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): June 25, 2022

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 8.01. Other Events.

On June 25, 2022, Arbutus Biopharma Corporation (the "Company") issued a press release announcing the presentation of new clinical and pre-clinical data from its proprietary compounds at the European Association for the Study of the Liver (EASL) International Liver Congress™ (ILC) and providing an update on its AB-836 clinical development program.

On June 27, 2022, the Company held a conference call and webcast presentation to discuss the new data. 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 June 25, 2022
99.2	Presentation dated June 27, 2022
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: June 27, 2022

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

Arbutus Presents New Data on AB-729, AB-836 and AB-101 at the EASL International Liver Congress™ 2022 and Provides AB-836 Clinical Update

AB-729, our RNAi therapeutic, provided robust and comparable HBsAg declines in both HBeAg+ and HBeAg- patients

50% (16 out of 32) of patients maintained HBsAg levels below 100 IU/mL 24 weeks after their last AB-729 dose

In the first five patients who discontinued both AB-729 and NA therapy after meeting stopping criteria, there has been no evidence of virologic or clinical relapse in 8-24 weeks of follow-up

Preliminary data to date have shown that AB-729 remains generally safe and well-tolerated after completing dosing in 41 patients

AB-729 continues to restore HBV-specific T-cells and decrease exhausted T-cells

AB-836, our oral capsid inhibitor, dosed at 100mg or 200mg once daily for 28 days, achieved mean declines in HBV DNA of 3.04 and 3.55 log_{10}, respectively, however safety findings warrant further evaluation in healthy volunteers

AB-101, our oral PD-L1 inhibitor, mediates activation and reinvigoration of HBV-specific T-cells from chronic hepatitis B patients in a pre-clinical model

Conference Call and Webcast Scheduled for 8:00 AM ET, Monday, June 27, 2022

WARMINSTER, Pa., June 25, 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 announced the presentation of new clinical and pre-clinical data from its proprietary compounds at the European Association for the Study of the Liver (EASL) International Liver Congress™ (ILC).

The new clinical data for AB-729, our RNAi therapeutic, continues to support its development as a potential cornerstone agent for the treatment of chronic hepatitis B (cHBV) infection. In addition, when AB-729 and nucleos(t)ide analogues (NA) were discontinued in the first five patients who met stopping criteria and consented, there was no evidence of virologic or clinical relapse in at least 8-24 weeks of follow-up, which may lead to a functional cure.

AB-836, our oral capsid inhibitor, demonstrated robust antiviral activity, however, two patients in the 200 mg cohort experienced alanine aminotransferase (ALT) elevations. Based on these observations along with potentially correlated immunological findings, we plan to conduct a Phase 1 clinical trial in healthy volunteers before progressing this program.

William Collier, President and Chief Executive Officer of Arbutus, commented, “Our comprehensive AB-729 data package that has been accepted for presentation at EASL, is indicative of the continued impressive clinical safety and efficacy profile seen with AB-729 in 41 patients. Our clinical team has conducted a thorough evaluation of this compound in cHBV patients with different characteristics to identify an adequate dose and dosing schedule to move into our ongoing Phase 2a clinical trials which will support our Phase 2b clinical program. We believe that AB-729 is capable of being a cornerstone agent in the treatment regimen to provide a functional cure for patients with cHBV.”

AB-729-001 Clinical Data Poster Presentations

Professor Man-Fung Yuen, D.Sc., M.D., Ph.D., Deputy Head of Department, Chief of Division of Gastroenterology and Hepatology, Master of Lap Chee, University of Hong Kong, and lead investigator of AB-729-001 clinical trial, presented a poster titled, “Continued suppression of viral markers observed following discontinuation of nucleos(t)ide analogue therapy in chronic hepatitis B subjects with low hepatitis B surface antigen levels after 48 weeks of treatment with AB-729”.

This presentation focused on the preliminary safety and virology data from those patients in part 3 of the AB-729-001 clinical trial who completed treatment with AB-729 and, after meeting the protocol-defined criteria, elected to stop their NA-therapy (n=9). Prof. Yuen reported on the first five of the nine patients that had between 8 and 24 weeks of data following discontinuation of all treatment.

The mean HBsAg for the five patients at baseline was 2887 IU/mL (range 1392-6765) compared to 69 IU/mL (range 4.58-150.1) at the last visit after discontinuing all treatment. All five patients remain off all treatment, and all have HBsAg levels below pre-baseline levels. None of the patients have met clinical or virologic relapse criteria. There were no adverse events (AEs) reported, no ALT elevations observed, and HBV DNA levels remain either less than the LLOQ (lower limit of quantification) or have transiently risen and subsequently decreased without intervention.

HBV Parameter	Pt. 46	Pt. 51	Pt. 52	Pt. 53	Pt. 61
HBsAg (IU/mL)					
Study Day 1	1392	6765	1888	2368	2021
Week 48/EOT	5	29.61	9.54	22.76	1.64
Last Visit prior to NA d/c	10.53	64.9	3.95	69.06	3.99
Last available post-NA d/c	41.22	150.1	10.97	138.9	4.58
HBcrAg (log U/mL)					
Study Day 1	3.8	<3.0	3.2	4.2	3.7
Week 48/EOT	3.4	<3.0	3	4.4	3.4
Last Visit prior to NA d/c	3.4	<3.0	3	4.5	3.5
Last available post-NA d/c	3.4	<3.0	3.1	4.5	3.6
HBV RNA (log_{10} U/mL)					
Study Day 1	2.07	TND	<LLOQ	<LLOQ	N/A
Week 48/EOT	TND	TND	0.7	TND	TND

Last Visit prior to NA d/c	1.29	1.07	1.2	TND	1.43
Last available post-NA d/c	1.16	1.31	1.36	1.08	1.09

Dr. Gaston Picchio, Chief Development Officer of Arbutus Biopharma, stated: "I am most excited with the data showing that after discontinuing treatment with AB-729 and NA-therapy, patients maintained a sustained reduction in HBsAg while avoiding an HBV DNA relapse. This degree of virologic control in the absence of any therapies could be in part explained by our findings showing evidence of an increase in HBV-specific T-cell proliferation *in vitro* using peripheral blood mononuclear cells from patients dosed with AB-729."

"The additional data from the AB-729-001 clinical trial are extremely impressive," stated Prof. Yuen. "To see patients maintain a sustained control of both HBsAg and HBV DNA after stopping all treatments is quite encouraging, although additional follow up is necessary to confirm these findings. We are continuing to follow these patients for one-year post discontinuation of all medications, to monitor for partial or functional cure."

Prof. Yuen also presented data from a poster titled, "Long-term suppression maintained after cessation of AB-729 treatment and comparable on-treatment response observed in HBeAg+ subjects".

With dosing complete in all six cohorts of patients (n=41), Prof. Yuen presented the following new data from Cohort K (n=7) which included HBeAg+ patients only:

- All seven patients reached HBsAg levels <100 IU/ml during AB-729 treatment or follow-up.
- Two patients reached HBsAg levels <LLOQ at one or more visits.
- The mean (SE) $\log_{10}$ change from baseline in HBeAg at end of treatment was -0.94(0.25) IU/mL.

In addition, Prof. Yuen presented follow-up data on Cohort G, which included HBV DNA+ patients who began treatment with tenofovir disoproxil fumarate concurrently with AB-729, and Cohorts E, F, I and J, which enrolled HBeAg- and HBV DNA- patients and evaluated different doses and dosing intervals. The reported data for these patients showed:

- 26 of 34 patients had HBsAg <100 IU/mL at some point during the trial.
- Most patients had a robust decline in HBsAg that was maintained well after cessation of AB-729 treatment, mean log change from baseline to 24 weeks post last dose was approximately -1.5 $\log_{10}$ across cohorts.
- Repeat dosing of AB-729 continues to be generally safe and well-tolerated with only transient Grade 1 or 2 ALT elevations.

Prof. Yuen continued, "This data shows that HBsAg responses with AB-729 are robust across all cohorts regardless of dose, dosing interval, HBeAg or HBV DNA status. In addition, the vast majority of patients reached HBsAg levels of less than 100 IU/mL, which is a clinically relevant threshold that could inform when to stop all therapies. With the encouraging safety and tolerability profile of AB-729, I look forward to continuing to develop this promising compound."

AB-836 Clinical Data Presentation

Prof. Edward Gane, University of Auckland, New Zealand Liver Transplant Unit, Auckland, New Zealand, presented the full data from this trial in a poster titled, "Safety, tolerability, pharmacokinetics, and antiviral activity of the 3rd generation capsid inhibitor AB-836 in healthy subjects and subjects with chronic hepatitis B".

AB-836-001 is a Phase 1a/1b clinical trial evaluating the safety and tolerability of multiple doses of AB-836 in patients with cHBV infection. Data from part 3 of the trial showed that the 100mg and 200mg doses of AB-836 provided potent inhibition of HBV replication with mean declines in HBV DNA at Day 28 of 3.04 and 3.55 $\log_{10}$ IU/mL, respectively. From a safety standpoint, there were no deaths or SAEs observed. Two HBeAg+ patients in the 100mg dose cohort had transient Grade 3 ALT elevations that resolved with continued dosing and were not considered treatment emergent adverse events (TEAEs). Two patients in the 200mg cohort had Grade 3 and Grade 4 ALT elevations on the last day of dosing (Day 28) that returned to baseline during follow up which were reported as TEAEs. The Grade 3 and Grade 4 ALT elevations seen in the 200 mg cohort were accompanied by serum IP-10 increases, a cytokine previously described to be associated with potential liver toxicity in the capsid inhibitor space. All patients with ALT elevations were asymptomatic and none had changes in bilirubin or met drug-induced liver injury (DILI) criteria. There were no other clinically significant lab abnormalities, ECG or vital sign changes observed.

Dr. Gaston Picchio, Chief Development Officer of Arbutus, commented, "I am impressed with the potency of AB-836, but disappointed with the safety signal seen in the 200mg cohort, especially since AB-836 demonstrated an encouraging safety profile pre-clinically. While the Grade 3 and Grade 4 ALT elevations resolved during follow-up and were not associated with clinical symptoms, they were accompanied by an increase in IP-10, an exploratory and hence not a definitive biomarker which we had previously observed in cases of liver toxicity associated with capsid inhibitors, and so we have decided, in the interest of patient safety, that we need to conduct an additional Phase 1 trial in healthy volunteers. We believe data from this additional study will help to determine whether or not these ALT elevations could be the result of liver toxicity. We will provide an update with respect to the status and timing of this clinical trial at a later date."

AB-101 Preclinical Poster Presentation

Dr. Emily Thi presented data from a poster titled, "Preclinical activity of small-molecule oral PD-L1 checkpoint inhibitors capable of reinvigorating T cell responses from chronic hepatitis B patients."

The purpose of this study was to assess the preclinical activity of AB-101 and the compound's ability to reinvigorate patient HBV-specific T-cells. Studies were conducted using a transgenic MC38 tumor mouse model and peripheral blood mononuclear cells (PBMCs) from cHBV patients. The data presented showed that once daily oral administration of AB-101 resulted in profound tumor reduction that was associated with T-cell activation. In addition, AB-101 activates and reinvigorates HBV-specific T-cells. This favorable preclinical profile supports further development of AB-101 as a therapeutic modality for cHBV treatment. AB-101 is currently undergoing IND-enabling activities.

All of the posters that were presented at EASL 2022 can be accessed through the Investors section of Arbutus' website under Events & Presentations at www.arbutusbio.com.

Conference Call and Webcast:

Arbutus will hold a conference call and webcast on Monday, June 27, 2022, at 8:00 AM Eastern Time to summarize the data presented at EASL. You can access a live webcast of the call, which will include presentation slides, 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 7014417.

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 7014417.

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.

About AB-101

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. We have identified a class of small molecule oral PD-L1 inhibitors that we believe will allow for controlled checkpoint blockade, enable oral dosing, and mitigate systemic safety issues typically seen with checkpoint antibody therapies. Our lead oral PD-L1 inhibitor candidate, AB-101, is currently in IND-enabling studies. We believe AB-101 has the potential to be used in combination with other approved and investigational agents for our mission to achieve a functional cure for HBV chronically infected patients. We are also exploring oncology applications for our internal PD-L1 portfolio.

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, an oral capsid inhibitor, an oral PD-L1 inhibitor, and oral RNA destabilizer that we intend to combine with the aim of providing 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. It is currently being evaluated in multiple phase 2 clinical trials. We also have an ongoing drug discovery and development program directed to identifying novel, orally active agents for treating coronavirus (including SARS-CoV-2). In addition, we are 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 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; and the potential for our product candidates to achieve success in clinical trials.

With respect to the forward-looking statements contained in this press release, Arbutus has made numerous assumptions regarding, among other things: the effectiveness and timeliness of preclinical studies and clinical trials, and the usefulness of the data; the timeliness of regulatory approvals; the continued demand for Arbutus' assets; and the stability of economic and market conditions. While Arbutus considers these assumptions to be reasonable, these assumptions are inherently subject to significant business, economic, competitive, market and social uncertainties and contingencies, including uncertainties and contingencies related to the ongoing COVID-19 pandemic 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.

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Arbutus BIOPHARMA

EASL Data Presentation & AB-836 Clinical Update

NASDAQ: ABUS

www.arbutusbio.com

June 27, 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 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.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.

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

Part 1 & 2:

Single-ascending dose

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

Part 3: Multiple Ascending Dose in cHBV Patients (n=7/cohort)

- **E:** 60mg Q4W HBV DNA-
- **F:** 60mg Q8W HBV DNA-
- **G:** 90mg Q8W + TDF HBV DNA+
- **I:** 90mg Q8W HBV DNA-
- **J:** 90mg Q12W HBV DNA-
- **K:** 90mg Q8W HBV DNA-, HBeAg+ only

Baseline Characteristics

Baseline Measure[#]	HBV DNA-					HBV DNA+
	Cohort E[$] (n=7)	Cohort F (n=7)	Cohort I (n=6)[^]	Cohort J (n=7)	Cohort K[*] (n=7)	Cohort G (n=7)
Age in years, mean (range)	45.1 (33 – 63)	44.0 (31 – 59)	45.7 (38 – 54)	44.3 (35 – 61)	41.4 (21 – 57)	43.9 (34 – 50)
Male gender, n (%)	4 (57)	4 (57)	4 (67)	5 (71)	4 (57)	3 (43)
BMI, mean (SD)	27.7 (5.0)	23.7 (2.2)	25.5 (3.1)	28.7 (4.8)	25.0 (4.7)	23.8 (4.0)
Race, n (%)						
Asian	1 (14)	5 (71)	5 (83)	4 (57)	6 (86)	6 (86)
Black	0	1 (14)	0	0	0	0
White	6 (86)	1 (14)	1 (17)	3 (43)	0	1 (14)
Pacific Islander	0	0	0	0	1 (14)	0
ALT (U/L), mean (SD)	22.4 (10.5)	23.4 (15.2)	26.0 (10.2)	20.1 (7.2)	25.1 (8.9)	32.7 (15.8)
HBV eAg-, n (%)[&]	7 (100)	6 (71)[@]	5 (83)	4 (57)	0	7 (100)
HBsAg (IU/mL), mean (range)	5,372 (584 – 11,761)	5,454 (667 – 18,605)	4,691 (338 – 19,017)	6,911 (309 – 25,345)	2,221 (545 – 5,273)	1,818 (277 – 4,723)

[#] Genotype not determined
[$] Patients switched to AB-729 60 mg Q12W for the extension phase
[^] n=6 due to 1 patient meeting exclusion criteria on D1 and a replacement patient receiving an incorrect dose on D1; both entered follow up and were excluded from analysis
[&] One patient counted as HBeAg- was identified as "HBeAg borderline" (baseline HBeAg = 0.18 IU/mL, LLOQ = 0.11 IU/mL)
[*] Cohort K Mean (SD) Baseline HBeAg = 22.7 (37.5) IU/mL

HBeAg: HBV E antigen | **TDF:** tenofovir disoproxil fumarate

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Robust HBsAg Declines Irrespective of Dose, Dosing Schedule, HBeAg or HBV DNA Status

Mean (SE) Baseline and Δ log10 HBsAg by Visit

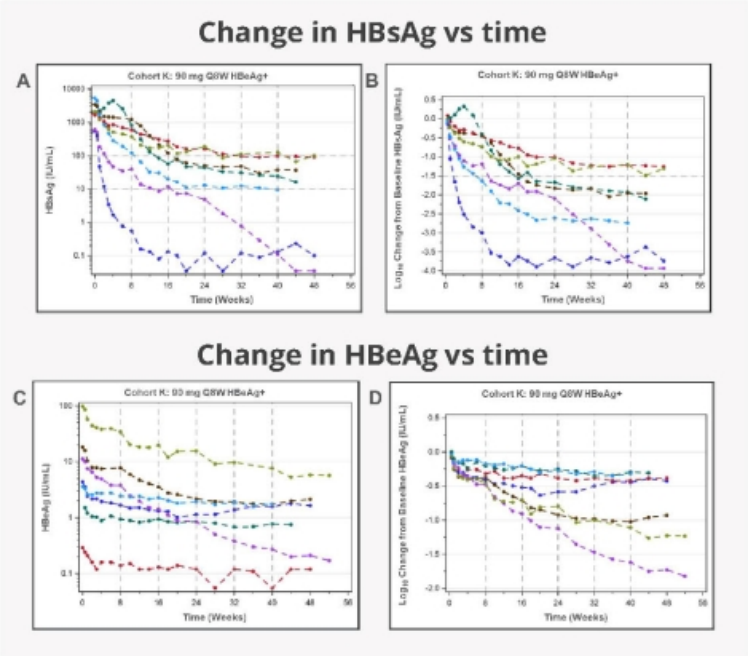
Nominal Visit	HBV DNA-					HBV DNA+
	Cohort E (n=7)	Cohort F (n=7)	Cohort I (n=6)	Cohort J✧ (n=7)	Cohort K (n=7)	Cohort G (n=7)
Baseline (IU/mL)	3.51 (0.20)	3.53 (0.17)	3.36 (0.23)	3.37 (0.28)	3.23 (0.14)	3.14 (0.14)
Week 12	-1.10 (0.15)	-1.02 (0.11)	-1.30 (0.19)	-1.06 (0.31)	-1.63 (0.39)	-1.56 (0.32)
Week 24	-1.84 (0.16)	-1.57 (0.09)	-1.80 (0.23)	-1.56 (0.25)	-1.99 (0.35)	-1.82 (0.29)
Week 36	-1.84 (0.19)	-1.78 (0.10)	-2.06 (0.28)	-1.70 (0.39)	-2.50 (0.39)	-2.08 (0.32)
Week 48	-1.89 (0.18)	-1.90 (0.14)	1.91 (0.32)	-1.80* (0.41)		-2.15 (0.34)
Week 12 Post Last Dose	-1.81 (0.17)	-1.74 (0.16)	-1.77 (0.31)	-1.80* (0.41)		-1.97 (0.28)
Week 24 Post Last Dose	-1.54 (0.19)	-1.48 (0.24)	-1.67 (0.40)	-1.52 (0.40)		-1.59 (0.31)

Note: Last dose Cohort E, Week 44; Cohorts F, I, G, K: Week 40; Cohort J: Week 36; Mean (SE) values presented only if N≥5; ✧ one subject in Cohort J chose not to extend treatment after Week 24; *Week 48 and 12 weeks post last dose are at the same visit for Cohort J

- Mean declines in HBsAg on treatment and post treatment continue to be comparable across cohorts
- Results to date from a dedicated HBeAg+ cohort (Cohort K) further support preliminary observations suggesting that baseline HBeAg status has no effect on response

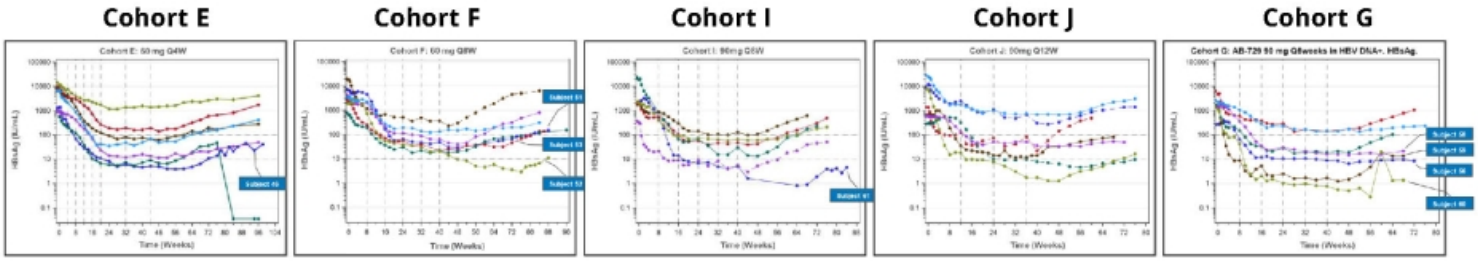
Arbutus BIOPHARMA

HBsAg and HBeAg Declines in HBeAg+ Subjects: Cohort K



Robust HBsAg Declines Persist After Stopping AB-729

Change in HBsAg vs time



- 26 of 34 patients had HBsAg < 100 IU/mL at some point during the study
- 1 patient in Cohort E (baseline HBsAg = 583.5 IU/mL) who qualified but declined to participate in NA discontinuation seroconverted at Week 84 (HBsAg < LLOQ and HBsAb = 189 mIU/mL at last visit); liver enzymes remained within normal limits.

AB-729-001: Safety Summary

Adverse events and laboratory abnormalities

Patients, n (%)	HBV DNA-					HBV DNA+	
	Cohort E (n=70)	Cohort F (n=7)	Cohort I (n=6)	Cohort J (n=7)	Cohort K (n=7)	Cohort G (n=7)	TOTAL (n=41)
Patients with any TEAE	4 (57)	5 (71)	1 (17)	3 (43)	5 (71)	5 (71)	23 (56)
Grade 1	3 (43)	4 (57)	0	2 (29)	4 (57)	4 (57)	17 (42)
Grade 2	1 (14)	1 (14)	1 (17)	1 (14)	1 (14)	0	5 (12)
Grade 3	0	0	0	0	0	1 (14)‡	2 (5)
SAEs (all unrelated)	0	0	0	1 (14)*	0	1 (14)‡	2 (5)
Patients with related TEAEs (all Grade 1)	2 (29)	4 (57)	1 (17)	2 (29)	5 (71)	2 (29)	16 (39)
Most common related TEAEs (in ≥ 2 patients):							
Injection site pain	0	2 (29)	0	1 (14)	4 (57)	1 (14)	9 (4)#
Injection site erythema	2 (29)	1 (14)	0	0	1 (14)	0	5 (2)#
Injection site bruising	2 (29)	0	1 (17)	0	0	0	3 (1)#
Liver–related laboratory abnormalities:							
ALT elevation							
Grade 2	2 (29)	1 (14)	2 (33)	0	3 (43)	1 (14)	9 (22)
Grade 3 or 4	0	0	0	0	0	0	0
AST elevation							
Grade 2	1 (14)	0	0	0	0	1 (14)	2 (5)
Grade 3 or 4	0	0	0	0	0	0	0

TEAE: treatment-emergent adverse event; SAE: serious adverse event; Grading criteria: Division of AIDS Table for Grading the Severity of Adult and Pediatric Adverse Events, V2.1

TEAE window was 12 weeks post-last dose of AB-729, data presented are cumulative from Screening/Study Day 1; worst grade of TEAE or lab abnormality reported

* SAE was an unrelated Grade 3 diagnosis of cholangiocarcinoma >12 weeks post last dose of AB-729; ‡ SAE was an unrelated Grade 3 thigh subcutaneous cyst abscess

n, % is number of events out of 242 total AB-729 doses administered in Part 3`

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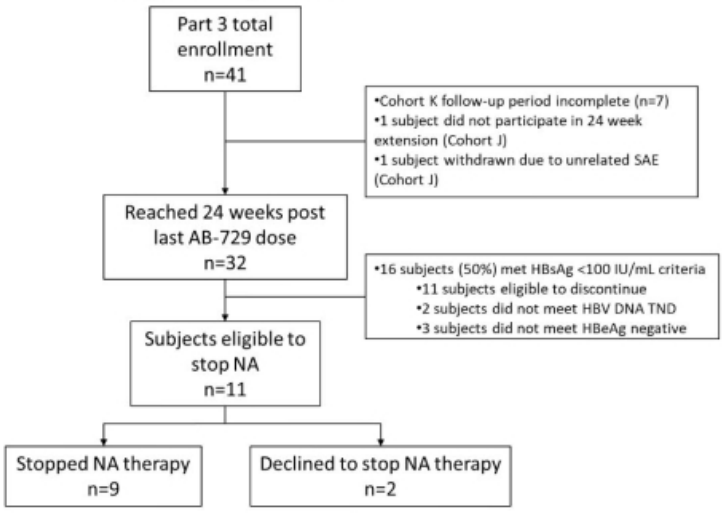
AB-729 and NA-Therapy Discontinuation Baseline Characteristics

Subject Disposition



Baseline Characteristics

Baseline Measure	Subject 46	Subject 51	Subject 52	Subject 53	Subject 61	Subject 56	Subject 58	Subject 59	Subject 60
Age (years)	35	49	36	61	56	52	50	36	46
Gender	Female	Male	Male	Female	Female	Female	Male	Male	Female
Race	Asian	Black	Asian	Asian	Asian	Asian	Asian	Asian	Asian
Study Cohort	E	F	F	F	I	G	G	G	G
NA therapy at study entry	ETV	ETV	TDF	TDF	ETV	none	none	none	none
Total duration of NA therapy	9 y, 7 m	6 y, 2 m	17 y	7 y, 5 m	6 y, 5 m	1 y, 6 m	1 y, 6 m	1 y, 6 m	1 y, 6 m

- All subjects who discontinued NAs were HBeAg negative at study entry

NA stopping criteria

- ALT <2 × ULN, and
- Undetectable HBV DNA, and
- HBeAg negative, and
- HBsAg <100 IU/mL at two consecutive visits at least 24 weeks after the last dose of AB-729

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HBV Markers in NA-Therapy Discontinuation Cohort

HBV Parameter	Pt. 46	Pt. 51	Pt. 52	Pt. 53	Pt. 61
HBsAg (IU/mL)					
Study Day 1	1392	6765	1888	2368	2021
Week 48/EOT	5	29.61	9.54	22.76	1.64
Last Visit prior to NA d/c	10.53	64.9	3.95	69.06	3.99
Last available post-NA d/c	41.22	150.1	10.97	138.9	4.58
HBcrAg (log U/mL)					
Study Day 1	3.8	<3.0	3.2	4.2	3.7
Week 48/EOT	3.4	<3.0	3	4.4	3.4
Last Visit prior to NA d/c	3.4	<3.0	3	4.5	3.5
Last available post-NA d/c	3.4	<3.0	3.1	4.5	3.6
HBV RNA (log_{10} U/mL)					
Study Day 1	2.07	TND	<LLOQ	<LLOQ	N/A
Week 48/EOT	TND	TND	0.7	TND	TND
Last Visit prior to NA d/c	1.29	1.07	1.2	TND	1.43
Last available post-NA d/c	1.16	1.31	1.36	1.08	1.09

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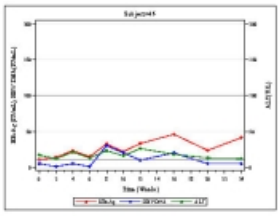
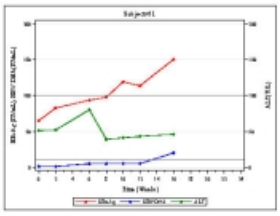
HBsAg, HBV DNA and ALT in NA Discontinuation Cohort

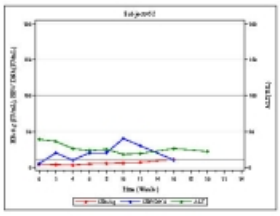
Pt. 46



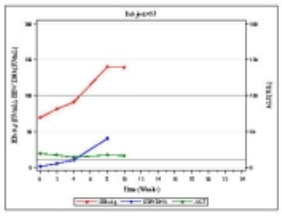
Pt. 51



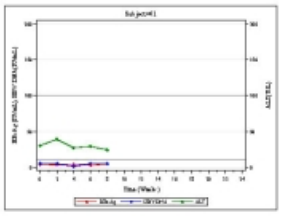
Pt. 52



Pt. 53



Pt. 61



- No subjects have met virologic or clinical relapse criteria or restarted NA therapy to date
- HBV DNA has transiently increased in some subjects and subsequently decreased with no intervention

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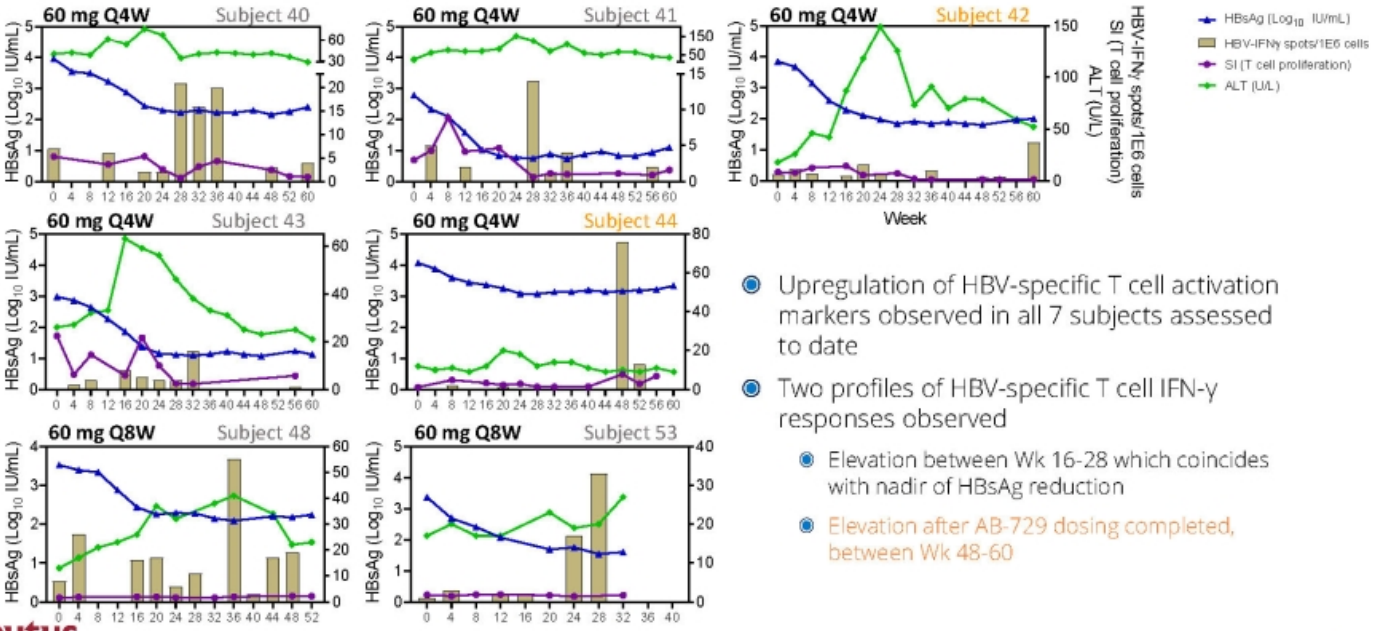
Conclusions NA Discontinuation Cohort

- AB-729 treatment for 48 weeks at varying doses and intervals led to continued HBsAg declines to <100 IU/mL in 16 of 32 (50%) subjects which were maintained for at least 24 weeks after the last dose of AB-729
- Eleven of these 16 subjects met protocol-defined NA stopping criteria
- No evidence of virologic or clinical relapse has been detected in the first 5 subjects to discontinue NA therapy with at least 8 - 24 weeks of follow up data available, and no subjects have restarted NA therapy to date
- HBsAg remains well below pre-study levels in all subjects
- Discontinuation of NA therapy for up to 24 weeks has been generally safe and well-tolerated to date, with no ALT flares observed.

HBV-Specific T-Cell Activation Increases with AB-729-Treated in cHBV+ Subjects



- Upregulation of HBV-specific T cell activation markers observed in all 7 subjects assessed to date
- Two profiles of HBV-specific T cell IFN-γ responses observed
  - Elevation between Wk 16-28 which coincides with nadir of HBsAg reduction
  - Elevation after AB-729 dosing completed, between Wk 48-60

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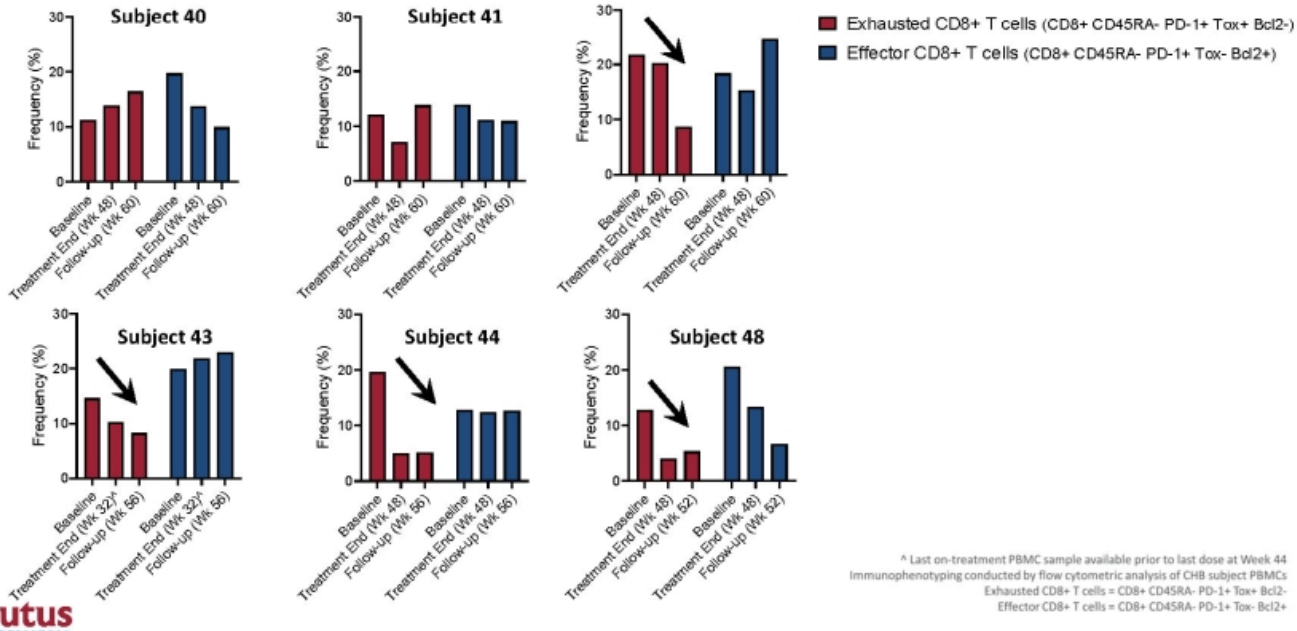
Exhausted CD-8+ T-Cells Decreased in 4/6 AB-729-Treated cHBV+ subjects



^ Last on-treatment PBMC sample available prior to last dose at Week 44
Immunophenotyping conducted by flow cytometric analysis of CHB subject PBMCs
Exhausted CD8+ T cells = CD8+ CD45RA- PD-1+ Tox+ Bcl2-
Effector CD8+ T cells = CD8+ CD45RA- PD-1+ Tox- Bcl2+

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AB-729 Key Messages

- AB-729 provides robust and comparable HBsAg decline in HBeAg+, HBeAg-, DNA+ and DNA- patients
- Robust HBsAg declines persist after stopping AB-729 treatment
  - 26 of 34 patients had HBsAg < 100 IU/mL at some point during the study
- 5 patients that discontinued both AB-729 and NA-therapy, maintained a sustained reduction in HBsAg
  - All patients did not meet clinical or virologic relapse criteria and all remain off treatment
- AB-729 remains generally safe and well-tolerated to date after completing dosing in 41 patients
- AB-729 continues to results in HBV-specific T-cell immune restoration and decrease of exhausted T-cells

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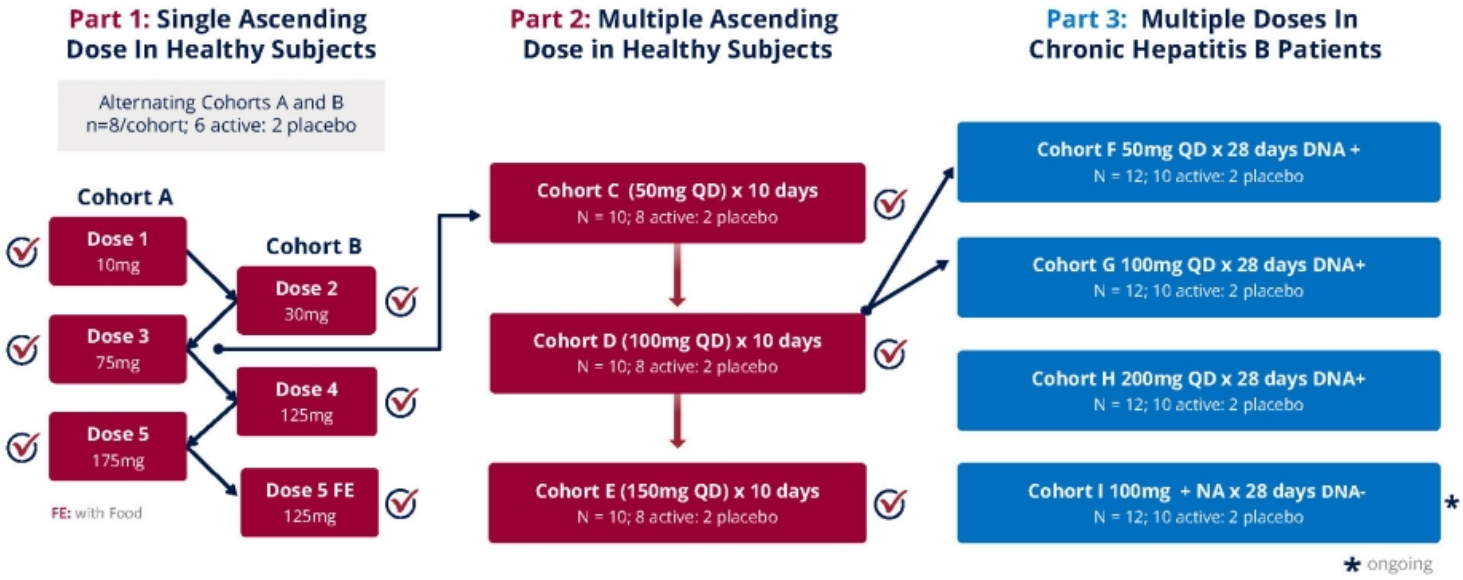
AB-836-001 Phase 1a/1b Clinical Trial



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AB-836-001 Study: Baseline Characteristics

Table 2: CHB Subjects Baseline Characteristics

Baseline Measure	Cohort F* 50mg QD N = 12	Cohort G^ 100mg QD N = 13	Cohort H# 200mg QD N = 13	Total N = 38
Age (years) [Mean (SD)]	41.5 (6.6)	42.5 (11.0)	38.8 (7.6)	40.9 (8.6)
BMI (kg/m^2) [Mean (SD)]	23.0 (4.9)	24.8 (2.8)	23.9 (3.3)	23.9 (3.7)
Male Gender [n (%)]	7 (58)	10 (77)	9 (69)	26 (68)
Race [n (%)]				
Asian	6 (50)	8 (62)	10 (77)	24 (63)
White	5 (42)	5 (38)	2 (15)	12 (32)
Other	1 (8)	0	1 (8)	2 (5)
Genotype [n (%)]				
A	0	0	1 (7.7)	1 (2.6)
B	2 (16.7)	4 (30.8)	3 (23.1)	9 (23.7)
C	4 (33.3)	2 (15.4)	6 (46.2)	12 (31.6)
D	5 (41.7)	6 (46.2)	2 (15.4)	13 (34.2)
Not Determined	1 (8.3)	1 (7.7)	1 (7.7)	3 (7.9)
HBeAg+ [n (%)]	4 (33)	4 (31)	4 (31)	12 (32)
ALT [Mean (SD)]	76.5 (176.8)	45.1 (20.4)	63.9 (58.9)	61.4 (102.1)
HBV DNA (Log_{10} IU/mL) [Mean (SD)]	4.96 (1.53)	6.28 (2.10)	5.76 (1.77)	5.69 (1.85)
HBsAg (Log_{10} IU/mL) [Mean (SD)]	3.45 (0.52)	3.88 (1.05)	3.79 (0.60)	3.71 (0.77)

*One subject in Cohort F was withdrawn from the study due to an asymptomatic HBV flare noted on the pre-dose Day 1 labs and will be replaced
^One subject in Cohort G had discordant HBeAg status between screening (HBeAg+) and Day -1 (HBeAg-); one additional HBeAg+ subject enrolled
#Two subjects in Cohort H were withdrawn due to inability to comply with study visits (COVID-19 and instability in Ukraine); 1 replacement was enrolled

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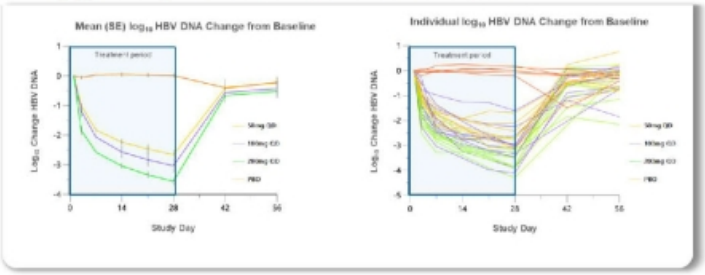
Robust HBV DNA Declines with AB-836 50 mg, 100mg and 200mg QD

Log_{10} Change from Baseline HBV DNA



Day 28 HBV DNA Response by Cohort

Dose Level	N	Mean (SE) Day 28 HBV DNA log_{10} change	Subjects > 3.0 log_{10} decline in HBV DNA	Subjects <LLOQ at Day 28
Cohort F 50mg QD	9	-2.66 (0.17)	4	1
Cohort G 100mg QD	11	-3.04 (0.21)	6	0
Cohort H 200mg QD	10	-3.55 (0.14)	9	3
Placebo	5	0.01 (0.06)	0	0

- Individual HBV DNA responses suggest that any baseline mutations in these cohorts, if present (data pending), did not affect response
- There were no meaningful changes in HBsAg over 28 days of dosing; HBV RNA data are pending

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AB-836 Safety

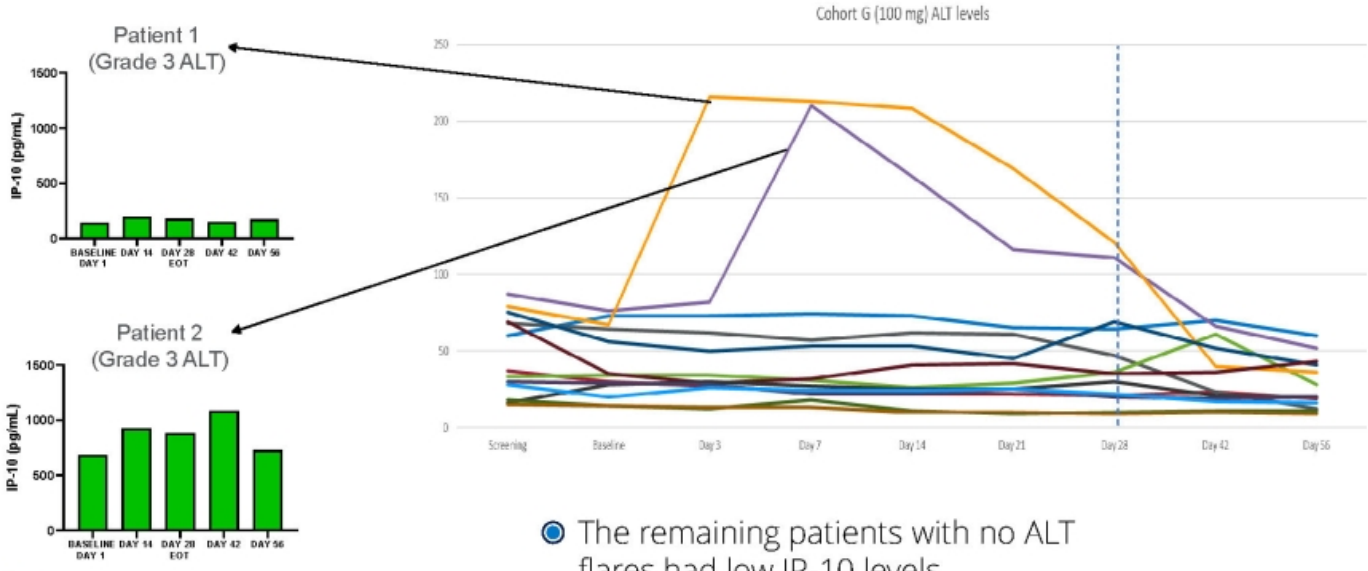
Table 6: Adverse Events – Part 3 (CHB)

Subjects, n	Cohort F 50mg QD [N=12]	Cohort G 100mg QD [N=13]	Cohort H 200mg QD [N=13]	TOTAL [N=38]
Subjects with any TEAE	4	3	4	11
Maximum TEAE Severity				
Grade 1	3	3	2	8
Grade 2	0	0	0	0
Grade 3	0	0	2	2
Grade 4	1[a]	0	0	1
Related TEAEs	0	1	1	2
SAEs	0	0	0	0
Liver-related laboratory abnormalities	1	2	2	5
ALT elevation (Maximum Lab Grade)				
Grade 3	0	2	1	3
Grade 4	1	0	1	2
AST elevation				
Grade 2	0	1	1	2
Grade 3	1	0	1	2

[a]The Grade 4 ALT and Grade 3 AST elevations noted in Cohort F were due to a pre-dose HBV flare detected on dosing Day 1 (subject was discontinued). The subject's ALT/AST upon screening was a lab Grade 2.

- Three TEAEs were considered treatment-related (Grade 1 dyspepsia in Cohort G and Grade 3 ALT/Grade 2 AST elevation in 1 Cohort H subject)
- Two subjects in Cohort G had transient Grade 3 ALT elevations that resolved with continued AB-836 dosing and were not considered TEAEs
- Two subjects in Cohort H had transaminase elevations on the last day of dosing (Day 28) that returned to baseline levels no later than Day 56 (reported as TEAEs and listed in liver related lab abnormalities above)
- All subjects with transaminase elevations were asymptomatic and none had changes in bilirubin or met DILI criteria
- No other clinically significant lab abnormalities, ECG or vital sign changes have been observed

IP-10 levels remain <2,000 pg/mL in subjects with Grade 3 ALT in Cohort G (100 mg)



- The remaining patients with no ALT flares had low IP-10 levels

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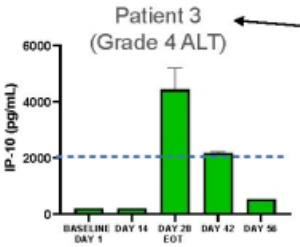
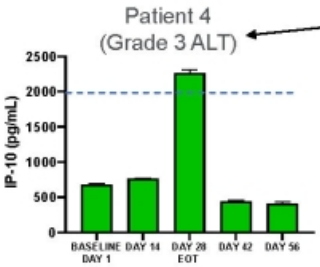
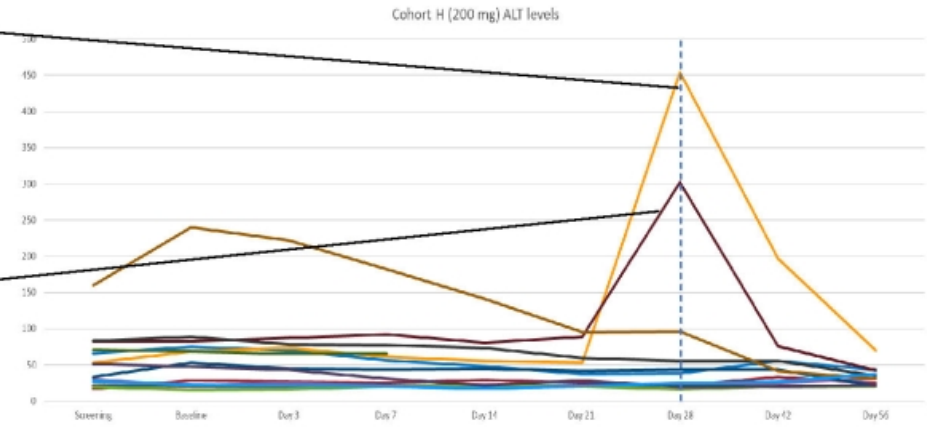
IP-10 levels spiked >2,000 pg/mL in patients with Grade 3 and 4 ALT in Cohort H (200 mg)







- The remaining patients with no ALT flares had low IP-10 levels

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AB-836-001 Conclusions

- AB-836 demonstrated potent inhibition of HBV replication with mean declines in HBV DNA at Day 28 of 3.04 and 3.55 log10 at 100mg QD and 200mg QD, respectively
- 50mg, 100mg and 200mg QD for 28 days in cHBV patients have been well-tolerated with the safety considerations described
- Because the IP-10 data is not definitive we will conduct an additional Phase 1a study in healthy volunteers to determine if the ALT flares seen in the 200 mg dose are beneficial or not

Thank You

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