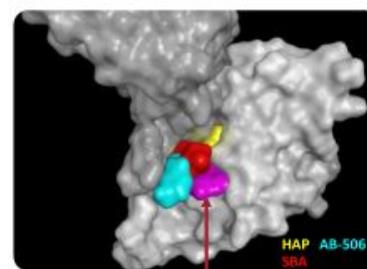
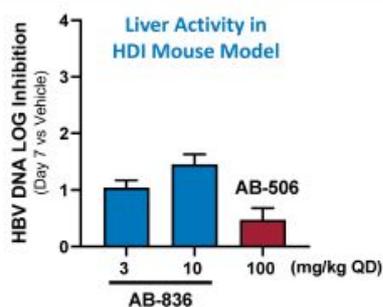
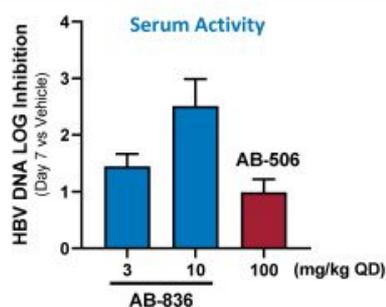
Projected to be once daily dosing

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

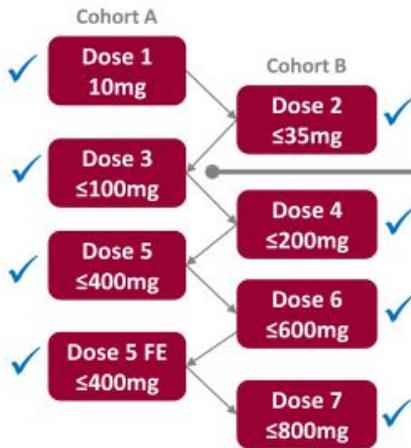


Unique Binding Site

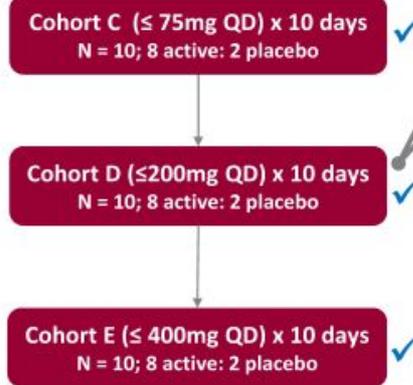
AB-836-001 Phase 1a/1b Clinical Trial

Part 1: Single Ascending Dose In Healthy Subjects

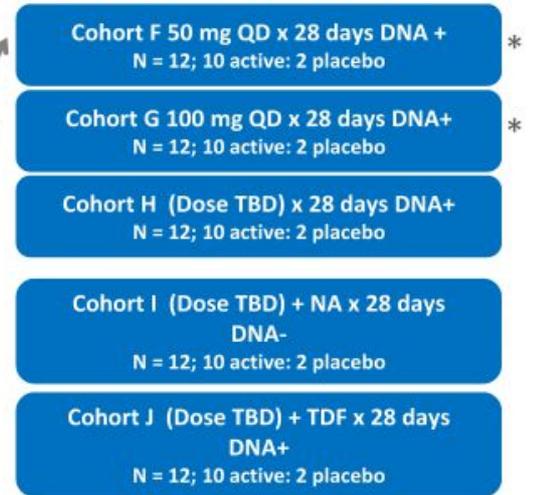
Alternating Cohorts A and B
n=8/cohort; 6 active: 2 placebo



Part 2: Multiple Ascending Dose in Healthy Subjects



Part 3: Multiple Doses In Chronic Hepatitis B Patients



AB-836 Phase 1a/1b Clinical Trial Preliminary Data

Parts 1 & 2: Single and multi-doses of AB-836 in healthy subjects

- **Safety:**
 - No deaths or SAEs
 - 1 subject (50mg once daily) discontinued on day 13 due to AE of agitation
 - All but 3 AEs were mild (Grade 2 headache, agitation and bronchitis), one assessed as drug related (Grade 1 rash)
 - No clinically significant abnormalities in clinical laboratory tests, ECGs, vital signs or physical exams noted.

Part 3: 50mg and 100mg of AB-836 once daily for 28 days in patients with HBV

- **Safety:**
 - No deaths or AEs
 - 1 patient had transient increase in ALT from baseline Grade 1 to Grade 3 that resolved with continued dosing
 - No clinical abnormalities in ECGs, vital signs or physical exams
- **Efficacy (Cohort G - 100 mg QD):**
 - Provides robust antiviral activity - mean (SE) log₁₀ change from baseline of -3.1 (0.5) at Day 28 (n=4)

Part 3 of the trial continues to enroll 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

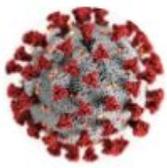
Current Lead Candidates

- 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

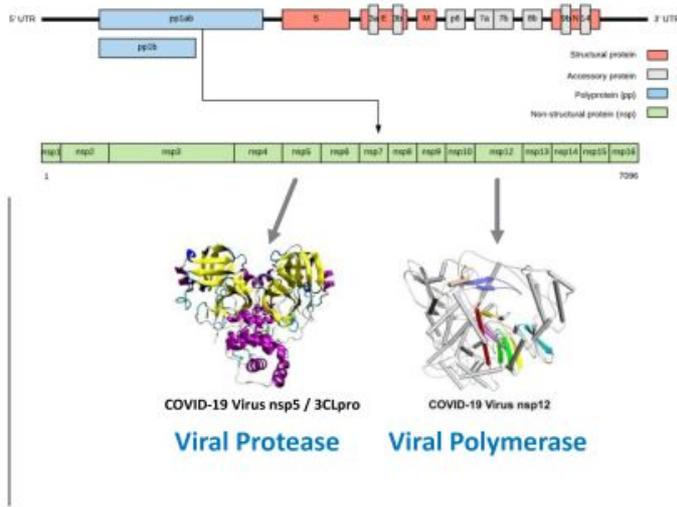
Lead PD-L1 candidate selected and moving forward into IND-Enabling studies

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

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