Corporate Presentation

NASDAQ: ABUS

www.arbutusbio.com

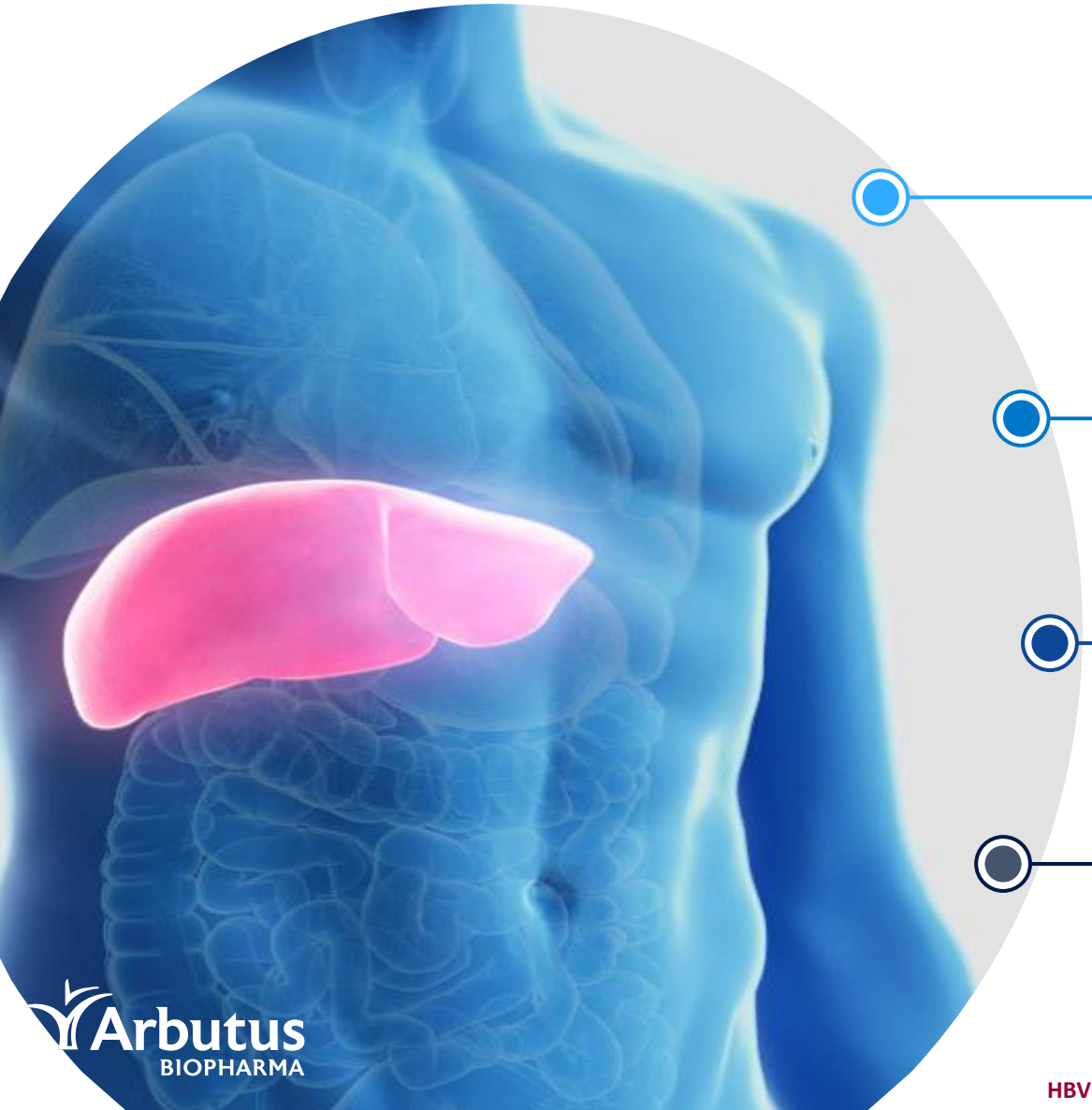
January 13, 2025

Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and Canadian securities laws. All statements that are not historical facts are hereby identified as forward-looking statements for this purpose and include, among others, statements relating to: the potential market opportunity for HBV; Arbutus' ability to meet a significant unmet medical need; the sufficiency of Arbutus' cash and cash equivalents for the anticipated durations; the expected cost, timing and results of Arbutus' clinical development plans and clinical trials, including its clinical collaborations with third parties; the potential for Arbutus' product candidates to achieve their desired or anticipated outcomes; Arbutus' expectations regarding the timing and clinical development of Arbutus' product candidates, including its articulated clinical objectives; the timeline to a combination cure for HBV; Arbutus' expectations regarding its technology licensed to third parties; the expected timing and payments associated with strategic and/or licensing agreements; Arbutus' expectations with respect to utilizing its ATM program; the patent infringement lawsuits; and other statements relating to Arbutus' future operations, future financial performance, future financial condition, prospects or other future events.

With respect to the forward-looking statements contained in this presentation, Arbutus has made numerous assumptions regarding, among other things: the timely receipt of expected payments; the effectiveness and timeliness of clinical trials, and the usefulness of the data; the timeliness of regulatory approvals; the continued demand for Arbutus' assets; and the stability of economic and market conditions. While Arbutus considers these assumptions to be reasonable, these assumptions are inherently subject to significant business, economic, competitive, market and social uncertainties, and contingencies including uncertainties and contingencies related to patent litigation matters. Forward-looking statements herein involve known and unknown risks, uncertainties and other factors that may cause the actual results, events or developments to be materially different from any future results, events or developments expressed or implied by such forward-looking statements. Such factors include, among others: ongoing and anticipated clinical trials may be more costly or take longer to complete than anticipated, and may never be initiated or completed, or may not generate results that warrant future development of the tested drug candidate; changes in Arbutus' strategy regarding its product candidates and clinical development activities; Arbutus may not receive the necessary regulatory approvals for the clinical development of Arbutus' products; economic and market conditions may worsen; uncertainties associated with litigation generally and patent litigation specifically; market shifts may require a change in strategic focus; and the parties may never realize the expected benefits of the collaborations; Arbutus may need to utilize its ATM program based on changes in its business; Arbutus' plans to reduce its net cash burn may not materially extend the cash runway and may create a distraction or uncertainty that may adversely affect its operating results, business, or investor perceptions; and risks related to the sufficiency of Arbutus' cash resources and its ability to obtain adequate financing in the future for its foreseeable and unforeseeable operating expenses and capital expenditures. 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.

Arbutus Biopharma (ABUS) Overview



Focused on Developing a Functional Cure for Patients with Chronic HBV

Leveraging virology expertise and proven track record in success to address global health issue.

HBV Represents a Large Commercial Opportunity

~250M[1] people have cHBV with current treatment options for most patients limited to life-long suppressive therapy, representing a need for a finite curative regimen.

Achieved Functional Cure in Phase 2a – Advancing into Phase 2b

Phase 2a clinical trial data with imdusiran shows that it is generally safe, well-tolerated and significantly reduces HBsAg. Imdusiran in combination with a short course of interferon achieves functional cure.

Strong Financial Position

Cash runway* through Q1 2028 fully funding the Phase 2b clinical trial. Seeking damages from patent litigation filed against Moderna & Pfizer/BioNTech for COVID-19 vaccine sales.

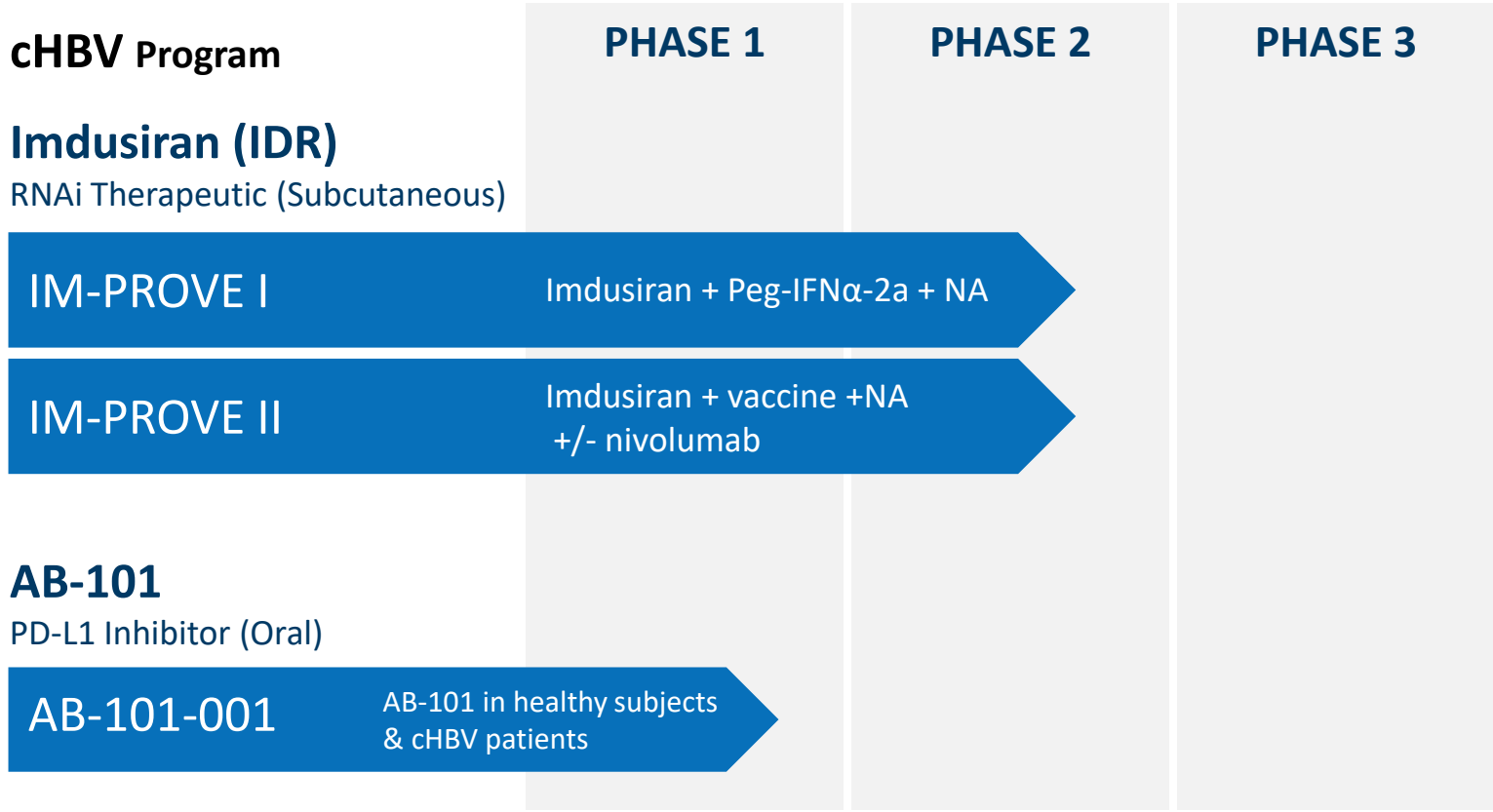
[1] https://www.who.int/news-room/fact-sheets/detail/hepatitis-b

* Cash runway assumes receipt of contractual milestones anticipated from Qilu.

HBV: Hepatitis B Virus | **cHBV:** chronic HBV | **HBsAg**: HBV Surface Antigen

Strategy for Value Creation

Develop a **combination therapy that includes antivirals and immunomodulators** to provide a finite, curative treatment for people with chronic HBV

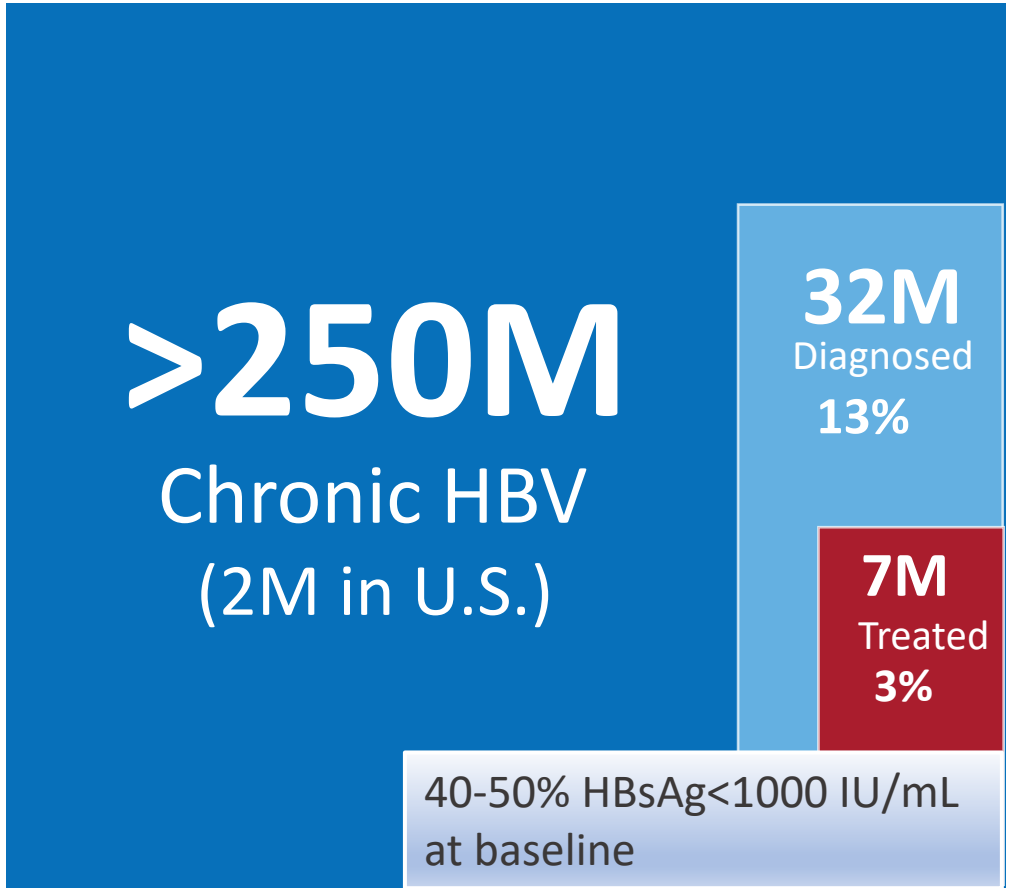


≥20% **Functional cure rate goal exceeded**

Functional Cure
Sustained HBsAg loss and HBV DNA <LLOQ 24 weeks off all treatment, with or without anti-HBs.

NA: Nucleoside Analogue | **LLOQ:** Lower Limit of Quantification | **anti-HBs:** hepatitis B surface antibodies

HBV: A Global Public Health Threat with a Significant Unmet Medical Need



- Most common serious liver infection
- 100x more infectious than HIV & 10x more infectious than HCV
- Primary cause of liver cancer (HCC, second-leading cause of cancer deaths globally)
- Limitations with current treatments, including <10% functional cure rate
- "Silent infection" that is transmittable through body fluids and from mother to child
- Significant patient stigma that can impact employment and family

~1.1 Million
DEATHS/YEAR

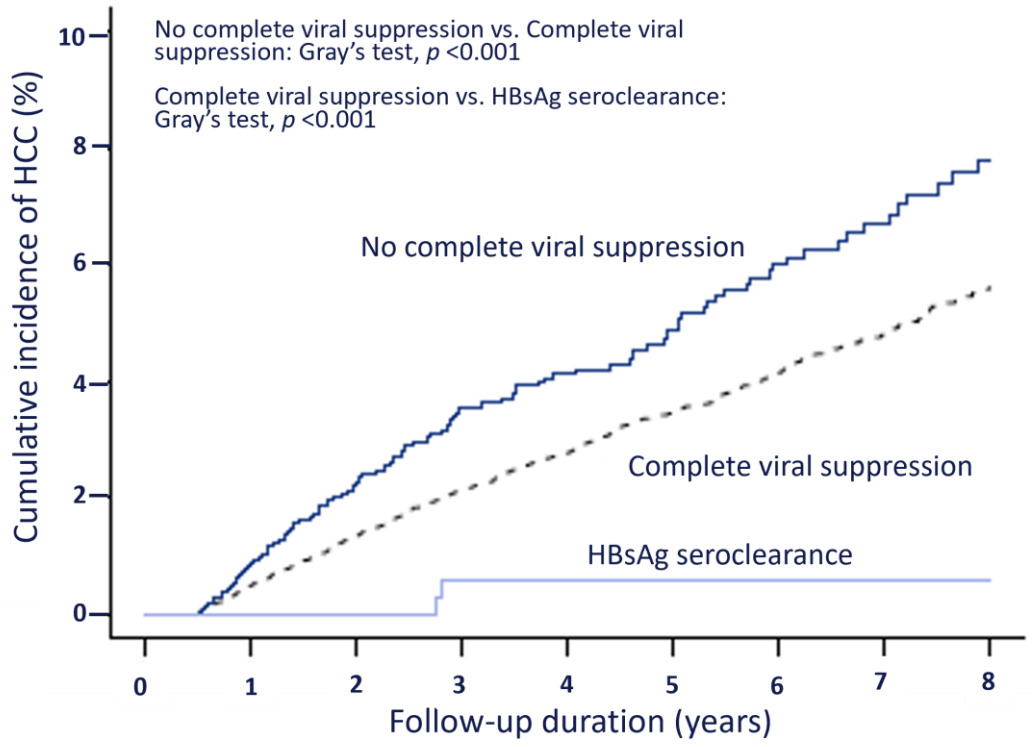
Sources:
https://www.who.int/news-room/fact-sheets/detail/hepatitis-b
https://www.hepb.org/what-is-hepatitis-b/what-is-hepb/facts-and-figures/
Pegasys, PEG-Intron, Baraclude and Viread Package Inserts

Terrault NA, et al. Incidence and prediction of HBsAg seroclearance in a prospective multi-ethnic HBeAg-negative chronic hepatitis B cohort. Hepatology. 2022 Mar;75(3):709-723 Yeo YH, et al. Incidence, Factors, and Patient-Level Data for Spontaneous HBsAg Seroclearance: A Cohort Study of 11,264 Patients. Clin Transl Gastroenterol. 2020 Sep;11(9):e00196 Hu RWH, et al. Quantitative hepatitis B surface antigen levels and determinants in chronic hepatitis B: Implications for novel drug development. 2024. EASL Congress. Milan, Italy https://www.mdpi.com/1999-4915/14/12/2668

HIV: Human Immunodeficiency Virus | **HCV:** Hepatitis C Virus | **HCC:** Hepatocellular carcinoma

Rationale for a Functional Cure in HBV

HBsAg Loss Further Reduces HCC Risk After Complete Viral Suppression with NA[1]



Benefits of a Functional Cure for Patients

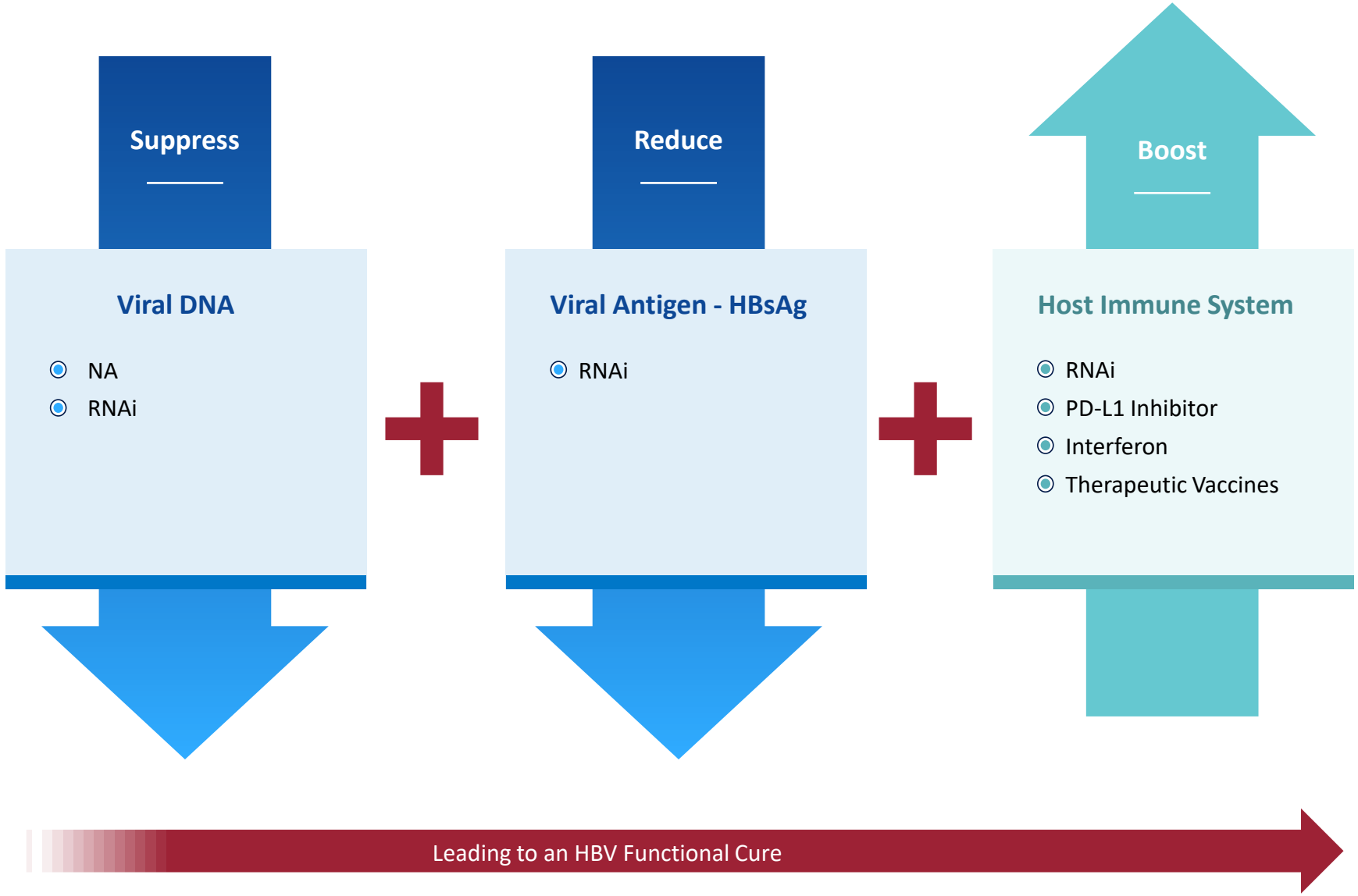
- **Prevent complications of disease progression -** HBsAg loss is strongly associated with a reduced risk of long-term adverse clinical outcomes observed among cHBV patients regardless of the presence of cirrhosis.[1, 2, 3]
- **Decrease HBV burden** by minimizing patient stigma[3]
- **Address the need for finite and more efficacious HBV treatments** that further improve long-term outcomes and lead to earlier treatment to prevent progression of disease and associated healthcare costs.[4, 5]

1 Yip, Terry Cheuk-Fung et al, Journal of Hepatology, 2018; Vol 70, Issue 3, 361-370
2 Moini, M. HBsAg Loss as a Treatment for Chronic HBV Infection: HBV Cure. *Viruses* **2022**, 14, 657
3 Smith-Palmer J, et al. Impactof Stigma on People Living with ChronicHepatitis B.Patient RelatOutcomeMeas. 2020;11:95-107
4 Chahal, et al, Open Forum Infectious Diseases 2019 Jan; 61(1)
5 Razavi-Shearer, et al, J Viral Hepat. 2023; 00:1-9

3-Pronged Approach to Therapeutic Success

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

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



Imdusiran

RNAi Therapeutic

Arbutus BIOPHARMA

Imdusiran: Key Differentiators

Unique Nucleotide Sequence

Single trigger targeting all HBV transcripts including HBx from cccDNA and integrated DNA

Specific Chemical Modifications

Reduces off-target effects but maintains potency and provides durable liver exposure

Proprietary GalNAc Display

Provides highly efficient liver-targeted uptake and enables subcutaneous dosing

Low Dose and Dosing Frequency

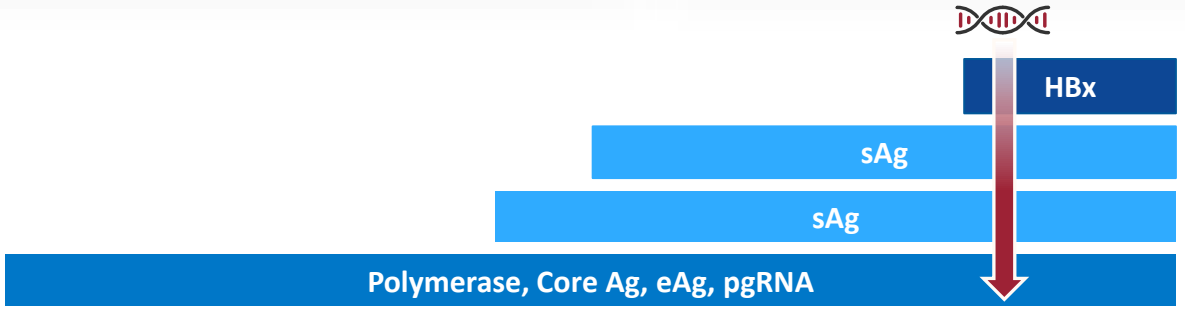
60 mg dosed every 8 weeks leads to consistent HBsAg declines

Immune Activation

HBV-specific T-cell immune restoration and decrease of exhausted T-cells in key responder patients

Highest Functional Cure Rates

When combined with a short course of IFN, a 50% functional cure rate was seen in patients with HBsAg <1000 IU/mL at baseline

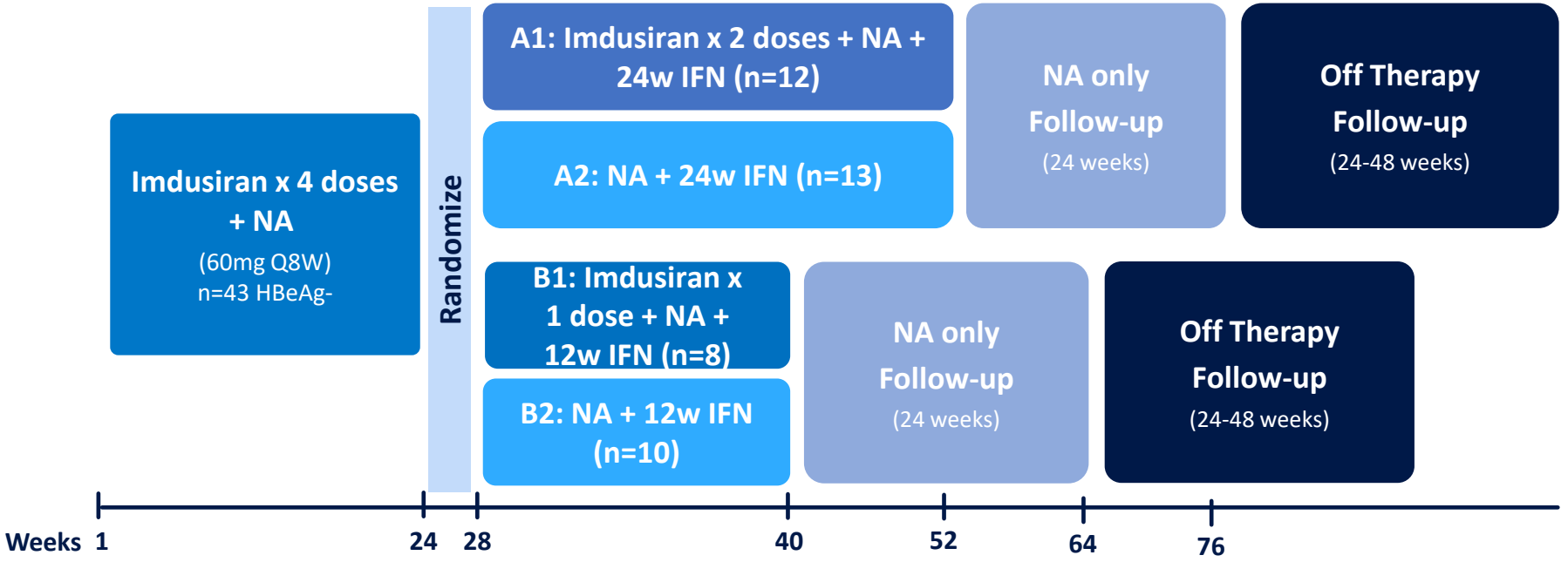


Arbutus BIOPHARMA

IM-PROVE I:

Phase 2a POC Clinical Trial

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



Multi-center, open-label Phase 2a

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

After completing IFN treatment and the 24-week NA only follow-up period, patients who meet the criteria to discontinue NA therapy will be followed for an additional 48 weeks off therapy

POC: Proof of Concept

Data presented at EASL 2024 and AASLD 2024

IM-PROVE I: Imdusiran with Short Courses of IFN Leads to Functional Cure

Patients with HBsAg Loss at Key Time Points

Achieved HBsAg loss (≤0.05 IU/mL) at time point, n/N (%)	A1: IDR (6 doses) + NA + IFN 24W N=12	A2: IDR (4 doses) + NA + IFN 24W N=13
EOT (WK 52)		
All	4/12 (33)	3/13 (23)
BL HBsAg <1000 IU/mL	4/6 (67)	2/7 (29)
24W Post-EOT (WK 76)		
All	4/12 (33)	2/13 (15)
BL HBsAg <1000 IU/mL	4/6 (67)	2/7 (29)
Functional Cure		
All	**3/12 (25)**	2/13 (15)
BL HBsAg <1000 IU/mL	**3/6 (50)**	2/7 (29)

BL, baseline; EOT, end of IFN treatment; FC, functional cure; HBsAg, hepatitis B surface antigen; IDR, imdusiran; IFN, pegylated interferon alfa-2a; NA, nucleos(t)ide analogue; W, week.

Key Findings from Cohort A1:

- 50% (3/6) of patients with baseline HBsAg <1000 IU/mL achieved a functional cure
- 25% (3/12) of all patients achieved a functional cure
- Those patients that achieved a functional cure also seroconverted with high anti-HBs levels
- The combination of imdusiran and IFN was generally safe and well-tolerated, with no SAEs related to imdusiran or IFN, and no AEs leading to discontinuation

Next Steps:

- Initiate placebo-controlled Phase 2b clinical trial with imdusiran, IFN and NA therapy – 1H 2025
  - n=~170 HBeAg-negative cHBV patients w/ baseline HBsAg ≤1000 IU/mL*
  - anticipated costs to complete the trial are $30 - $40M

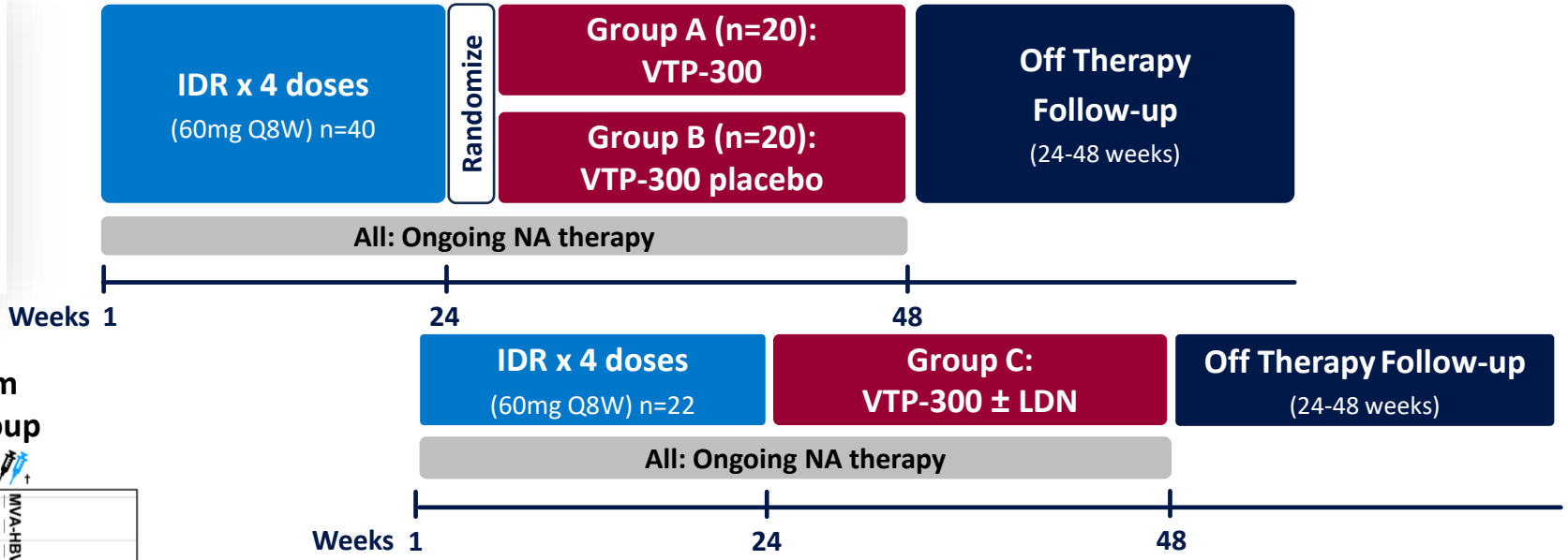
Arbutus BIOPHARMA

Data presented at AASLD 2024
*Subject to regulatory approval

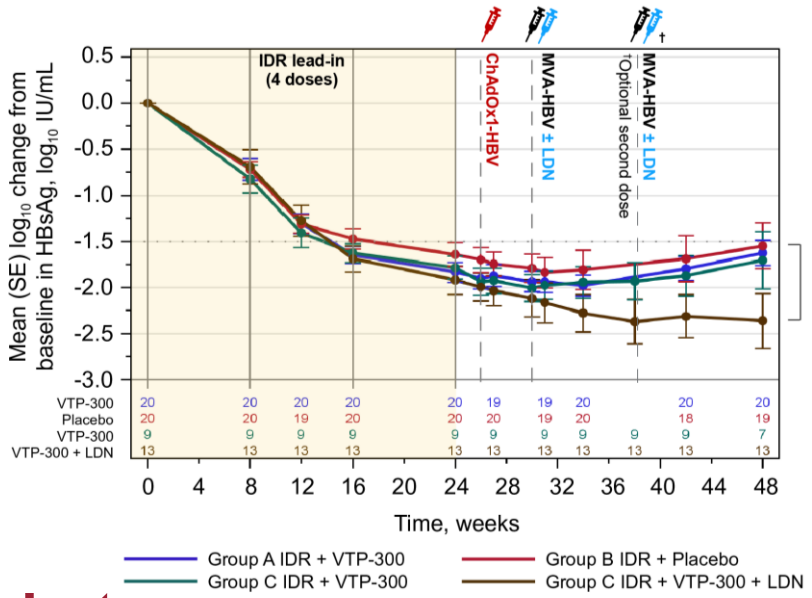
SAEs: Serious Adverse Events | **AEs:** Adverse Events

IM-PROVE II Phase 2a Clinical Trial

Evaluating imdusiran in combination with Barinthus Bio's immunotherapeutic, VTP-300, and NA with or without low dose nivolumab (LDN)



Mean HBsAg Change from Baseline by Treatment Group



*P=0.017. ANCOVA adjusted for baseline HBsAg.

Preliminary Data:

- 23% (3/13) of LDN-treated patients achieved HBsAg loss at week 48
- The combination of imdusiran, VTP-300 and LDN was generally safe and well-tolerated and did not result in any immune-related adverse events
- Subjects are being followed off NA therapy for assessment of functional cure

Arbutus BIOPHARMA

Data presented at EASL 2024 and AASLD 2024

Imdusiran: Key Takeaways from Clinical Trials to Date

Imdusiran was generally safe and well-tolerated after completing dosing in >200 cHBV patients

Imdusiran provided robust and comparable HBsAg declines (~1.5-2.0 log_{10}) regardless of dose, dosing interval, HBeAg or DNA status

When combined with a short course of IFN, a 50% functional cure rate was seen in patients with HBsAg <1000 IU/mL at baseline

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

Arbutus BIOPHARMA

Data from Phase 1 and all Phase 2a clinical trials conducted to date with imdusiran.

Imdusiran

Strategic Collaboration

QILU PHARMACEUTICAL

Exclusive Licensing* and Strategic Partnership

Develop, manufacture and commercialize imdusiran in Greater China

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

Deal economics for Arbutus:

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

Qilu Pharmaceutical:

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

Arbutus BIOPHARMA

AB-101

Oral PD-L1 Checkpoint Inhibitor

Arbutus BIOPHARMA

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

Rationale

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

Small-Molecule Inhibitor Approach

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

AB-101

- Blocks PD-L1/PD-1 interaction at sub-nM concentrations
- Activates HBV-specific immune responses in T-cells from cHBV patients in vitro
- Novel MOA identified
- Demonstrates a robust checkpoint mediated *in vivo* effect
- Improves HBV-specific T- and B-cell responses *ex vivo*

Currently in a Phase 1a/1b clinical trial

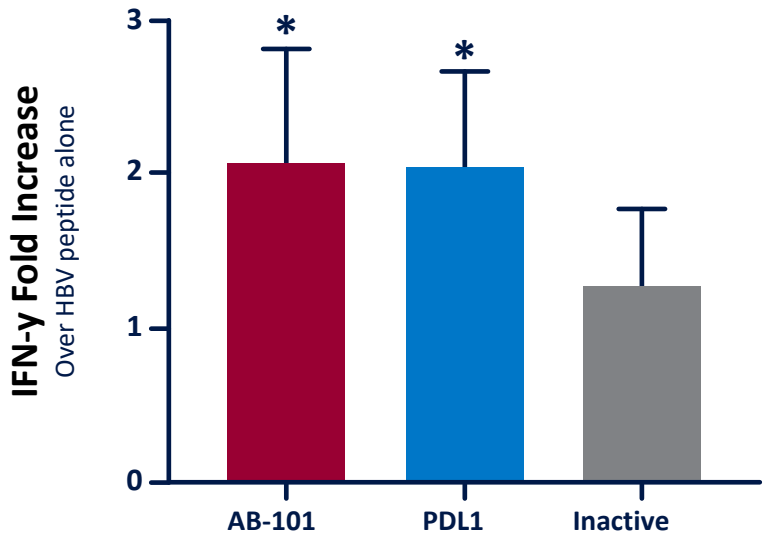
Arbutus BIOPHARMA

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

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

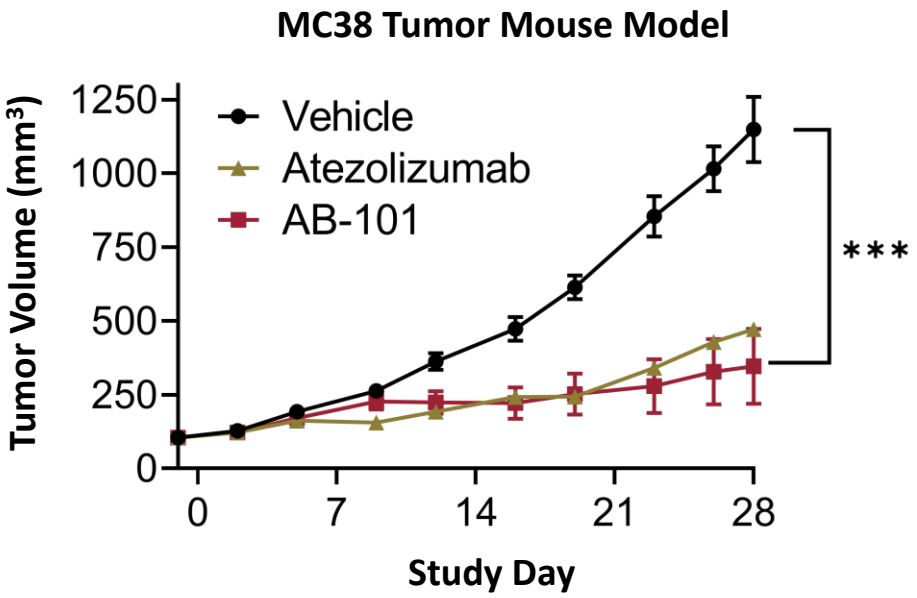
AB-101 is highly potent and activates HBV specific immune cells from chronic HBV patients

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



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

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



Data presented at EASL 2022

PBMC: Peripheral Blood Mononuclear Cells

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

Parts 1 & 2 – Healthy Subjects**

Part 1: SAD
(n=8/cohort – 6:2)

- 1A: 1 mg ✓
- 1B: 3 mg ✓
- 1C: 10 mg ✓
- 1D: 25 mg* ✓

Part 2: MAD
(n=10/cohort – 8:2)

- 2A: 10 mg daily x 7 days ✓
- 2B: 25 mg daily x 7 days† ✓

†In the 25mg cohort, preliminary data shows all subjects with evidence of receptor occupancy, with 7 of the 8 subjects demonstrating receptor occupancy >70% during the 7-day dosing period.

Part 3 – cHBV Patients
(n=12/cohort – 10:2)
Virally suppressed

- 3A: 10 mg daily x 28d
- 3B: Dose/interval TBD x 28d

Preliminary data for Cohort 3A expected in 1H 2025

Next steps will be determined after evaluating data from Part 3.

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

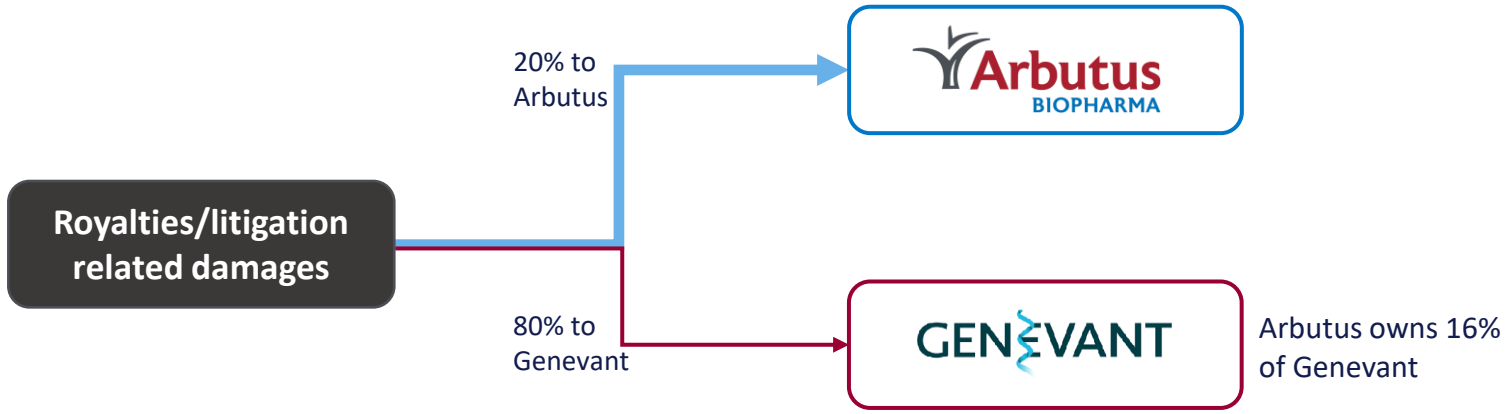
** Additional doses may be tested in Part 1 and Part 2

Arbutus BIOPHARMA

LNP Litigation: Update

- **Moderna - Trial date September 24, 2025 (subject to the Court's availability)***
  - Markman Hearing occurred February 8, 2024 – judge heard arguments on claim construction.
    - Court provided ruling on April 3 and agreed with Arbutus's position on the majority of the claims
  - Expert reports and expert depositions continue

- **Pfizer**
  - Lawsuit ongoing
  - Markman Hearing occurred on December 18, 2024.
  - Next steps: Court expected to provide ruling on claim construction & issue scheduling order in 1H 2025.



*Above referenced date is included in the 8/15/2024 Stipulation to Extend Time.

Arbutus BIOPHARMA

2025 Key Milestones

Milestone	Timing 2025
Initiate Phase 2b clinical trial (imdusiran + IFN)	**1H**
IM-PROVE II Phase 2a (imdusiran + VTP-300 + nivolumab): Functional cure data	**1H**
AB-101-001: Preliminary data from Cohort 3A in cHBV patients	**1H**
LNP Litigation: Outcome of PFE Markman Hearing *	**1H**
LNP Litigation: Moderna Trial **	**2H**

* subject to Court's ruling
** subject to Court's availability

Arbutus BIOPHARMA

Investment Highlights

Indication with significant unmet medical need & large market opportunities

Focused on developing a functional cure for HBV

Team with virology expertise and proven track record

Discovered, developed & commercialized multiple drugs

Portfolio of internally discovered assets with distinct MOAs

RNAi therapeutic
Oral PD-L1 inhibitor

Lead HBV compound – imdusiran, RNAi therapeutic advancing into Phase 2b combination clinical trial

Data from Phase 2a shows imdusiran combined with interferon is generally safe, well-tolerated and functionally cured 50% of patients with HBsAg<1000 IU/mL at baseline

Strong financial position

Cash balance* of $123M as of 12/31/24, cash runway through Q1 2028**; Phase 2b fully funded, 2025 cash burn $47-50M.

Patented LNP technology

Receiving licensing royalties arising from Alnylam's Onpattro® and seeking damages from patent litigation suits filed against Moderna & Pfizer/BioNTech for COVID-19 vaccine sales

*Unaudited; consists of cash, cash equivalents and marketable securities.
** Cash runway assumes receipt of contractual milestones anticipated from Qilu.

Arbutus BIOPHARMA

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

Thank You