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): May 2, 2024

Arbutus Biopharma Corporation
(Exact name of registrant as specified in its charter)

British Columbia, Canada	**001-34949**	**98-0597776**
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(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 May 2, 2024, Arbutus Biopharma Corporation (the "Company") issued a press release announcing its financial results for the first quarter ended March 31, 2024 and certain other information. A copy of the press release is furnished as Exhibit 99.1 hereto and is incorporated by reference herein.

Item 8.01. Other Events.

On May 2, 2024, 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.

Exhibit Number	Description
99.1	Press Release dated May 2, 2024
99.2	Corporate Presentation dated May 2, 2024
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: May 2, 2024

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

EXHIBIT 99.1

Arbutus Reports First Quarter 2024 Financial Results and Provides Corporate Update

End-of-treatment data from two Phase 2a combination clinical trials with imdusiran to be presented at the EASL Congress in June 2024

Preliminary data from the single-dose portion of the AB-101-001 clinical trial show that AB-101 was generally well-tolerated and bound to the receptor target in healthy subjects

Court provides claim construction ruling in ongoing patent infringement lawsuit against Moderna; Court date scheduled for April 21, 2025

Strong financial position – expected cash runway extended through the second quarter of 2026

Conference Call and Webcast Today at 8:45 AM ET

WARMINSTER, Pa., May 02, 2024 (GLOBE NEWSWIRE) -- Arbutus Biopharma Corporation (Nasdaq: ABUS) ("Arbutus" or the "Company"), a clinical-stage biopharmaceutical company leveraging its extensive virology expertise to develop a functional cure for people with chronic hepatitis B virus (cHBV) infection, today reports first quarter 2024 financial results and provides a corporate update.

"We continued to make progress in the first quarter of 2024 in advancing our pipeline of HBV assets," said Michael J. McElhaugh, Interim President and Chief Executive Officer of Arbutus Biopharma. "Along with imdusiran, which we see as a potential cornerstone therapeutic, we believe an immune modulator also plays an important role in the treatment regimen to functionally cure cHBV. In pursuit of this goal, we have initiated our third Phase 2a trial combining imdusiran with an immune modulator and are reporting the first part of the Phase 1a/1b trial with AB-101, our oral proprietary PD-L1 checkpoint inhibitor. The end-of-treatment data from our two ongoing Phase 2a combination trials with imdusiran and other immune modulators will be presented at the EASL conference upcoming in June. With an expected cash runway now through the second quarter of 2026, we are well funded to move our existing clinical trials forward to achieve meaningful data and advance into a later stage clinical trial."

Clinical Development Update

Imdusiran (AB-729, RNAi Therapeutic)

- AB-729-201 is a Phase 2a clinical trial that is evaluating the safety, tolerability and antiviral activity of the combination of imdusiran, nucleos(t)ide analogue (NA) therapy and pegylated interferon alfa-2a (IFN) in patients with cHBV. Preliminary data presented at the EASL Congress in June 2023 suggest that the addition of IFN to imdusiran was generally well-tolerated and appears to result in continued HBsAg declines in some patients. End-of-treatment data from this trial will be shared at the upcoming EASL Congress in June.
- AB-729-202 is a Phase 2a clinical trial that is evaluating the safety and immunogenicity of imdusiran, NA therapy and Barinthus Bio's VTP-300, an HBV antigen-specific immunotherapy. Preliminary data presented at AASLD – The Liver Meeting in November 2023 showed that the combination of imdusiran and VTP-300 provided a meaningful reduction of HBsAg levels that are maintained well below baseline. End-of-treatment data from this portion of the trial will be shared at the upcoming EASL Congress in June.
- AB-729-202 was amended to include an additional cohort of 20 patients who will receive imdusiran plus NA therapy for 24 weeks followed by VTP-300 plus up to two low doses of nivolumab, an approved anti-PD-1 monoclonal antibody. Preliminary end-of-treatment data from this additional cohort are expected in the second half of 2024.
- AB-729-203 is a Phase 2a clinical trial evaluating the safety, tolerability and antiviral activity of imdusiran and NA therapy in combination with intermittent low doses of durvalumab, an approved anti-PD-L1 monoclonal antibody. Patients are being screened in this clinical trial. The clinical trial is designed to enroll 30 patients in three separate cohorts. All patients will receive 60mg of imdusiran every 8 weeks for 48 weeks and 2 doses of durvalumab given via IV infusion at pre-specified times during the imdusiran treatment period that will differ by cohort. After completion of treatment, all patients will be assessed for NA discontinuation and followed for at least 24 to 48 weeks.

AB-101 (Oral PD-L1 Inhibitor)

- AB-101-001 is a Phase 1a/1b double-blind, randomized, placebo-controlled clinical trial designed to investigate the safety, tolerability, pharmacokinetics (PK), and pharmacodynamics (PD) of single- and multiple-ascending oral doses of AB-101 for up to 28 days in healthy subjects and patients with cHBV. Part 1 of the clinical trial has enrolled four sequential cohorts of eight healthy subjects each (6 active:2 placebo) to date, each receiving a single dose of AB-101 at increasing dose levels up to 25mg or placebo. In this trial, AB-101 was generally well-tolerated with evidence of dose-dependent receptor occupancy. In the 25mg cohort, all five evaluable subjects showed evidence of receptor occupancy between 50-100%. Arbutus has moved into Part 2 of this clinical trial which evaluates multiple-ascending doses of AB-101 in healthy subjects and expects to report preliminary data in the second half of this year.

Corporate Updates

In a separate press release issued today, Arbutus announced that Michael J. Sofia, PhD will be retiring as Chief Scientific Officer at the end of 2024. Dr. Sofia is a co-founder of Arbutus and a globally recognized, Lasker award-winning antiviral drug discovery and development scientist.

The following abstracts were accepted for presentation at the EASL Congress 2024:

Abstract Title: Imdusiran (AB-729) administered every 8 weeks in combination with 24 weeks of pegylated interferon alfa-2a in virally suppressed, HBeAg-negative subjects with chronic HBV infection leads to HBsAg loss in some subjects at end of IFN treatment.

Authors: Man-Fung Yuen, Jeong Heo, Ronald G Nahass, Grace Lai-Hung Wong, Tatiana Burda, Kalyan Ram Bhamidimarri, Tsung-Hui Hu, Tuan T Nguyen, Young-Suk Lim, Chi-Yi Chen, Stuart C Gordon, Jacinta Holmes, Wan-Long Chuang, Anita Kohli, Naim Alkhouri, Kevin Gray, Emily P. Thi, Elina Medvedeva, Timothy Eley, Sharie C Ganchua, Christina Iott, Elizabeth Eill, Christine L. Espiritu, Mark Anderson, Tiffany Fortney, Gavin Cloherty, Karen D Sims

Abstract Title: Imdusiran (AB-729) administered every 8 weeks for 24 weeks followed by the immunotherapeutic VTP-300 maintains lower HBV surface antigen levels in NA-suppressed CHB subjects than 24 weeks of imdusiran alone.

Authors: Kosh Agarwal, Man-Fung Yuen, Stuart Roberts, Gin-Ho Lo, Chao-Wei Hsu, Wan-Long Chuang, Chi-Yi Chen, Pei-Yuan Su, Sam Galhenage, Sheng-Shun Yang, Emily P. Thi, Katie Anderson, Deana Antoniello, Elina Medvedeva, Timothy Eley, Tilly Varughese, Louise Bussey, Charlotte Davis, Antonella Vardeu, Christine L. Espiritu, Sharie C Ganchua, Christina Iott, Elizabeth Eill, Tom Evans, Karen D Sims

LNP Litigation Update:

- With respect to the Moderna lawsuit, the claim construction hearing occurred on February 8, 2024. On April 3, 2024, the Court provided its claim construction ruling, in which it construed the disputed claim terms and agreed with Arbutus' position on most of the disputed claim terms. Fact discovery is on-going and next steps include expert reports and depositions. A trial date has been set for April 21, 2025, and is subject to change.
- The lawsuit against Pfizer/BioNTech is ongoing and a date for a claim construction hearing has not been set.

Arbutus continues to protect and defend its intellectual property, which is the subject of the on-going lawsuits against Moderna and Pfizer/BioNTech. The Company is seeking fair compensation for Moderna's and Pfizer/BioNTech's use of its patented LNP technology that was developed with great effort and at a great expense, without which Moderna and Pfizer/BioNTech's COVID-19 vaccines would not have been successful.

Financial Results

Cash, Cash Equivalents and Investments

As of March 31, 2024, the Company had cash, cash equivalents and investments in marketable securities of $137.9 million compared to $132.3 million as of December 31, 2023. During the three months ended March 31, 2024, the Company used $19.3 million in operating activities, which was offset by $21.8 million of net proceeds from the issuance of common shares under its "at-the-market" offering program (ATM Program). During April 2024, the Company received an additional $22.4 million of net proceeds under its ATM Program. The Company expects its 2024 net cash burn to range from between $63 million to $67 million, excluding any proceeds received from its ATM Program. The Company believes its cash, cash equivalents and investments in marketable securities including the additional net proceeds received under its ATM Program during April 2024, will be sufficient to fund its operations through the second quarter of 2026.

Revenue

Total revenue was $1.5 million for the three months ended March 31, 2024 compared to $6.7 million for the same period in 2023. The decrease of $5.2 million was due primarily to: i) a decrease in license revenue recognized related to the Company's progress towards the satisfaction of its performance obligations with respect to the licensing agreement with Qilu; and ii) a decrease in license royalty revenue from Alnylam due to lower sales of ONPATTRO in 2024 compared to 2023.

Operating Expenses

Research and development expenses were $15.4 million for the three months ended March 31, 2024 compared to $18.3 million for the same period in 2023. The decrease of $2.9 million was due primarily to the discontinuation of the Company's AB-161 and coronavirus programs in September 2023 as part of its efforts to focus its pipeline on its lead HBV product candidates, partially offset by an increase in clinical expenses for the Company's multiple imdusiran Phase 2a clinical trials. General and administrative expenses were $5.3 million for the three months ended March 31, 2024 compared to $5.6 million for the same period in 2023. The decrease of $0.3 million was due primarily to a decrease in non-cash stock-based compensation expenses.

Net Loss

For the three months ended March 31, 2024, the Company net loss was $17.9 million, or a loss of $0.10 per basic and diluted common share, as compared to a net loss of $16.3 million, or a loss of $0.10 per basic and diluted common share, for the three months ended March 31, 2023.

Outstanding Shares

As of March 31, 2024, the Company had approximately 180.2 million common shares issued and outstanding. During April 2024, the Company issued an additional 7.8 million common shares under its ATM program. In addition, the Company had approximately 22.6 million stock options and unvested restricted stock units outstanding as of March 31, 2024. Roivant Sciences Ltd. owned approximately 20% of our outstanding common shares as of April 30, 2024.

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

	Three Months Ended March 31,	
	2024	**2023**
Revenue		
Collaborations and licenses	$ 939	$ 5,509
Non-cash royalty revenue	593	1,178
Total revenue	**1,532**	**6,687**
Operating expenses		
Research and development	15,403	18,275
General and administrative	5,312	5,552
Change in fair value of contingent consideration	180	273
Total operating expenses	**20,895**	**24,100**
Loss from operations	(19,363)	(17,413)
Other income (loss)		
Interest income	1,545	1,268
Interest expense	(44)	(198)
Foreign exchange gain	(13)	4
Total other income	1,488	1,074
Net loss	$ **(17,875)**	**$ (16,339)**
Loss per share		
Basic and diluted	$ (0.10)	$ (0.10)
Weighted average number of common shares		
Basic and diluted	175,625,552	161,643,404
Comprehensive loss		
Unrealized gain on available-for-sale securities	50	854
Comprehensive loss	$ **(17,825)**	**$ (15,485)**

UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands)

	March 31, 2024	December 31, 2023
Cash, cash equivalents and marketable securities, current	$ 129,240	$ 126,003
Accounts receivable and other current assets	6,632	6,024
Total current assets	**135,872**	**132,027**
Property and equipment, net of accumulated depreciation	4,414	4,674
Investments in marketable securities, non-current	8,677	6,284
Right of use asset	1,327	1,416
Total assets	$ **150,290**	**$ 144,401**
Accounts payable and accrued liabilities	$ 8,247	$ 10,271
Deferred license revenue, current	11,547	11,791
Lease liability, current	502	425
Total current liabilities	**20,296**	**22,487**
Liability related to sale of future royalties	6,396	6,953
Contingent consideration	7,780	7,600
Lease liability, non-current	1,181	1,343
Total stockholders' equity	114,637	106,018
Total liabilities and stockholders' equity	$ **150,290**	**$ 144,401**

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Three Months Ended March 31,	
	2024	**2023**
Net loss	$ (17,875)	$ (16,339)
Non-cash items	1,439	1,372
Change in deferred license revenue	(244)	(4,104)
Other changes in working capital	(2,615)	(8,230)
Net cash used in operating activities	**(19,295)**	**(27,301)**
Net cash provided by investing activities	**11,694**	**16,678**
Issuance of common shares pursuant to the Open Market Sale Agreement	21,765	19,862
Cash provided by other financing activities	2,665	555
Net cash provided by financing activities	**24,430**	**20,417**
Effect of foreign exchange rate changes on cash and cash equivalents	(13)	4
Increase in cash and cash equivalents	16,816	9,798
Cash and cash equivalents, beginning of period	26,285	30,776
Cash and cash equivalents, end of period	43,101	40,574
Investments in marketable securities	94,816	137,944
Cash, cash equivalents and marketable securities, end of period	$ **137,917**	**$ 178,518**

Conference Call and Webcast Today

Arbutus will hold a conference call and webcast today, Thursday, May 2, 2024, at 8:45 AM Eastern Time to provide a corporate update. To dial-in for the conference call by phone, please register using the following link: Registration Link. A live webcast of the conference call can be accessed through the Investors section of Arbutus' website at www.arbutusbio.com.

An archived webcast will be available on the Arbutus website after the event.

About imdusiran (AB-729)

Imdusiran 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. Imdusiran targets hepatocytes using Arbutus' novel covalently conjugated N-Acetylgalactosamine (GalNAc) delivery technology enabling subcutaneous delivery. Clinical data generated thus far has shown single and multiple doses of imdusiran to be generally safe and well-tolerated, while also providing meaningful reductions in hepatitis B surface antigen and hepatitis B DNA. Imdusiran is currently in multiple Phase 2a clinical trials.

About AB-101

AB-101 is our oral PD-L1 inhibitor candidate that we believe will allow for controlled checkpoint blockade while minimizing the systemic safety issues typically seen with checkpoint antibody therapies. Immune checkpoints such as PD-1/PD-L1 play an important role in the induction and maintenance of immune tolerance and in T-cell activation. Preclinical data generated thus far indicates that AB-101 mediates re-activation of exhausted HBV-specific T-cells from cHBV patients. We believe AB-101, when used in combination with other approved and investigational agents, could potentially lead to a functional cure in patients chronically infected with HBV. AB-101 is currently being evaluated in a Phase 1a/1b clinical trial.

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 identify and develop novel therapeutics with distinct mechanisms of action, which can be combined to provide a functional cure for patients with chronic hepatitis B virus (cHBV). We believe the key to success in developing a functional cure involves suppressing HBV DNA, reducing surface antigen, and boosting HBV-specific immune responses. Our pipeline of internally developed, proprietary compounds includes an RNAi therapeutic, imdusiran (AB-729), and an oral PD-L1 inhibitor, AB-101. Imdusiran has generated meaningful clinical data demonstrating an impact on both surface antigen reduction and reawakening of the HBV-specific immune response. Imdusiran is currently in three Phase 2a combination clinical trials. AB-101 is currently being evaluated in a Phase 1a/1b clinical trial. 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 with respect to the release of data from our clinical trials and the expected timing thereof; 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 expectations regarding our pending litigation matters; and our expected financial condition, including our anticipated net cash burn, the anticipated duration of cash runways and timing regarding needs for additional capital.

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 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; and Arbutus and its collaborators may never realize the expected benefits of the collaborations; market shifts may require a change in strategic focus.

A more complete discussion of the risks and uncertainties facing Arbutus appears in Arbutus' Annual Report on Form 10-K, 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

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Arbutus BIOPHARMA

Corporate Presentation

NASDAQ: ABUS

www.arbutusbio.com

May 2, 2024

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' expectations regarding its technology licensed to third parties; the expected timing and payments associated with strategic and/or licensing agreements; the patent infringement lawsuits; 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 pre-clinical 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 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; and the parties may never realize the expected benefits of the collaborations. 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.

Our Strategy for Value Creation

Leverage the proven track record of success established with our team's expertise in understanding and treating viral infections by discovering and developing a differentiated pipeline of therapies targeting chronic HBV.

Develop a **combination therapy that includes antivirals and immunologics** to provide a finite duration treatment for people with cHBV that results ≥20% functional cure rate.

Arbutus BIOPHARMA

HBV: Hepatitis B Virus | **cHBV:** chronic HBV

Investment Highlights

Indications with significant unmet medical need & large market opportunities	Team with virology expertise and proven track record	Portfolio of internally discovered assets with distinct MOAs	Lead HBV compound – imdusiran (AB-729) RNAi therapeutic in multiple Phase 2a combination clinical trials	Strong financial position	Patented LNP technology
Focused on developing a functional cure for HBV	Discovered, developed & commercialized multiple drugs	RNAi therapeutic PD-L1 inhibitor	Data shows imdusiran is generally safe and well-tolerated and has shown meaningful suppression of HBsAg while on- or off-treatment	Cash runway through Q2 2026	Receiving licensing royalties arising from Alnylam's Onpattro® and seeking damages from patent litigation suits filed against Moderna & Pfizer/BioNTech for COVID-19 vaccine sales

Arbutus BIOPHARMA

MOA: Mechanism of Action | **PD-L1:** Programmed death-ligand 1 | **HBsAg:** Hepatitis B surface antigen

Pipeline

Arbutus BIOPHARMA

NA: Nucleoside Analogue

HBV Overview

Cause & Symptoms

- Life-threatening liver infection caused by hepatitis B virus (HBV)
- Transmitted through body fluids and from mother to child
- Long-term chronic infection (cHBV) leads to higher risk of cirrhosis and/or liver cancer

Diagnosis

- HBsAg detection
- Additional biomarkers necessary to determine stage of disease

Treatments

- NA therapy – lifelong daily therapy, aimed at reducing HBV DNA and risk of cirrhosis and/or HCC
- Peg-IFNα – administered weekly; poorly tolerated
- <5% of patients achieve functional cure

Rationale

- Need for finite and more efficacious HBV treatments that further improve long-term outcomes and increase functional cure rate
- Combination therapy with different MOAs will be required to reduce HBsAg, suppress HBV DNA, and boost immune system

Sources for all data on slide:

1 Hepatitis B Fact Sheet, WHO https://www.who.int/news-room/fact-sheets/detail/hepatitis-b ; Hep B Foundation link https://www.hepb.org/what-is-hepatitis-b/what-is-hepb/facts-and-figures/ ; Kowdley et al. Hepatology (2012) Prevalence of Chronic Hepatitis B Among Foreign-Born Persons Living in the US by Country of Origin

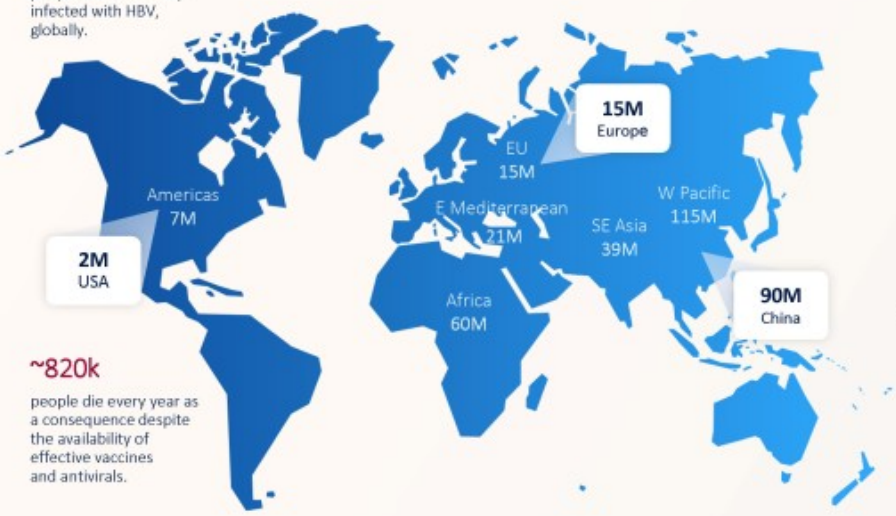
2 Pegasys, PEG-Intron, Baraclude and Viread Package Inserts

Arbutus BIOPHARMA

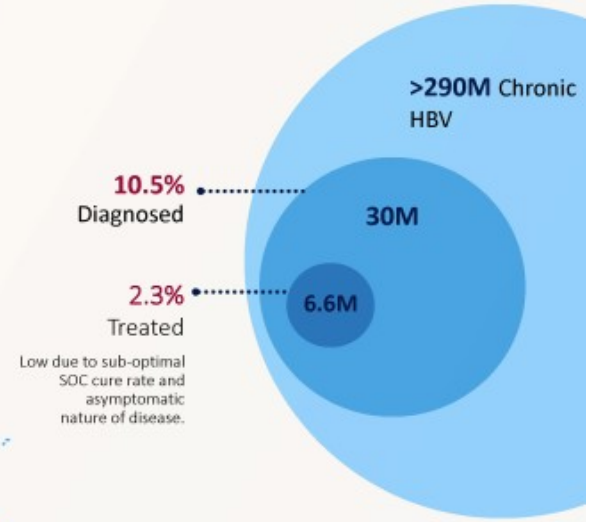
HBsAg: HBV Surface Antigen | **HCC:** Hepatocellular carcinoma

HBV Presents a Significant Unmet Medical Need

>290M
people are chronically infected with HBV, globally.



~820k
people die every year as a consequence despite the availability of effective vaccines and antivirals.



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

Arbutus BIOPHARMA

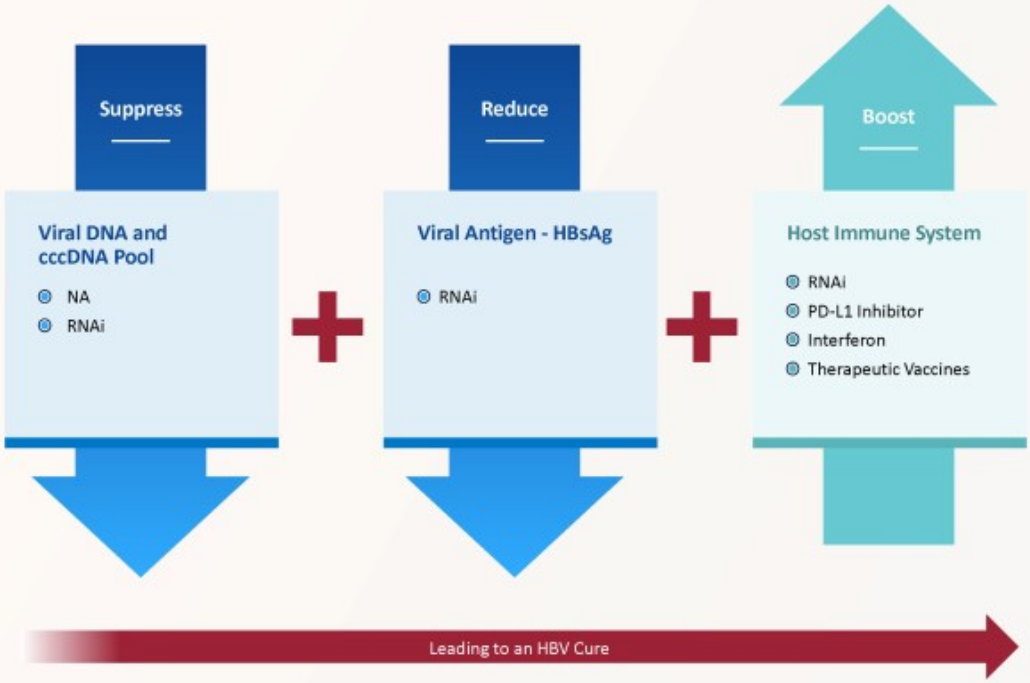
SOC: Standard of Care

Sources: https://www.who.int/news-room/fact-sheets/detail/hepatitis-b
https://www.hepb.org/what-is-hepatitis-b/what-is-hepb/facts-and-figures/

3-Pronged Approach to Therapeutic Success

- **Suppress** HBV DNA
- **Reduce** viral antigens
- **Boost** host immune response

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

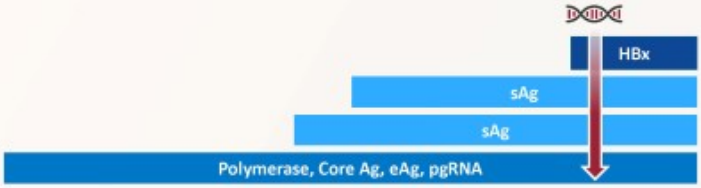


Imdusiran

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 other agents
- Actively targets the liver
- Active against cccDNA derived and integrated HBsAg transcripts
- Clean profile in long term preclinical safety studies



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AB-729-001 Phase 1a/1b Clinical Trial: Key Takeaways

Imdusiran was generally safe and well-tolerated after completing dosing in over 40 CHB patients

Imdusiran provided robust and comparable HBsAg declines regardless of dose, dosing interval, HBeAg or DNA status

A reduction in HBsAg and HBV DNA was sustained in the majority of patients that stopped all treatments

Imdusiran results in HBV-specific T-cell immune restoration and decrease of exhausted T-cells in some patients

Imdusiran 60 mg every 8 weeks for 24 to 48 weeks selected for Phase 2 trials

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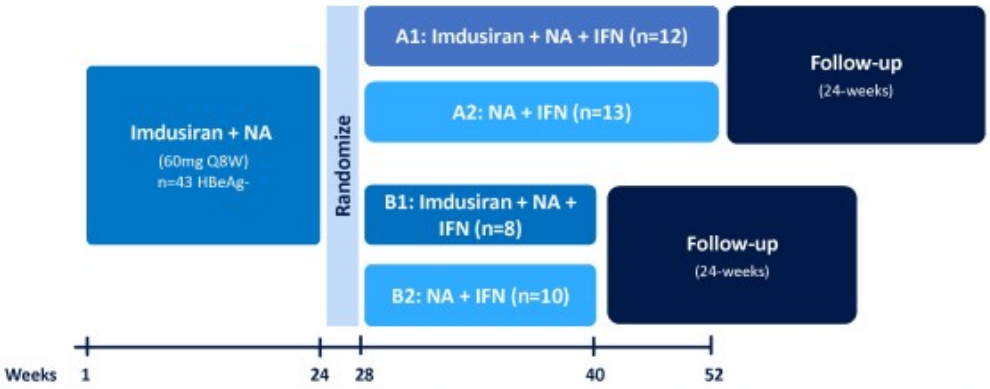
AB-729-201:

Phase 2a POC Clinical Trial

Imdusiran in combination with **ongoing NA therapy and short courses of Peg-IFNα-2a in cHBV patients**

Preliminary end-of-treatment data expected in 1H 2024



Multi-center, open-label Phase 2a

Primary objective: evaluate safety and tolerability of imdusiran in combination with Peg-IFNa-2a in patients with NA-suppressed cHBV

After 24-weeks of follow-up, patients are assessed to stop NA therapy. Those patients that stop NA therapy will be followed for an additional 48 weeks

Preliminary data through 12 weeks of IFN treatment for the first 12 subjects were presented at EASL Congress 2023; additional data to be presented at EASL Congress 2024

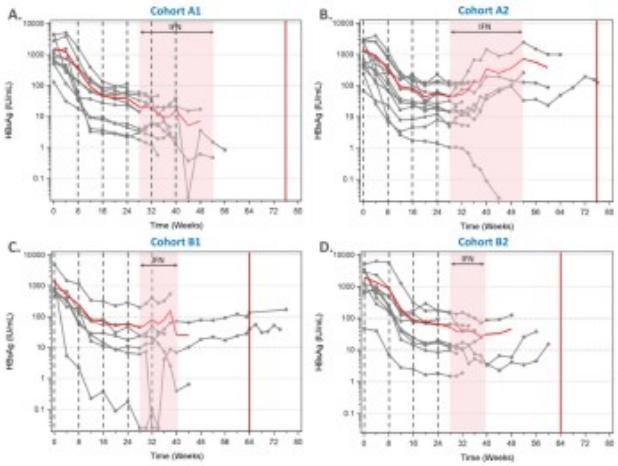
POC: Proof of Concept

AB-729-201: Imdusiran Treatment Led to Consistent HBsAg Declines; IFN may contribute to additional declines

Mean (SE) HBsAg log_{10} Change from Baseline at Key Timepoints

Timepoint	Cohort A1 AB-729+NA+IFN 24 wks N	Mean (SE)	Cohort A2 NA + IFN 24 wks N	Mean (SE)	Cohort B1 AB-729+NA+IFN 12 wks N	Mean (SE)	Cohort B2 NA + IFN 12 wks N	Mean (SE)	Total N	Mean (SE)
Baseline level	11	2.99 (0.14)	13	2.91 (0.14)	7	2.98 (0.13)	10	3.06 (0.19)	43	2.98 (0.07)
Δ at Week 12	11	-1.42 (0.18)	13	-1.30 (0.10)	7	-1.59 (0.38)	10	-1.25 (0.12)	43	-1.37 (0.09)
Δ at Week 24	11	-1.71 (0.17)	13	-1.43 (0.12)	7	-1.80 (0.37)	10	-1.54 (0.10)	42	-1.59 (0.09)
Δ at Week 40 (12 weeks IFN*)	4	-2.22 (0.28)	5	-1.31 (0.60)	3	-2.04 (0.71)	3	-2.20 (0.23)	15	-1.88 (0.26)
Δ at Week 52 (24 weeks IFN#)	2	-3.36 (0.12)	4	-0.56 (0.27)	2	-1.17 (0.40)	2	-1.99 (0.33)	10	-1.53 (0.37)

Individual and Mean HBsAg Results by Cohort Over Time



Preliminary results:

- Treatment was generally well tolerated with continued HBsAg declines in some patients during the IFN treatment period
- Mean HBsAg decline during lead-in phase was 1.6 log_{10} at week 24 of treatment
- 93% of patients (38 of 41 randomized) had HBsAg levels <100 IU/mL during treatment period
- 4 patients reached HBsAg levels <LLOQ during IFN treatment

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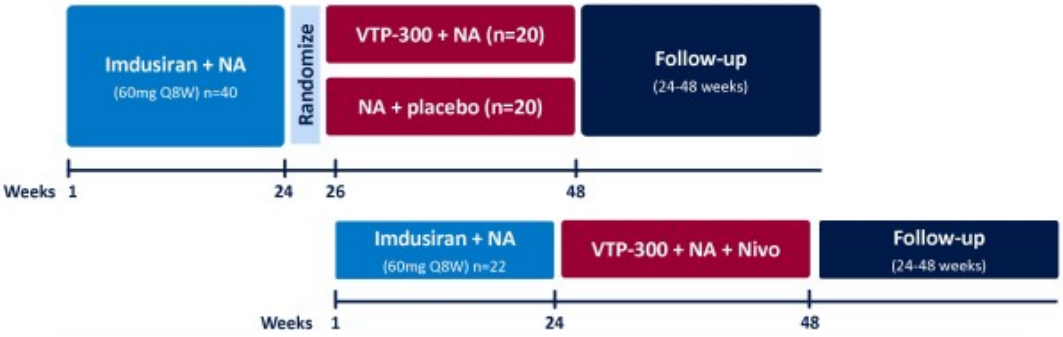
Data presented at EASL 2023

AB-729-202:

Phase 2a POC Clinical Trial

POC Phase 2a clinical trial evaluating imdusiran in combination with Barinthus Bio's immunotherapeutic, VTP-300, NA and with or without low dose nivolumab

Preliminary end-of-treatment data for imdusiran + VTP-300 + NA expected in 1H 2024



Primary objective: evaluate safety and reactogenicity of imdusiran followed by VTP-300 or placebo

At Week 48 all participants who are eligible to discontinue NA therapy will be followed for an additional 48 weeks

Preliminary results presented at AASLD The Liver Meeting 2023; additional data to be presented at EASL Congress 2024

Clinical trial expanded to include an additional arm with nivolumab (Opdivo®) with preliminary data expected in 2H 2024

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

POC: Proof of Concept

AB-729-202: HBsAg Levels were Reduced and Sustained with Imdusiran and VTP-300 Treatment

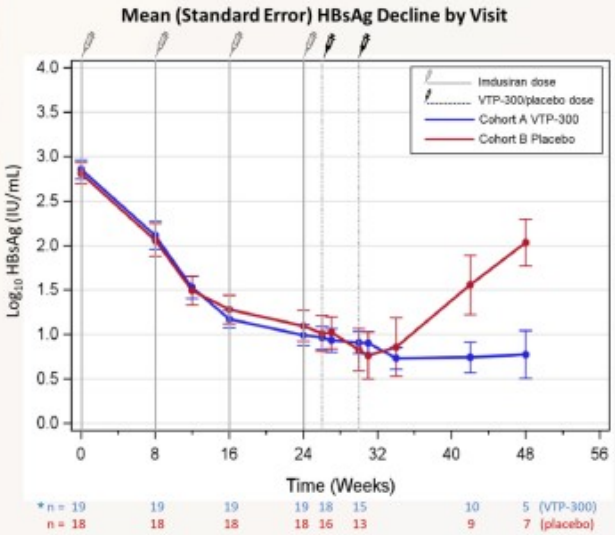
Mean HBsAg Change from Baseline and Key Milestones

Study Week	Mean (SE) Change from Baseline N, log_{10} IU/mL (SE)				HBsAg <100 IU/mL N, (%)		HBsAg <10 IU/mL N, (%)	
	imdusiran 60 mg Q8W x 4 doses							
Baseline	40	2.85 (0.07)			NA		NA	
12	39	-1.31 (0.07)			32/39 (82.1)		7/39 (17.9)	
26	34	-1.86 (0.09)			33/34 (97.1)		15/34 (44.1)	
	N	VTP-300	N	PBO	VTP-300	PBO	VTP-300	PBO
34	13	-2.12 (0.13)	13	-2.01 (0.31)	13/13 (100)	11/13 (84.6)	8/13 (61.5)	6/13 (46.2)
48	5	-1.87 (0.41)	7	-1.03 (0.21)	5/5 (100)	4/7 (57.1)	3/5 (60.0)	0/7 (0)

Preliminary results:

- Robust reductions of HBsAg were seen during the imdusiran treatment period, with 33/34 (97%) of patients <100 IU/mL at the time of VTP-300/placebo administration
- VTP-300 appears to maintain low HBsAg levels in the early post-treatment period, as the mean HBsAg levels in the placebo group begin to rebound starting ~12 weeks after the last dose of imdusiran
- All VTP-300 treated patients have maintained HBsAg <100 IU/mL through Week 48, 60% have maintained HBsAg <10 IU/mL, and all have qualified to stop NA therapy

Mean HBsAg Change from Baseline by Treatment Group



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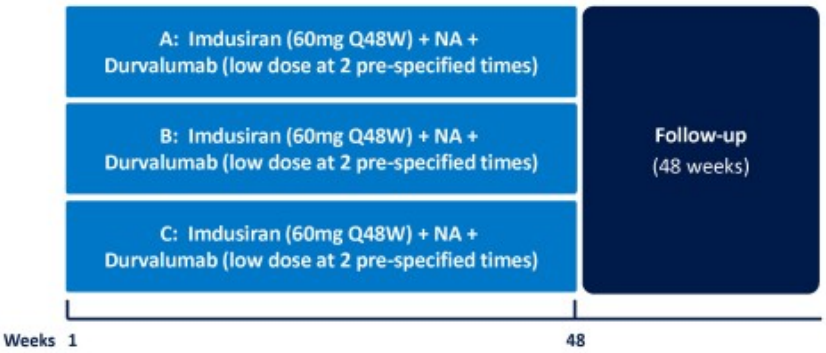
Data presented at AASLD 2023

AB-729-203:

Phase 2a POC Clinical Trial

Imdusiran in combination with NA therapy and intermittent low doses of durvalumab, an anti-PD-L1 monoclonal antibody

Screening initiated in 1H 2024



Primary objective: evaluate safety, tolerability and antiviral activity of imdusiran and NA therapy in combination with durvalumab

N=30 virologically-suppressed patients randomized into 3 separate cohorts

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POC: Proof of Concept

Imdusiran

Strategic Collaboration

QILU PHARMACEUTICAL

Exclusive Licensing* and Strategic Partnership

Develop, manufacture and commercialize imdusiran 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

Arbutus BIOPHARMA

Deal economics for Arbutus:

$40M	Upfront payment (received in 2022)
$15M	Equity investment (received in 2022)
Up to $245M	Commercialization and milestone payments
Double-digit up to low twenties %	Tiered royalties on annual sales

Qilu Pharmaceutical:

One of the leading pharmaceutical companies in China, provides development, manufacturing, and commercialization expertise to this partnership

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 HBV-specific 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/PD-1 interaction at sub-nM concentrations
- Activates HBV-specific immune responses in T-cells from cHBV patients in vitro
- Novel MOA identified
- Demonstrates a robust checkpoint mediated *in vivo* effect
- Improves HBV-specific T- and B-cell responses *ex vivo*

Currently in a Phase 1a/1b clinical trial

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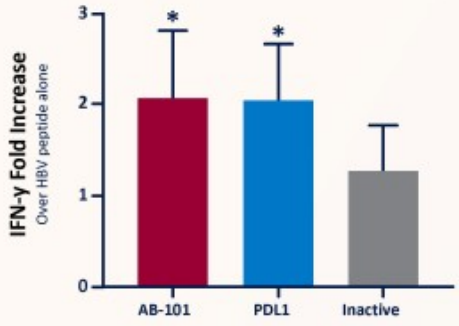
PD-1: Programmed death ligand protein | **Abs:** Antibodies

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

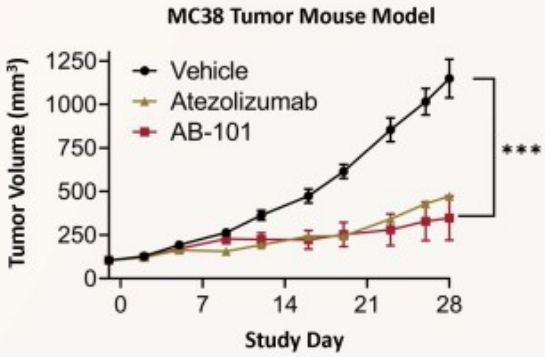
AB-101 is highly potent and activates HBV specific immune cells from chronic HBV patients

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



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

Once daily oral administration of AB-101 resulted in profound tumor reduction



Data presented at EASL 2022

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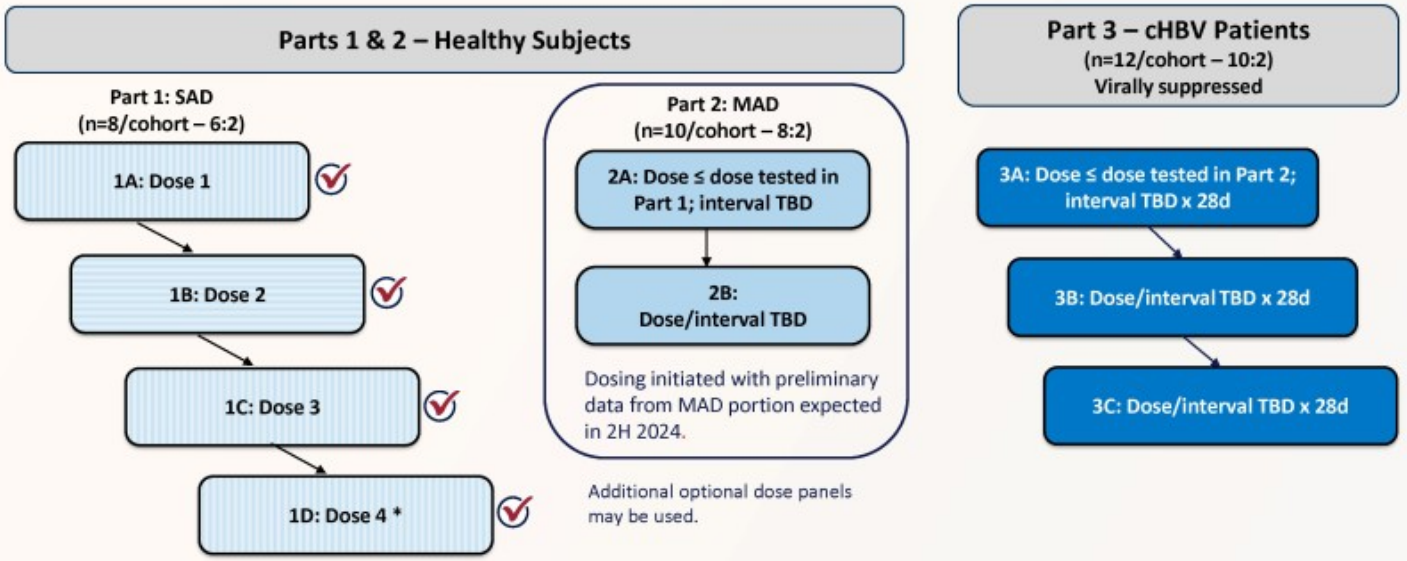
PBMC: Peripheral Blood Mononuclear Cells

AB-101-001: Phase 1a/1b Clinical Trial with AB-101



* Preliminary data shows AB-101 is well tolerated and binds to the receptor target. In the 25mg cohort, all 5 evaluable subjects showed evidence of receptor occupancy between 50-100%.

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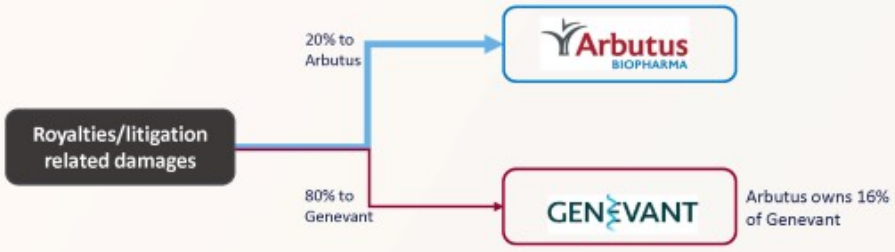
LNP Litigation: Update

- **Moderna - Trial date April 21, 2025***
  - Fact discovery on-going
  - Markman Hearing occurred February 8, 2024 – judge heard arguments on claim construction.
    - Court provided ruling on April 3 and agreed with Arbutus's position on the majority of the claims
  - Next Steps
    - Expert reports / depositions

- **Pfizer**
  - Lawsuit ongoing
  - Date for claim construction hearing has not been set



*Above referenced date is included in the 2/27/2024 Court's Scheduling Order Extension and is subject to change.

Arbutus BIOPHARMA

2024 Key Milestones

Cash balance* of $138M as of March 31, 2024, cash runway through Q2 2026; 2024 net cash burn between $63M and $67M

Milestone	Anticipated Timing 2024
AB-729-201 Phase 2a (imdusiran + IFN): End-of-treatment data	1H
AB-729-202 Phase 2a (imdusiran + VTP-300): End-of-treatment data	1H
AB-729-203 (imdusiran + durvalumab): Initiate Phase 2a clinical trial	1H ✓
AB-101-001: Preliminary data from healthy subject cohorts	1H ✓
AB-729-202 Phase 2a (imdusiran + VTP-300 + nivolumab): End-of-treatment data	2H
AB-101-001: Preliminary data from multiple-ascending dose healthy subject cohorts	2H

*Consists of cash, cash equivalents and marketable securities

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Thank You

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