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 24, 2022

Arbutus Biopharma Corporation

(Exact name of registrant as specified in charter)

British Columbia, Canada (State or other jurisdiction

of incorporation)

001-34949 (Commission File Number) 98-0597776

(IRS Employer Identification No.)

701 Veterans Circle

Warminster, Pennsylvania (Address of principal executive offices) 18974 (Zip Code)

(267) 469-0914

Registrant's telephone number, including area code

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

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

□ Written communication 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 communication pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

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

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

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

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

Emerging growth company \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 8.01. Other Events.

On May 24, 2022, Arbutus Biopharma Corporation (the "Company") posted an updated corporate presentation on its website at www.arbutusbio.com. A copy of the Corporate Presentation is filed as Exhibit 99.1 hereto and is incorporated by reference herein.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description	
<u>99.1</u> 104	<u>Corporate Presentation dated May 24, 2022</u> 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 24, 2022

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



Corporate Presentation

NASDAQ: ABUS www.arbutusbio.com

May 24, 2022



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 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 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 development 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 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.secdar.com. All forward-looking statements or to publicly announce the result of any revisions to any of the forward-looking statements or to publicly announce the result of any revisions to any of the forward-looking statements or to publicly announce the result of any revisions to any of the forward-loo



Our Strategy

Leverage the proven track record of success established with our team's expertise in understanding and treating viral infections by discovering and developing a broad, differentiated pipeline of therapies targeting chronic HBV, COVID-19, and future coronavirus outbreaks.



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



Develop **novel oral pan coronavirus antivirals targeting essential viral proteins** with the goal of reducing hospitalizations and providing preexposure prophylactic therapy.



HBV: Hepatitis B Virus | cHBV: chronic HBV

Investment Highlights



MOA: Mechanism of Action | PD-L1: Programmed death-ligand 1 | M^{pro}: Main protease | NSP12: Non-structural protein | HBsAg: Hepatitis B surface antigen

Broad Pipeline

			Lead Optimization	IND Enabling	Phase 1	Phase 2	Phase 3	Marketed
	RNAi Therapeutic AB-729	AB-729-001 single-asce	nding dose / multiple-as	cending dose				
			AB-729-201 Combo tria	ol (AB-729 + Peg-IFNa-2a +	NA)			
			Combo trial (AB-729 +	core inhibitor + NA)				
BV			AB-729-202 Combo tria	al (AB-729 + vaccine + NA)*			
Ŧ	Capsid Inhibitor (oral)	AB-836	AB-836-001 single-asce	nding dose / multiple-as	cending dose			
	PD-L1 Inhibitor (oral)	AB-101						
	RNA destabilizer (oral)	AB-161						
0-19	M ^{pro} inhibitor (oral)							
COVIE	Nsp12 polymerase inhi (oral)	bitor						
	*Clinical trial expected to initiate	in 1H 2022						
×	butuc							
	BIOPHARMA NA:	Nucleoside A	nalogue					5

HBV Overview





HBsAg: HBV Surface Antigen | HCC: Hepatocellular carcinoma

HBV Presents a Significant Unmet Medical Need



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.



Key Attributes of Each MOA to Combine to Develop a Cure for HBV



AB-729

RNAi Therapeutic

Proprietary GalNAc-conjugate delivery technology provides liver targeting and enables subcutaneous dosing



Arbutus

- 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 1 & 2: Singleascending dose

Robust HBsAg and HBV DNA declines in HBV DNA+ patients with AB-729 monotherapy (90mg singledose)

Arbutus

Part 3: Multiple Ascending Dose in cHBV Patients (n=7) - Ongoing

E: 60mg Q4W				HBV DNA+		
HBV DNA-	Baseline Measure*	Cohort E* (N=7)	Cohort F (N=7)	Cohort I (N=6)^	Cohort J N=7)	Cohort G (N=7)
F: 60mg Q8W HBV DNA-	Age in years, mean (range)	45.1 (33-63)	44.0 (31-59)	45.7 (38-54)	44.3 (35-61)	43.9 (34-50)
	Male gender, n (%)	4 (57%)	4 (57%)	4 (67%)	5 (71%)	3 (43%)
G: 90mg Q8W + TDF	BMI, mean (SD)	27.7 (5.0)	23.7 (2.2)	25.5 (3.1)	28.7 (4.8)	23.8 (4.0)
HBV DNA+	Race, n (%)					
I: 90mg Q8W	Asian	1 (14%)	5 (71%)	5 (83%)	4 (57%)	6 (86%)4
HBV DNA-	Black	0	1 (14%)	0	0	0
I: 90mg O12W	White	6 (86%)	1 (14%)	1 (17%)	3 (43%)	1 (14%)
HBV DNA-	ALT (U/L), mean (SD)	22.4 (10.5)	23.4 (15.2)	25.0 (10.2)	20.1 (7.2)	32.7 (15.8)
K. 90mg OSW HBV DNA-	HBV eAg negative, n (%)	7 (100%)	6 (71%)~	5 (83%)	4 (57%)	7 (100%)
HBeAg+ only	HBsAg (IU/mL), mean (range)	5,372 (584-11,761	5,354 (667-18,605)	4,691 (338-19,017)	6,911 (309-25,345)	1,818 (277-4,723)

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

HBeAg: HBV E antigen | TDF: tenofovir disoproxil fumarate

Post AB-729 Treatment: HBsAg Suppression at Levels <100 IU/mL Maintained up to 28 Weeks



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



AB-729 Dose and Dosing Intervals Mean (SE) Baseline HBsAg Response Similar

		HBV	DNA-		HBV DNA+
Visit	Cohort E 60mg Q4W ⁴ (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)			
	o	ff Treatment (# we	eks post last dose	e)	
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 (5E) 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

Arbutus

Data Presented at AASLD 2021

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)



AE: Adverse Event | TEAE: Treatment Emergent Adverse Event

AB-729-001 Clinical Trial Key Takeaways

AB-729 dosed 60mg Q4W and Q8W and 90mg Q8W and Q12W resulted in robust and comparable HBsAg declines

 AB-729 monotherapy resulted in robust HBsAg and HBV DNA declines in HBV DNA+ patients Long-term dosing with AB-729 resulted in 75% of patients* reaching <100 IU/mL of HBsAg, a clinically relevant threshold which could inform when to stop all therapies

HBsAg suppression at levels of <100 IU/mL maintained up to 28 weeks off AB-729 treatment Preliminary data suggest that long-term suppression of HBsAg with AB-729 results in increased HBV-specific immune response* AB-729 was generally safe and well-tolerated through 40-48 weeks of dosing



* Data presented at EASL 2021

AB-729-201: Phase 2a POC Clinical Trial

AB-729 in combination with ongoing NA therapy and short courses of Peg-IFNα-2a in cHBV patients

Initial data expected 2H 2022





Multi-center, open-label Phase 2a

Primary objective: evaluate safety and tolerability of AB-729 in combination with Peg-IFNa-2a in patients with NA-suppressed cHBV

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

POC: Proof of Concept

AB-729 Clinical Collaboration

assemblybio

Provides accelerated AB-729 combination POC with Assembly's capsid inhibitor and a NA

Fully enrolled; initial data 2H 2022





Primary objective: evaluate safety and tolerability of vebicorvir in combination with AB-729 in patients with cHBV receiving NA therapy

n= ~60 virologically-suppressed patients with cHBV infection

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

AB-729-202:

Phase 2a POC Clinical Trial



POC Phase 2a clinical

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

Expected to initiate 1H 2022





Primary objective: evaluate safety and reactogenicity of AB-729 followed by VTP-300 or placebo

At week 48 all participants who are eligible to discontinue NA therapy will be followed for 48-weeks

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

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 Q-lu territory for exploiting AB-729 in the rest of the world



Deal economics for Arbutus:

\$40M	Upfront payment
\$15M	Equity investment
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-836

Next Generation Capsid Inhibitor

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

Novel chemical series differentiated from other Class II capsid inhibitors

- Leverages a novel binding site within the core protein dimer-dimer interface
- Improved intrinsic potency with $EC_{50} \le 10 \text{ nM}$
- 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
- Once daily dosing
- Pan-genotypic
- Combinable with other MOA agents



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



AB-836-001 Preliminary Data

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

Safety:

Arbutus

- 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

Safety

Next generation small molecule anticipated to circumvent non-clinical safety findings with first generation molecule

Novelty

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

Convenience

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 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

AB-101 is currently in IND-enabling studies



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

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

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



Pan-Coronavirus Overview



Coronavirus Strategy

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



2022 Key Milestones

Cash balance* of \$221.8M as of March 31, 2022, cash runway into Q2 2024

*Consists of cash, cash balance, cash equivalents and marketable securities

Milestone	Anticipated Timing 2022
AB-836, next generation oral capsid inhibitor: Data 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

