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): March 3, 2022

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 \Box

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 March 3, 2022, Arbutus Biopharma Corporation (the "Company") issued a press release announcing its financial results for the fourth quarter and year ended December 31, 2021 and certain other information. A copy of the press release is furnished herewith as Exhibit 99.1 hereto and is incorporated by reference herein.

Item 8.01. Other Events.

On March 3, 2022, 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>
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<u>99.1</u>	Press release dated March 3, 2022
<u>99.2</u>	Corporate Presentation dated March 3, 2022
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: March 3, 2022

By: <u>/s/ David C. Hastings</u> David C. Hastings Chief Financial Officer

Arbutus Reports Fourth Quarter and Year End 2021 Financial Results and Provides Corporate Update

Anticipate reporting data from four clinical trials in chronically infected HBV patients in 2022

Expected to complete IND-enabling studies for two oral compounds (PD-L1 inhibitor AB-101 and RNA destabilizer AB-161) to treat HBV in the second half of 2022

Anticipate advancing an oral compound that inhibits the SARS-CoV-2 nsp5 main protease into IND enabling studies in the second half of 2022

Arbutus and Genevant Sciences filed patent infringement lawsuit against Moderna

Conference Call and Webcast Today at 8:45 AM ET

WARMINSTER, Pa., March 03, 2022 (GLOBE NEWSWIRE) -- Arbutus Biopharma Corporation (Nasdaq: ABUS), a clinical-stage biopharmaceutical company leveraging its extensive virology expertise to develop novel therapeutics that target specific viral diseases, today reports its fourth quarter and year end 2021 financial results and provides pipeline updates.

"2021 was a transformative year for Arbutus as we greatly expanded our development efforts in Hepatitis B and coronavirus infections, including SARS-CoV-2," said William Collier, Arbutus' President and Chief Executive Officer. "We formed strategic and clinical partnerships that allowed us to explore several combination therapies with AB-729, our RNAi therapeutic, as a potential cornerstone agent in a functional cure for Hepatitis B, expand the reach of AB-729 to greater China and broaden our pipeline to include programs targeting coronaviruses. In addition, we have expanded our preclinical programs in HBV with our oral PD-L1 inhibitor, AB-101, and our oral RNA destabilizer, AB-161, both of which are expected to complete IND-enabling studies this year. Multiple key clinical trial data read-outs expected later this year for AB-729 and AB-836 will inform our go-forward clinical and regulatory strategy for HBV Phase 2b development."

Pipeline Update

AB-729 (RNAi Therapeutic)

- Arbutus is currently dosing patients in the last cohort of its Phase 1a/1b clinical trial to evaluate the safety and tolerability of AB-729 in patients with chronic Hepatitis B (cHBV) infection (AB-729-001 Trial). Data observed to-date show that AB-729 continues to reduce HBsAg across all doses and dosing intervals with a favorable safety and tolerability profile. Additionally, long term dosing of AB-729 has increased HBV-specific immune responses in some patients.
- The Company intends to present updated and new on-treatment data on multiple cohorts of patients included in the AB-729-001 Trial, as well as long-term follow-up data for patients in the AB-729-001 Trial who completed treatment and have discontinued AB-729 and standard-of-care nucleos(t)ide analogues (NA) therapy at a medical conference this year.
- In-line with the Company's strategy to combine multiple therapies that target different points of the viral replication cycle to develop a curative treatment regimen for cHBV, Arbutus is currently enrolling patients in its Phase 2a randomized, open-label, proof-of-concept clinical trial designed to evaluate the safety and tolerability of AB-729 in combination with ongoing NA therapy and short courses of PEG-IFNα-2a in 40 patients with cHBV infection. The Company is expecting initial data from this clinical trial in the second half of 2022.
- Also, in line with the Company's strategy, Arbutus has 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 (ASPIN), respectively, in patients with cHBV infection.
 - Enrollment is on-going in the Phase 2a 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 the second half of 2022.
 - Arbutus is on-track to initiate a triple combination Phase 2a clinical trial in the first half of 2022 to evaluate AB-729, combined with VTP-300, Vaccitech's therapeutic vaccine and an NA.
 - Enrollment is complete in a cohort of patients in Antios' Phase 2a clinical trial evaluating AB-729, ATI-2173, Antios' ASPIN, and Viread (tenofovir disoproxil fumarate). With the majority of patients in this cohort enrolled in Ukraine, which is currently in a state of war, they may be lost to follow-up before completing the trial. Therefore, Arbutus and Antios may report limited data on a reduced number of patients from this clinical trial.

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 persistence.
- Arbutus is enrolling patients in part 3 of its on-going Phase 1a/1b clinical trial evaluating the safety and tolerability of multiple doses of AB-836 in patients with cHBV infection. The Company is on-track to report additional data from patients with cHBV infection in the first half of 2022.

AB-101 (Oral PD-L1 Inhibitor)

• AB-101 is Arbutus' oral PD-L1 inhibitor that is designed to reawaken the immune system, which the Company believes may be a key component in developing a functional cure for HBV.

• Arbutus has commenced IND-enabling studies for AB-101 and intends to complete those studies in the second half of 2022.

AB-161 (Oral RNA destabilizer)

- AB-161 is Arbutus' next-generation oral HBV specific RNA destabilizer, which is being developed to create an all-oral treatment regimen to functionally cure HBV.
- Arbutus has conducted extensive non-clinical safety evaluations with AB-161 that provide confidence in the molecule's ability to circumvent the peripheral neuropathy findings seen in non-clinical safety studies with the Company's first-generation oral RNA destabilizer, AB-452.
- Arbutus has commenced IND-enabling studies for AB-161 and intends to complete those studies in the second half of 2022.

COVID-19 and Pan-Coronavirus Programs

- Leveraging its extensive antiviral drug discovery experience, Arbutus is focused on the discovery and development of new pancoronavirus 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.
- Arbutus intends to nominate a candidate that inhibits the SARS-CoV-2 nsp5 main protease (M^{pro}) in the first half of 2022 and advance that candidate into IND-enabling studies. In addition, the Company intends to continue lead optimization activities for an Nsp12 viral polymerase candidate.

Corporate Update

- In April 2018, Arbutus entered into an agreement with Roivant Sciences Ltd. (Roivant), its largest shareholder, to launch Genevant Sciences Ltd. (Genevant), a company focused on a broad range of RNA-based therapeutics enabled by Arbutus' LNP and ligand conjugate delivery technologies. Arbutus licensed rights to its LNP and ligand conjugate delivery platforms to Genevant for RNA-based applications outside of HBV, except to the extent certain rights had already been licensed to other third parties. Arbutus retained all rights to its LNP and conjugate delivery platforms for HBV and owns approximately 16% of the common equity of Genevant.
- In February 2022, Arbutus and Genevant filed a lawsuit in the U.S. District Court for the District of Delaware against Moderna, Inc. and a Moderna affiliate seeking damages for infringement of U.S. Patent Nos. 8,058,069, 8,492,359, 8,822,668, 9,364,435, 9,504,651, and 11,141,378 in the manufacture and sale of MRNA-1273, Moderna's vaccine for COVID-19. The patents relate to nucleic acid-lipid particles and lipid vesicles, as well as compositions and methods for their use. Arbutus, and Genevant, do not seek an injunction or otherwise seek to impede the sale, manufacture or distribution of MRNA-1273. However, the parties seek fair compensation for Moderna's use of their patented technology that was developed with great effort and at a great expense, without which Moderna's COVID-19 vaccine would not have been successful.
- Under the license agreement with Genevant, as amended, if Genevant receives proceeds from an action for infringement by any third parties of Arbutus' intellectual property licensed to Genevant, Arbutus would be entitled to receive, after deduction of litigation costs, 20% of the proceeds received by Genevant or, if less, tiered low single-digit royalties on net sales of the infringing product (inclusive of the proceeds from litigation or settlement, which would be treated as net sales).

Financial Results

Cash, Cash Equivalents and Investments

As of December 31, 2021, the Company had cash and cash equivalents of \$109.3 million and investments in marketable securities of \$81.7 million, totaling \$191.0 million, as compared to \$123.3 million as of December 31, 2020. The ending cash, cash equivalents and marketable securities as of December 31, 2021 do not include a \$40 million upfront payment and a \$15 million equity investment from Qilu Pharmaceutical as part of an exclusive licensing agreement and strategic partnership to develop and commercialize AB-729 in China, received in January 2022.

During the year ended December 31, 2021, Arbutus used \$67.5 million in operating activities, which was offset by \$134.7 million of net proceeds from the issuance of common shares under Arbutus's "at-the-market" offering program. Arbutus expects a net cash burn between \$90 to \$95 million in 2022 and believes its cash runway, including \$55 million of gross proceeds received from Qilu Pharmaceutical in January 2022, will be sufficient to fund the Company's operations into the second quarter of 2024.

Net Loss

For the year ended December 31, 2021, the Company's net loss attributable to common shares was \$88.4 million, or a loss of \$0.83 per basic and diluted common share, as compared to a net loss of \$75.9 million, or a loss of \$1.00 per basic and diluted common share, for the year ended December 31, 2020. Net loss attributable to common shares for the year ended December 31, 2021 and 2020 included \$12.1 million of non-cash expense in both periods for the accrual of coupon on the Company's convertible preferred shares, which converted into 22.8 million common shares in October 2021.

Operating Expenses

Research and development expenses were \$65.5 million for the year ended December 31, 2021 compared to \$49.3 million for the same period in 2020. The increase of \$16.2 million in research and development expenses for the year ended December 31, 2021 versus the same period in 2020 was due primarily to an increase in expenses related to the Company's multiple, ongoing AB-729 clinical trials, including its collaboration with Assembly, an increase in expenses for its ongoing AB-836 Phase 1a/1b clinical trial, and an increase in expenses for its early stage development programs, including its coronavirus programs.

Outstanding Shares

As of December 31, 2021, the Company had approximately 145.0 million common shares issued and outstanding, as well as approximately 11.4 million stock options outstanding. Following the conversion of preferred shares in October 2021, Roivant owned approximately 27% of the Company's outstanding common shares as of December 31, 2021.

COVID-19 Impact

The COVID-19 virus, first identified in December 2019, 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 and patients in new clinical trials. While we have been able to progress with our clinical and pre-clinical activities to date, it is not possible to predict if the COVID-19 pandemic will materially impact our plans and timelines in the future.

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

	Year ended December 31,		
	 2021		2020
Revenue			
Revenue from collaborations and licenses	\$ 4,880	\$	3,519
Non-cash royalty revenue	6,108		3,395
Total revenue	10,988		6,914
Operating expenses			
Research and development	65,502		49,338
General and administrative	17,136		14,845
Change in fair value of contingent consideration	1,872		473
Site consolidation	—		64
Total operating expenses	 84,510		64,720
Loss from operations	 (73,522)		(57,806)
Other income (loss)			
Interest income	127		741
Interest expense	(2,857)		(4,011)
Net equity investment loss	—		(2,545)
Foreign exchange gains (losses)	5		(124)
Total other loss	(2,725)		(5,939)
Net loss	\$ (76,247)	\$	(63,745)
Dividend accretion of convertible preferred shares	(12,139)		(12,123)
Net loss attributable to common shares	\$ (88,386)	\$	(75,868)
Net loss per common share			
Basic and diluted	\$ (0.83)	\$	(1.00)
Weighted average number of common shares			
Basic and diluted	106,242,452		75,835,378

UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS (in thousands)

	Dec	ember 31, 2021	Decer	nber 31, 2020
Cash, cash equivalents and marketable securities, current	\$	155,317	\$	123,268
Accounts receivable and other current assets		5,344		4,436
Total current assets		160,661		127,704
Property and equipment, net of accumulated depreciation		5,983		6,927
Investments in marketable securities, non-current		35,688		—
Right of use asset		2,092		2,405
Other non-current assets		61		44
Total assets	\$	204,485	\$	137,080
Accounts payable and accrued liabilities	\$	10,838	\$	9,151
Lease liability, current		383		390
Total current liabilities		11,221		9,541
Liability related to sale of future royalties		16,296		19,554
Contingent consideration		5,298		3,426
Lease liability, non-current		2,231		2,593
Total stockholders' equity		169,439		101,966
Total liabilities and stockholders' equity	\$	204,485	\$	137,080

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOW (in thousands)

	Twelve Months Ended December 31,			
		2021		2020
Net loss	\$	(76,247)	\$	(63,745)
Other non-cash items		7,785		11,873
Changes in working capital		930		431
Net cash used in operating activities		(67,532)		(51,441)
Net cash used in investing activities		(12,678)		(14,909)
Net cash provided by financing activities		137,236		86,297
Effect of foreign exchange rate changes on cash and cash equivalents		5		56
Increase in cash and cash equivalents		57,031		20,452
Cash and cash equivalents, beginning of period		52,251		31,799
Cash and cash equivalents, end of period		109,282		52,251
Investments in marketable securities		81,723		71,017
Cash, cash equivalents and marketable securities, end of period	\$	191,005	\$	123,268

Conference Call and Webcast Today

Arbutus will hold a conference call and webcast today, Thursday, March 3, 2022, 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: 3977368.

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: 3977368.

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. AB-729 is currently in multiple Phase 2a clinical trials.

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. Preliminary data from an on-going Phase 1a/1b clinical trial has shown that AB-836 is generally safe and well-tolerated and provides robust antiviral activity.

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 290 million people worldwide suffer from chronic HBV infection, while other estimates indicate that approximately 2.4 million people in the United States suffer from chronic HBV infection. Approximately 820,000 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 leveraging its extensive virology expertise to develop novel therapeutics that target specific viral diseases. Our current focus areas include Hepatitis B virus (HBV), SARS-CoV-2, and other coronaviruses. In HBV, we are developing a RNAi therapeutic, oral capsid inhibitor, oral PD-L1 inhibitor, and oral RNA destabilizer that we intend to combine to provide a functional cure for patients with chronic HBV by suppressing viral replication, reducing surface antigen and reawakening the immune system. We believe our lead compound, AB-729, is the only RNAi therapeutic with evidence of immune re-awakening, and is currently being evaluated in multiple phase 2 clinical trials. We have an ongoing drug discovery and development program directed to identifying novel, orally active agents for treating coronavirus (including SARS-CoV-2). We are also exploring oncology applications for our internal PD-L1 portfolio. 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; the patent infringement lawsuit against Moderna; 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 and patent litigation matters.

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; uncertainties associated with litigation generally and patent litigation specifically; 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

March 3, 2022

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; the expected timing and payments associated with strategic and/or licensing agreements; the patent infringement lawsuit against Moderna; 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 and patent litigation matters. 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; uncertainties associated with litigation generally and patent litigation specifically; 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.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.



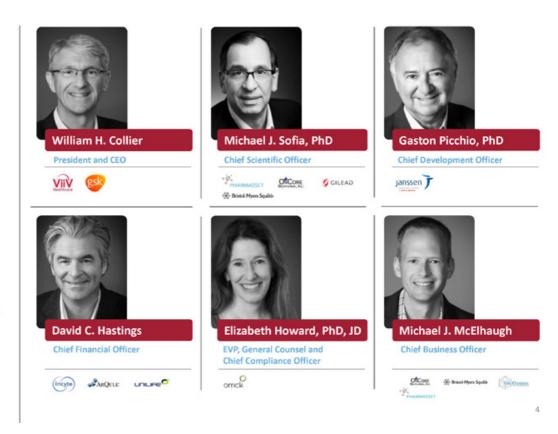
Investment Highlights

Significant Unmet Medical Need in HBV	Goal of HBV Functional Cure	Broad HBV Portfolio	Coronavirus Research Initiative	Team with Antiviral Expertise & Proven Track Record	16 % Ownership in Genevant
Global HBV prevalence double that of HCV, potential for larger market opportunity	Undetectable HBV DNA and HBsAg delivered through finite duration treatment with a combination of drugs with different modes of action	HBV compounds include: RNAi Capsid Inhibitors PD-L1 Inhibitors HBV RNA Destabilizer	Focused on direct acting antivirals targeting the viral polymerase and protease	Extensive knowledge gained from HIV and HCV success being applied to HBV and Coronaviruses	Rights to potential future royalties and sublicense revenues for patented LNP Technology; Filed patent infringement lawsuit against Moderna
HARDULUS NASDAQ: A	202	irus HIV Human Immunodeficienc	y Virus		3

Proven Leadership Team

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





Pipeline

			Lead Optimization	IND Enabling	Phase 1	Phase 2	Phase 3	Marketed
	RNAi Therapeutic	AB-729	AB-729 single-ascendir	ng dose / multiple-ascend	ing dose	6		
			Combo trial (729 + Peg-	IFNa-2a + NA)				
			Combo trial (729 + Vebi	icorvir + NA)				
			Combo trial (729 + ATI-	2173 + NA)				
HBV			Combo trial (729 + VTP-	-300 + NA)*				
	Capsid Inhibitor (oral)	AB-836	AB-836 single-ascendin	g dose / multiple-ascend	ing dose			
	PD-L1 Inhibitor (oral)	AB-101						
Ц,	RNA destabilizer (oral)	AB-161						
COVID-19	Mpro small molecule							
COVI	Nsp12 viral polymerase							

*Clinical trial to initiate in 1H 2022



5

HBV Presents a Significant Unmet Medical Need



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

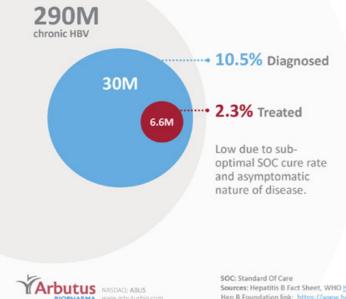
C	PegIFN	Entecavir	Tenofovir	New HBV Therapies
Dosing Duration	48-weeks	Chronic	Chronic	Trate of Undetectable HBV DNA
HBV DNA Undetectable (<60-80 IU/ml)	7-19%	67-90%	76-93%	Trate of HBSAg Loss
HBsAg Loss	~3-7%	~1-2%	~1-3%	HIGHER CURES RATES

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

7

Compelling Growth Opportunity in the HBV Market



An HBV curative regimen

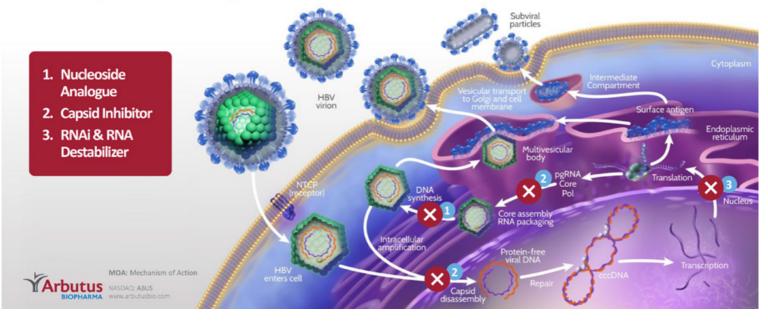
would substantially increase diagnosis and treatment rates to unlock significant market growth opportunities.

8

Soc: standard Of Care Sources: Hepatitis B Fact Sheet, WHO <u>https://www.who.int/news-room/fact-sheets/detail/hepatitis-b</u> Hep B Foundation link: <u>https://www.hepb.org/what-is-hepatitis-b/what-is-hepb/facts-and-figures/</u>

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

HBV lifecycle illustrates key points for intervention



3-Pronged Approach to Therapeutic Success

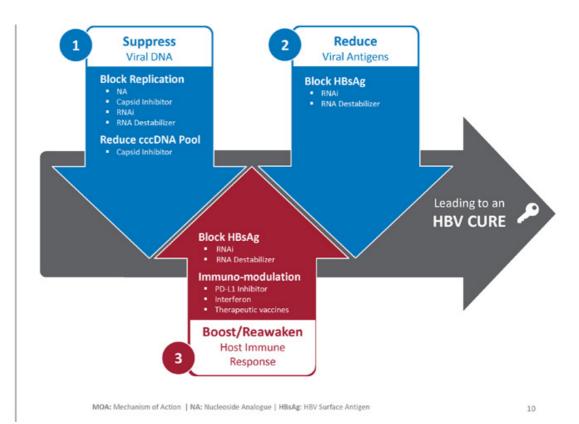
Suppress viral antigens

Reduce HBV DNA

Boost host immune response

Therapeutic success will require a combination of agents with complementary MOAs





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

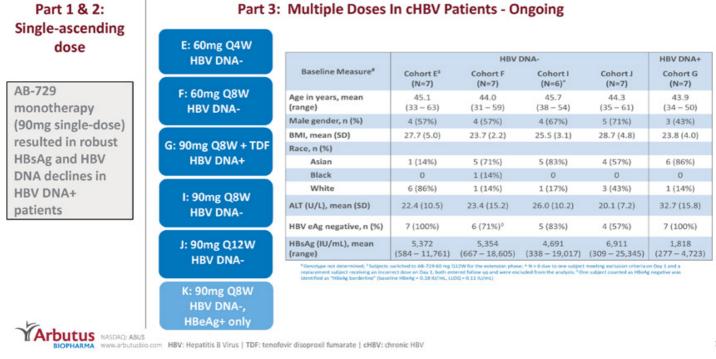
Actively targets the liver

Active against cccDNA derived and integrated HBsAg transcripts

Clean profile in long term preclinical safety studies

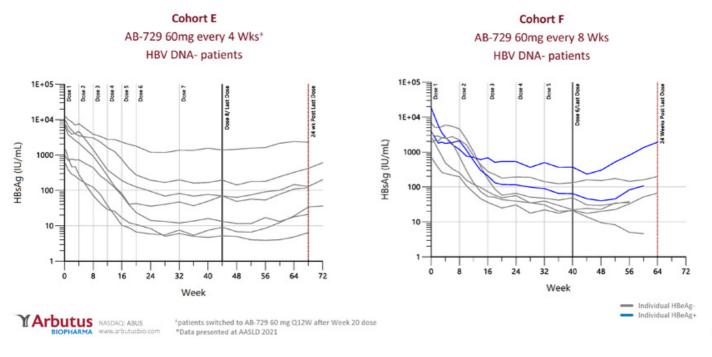


AB-729-001 Phase 1a/1b Clinical Trial

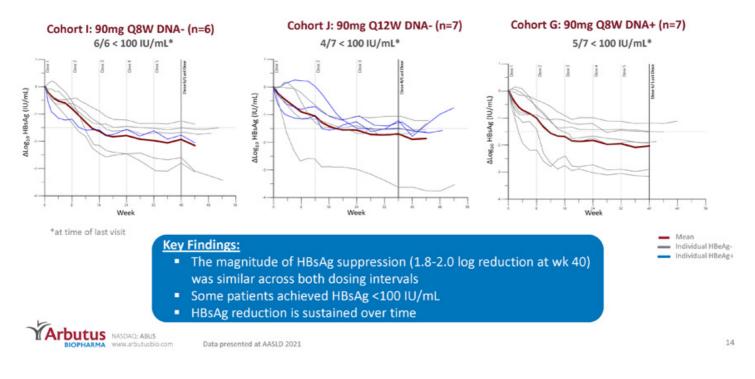


Part 3: Multiple Doses In cHBV Patients - Ongoing

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



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



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

		HBV D	NA-		HBV DNA+
Visit	Cohort E 60mg Q4W ⁱ (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 Treatme	ent (# weeks post	ast 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

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AB-729-001 Safety Summary

- 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



* 1 patient (Cohort A) with rapid decline in HBsAg of ~2.0 log10 IU/mL had an unrelated Gr 2 AE of food poisoning resulting in unrelated transient Grade 3 AEs of ALT/AST elevation (without bilirubin changes)

AB-729-001 Clinical Trial Key Takeaways

- AB-729 dosed 60mg every 4 wks and every 8 wks and 90mgs every 8 wks and 12 wks resulted in robust and comparable HBsAg declines
 - AB-729 monotherapy (90mg single-dose) resulted in robust HBsAg and HBV DNA declines in HBV DNA + patients
- 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</p>
- 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 40-48 weeks of dosing



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

- Enrollment on-going in a Phase 2a combination trial with ongoing NA therapy and short courses of Peg-IFNα-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. enrolling patients in Phase 2a
 - Antios Therapeutics, Inc. enrollment complete in cohort with AB-729; the majority of patients in this cohort enrolled in Ukraine, which is currently in a state of war, and they may be lost to followup before completing the trial. Therefore, Arbutus and Antios may report limited data on a reduced number of patients from this clinical trial.
 - Vaccitech plc 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-IFNα-2a in cHBV patients

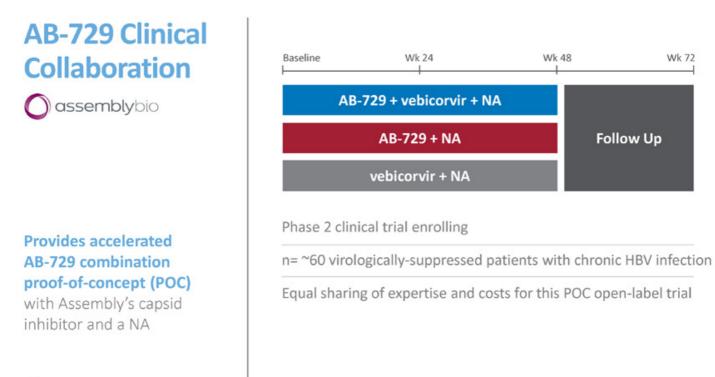


n=40 stably NA-suppressed, HBeAg negative, non-cirrhotic cHBV patients

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





NA: Nucleoside Analogue

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Wk 72



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 initiate clinical trial in first half of 2022

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

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

AB-729 Strategic Collaboration

🕓 QILU PHARMACEUTICAL

Exclusive Licensing* and Strategic Partnership

Develop, manufacture and commercialize AB-729 in mainland China, Hong Kong, Macau and Taiwan

> *ABUS retains the non-exclusive right to develop and manufacture in the Qilu territory for exploiting AB-729 in the rest of the world



Goal - to bring AB-729 to the largest HBV patient population and to tap into one of the largest and most promising healthcare markets worldwide

Arbutus has received \$40M upfront payment and \$15M equity investment, and is eligible for up to \$245M in commercialization and milestone payments and double-digit tiered royalties up to low twenties percent on annual sales

Qilu Pharmaceutical – one of the leading pharmaceutical companies in China, provides development, manufacturing and commercialization expertise to this partnership

AB-836 Next Generation Capsid Inhibitor

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



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 EC50 \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

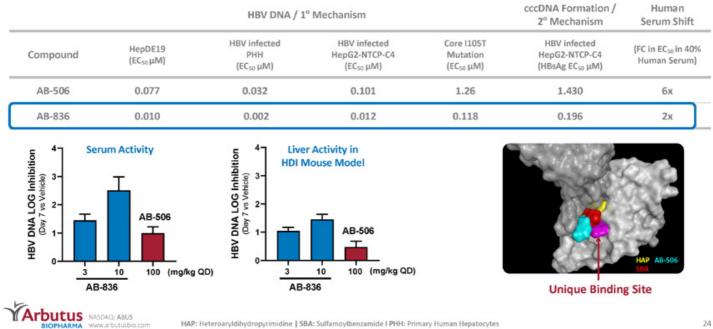
Demonstrates high liver concentrations in multiple species

Projected to be once daily dosing

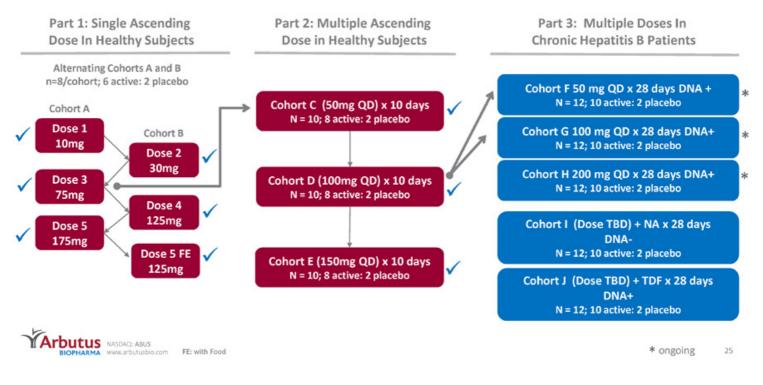
Pan-genotypic

Combinable with other MOA agents

AB-836: Next Generation Capsid Inhibitor



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



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 cHBV

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

AB-161: Next Generation Oral RNA Destabilizer

Next generation small molecule that circumvents non-clinical safety findings with first generation molecule Offers a novel mechanism of action to reduce HBsAg and other viral proteins and viral RNA We believe this approach offers potential for an **oral HBsAg reducing agent** and all oral combination therapy

AB-161 is currently in IND-enabling studies



AB-101: Oral PD-L1 Inhibitor for HBV Immune Reactivation

Rationale

- HBV immune tolerance is a critical driver of cHBV infection
- PD-1:PD-L1 checkpoint axis plays a key role in immune tolerization in cHBV
- PD-L1 expression upregulated during HBV infection
- PD-1 upregulated on HBVspecific T- and B-cells
- Inhibition associated with HBsAg loss in some cHBV patients

Small-Molecule Inhibitor Approach

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

AB-101

- Blocks PD-L1/PD1 interaction at sub-nM concentrations
- Activates HBV-specific immune responses in T-cells from CHB patients in vitro
- Novel MOA identified
- Demonstrates a robust checkpoint mediated in vivo effect
- Improves HBV-specific T- and B-cell responses ex vivo

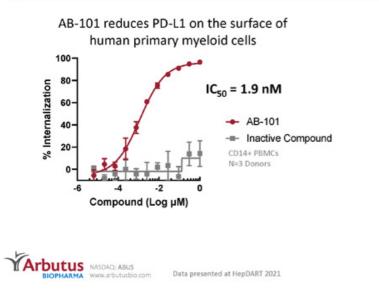
AB-101 is currently in IND-enabling studies



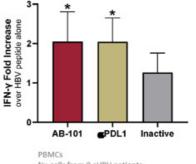
PD-L1: Programmed death-ligand 1 | PD-1: Programmed death ligand protein DAAs: Direct acting antivirals | Abs: Antibodies | MOA: Mechanism of action

AB-101: Small-Molecule Oral PD-L1 Inhibitor for HBV

AB-101 is highly potent with demonstrated activity against cells from chronic HBV patients



AB-101 reinvigorates HBV-specific cHBV patient T-cells



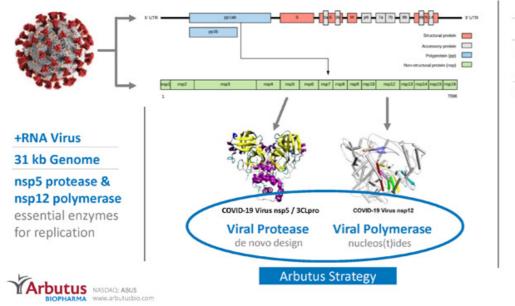
N= cells from 9 cHBV patients *p<-0.05

PBMC: Peripheral Blood Mononuclear Cells

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Coronavirus Strategy

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



Pan-Coronavirus Focused

Long Term Commitment

Small Molecule Direct-Acting Antivirals

X-Chem/Proteros Collaboration

- Proprietary DEL library screening and structural biology for M^{PRO} inhibitor discovery
- First milestone reached; several unique compound series that inhibit nsp5 protease identified
- Advancing to lead optimization stage

2022 Key Objectives

Proforma cash balance of \$245M as of December 31, 2021*, cash runway into 2Q 2024

Objective	Anticipated Timing 2022
AB-836, next generation oral capsid inhibitor: Full data set from Phase 1a/1b clinical trial in patients with chronic HBV	1H
AB-729, RNAi therapeutic: initiate a triple combination Phase 2a POC clinical trial with VTP-300 (Vaccitech) and a NA	1H
AB-729: Follow-up data (long-term on- and off-treatment) from Phase 1a/1b, evaluating multiple doses and dosing schedules	1H/2H
AB-729: Initial data from Phase 2a combination trial with NA therapy and Peg-IFN $lpha$ -2a	2H
AB-729: Initial data from Phase 2a combination trial with VBR (Assembly) and a NA	2H
AB-101, oral PD-L1 inhibitor compound: complete IND-enabling studies	2H
AB-161, next generation oral RNA destabilizer: complete IND-enabling studies	2H
COVID M ^{pro} : Advance clinical candidate that inhibits the SARS-CoV-2 nsp5 main protease into IND-enabling studies	2H

Thank You

NASDAQ: ABUS

www.ArbutusBio.com