

**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 18, 2020

**Arbutus Biopharma Corporation**

(Exact name of registrant as specified in charter)

<b>British Columbia, Canada</b> <small>(State or other jurisdiction of incorporation)</small>	<b>001-34949</b> <small>(Commission File Number)</small>	<b>98-0597776</b> <small>(IRS Employer Identification No.)</small>
<b>701 Veterans Circle Warminster, Pennsylvania</b> <small>(Address of principal executive offices)</small>	<b>18974</b> <small>(Zip Code)</small>	

**(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:

<b>Title of each class</b>	<b>Trading Symbol(s)</b>	<b>Name of each exchange on which registered</b>
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 May 18, 2020, Arbutus Biopharma Corporation (the "Company") issued a press release and held a conference call with a slide presentation announcing positive 60 mg AB-729 single-dose week 12 data in patients with chronic hepatitis B. A copy of the press release and the slide presentation are filed herewith as Exhibit 99.1 and Exhibit 99.2, respectively, and are incorporated by reference herein.

On May 18, 2020, the Company posted an updated corporate presentation on its website at [www.arbutusbio.com](http://www.arbutusbio.com). A copy of the presentation is filed herewith as Exhibit 99.3 and is incorporated by reference herein.

**Item 9.01. Financial Statements and Exhibits.****(d) Exhibits.**

<u>Exhibit Number</u>	<u>Description</u>
99.1	<a href="#">Press Release, dated May 18, 2020.</a>
99.2	<a href="#">Slide Presentation, dated May 18, 2020.</a>
99.3	<a href="#">Corporate Presentation, dated May 18, 2020.</a>

**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 18, 2020

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

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**Arbutus Announces Single-Dose Week 12 Data in Chronic Hepatitis B Subjects with 60 mg AB-729 Demonstrating a Significant and Continuous Reduction in HBsAg**

**Mean 60 mg HBsAg reduction of 0.99 log<sub>10</sub> IU/mL at week 12, with normal ALT and AST values throughout the follow-up period**

**90 mg single-dose and 60 mg multi-dose cohorts initiated with data expected in the second half of 2020**

**Conference Call and Webcast Scheduled Today at 4:30 PM ET**

**Warminster, PA - May 18, 2020** - Arbutus Biopharma Corporation (Nasdaq: ABUS), a clinical-stage biopharmaceutical company focused on developing a cure for people with chronic hepatitis B virus (HBV) infection, today reports positive follow-up data from a Phase 1a/1b clinical trial (AB-729-001) in chronic HBV subjects on nucleos(t)ide therapy who received a single subcutaneous injection of 60 mg of AB-729, a proprietary GalNAc delivered RNAi compound.

William Collier, President and Chief Executive Officer of Arbutus, stated, "These new data further demonstrate the robust activity of AB-729. At week 12, the 60 mg single-dose achieved equivalent reductions in HBsAg as the 180 mg single-dose. We are currently dosing chronic HBV subjects in a multi-dose cohort with 60 mg of AB-729. These data keep us on track for achieving our goal of delivering a combination therapy that includes HBsAg reduction in chronic hepatitis B subjects."

**Mean HBsAg changes from baseline:**

	60 mg Single-Dose Cohort (N=6)	180 mg Single-Dose Cohort (N=4)
Day 29 mean log <sub>10</sub> IU/mL (Standard Error of the Mean)	-0.24 (0.13)	-0.8 (0.38)
Week 12 (day 84) mean log <sub>10</sub> IU/mL (Standard Error of the Mean)	-0.99 (0.24)	-0.98 (0.22)

Dr. Gaston Picchio, Chief Development Officer of Arbutus, stated, "Importantly, throughout the 12 week period, not only does AB-729 demonstrate robust HBsAg reduction, it does so while remaining generally safe and well tolerated with no abnormal transaminase values in any of the six subjects."

Dr. Picchio added, "We are impressed by both the magnitude and continuous reduction in HBsAg achieved with a single 60 mg dose. We believe that these features could provide a competitive advantage with a low dose and reduced frequency of injections. To this end, we are currently dosing chronic HBV subjects in a multi-dose cohort with 60 mg at 4 week intervals and also intend to evaluate 60 mg at 8 week intervals, which will begin as soon as possible. As we previously announced we are also exploring an additional 90 mg single-dose cohort. We expect data from both the 60 mg multi-dose cohorts in the second half of the year. We also expect week 12 90 mg single-dose data in the second half of 2020."

### Summary of clinical trial design

AB-729-001 is an ongoing first-in-human clinical trial consisting of three parts:

- In Part 1, three cohorts of healthy subjects were randomized 4:2 to receive single-doses (60 mg, 180 mg or 360 mg) of AB-729 or placebo.
- In Part 2, non-cirrhotic, HBeAg positive or negative, chronic HBV subjects (N=6) on a background of nucleos(t)ide therapy with HBV DNA below the limit of quantitation received single-doses (60 mg or 180 mg) of AB-729. An additional cohort in Part 2 is designed to include 90 mg single-dose of AB-729 in HBV DNA positive chronic HBV subjects.
- In Part 3, chronic HBV subjects, HBV DNA negative first and HBV DNA positive later, will receive multi-doses of AB-729 for up to six months.

### COVID-19

In December 2019 an outbreak of a novel strain of coronavirus (COVID-19) was identified in Wuhan, China. This virus continues to spread globally, has been declared a pandemic by the World Health Organization and has spread to nearly every country in the world. The impact of this pandemic has been, and will likely continue to be, extensive in many aspects of society. The pandemic has resulted in and will likely continue to result in significant disruptions to businesses. A number of countries and other jurisdictions around the world have implemented extreme measures to try and slow the spread of the virus. These measures include the closing of businesses and requiring people to stay in their homes, the latter of which raises uncertainty regarding the ability to travel to hospitals in order to participate in clinical trials. Additional measures that have had, and will likely continue to have, a major impact on clinical development, at least in the near-term, include shortages and delays in the supply chain, and prohibitions in certain countries on enrolling subjects in new clinical trials. While we have been able to progress with our clinical and pre-clinical activities to date, it is not possible to predict if the COVID-19 pandemic will negatively impact our plans and timelines in the future.

### Conference Call and Webcast Today

Arbutus will hold a conference call and webcast today, Monday, May 18, 2020 at 4:30 pm Eastern Time to provide a corporate update. 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](http://www.arbutusbio.com) or directly at [Live Webcast](#). Alternatively, you can dial (866) 393-1607 or (914) 495-8556 and reference conference ID 8186276.

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 8186276.

### About Arbutus

Arbutus Biopharma Corporation is a publicly traded (Nasdaq: ABUS) biopharmaceutical company dedicated to discovering, developing and commercializing a cure for people with chronic Hepatitis B (HBV) infection. The Company is advancing multiple drug product candidates that may be combined into a potentially curative regimen for chronic HBV infection. For more information, visit [www.arbutusbio.com](http://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 expectations regarding the timing and clinical development of our product candidates; our expectation that certain data from the 60 mg multi-dose and 90 mg single-dose cohorts will be available in the second half of 2020; our plans to evaluate 60 mg at 8 week intervals as soon as possible; and our expectations regarding the effect of the COVID-19 pandemic on our business.

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

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 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; and market shifts may require a change in strategic focus; and the ongoing COVID-19 pandemic could significantly disrupt our 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](http://www.sedar.com) and at [www.sec.gov](http://www.sec.gov). All forward-looking statements herein are qualified in their entirety by this cautionary statement, and Arbutus disclaims any obligation to revise or update any such forward-looking statements or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments, except as required by law.

**Contact Information****Investors and Media**

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# AB-729-001 60mg Week 12 Results

May 18, 2020

NASDAQ: ABUS

[www.arbutusbio.com](http://www.arbutusbio.com)

# Forward Looking Statements

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With respect to the forward-looking statements contained in this presentation, 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.

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COVID-19. In December 2019 an outbreak of a novel strain of coronavirus (COVID-19) was identified in Wuhan, China. This virus continues to spread globally, has been declared a pandemic by the World Health Organization and has spread to nearly every country in the world. The impact of this pandemic has been, and will likely continue to be, extensive in many aspects of society. The pandemic has resulted in and will likely continue to result in significant disruptions to businesses. A number of countries and other jurisdictions around the world have implemented extraordinary measures to try and slow the spread of the virus. These measures include the closing of businesses and requiring people to stay in their homes, the latter of which raises uncertainty regarding ability to travel to hospitals in order to participate in clinical trials. Additional measures that have had, and will likely continue to have, a major impact on clinical development, at least in the short term, include shortages and delays in the supply chain, and prohibitions in certain countries on enrolling subjects in new clinical trials (e.g. in Australia). It is not possible to predict if the COVID-19 pandemic will negatively impact our plans and timelines.

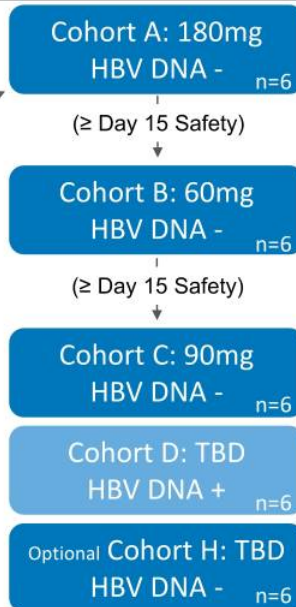


# AB-729-001 Study Design

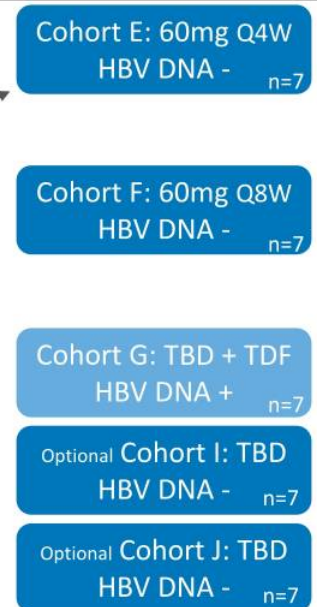
## PART 1: Single Ascending Dose In Healthy Subjects



## PART 2: Single Doses In Chronic Hepatitis B Subjects



## PART 3: Multiple Doses In Chronic Hepatitis B Subjects



HBV: Hepatitis B Virus  
TDF: Tenofovir Disoproxil Fumarate  
TBD: To Be Determined

# AB-729-001 Key Inclusion/Exclusion Criteria

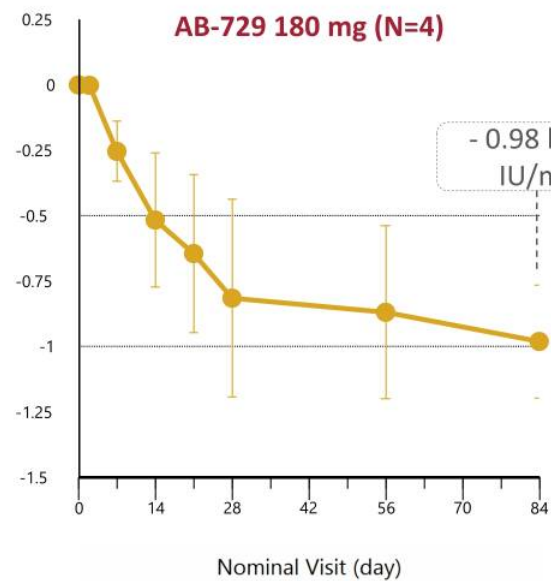
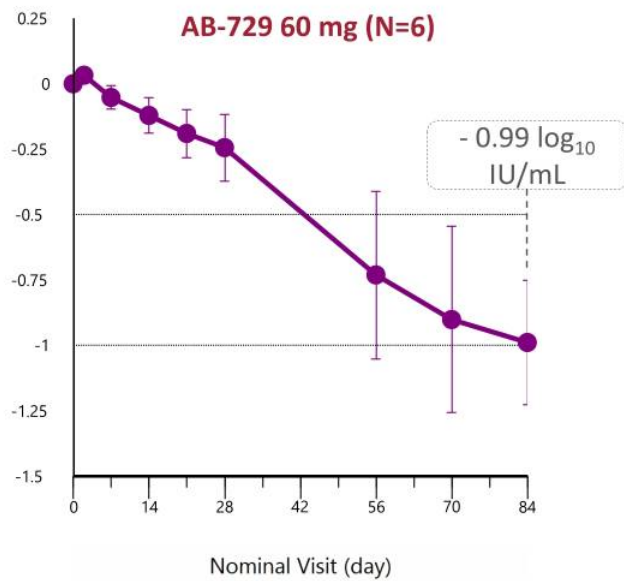
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1. Documented chronic hepatitis B infection; confirmed HBeAg positive or negative
2. HBV-DNA at screening:
  - a) For HBV-DNA negative subjects (on a NA for at least 6 months): HBV-DNA <LLOQ
  - b) For HBV-DNA positive subjects: HBV-DNA  $\geq 1,000$  IU/mL
3. HBsAg  $\geq 250$  IU/mL at screening
4. Non-cirrhotic with mild/moderate fibrosis defined by:
  - a) Liver biopsy Metavir Fibrosis Score of F0-2 (or equivalent) within 12 months OR Fibroscan® result  $\leq 10$  kPa within 6 months
5. ALT/AST <5x ULN for Part 2 and <2x ULN for Part 3; Tbili <1.5x ULN for all Parts

# AB-729-001 Chronic Hepatitis B Subject Demographics

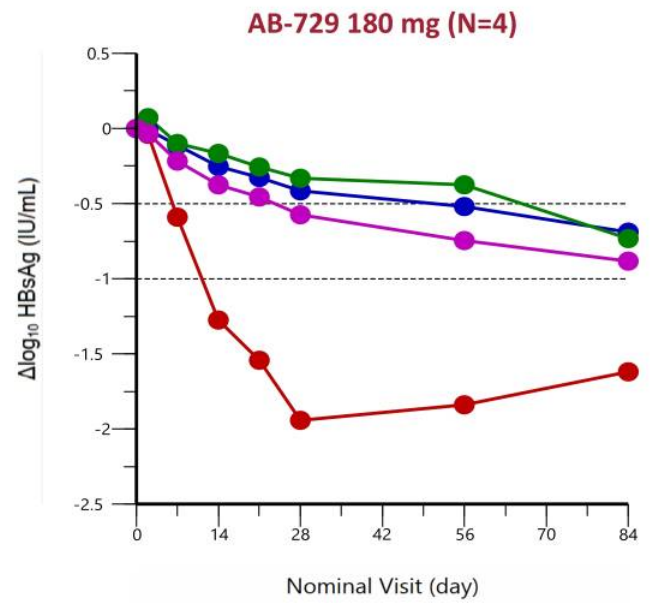
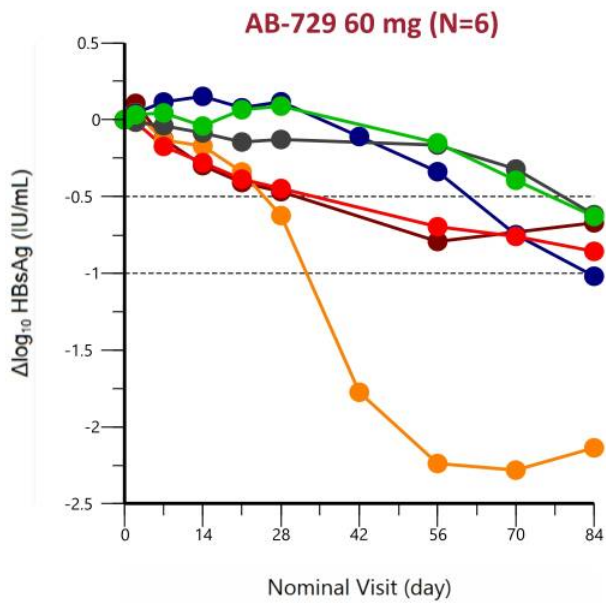
	Cohort A: 180mg (n=4)	Cohort B: 60mg (n=6)
Age (mean, range)	42.8 (35-53)	48.2 (33-56)
Male Gender (n, percentage)	3 (75%)	3 (50%)
Asian Race (n, percentage)	0 (0%)	3 (50%)
Hepatitis B e-Antigen Negative (n, percentage)	3 (75%)	6 (100%)
Baseline Hepatitis B Surface Antigen (mean, range)	8,577 (4,720 - 10,289) IU/mL	2,095 (405 – 5,110) IU/mL

# Continuous Mean HBsAg Decline of $\sim 1 \log_{10}$ with a Single mg Dose Matching HBsAg Decline of 180 mg at Week 12

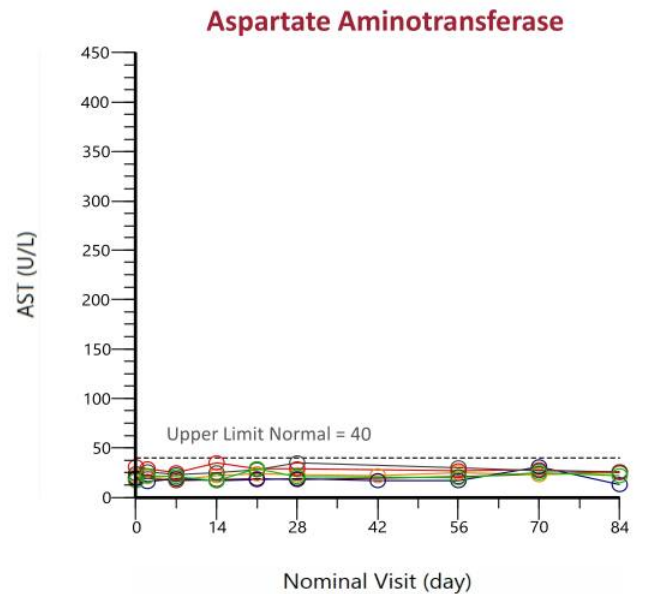
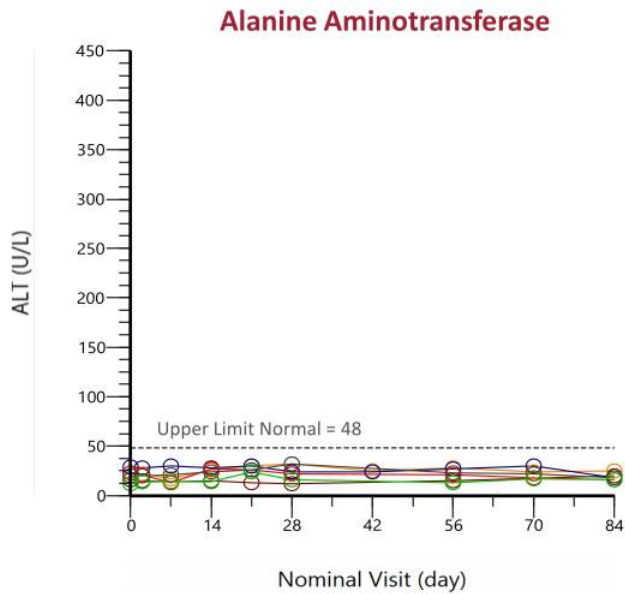


# All Subjects Responded in the 60mg Single-Dose Cohort

Minimum HBsAg decline of  $-0.62 \log_{10}$  and maximum HBsAg decline of  $-2.14 \log_{10}$  at week 12



# AB-729 60mg Single-dose Generally Safe and Well Tolerated with Normal ALT/AST Through 12 Weeks



## AB-729 Next Steps

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Cohort	Status	Preliminary Data Anticipated
60 mg multi-dose (Dose Interval = 4 weeks)	Ongoing	2H 2020
60 mg multi-dose (Dose Interval = 8 weeks)	Initiate ASAP	2H 2020
90 mg single-dose	Ongoing	2H 2020

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# Q&A

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# Corporate Presentation

May 2020

NASDAQ: ABUS

[www.arbutusbio.com](http://www.arbutusbio.com)

# Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and Canadian securities laws. All statements of historical facts are hereby identified as forward-looking statements for this purpose and include, among others, statements relating to: the potential for HBV to have a larger opportunity than HCV; our ability to meet a significant unmet medical need; the sufficiency of our cash and cash equivalents to extend into mid 2021; our expectation for multiple 6 and 90 mg single-dose data in the second half of 2020; the potential for an oral HBsAg reducing agent and potential all oral combination therapy; our objective to complete IND enablement for AB-836 in the second half of 2020; the potential for AB-836 to be low dose with a greater therapeutic window and to address known capsid resistant variants T33N and I105T; the potential for AB-836 to be once daily dosing; our expectations regarding the timing and clinical development of our product candidates; the timeline to a combination cure for HBV; our overall strategy; and other statements relating to our 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 regulatory payments; the effectiveness and timeliness of preclinical studies and clinical trials, and the usefulness of the data; the timeliness of regulatory approvals; the continued demand for our products; and the stability of economic and market conditions. While Arbutus considers these assumptions to be reasonable, these assumptions are inherently subject to significant economic, competitive, market and social uncertainties and contingencies including uncertainties and contingencies related to the ongoing COVID-19 pandemic. Forward-looking statements herein involve known and unknown risks, uncertainties and other factors that may cause the actual results, events or developments to be materially different from any future results 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; and market conditions may worsen; and market shifts may require a change in strategic focus; and the ongoing COVID-19 pandemic could significantly disrupt our 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' disclosure filings which are available at [www.sec.gov](http://www.sec.gov) and at [www.sedar.com](http://www.sedar.com).

The forward-looking statements made in connection with this presentation represent our views only as of the date of this presentation (or any earlier date indicated in such statements). While we may update certain forward-looking statements from time to time, we specifically disclaim any obligation to do so, even if new information becomes available in the future.

**COVID-19.** In December 2019 an outbreak of a novel strain of coronavirus (COVID-19) was identified in Wuhan, China. This virus continues to spread globally, has been declared a public health emergency by the World Health Organization and has spread to nearly every country in the world. The impact of this pandemic has been, and will likely continue to be, extensive in many societies. The pandemic has resulted in and will likely continue to result in significant disruptions to businesses. A number of countries and other jurisdictions around the world have implemented extreme measures to try and slow the spread of the virus. These measures include the closing of businesses and requiring people to stay in their homes, the latter of which raises uncertainty regarding the ability to travel to hospitals in order to participate in clinical trials. Additional measures that have had, and will likely continue to have, a major impact on clinical development, at least in the near-term, include shortages and delays in the supply chain, and prohibitions in certain countries on enrolling subjects in new clinical trials (e.g., Australia). It is not possible to predict if the COVID-19 pandemic will negatively impact our plans and timelines.

# Investment Highlights

Therapeutic focus – curing chronic Hepatitis B Virus (HBV) Infection

Significant  
Unmet Medical  
Need in HBV

Global HBV  
prevalence double  
that of HCV,  
potential for  
larger market  
opportunity

Goal of HBV  
Functional  
Cure

Undetectable HBV  
DNA and HBsAg  
delivered through  
finite duration  
treatment with a  
combination of  
drugs with different  
modes of action

Broad  
HBV  
Portfolio

HBV assets include:

RNAi  
Capsid Inhibitors  
PD-L1  
HBV RNA  
Destabilizers

Coronavirus  
Research  
Initiative

Focused on direct  
acting antivirals  
targeting the viral  
polymerase and  
protease

Team with  
Antiviral  
Expertise  
Proven Tra  
Record

Applying  
knowledge gained  
from HIV and HCV suc  
HBV  
and Coronavir

# Proven Leadership Team

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



**William H. Collier**

President and CEO



**Michael J. Sofia, PhD**

Chief Scientific Officer



**Gaston Picchio, PhD**

Chief Development Officer



**David C. Hastings**

Chief Financial Officer



**Elizabeth Howard, PhD, JD**

EVP, General Counsel and Chief Compliance Officer



**Michael J. McElhaugh**

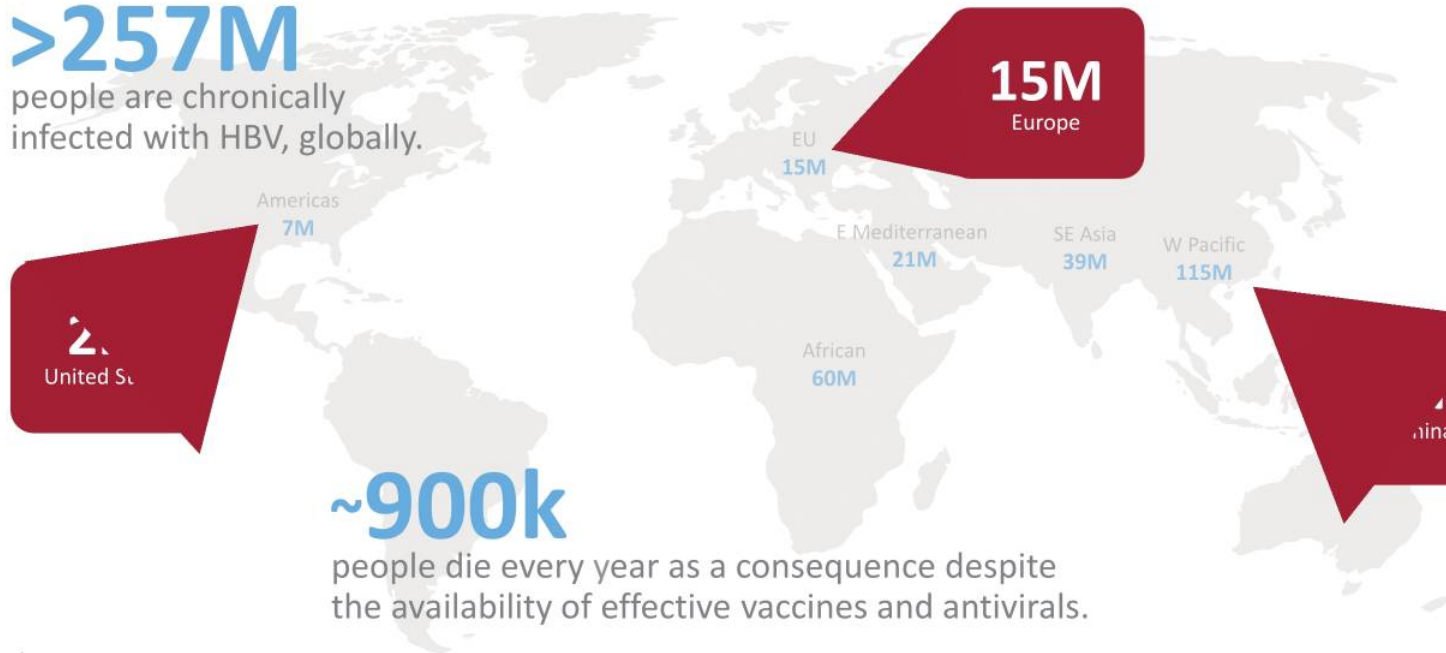
Chief Business Officer



# HBV Presents a Significant Unmet Medical Need

**>257M**

people are chronically infected with HBV, globally.



**~900k**

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

# Significant Opportunity to Improve HBV Cure Rates

HBV cures are achievable with today's SOC in **<5% of patients**. Sustained HBsAg and HBV DNA loss after end-of-treatment\* is rare.

\*undetectable HBsAg and HBV DNA 6 months after end-of-treatment accepted as a functional cure..



## STANDARD OF CARE THERAPIES FOR CHRONIC HBV

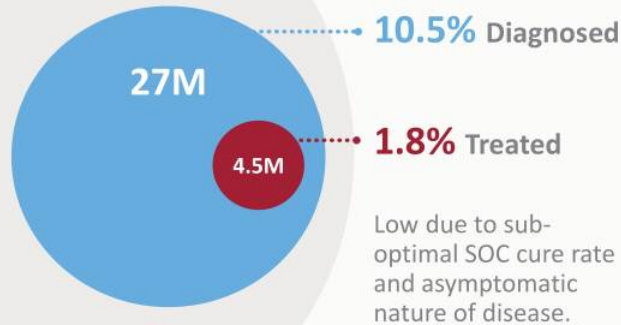
	PegIFN	Entecavir	Tenofovir	New HBV Therapies
Dosing Duration	48-weeks	Chronic	Chronic	rate of Undetectable HBV D
HBV DNA Undetectable (<60-80 IU/ml)	7-19%	67-90%	76-93%	+
HBsAg Loss	~3-7%	~1-2%	~1-3%	=
				HIGHER CURES RATES

Achievable **HBV Cure Rates** with Current SOC

SOC: Standard Of Care | HBsAg: HBV Surface Antigen | PegIFN: Pegylated Interferon  
Source: EASL HBV Clinical Practice Guidelines, 2017 - Pegasys, PEG-Intron, Baraclude and Viread Package Inserts

# Compelling Growth Opportunity in the **HBV Market**

**257M**  
chronic HBV



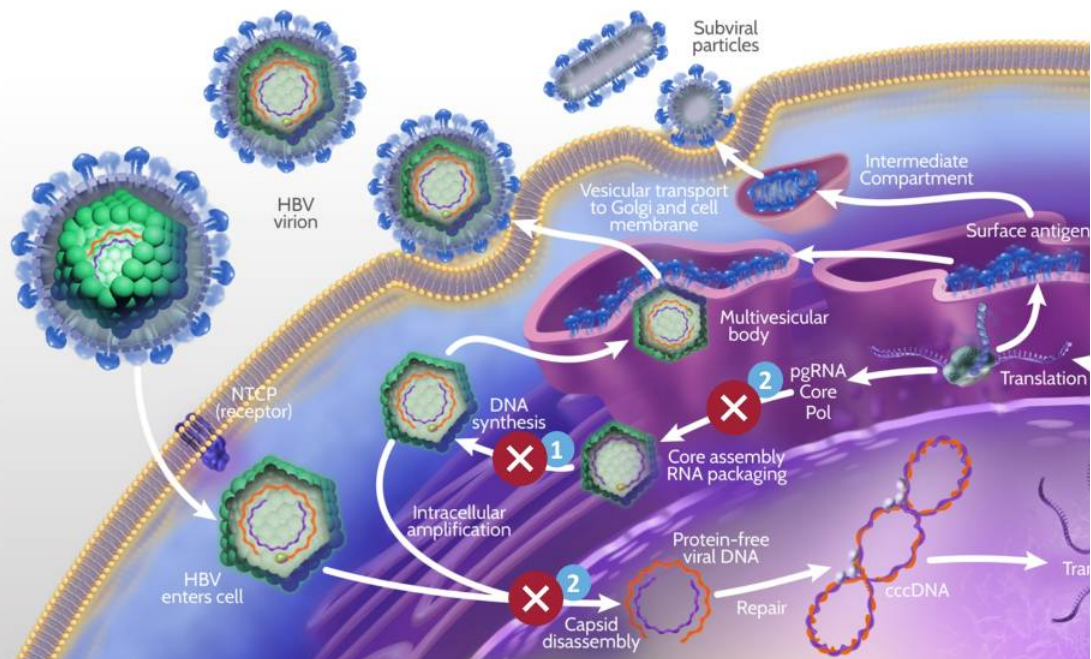
An HBV curative regimen would substantially increase **diagnosis** and **treatment** rates to unlock significant **market growth opportunities**.



# HBV Lifecycle Illustrates Key Points for Intervention

A combination of agents with complementary MOA is needed to cure HBV

1. Nucleoside Analogue
2. Capsid Inhibitor
3. RNAi & RNA Destabilizer

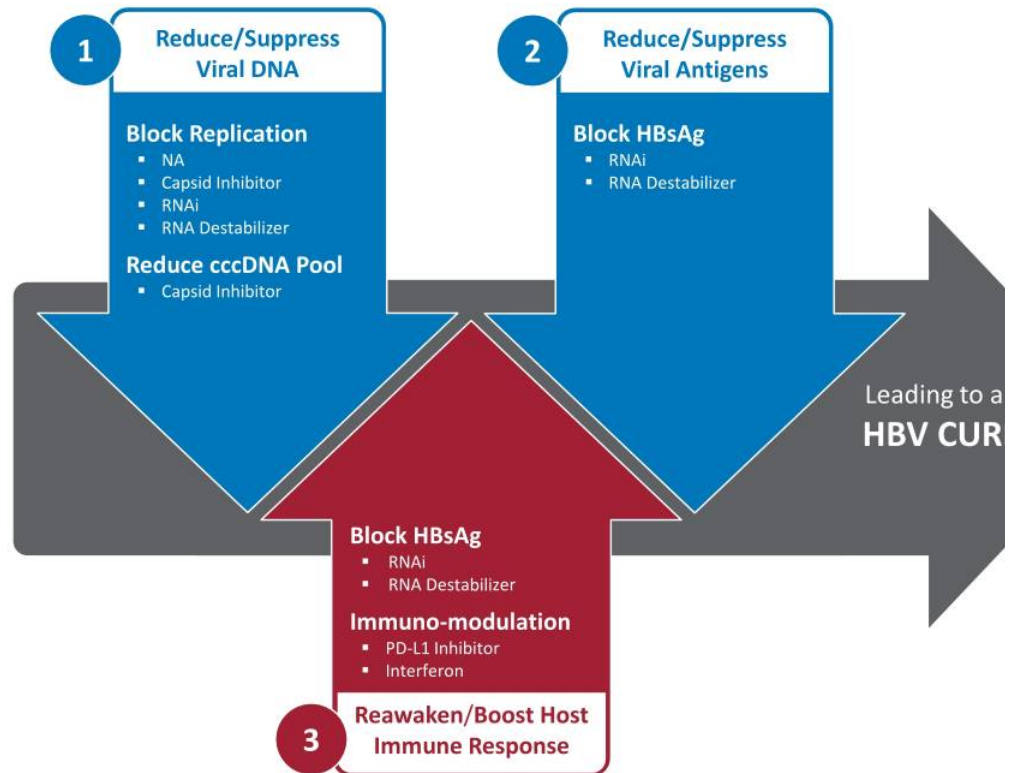


# Keys to Therapeutic Success

Suppress HBV DNA and viral antigens

Reawaken host immune response

Therapeutic success will require a combination of agents with complementary MOAs



MOA: Mechanism Of Action | NA: Nucleoside Analogue | HBsAg: HBV Surface Antigen

# Arbutus HBV Pipeline



# AB-729

## RNAi Therapeutic

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



Single trigger RNAi agent targeting all HBV transcripts

Inhibits HBV replication and lowers all HBV antigens

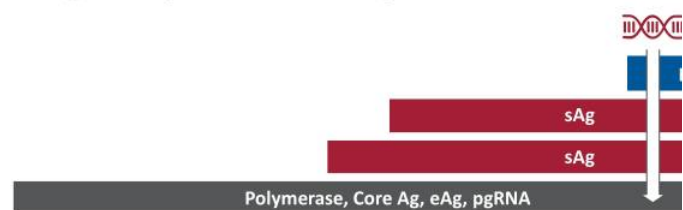
Pan-genotypic activity across HBV genotypes

Demonstrated complementarity with capsid inhibitors

Actively targets the liver

Active against cccDNA derived and integrated HBsAg transcripts

Clean profile in long term preclinical safety studies



# AB-729

## RNAi Therapeutic

### In May 2020,

Arbutus announced additional positive single-dose Phase 1a/1b clinical trial results for AB-729

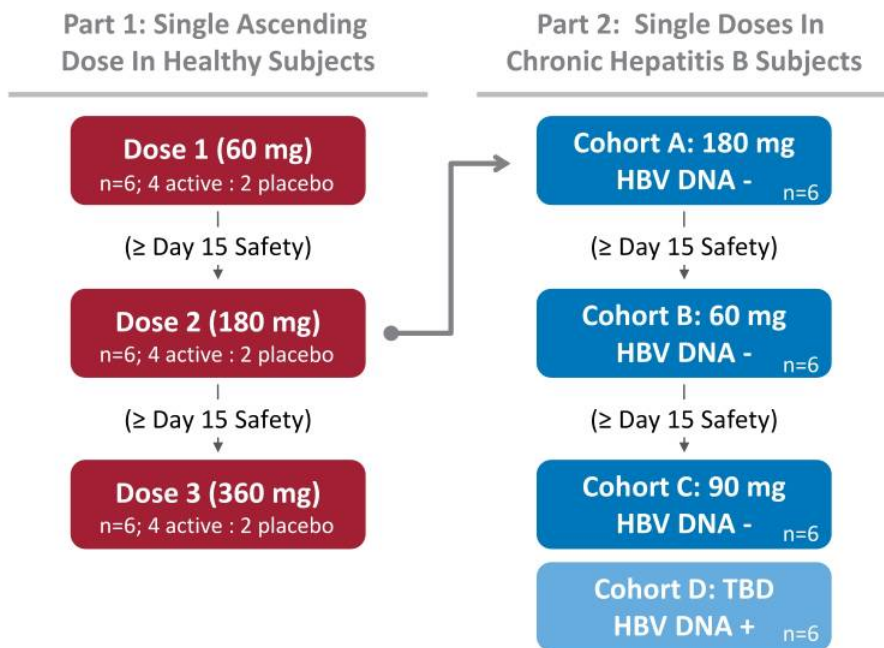
**Continuous HBsAg decline** with a single 60 mg dose through week 12 with mean HBsAg decline of approximately 1.0 log matching the 180 mg cohort at week 12.

**All subjects had normal ALTs/ASTs** throughout the 12 week follow up period.

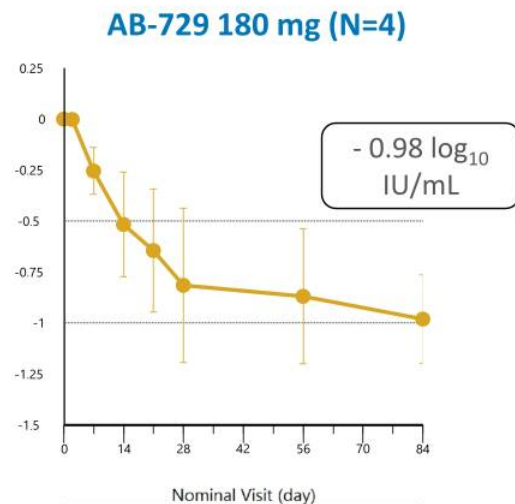
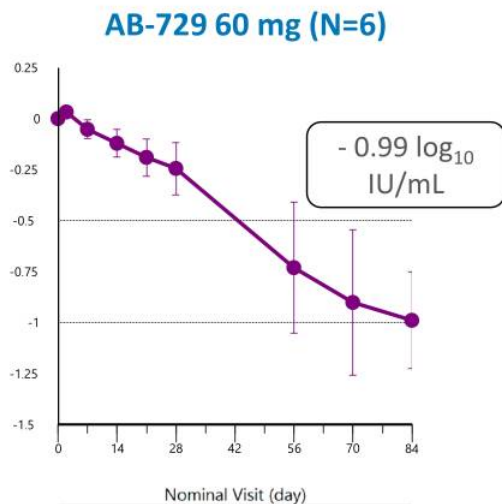
**All subjects responded to therapy** with everyone achieving at least a -0.62 log reduction in HBsAg at week 12 in the 60 mg dose group with a maximum decline of -2.14 log.

**AB-729 may provide a competitive advantage** through low dose and reduced frequency of injections.

# AB-729-001 Study Design

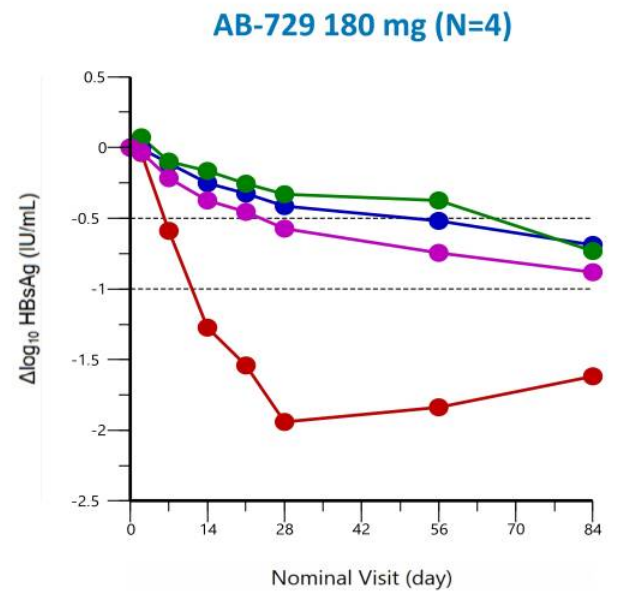
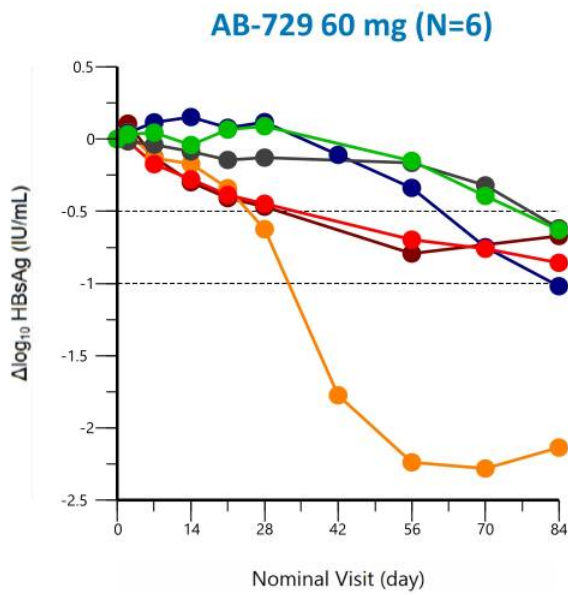


# Continuous Mean HBsAg Decline of $\sim 1 \log_{10}$ with a Single 60 mg Dose Matching HBsAg Decline of 180 mg at Week 12



# All Subjects Responded in the 60 mg Single-Dose Cohort

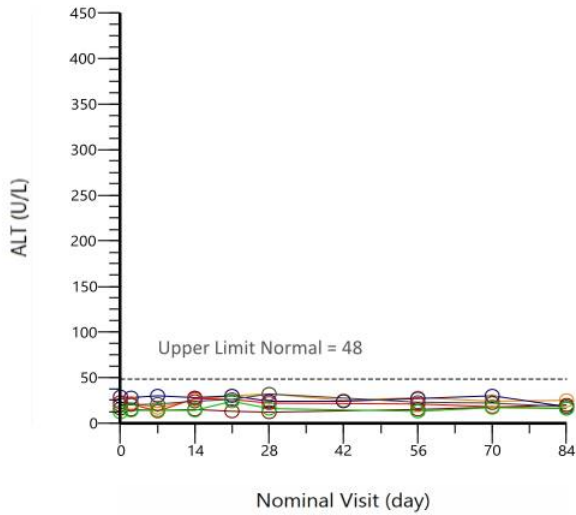
Minimum HBsAg decline of -0.62 log<sub>10</sub> and maximum HBsAg decline of -2.14 log<sub>10</sub> at week 12



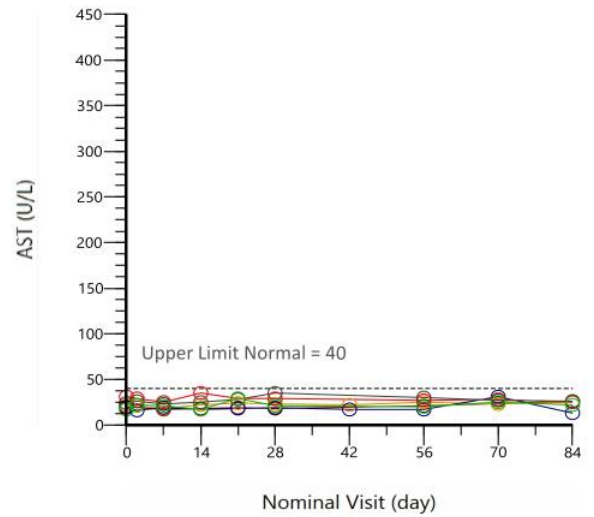


# AB-729 60 mg Single-Dose Generally Safe and Well Tolerated with Normal ALT/AST Through 12 Weeks

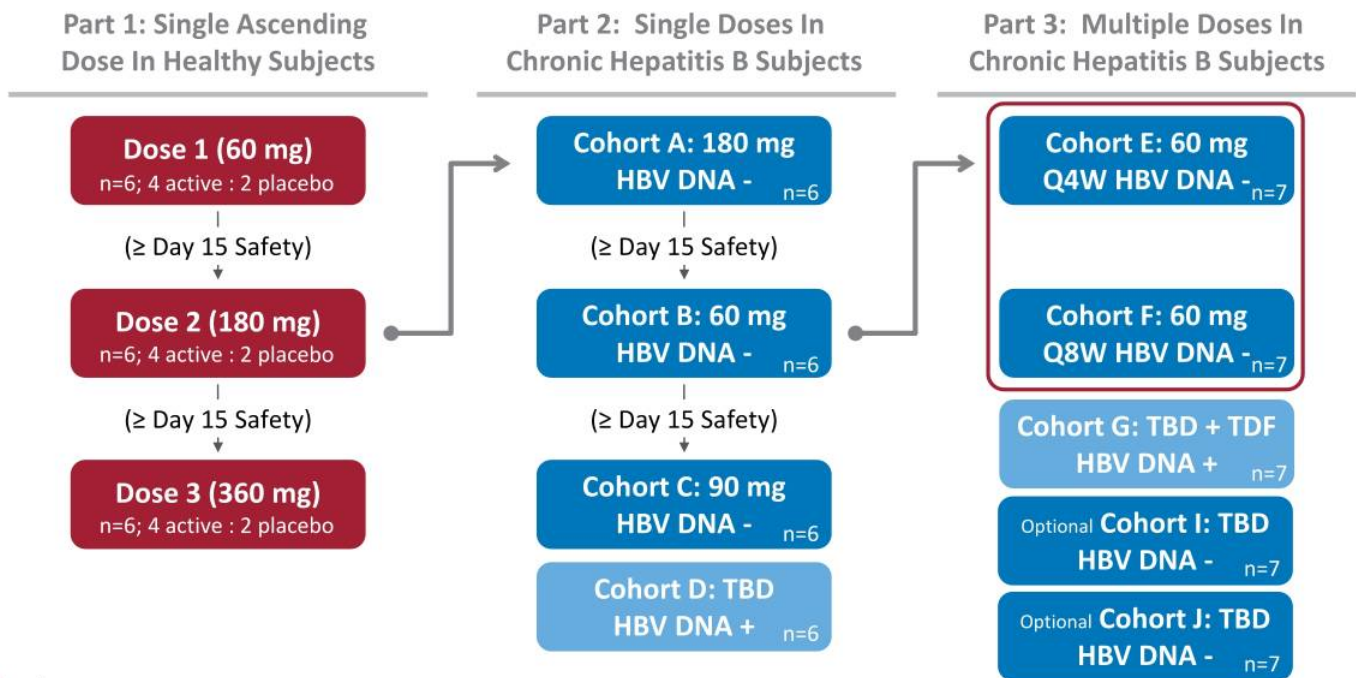
### Alanine Aminotransferase



### Aspartate Aminotransferase



# AB-729-001 Study – Next Steps



# AB-836

## Capsid Inhibitor

### IND enabling studies ongoing

Potential for increased potency and enhanced resistance profile

Novel chemical series differentiated from AB-506 and other competitive compounds in the Class II capsid inhibitor space

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Leverages a novel binding site within the core protein dimer-dimer interface

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Improved intrinsic potency with  $EC_{50} \leq 10$  nM

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Active against NA resistant variants

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Potential to address known capsid resistant variants T33N and I105T

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Provides the potential for low dose and wide therapeutic window

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Projected to be once daily dosing

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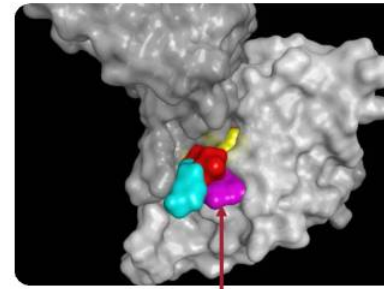
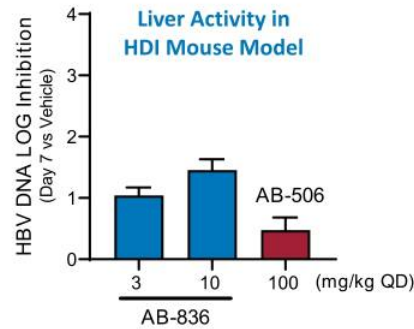
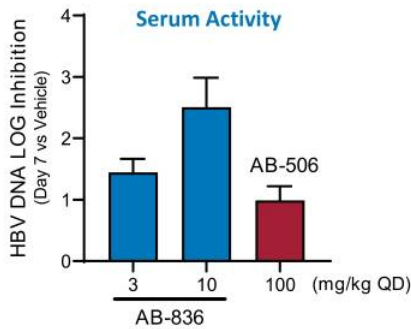
Pangenotypic

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Combinable with other MOA agents

# AB-836: A Next Generation Capsid Inhibitor

Compound	HBV DNA / 1 <sup>o</sup> Mechanism				cccDNA Formation /	Hum:
	HepDE19 (EC <sub>50</sub> μM)	HBV infected PHH (EC <sub>50</sub> μM)	HBV infected HepG2-NTCP-C4 (EC <sub>50</sub> μM)	Core I105T Mutation (EC <sub>50</sub> mM)	2 <sup>o</sup> Mechanism HBV infected HepG2-NTCP-C4 (HBsAg EC <sub>50</sub> μM)	Serum : (FC in EC <sub>50</sub> Human S
AB-506	0.077	0.032	0.101	1.26	1.430	6x
AB-836	0.010	0.002	0.012	0.118	0.196	2x



Unique Binding Site

# Next Gen RNA Destabilizer Program

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

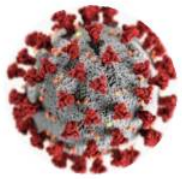
**Continuing active research** and development of a next generation small molecule

**We believe this approach offers potential** for an oral HBsAg reducing agent and all oral combination therapy

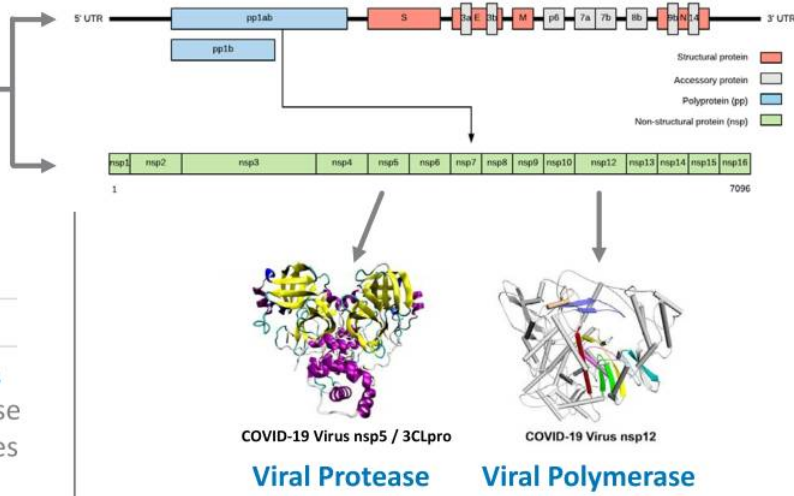


# Coronavirus Strategy

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



**+RNA Virus**  
**31 kb Genome**  
**nsp5 protease & nsp12 polymerase**  
 essential enzymes for replication



**Long term commitment**  
**Pan-coronavirus focused**  
**Small Molecule Direct-Acting Antivirals**

Directed Effort

- nsp12 Viral Polymerase nucleosid(t)es
- nsp5 Main Viral Protease denovo design

**Screening Effort**

- Proprietary library screener through COVID R&D consortium

## Key Objectives for 2020

Cash balance of \$88.1M as March 31, 2020, cash runway into mid-2021

Objective	Anticipated Timing
AB-729 preliminary phase 1a/1b single-dose data	✓ Late 1Q 2020
AB-729 additional week 12 60 mg single-dose data	✓ May 2020
AB-729 multi-dose 60 mg data (4 and 8 wk dosing intervals)	2H 2020
AB-729 week 12 single-dose 90 mg data	2H 2020
AB-836 complete IND enabling studies	2H 2020

