



Corporate Presentation

NASDAQ: ABUS

www.arbutusbio.com

November 15, 2024

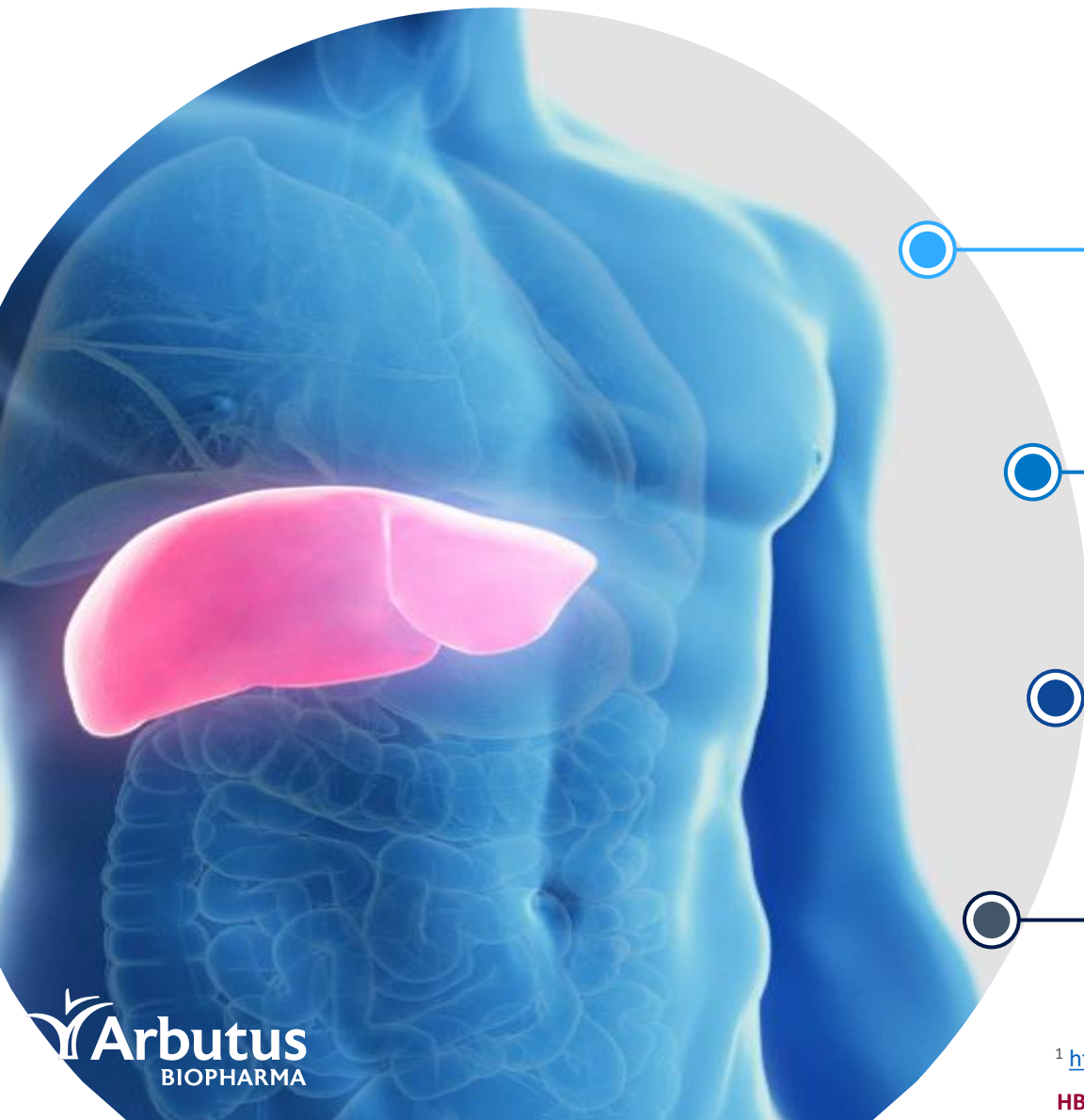


Forward-Looking Statements

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

With respect to the forward-looking statements contained in this presentation, Arbutus has made numerous assumptions regarding, among other things: the timely receipt of expected payments; the effectiveness and timeliness of pre-clinical studies and clinical trials, and the usefulness of the data; the timeliness of regulatory approvals; the continued demand for Arbutus' assets; and the stability of economic and market conditions. While Arbutus considers these assumptions to be reasonable, these assumptions are inherently subject to significant business, economic, competitive, market and social uncertainties, and contingencies including uncertainties and contingencies related to patent litigation matters. Forward-looking statements herein involve known and unknown risks, uncertainties and other factors that may cause the actual results, events or developments to be materially different from any future results, events or developments expressed or implied by such forward-looking statements. Such factors include, among others: anticipated pre-clinical and clinical trials may be more costly or take longer to complete than anticipated, and may never be initiated or completed, or may not generate results that warrant future development of the tested drug candidate; changes in Arbutus' strategy regarding its product candidates and clinical development activities; Arbutus may not receive the necessary regulatory approvals for the clinical development of Arbutus' products; economic and market conditions may worsen; uncertainties associated with litigation generally and patent litigation specifically; market shifts may require a change in strategic focus; and the parties may never realize the expected benefits of the collaborations. A more complete discussion of the risks and uncertainties facing Arbutus appears in Arbutus' Annual Report on Form 10-K, Quarterly Report on Form 10-Q and Arbutus' periodic disclosure filings, which are available at www.sec.gov and at www.sedar.com. All forward-looking statements herein are qualified in their entirety by this cautionary statement, and Arbutus disclaims any obligation to revise or update any such forward-looking statements or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments, except as required by law.

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

~250M¹ people have cHBV with current treatment options for most patients limited to life-long suppressive therapy, representing a need for a finite curative regimen.

Multiple Phase 2 Clinical Trials with Near Term Catalysts

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.

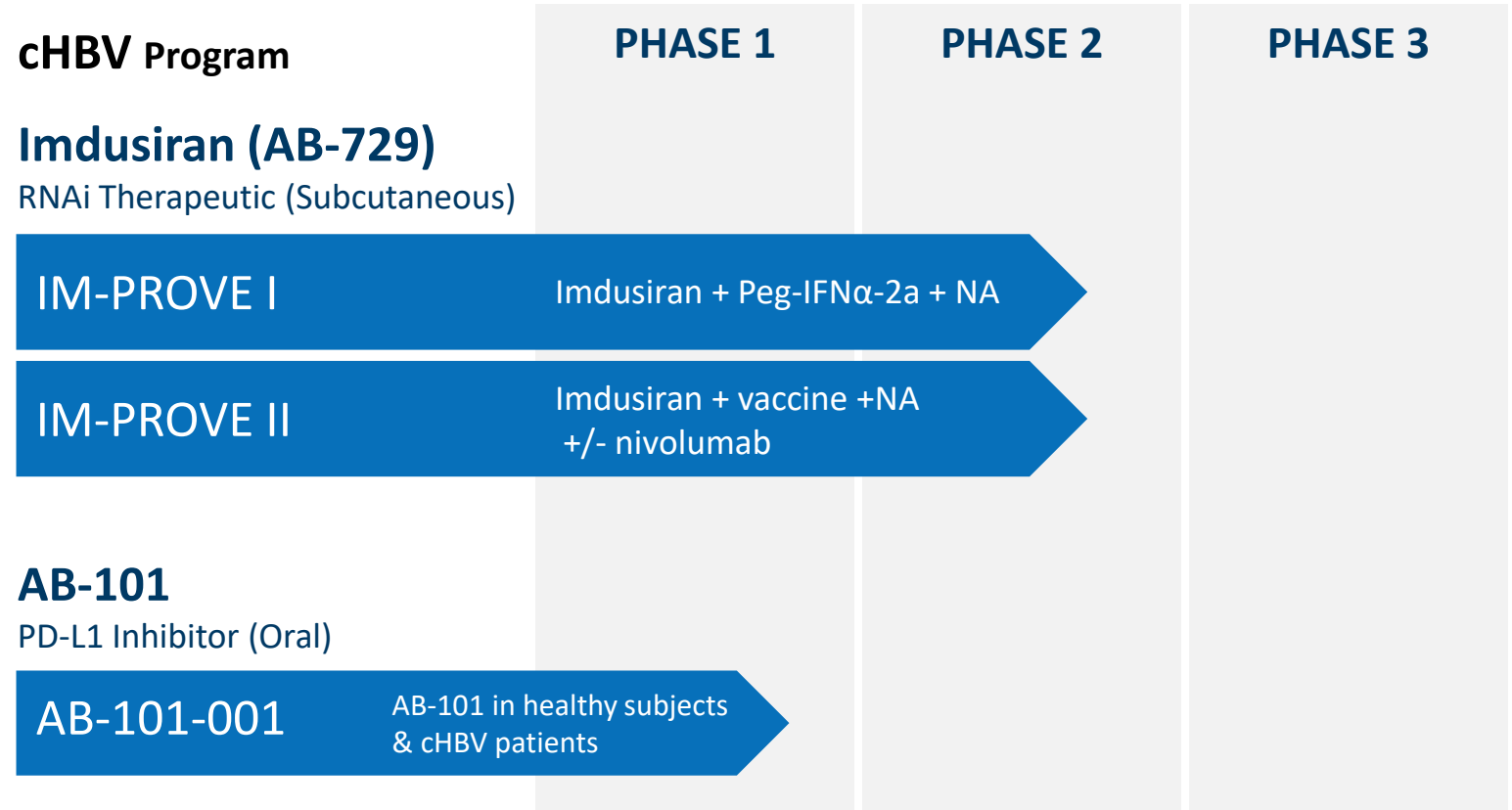
Strong Financial Position

Cash runway into Q4 2026. 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>

Strategy for Value Creation

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

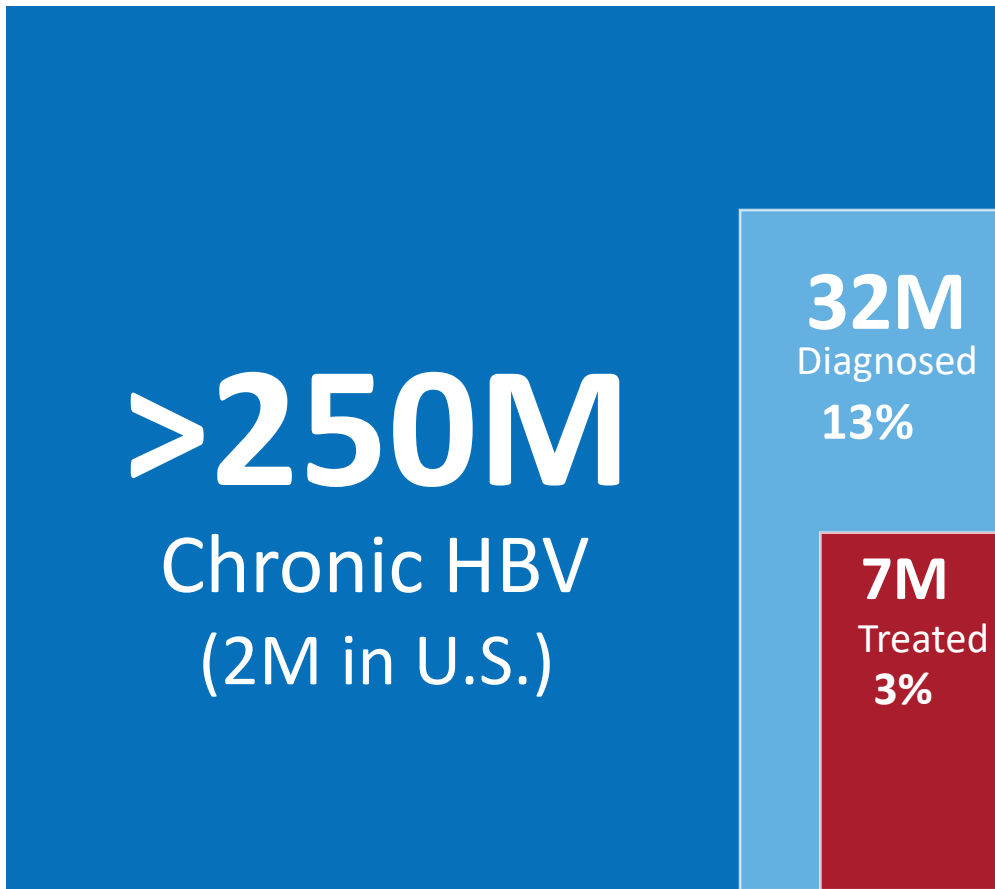


$\geq 20\%$ Functional cure rate goal exceeded

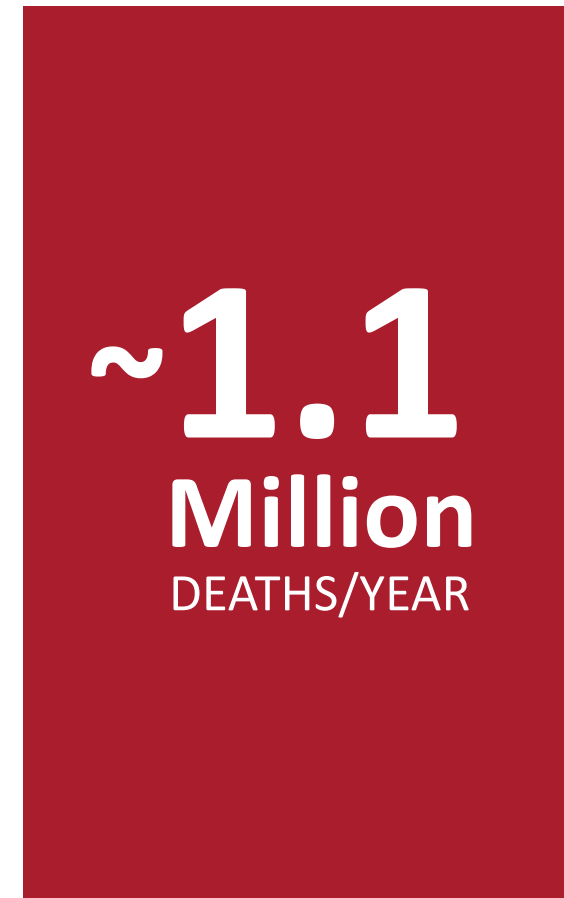
Functional Cure

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

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



Sources:

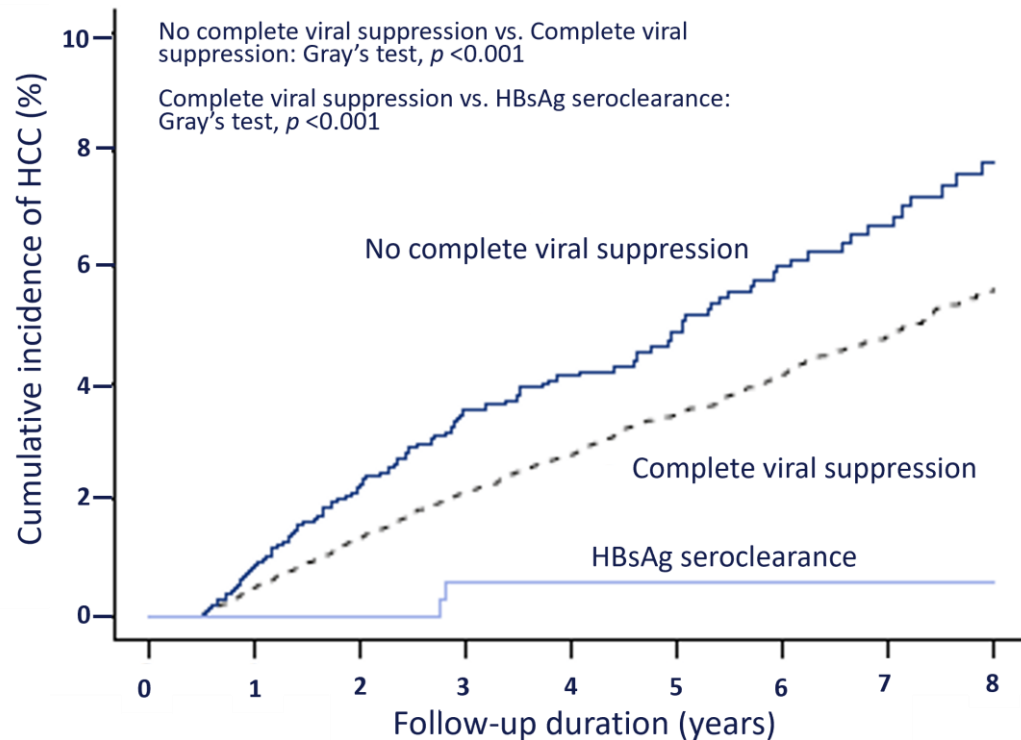
<https://www.who.int/news-room/fact-sheets/detail/hepatitis-b>

<https://www.hepb.org/what-is-hepatitis-b/what-is-hepb/facts-and-figures/>

Pegasys, PEG-Intron, Baraclude and Viread Package Inserts

Rationale for a Functional Cure in HBV

HBsAg Loss Further Reduces HCC Risk After Complete Viral Suppression with NA¹



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 stigma³
- **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. Impact of Stigma on People Living with Chronic Hepatitis B. *Patient Relat Outcome Meas.* 2020;11:95-107

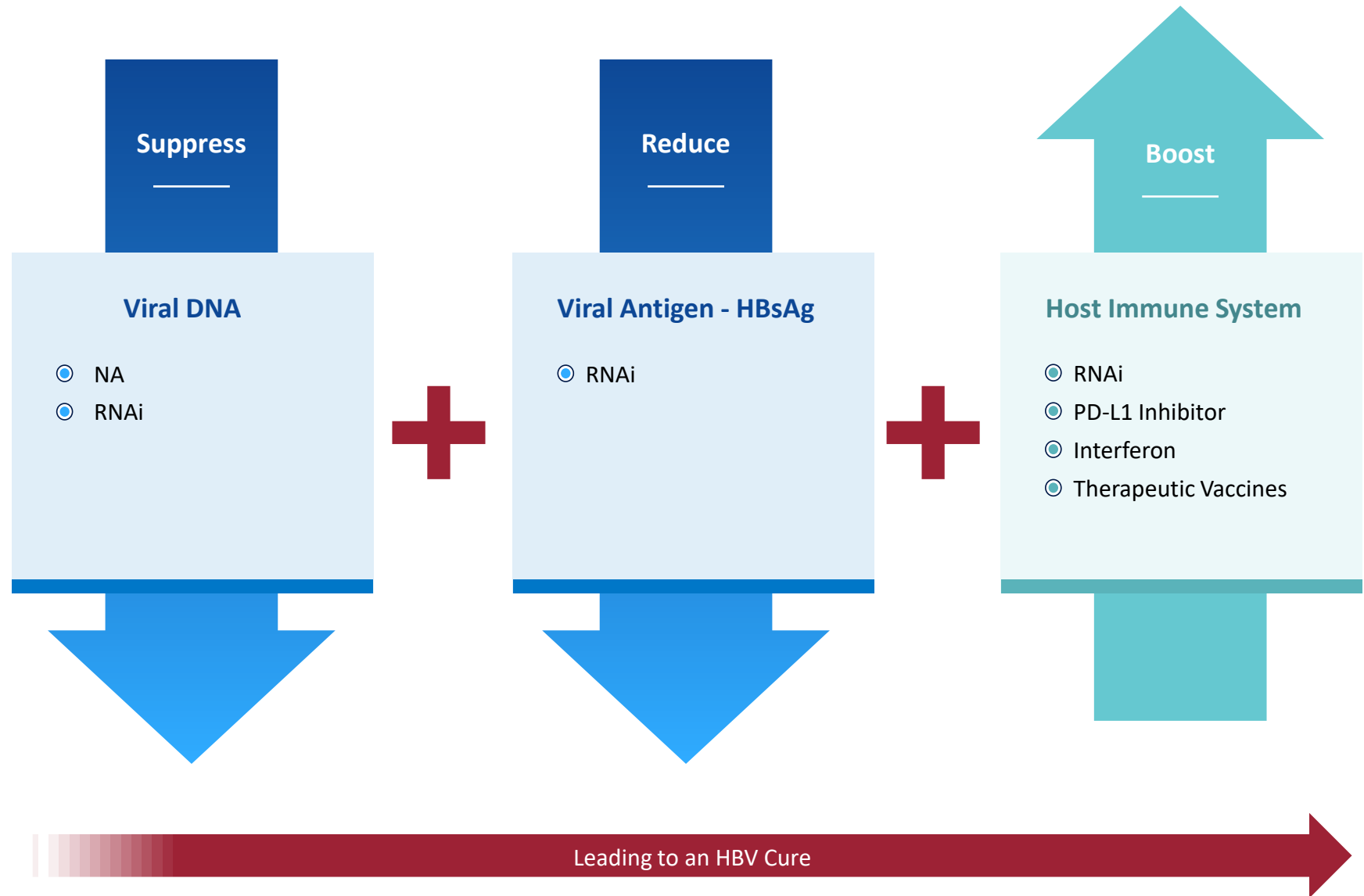
⁴ Chahal, et al, Open Forum Infectious Diseases 2019 Jan; 61(1)

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

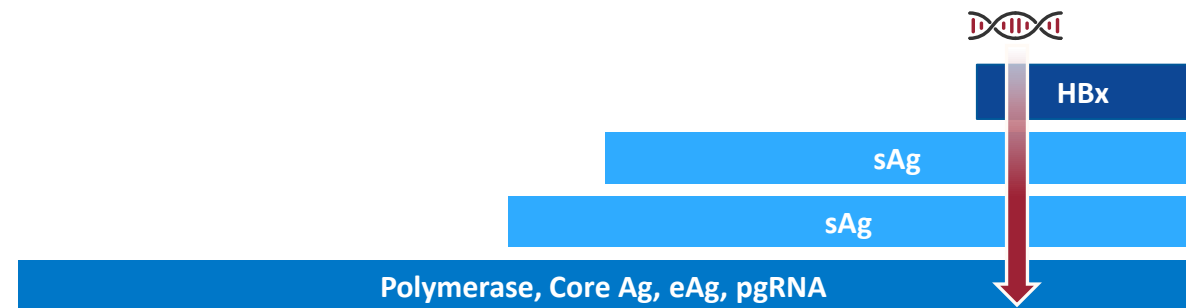
Imdusiran

RNAi Therapeutic

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



- Single trigger RNAi agent targeting all HBV transcripts
- Inhibits HBV replication and lowers all HBV antigens
- Pan-genotypic activity across HBV genotypes
- Demonstrated complementarity with other agents
- Actively targets the liver
- Active against cccDNA derived and integrated HBsAg transcripts
- Favorable profile in long term preclinical safety studies



Imdusiran: Key Takeaways from Clinical Trials to Date

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

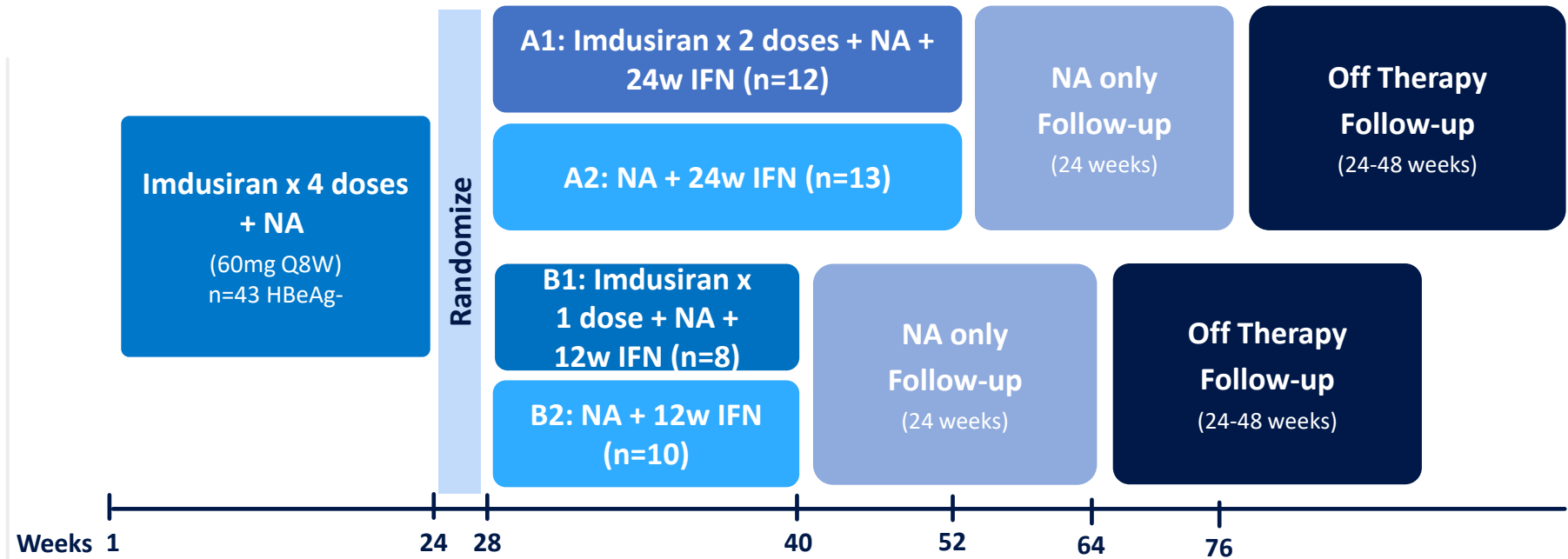
Imdusiran provided robust and comparable HBsAg declines (~1.5-2.0 \log_{10}) regardless of dose, dosing interval, HBeAg or DNA status

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

IM-PROVE I: Phase 2a POC Clinical Trial

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



Multi-center, open-label Phase 2a

Primary objective: evaluate safety and tolerability of imdusiran in combination with Peg-IFN α -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

In Cohort A1, imdusiran plus interferon functionally cured 50% of patients with HBsAg <1000 IU/mL and 25% of patients overall. Data presented to-date showed that imdusiran plus 24 weeks of IFN was generally safe and well-tolerated.

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	B1: IDR (5 doses) + NA + IFN 12W N=8	B2: IDR (4 doses) + NA + IFN 12W N=10
EOT				
All	4/12 (33)	3/13 (23)	0/8	0/10
BL HBsAg <1000 IU/mL	4/6 (67)	2/7 (29)	0/6	0/4
24W Post-EOT				
All	4/12 (33)	2/13 (15)	0/8	0/10
BL HBsAg <1000 IU/mL	4/6 (67)	2/7 (29)	0/6	0/4
Functional Cure				
All	3/12 (25)	2/13 (15)	0/8	1/10 (10)
BL HBsAg <1000 IU/mL	3/6 (50)	2/7 (29)	0/6	0/4

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

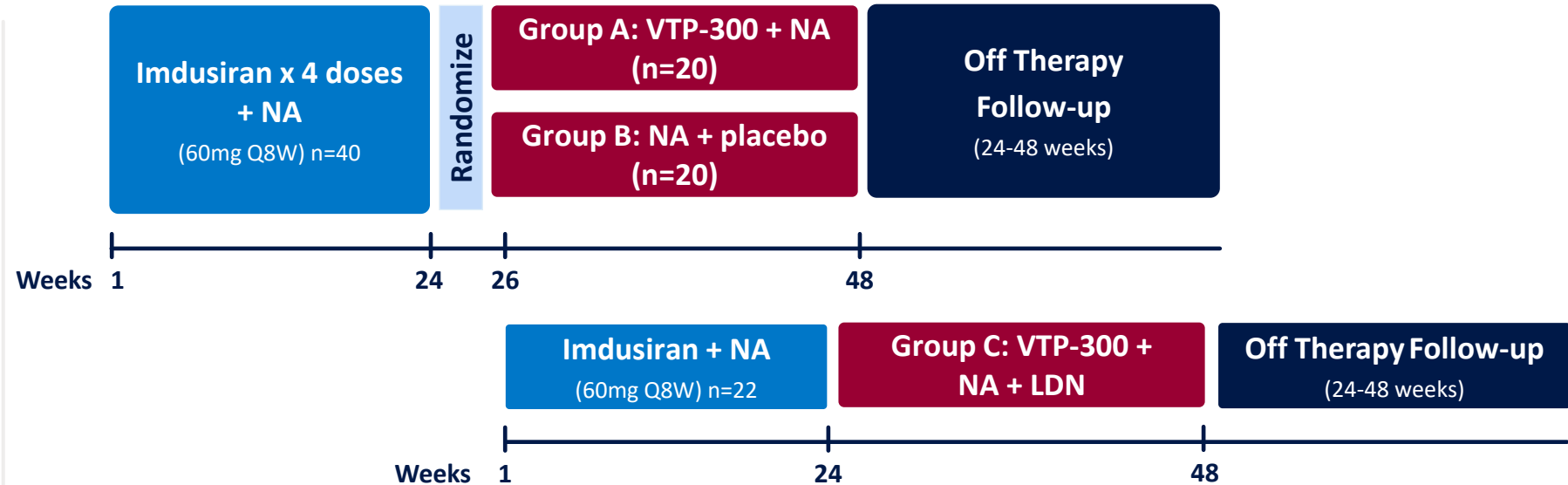
IM-PROVE II:

Phase 2a POC Clinical Trial



POC Phase 2a clinical trial

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



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

Clinical trial expanded to include Group C, an additional arm with LDN (low dose of nivolumab, Opdivo®)

At Week 48 all participants who meet the criteria to discontinue NA therapy will be followed for an additional 48 weeks off therapy

Results presented at EASL Congress 2024 from Group A and B showed that imdusiran followed by VTP-300 was generally safe and well-tolerated and led to maintenance of lower HBsAg levels during the post-treatment follow-up period

Results from Group C, presented at AASLD 2024, showed that the addition of LDN increased rates of HBsAg loss at Week 48

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

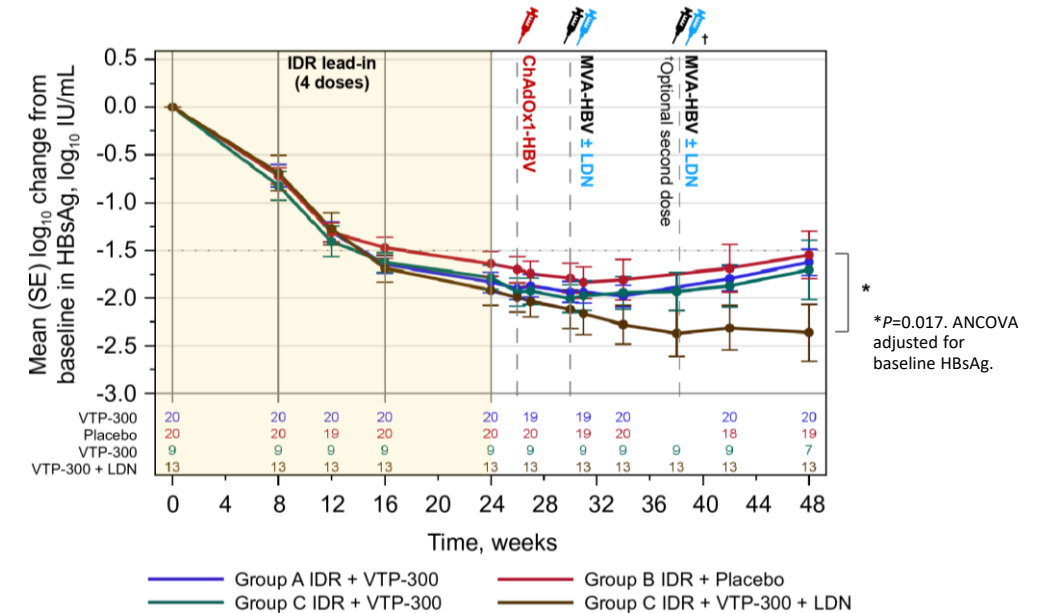
IM-PROVE II: Imdusiran, VTP-300 and Nivolumab Meaningfully Lowers HBsAg Levels

Mean HBsAg Change from Baseline and Key Milestones in Group C

Study week	Mean (SE) change from baseline, log ₁₀ IU/mL (SE) [n]	HBsAg <100 IU/mL, n/N (%)	HBsAg <10 IU/mL, n/N (%)	HBsAg <LLOQ, n/N (%)
IDR 60 mg Q8W × 4 doses				
Baseline	2.83 (0.11) [22]	2/22 (9)	0/22 (0)	0/22 (0)
Week 12	-1.33 (0.12) [22]	15/22 (68)	7/22 (32)	0/22 (0)
Week 26	-1.97 (0.11) [22]	21/22 (96)	12/22 (55)	0/22 (0)
	VTP-300 + LDN	VTP-300 + LDN	VTP-300 + LDN	VTP-300 + LDN
Week 34	-2.28 (0.20) [13]	-1.94 (0.17) [9]	12/13 (92)	8/9 (89)
Week 48/ EOT	-2.36 (0.30) [13]	-1.70 (0.31) [7]	12/13 (92)	5/7 (71)
	VTP-300 + LDN	VTP-300 + LDN	VTP-300 + LDN	VTP-300 + LDN
Week 34	-2.28 (0.20) [13]	-1.94 (0.17) [9]	12/13 (92)	8/9 (89)
Week 48/ EOT	-2.36 (0.30) [13]	-1.70 (0.31) [7]	12/13 (92)	5/7 (71)

EOT, end of treatment; HBsAg, hepatitis B surface antigen; IDR, imdusiran; LDN, lose-dose nivolumab; LLOQ, lower limit of quantitation; Q8W, every 8 weeks.

Mean HBsAg Change from Baseline by Treatment Group



Preliminary Data:

- Patients that received imdusiran, VTP-300 and LDN (n=13) experienced a statistically significant (*p*=0.017) greater mean log₁₀ decline in HBsAg levels at week 48 compared with all other Groups
- 23% of LDN-treated patients (3/13) 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

Imdusiran

Strategic Collaboration



Exclusive Licensing* and Strategic Partnership

Develop, manufacture and commercialize imdusiran in mainland China, Hong Kong, Macau and Taiwan

*ABUS retains the non-exclusive right to develop and manufacture in the Qilu territory for exploiting AB-729 in the rest of the world

Deal economics for Arbutus:

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

Qilu Pharmaceutical:

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





AB-101

Oral PD-L1 Checkpoint Inhibitor

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

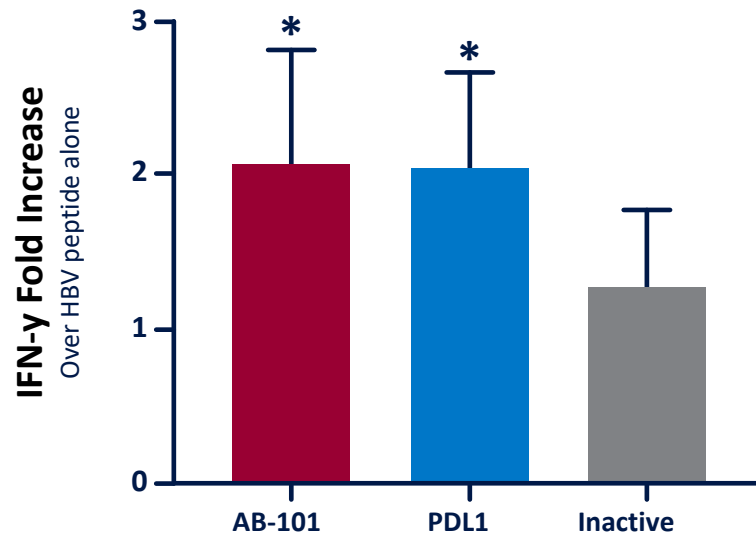
- Blocks PD-L1/PD-1 interaction at sub-nM concentrations
- Activates HBV-specific immune responses in T-cells from cHBV patients *in vitro*
- Novel MOA identified
- Demonstrates a robust checkpoint mediated *in vivo* effect
- Improves HBV-specific T- and B-cell responses *ex vivo*

Currently in a Phase 1a/1b clinical trial

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

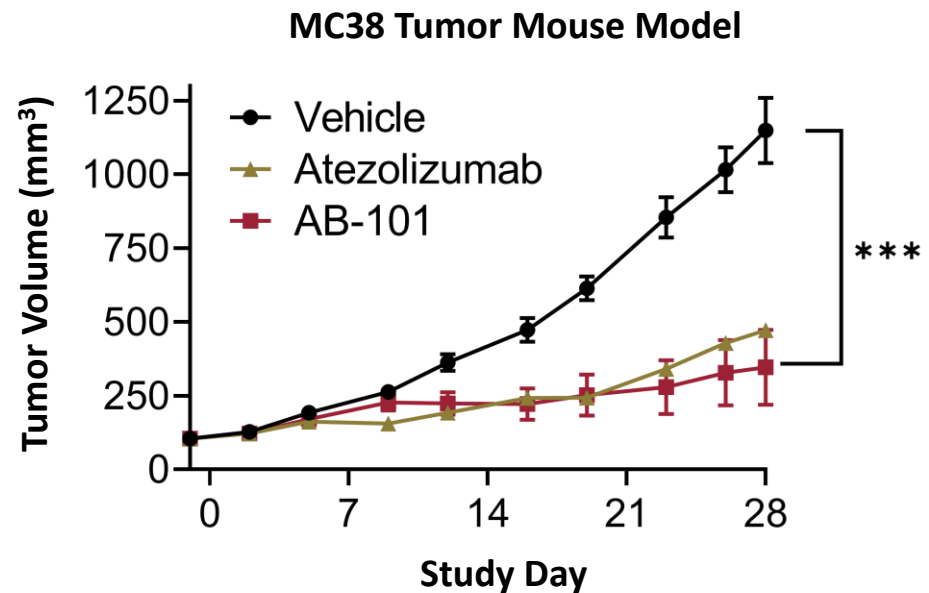
AB-101 is highly potent and activates HBV specific immune cells from chronic HBV patients

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



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

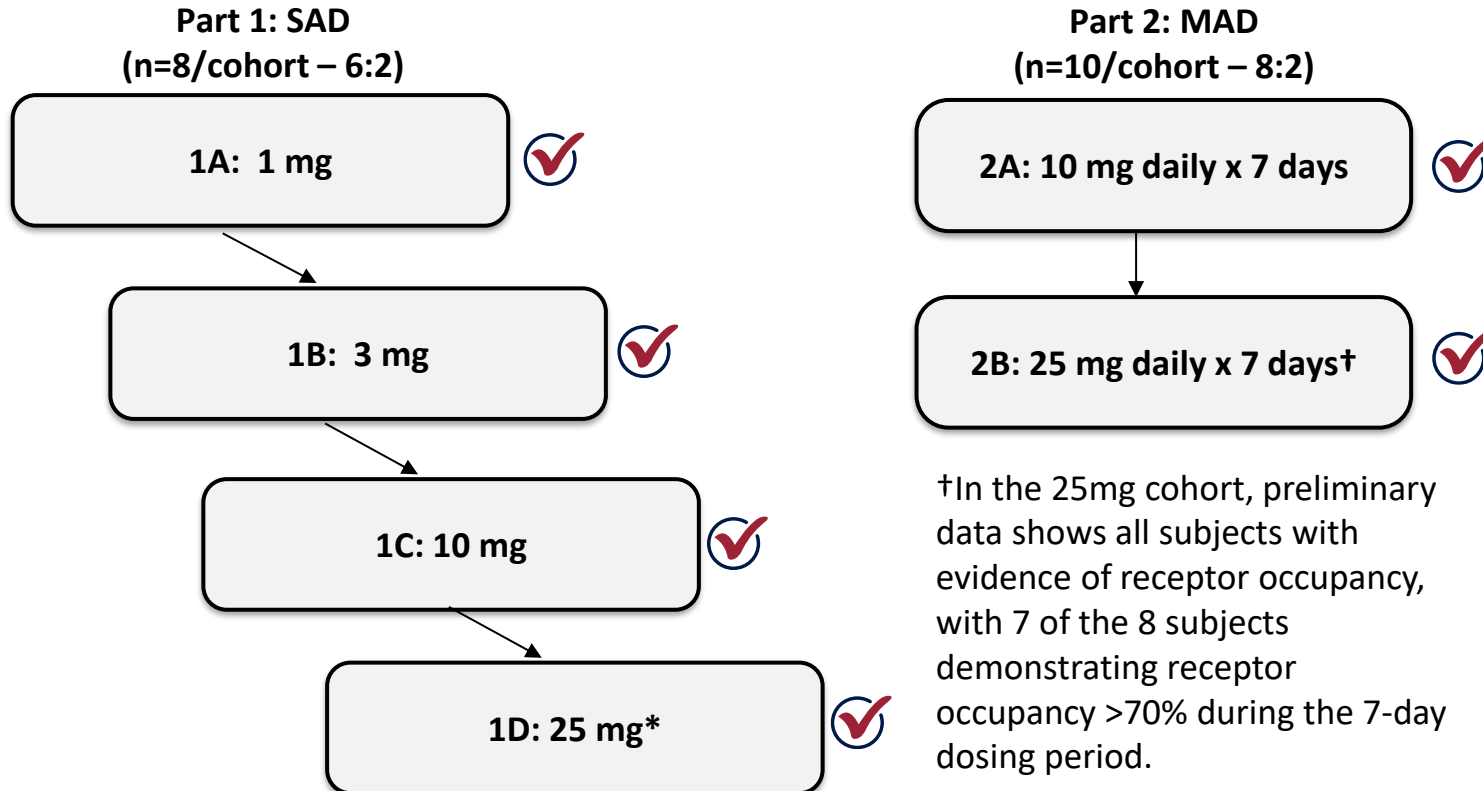
Once daily oral administration of AB-101 resulted in
statistically significant tumor reduction



Data presented at EASL 2022

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

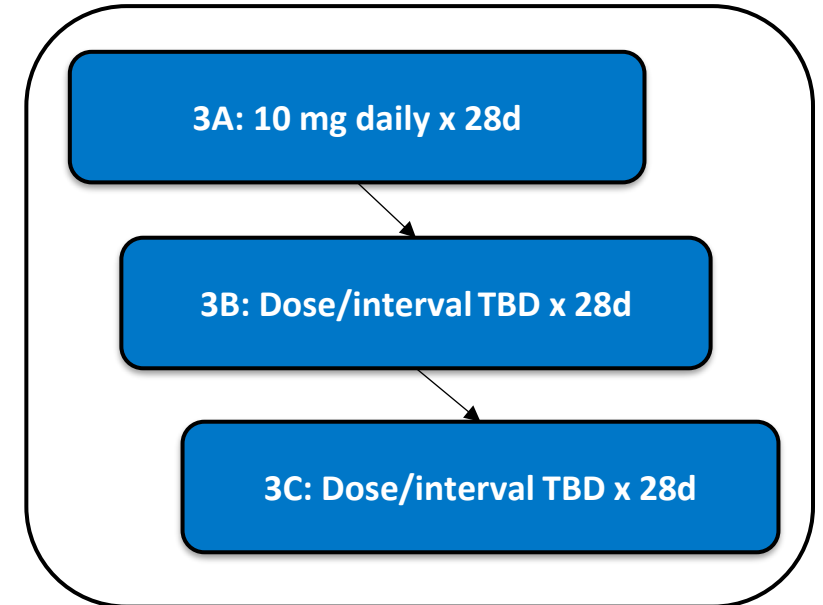
Parts 1 & 2 – Healthy Subjects**



* 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

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

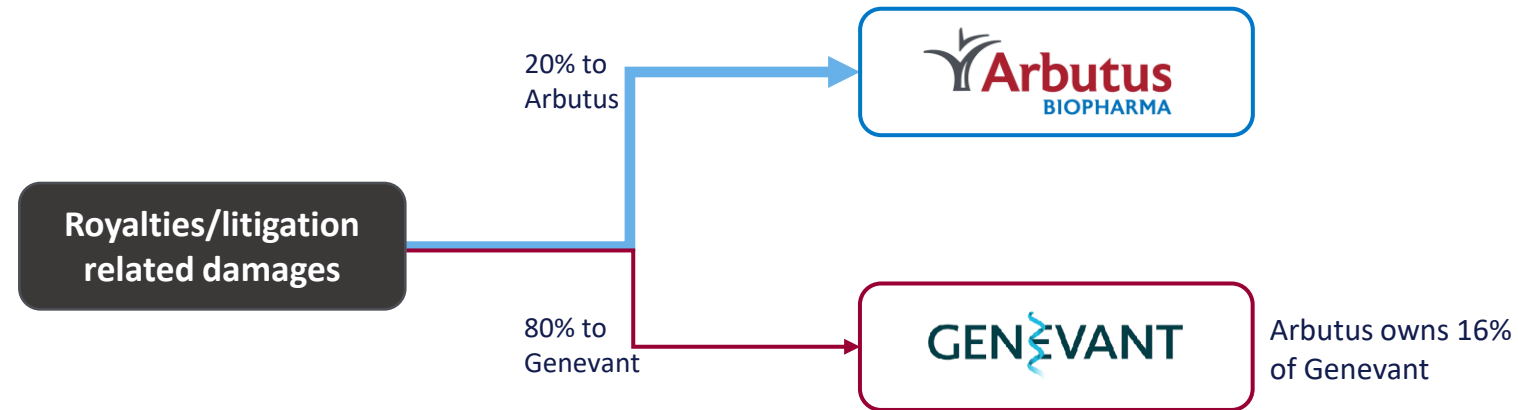


Patient dosing initiated in Q3 2024
Preliminary data expected in 1H 2025

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
 - Next Steps
 - Expert reports / depositions

- Pfizer
 - Lawsuit ongoing
 - Markman Hearing scheduled for December 18, 2024



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

2024 Key Milestones

Milestone	Timing 2024
IM-PROVE I Phase 2a (imdsiran + IFN): End-of-treatment data	1H ✓
IM-PROVE II Phase 2a (imdsiran + VTP-300): End-of-treatment data	1H ✓
AB-101-001: Preliminary data from healthy subject cohorts	1H ✓
IM-PROVE II Phase 2a (imdsiran + VTP-300 + nivolumab): End-of-treatment data	2H ✓
AB-101-001: Preliminary data from multiple-ascending dose healthy subject cohorts	2H ✓

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 (AB-729) RNAi therapeutic in multiple Phase 2a combination clinical trials

Data shows imdusiran is generally safe and well-tolerated and has achieved functional cure in combination with interferon



Strong financial position

Cash balance* of \$130.8M as of Sept. 30, 2024, cash runway into Q4 2026; 2024 cash burn between \$63M and \$67M



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

*Consists of cash, cash equivalents and marketable securities

Thank You

