Arbutus BIOPHARMA

A Leading HBV Therapeutics Company

Corporate Overview | August 2017

NASDAQ: ABUS www.arbutusbio.com

Forward Looking Statements

This presentation contains forward-looking statements within the meaning of 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 presentation include statements about, among others: meeting a significant unmet medical need and market opportunity; developing a curative regimen for HBV; accomplishing the objectives of ARB-1467 and AB-423; receiving results from Alnylam's Phase III study on Patisiran in 2017; receiving additional clinical data from the HBV pipeline in 2H17; current cash funding the company into late 2018; and non-dilutive financing potential from non-HBV assets and LNP licensing.

With respect to the forward-looking statements contained in this presentation, Arbutus has made numerous assumptions regarding, among other things: stability of economic and market conditions; the effectiveness and commercial viability of the company's products. While Arbutus considers these assumptions to be reasonable, these assumptions are inherently subject to significant business, economic, competitive, market and social uncertainties and contingencies. 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: the company's product pipeline may not prove to be effective or commercially beneficial; and economic and capital market conditions may worsen. A more complete discussion of the risks and uncertainties facing Arbutus appears in Arbutus' Annual Report on Form 10-K and Arbutus' continuous disclosure filings which are available at www.sec.gov and at www.sedar.com. Arbutus disclaims any obligation to update any 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 Investment Highlights

- Chronic Hepatitis B is a large, global unmet medical need
- Our world class scientific team has a track record of success in antivirals
- Each drug in our portfolio has potential to improve patient outcomes
- Our clinical studies are generating important new efficacy data this year
- We are on a path to functional cures in HBV patients – key to approval
- LNP asset will drive value by enabling mRNA and gene-editing platforms

Experienced Leadership Team

Mark J. Murray, PhD
President and CEO

Tekmira · Protiva · ZymoGenetics · XCyte

William T. Symonds, PharmD
Chief Development Officer

Roivant Sciences · Gilead · Pharmasset

Bruce Cousins, CA
Chief Financial Officer

Tekmira · Aspreva · Johnson & Johnson · Deloitte

Michael J. Sofia, PhD
Chief Scientific Officer

OnCore Biopharma, Inc. · Gilead · Pharmasset · Bristol-Myers Squibb

Collaboration with the Blumberg Research Institute Expands on Extensive Internal Capabilities

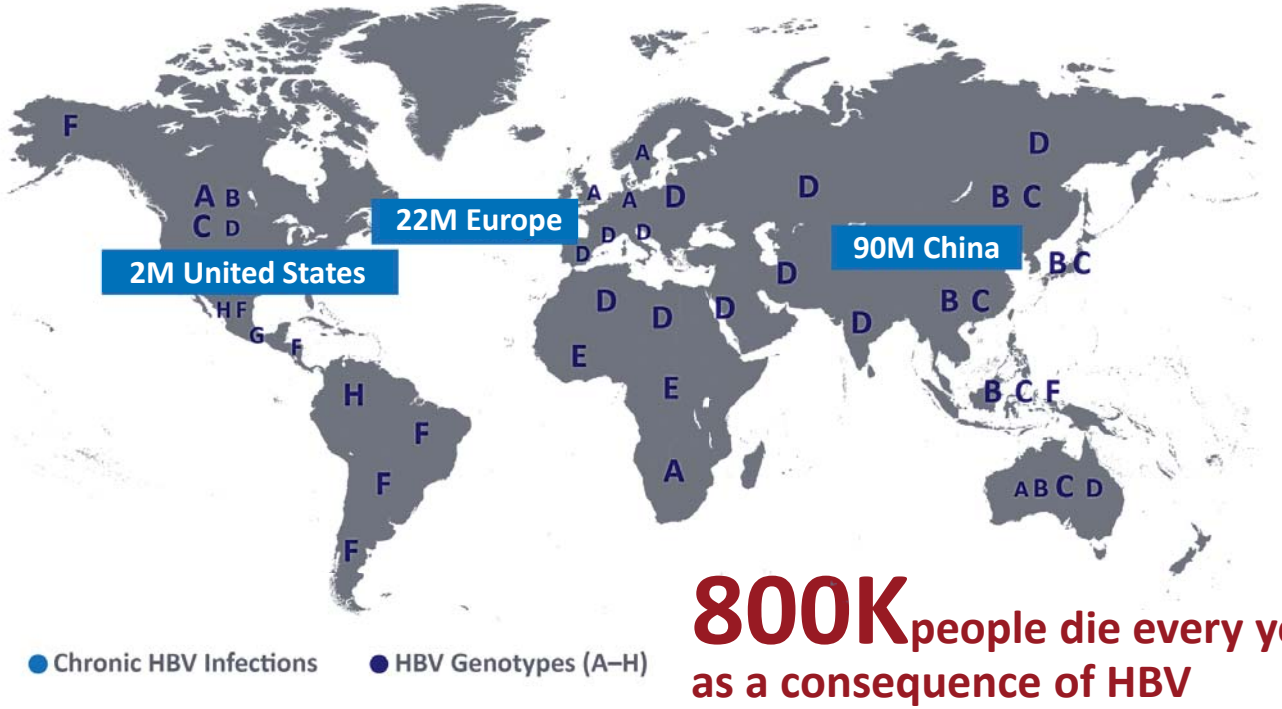
HBV and LNP to Drive Value for Arbutus

- Hepatitis B Opportunity
- Arbutus HBV Pipeline
- Future Development
- Lipid Nanoparticle (LNP) Delivery Technology
- Upcoming Milestones

Chronic HBV – Global Unmet Medical Need

Significant Prevalence in Developed World

350M people chronically infected with HBV



800K people die every year as a consequence of HBV

- Lozano R, Naghavi M, Foreman K et al. The Lancet 2012; 380: 2095-128
- World Health Organization: Fact Sheet No. 204. Hepatitis B, revised, August 2008. Geneva: WHO. www.who.int/mediacentre/factsheets/fs204/en/index.html

Significant Opportunity to Improve Cure Rates

Approved Therapies Show a Cure is Possible But Result in <5% Cure Rate

- New treatment options need to:
  - Increase the rate of undetectable HBV DNA
  - Increase the rate of HBsAg loss
  - ***Result in more cures***

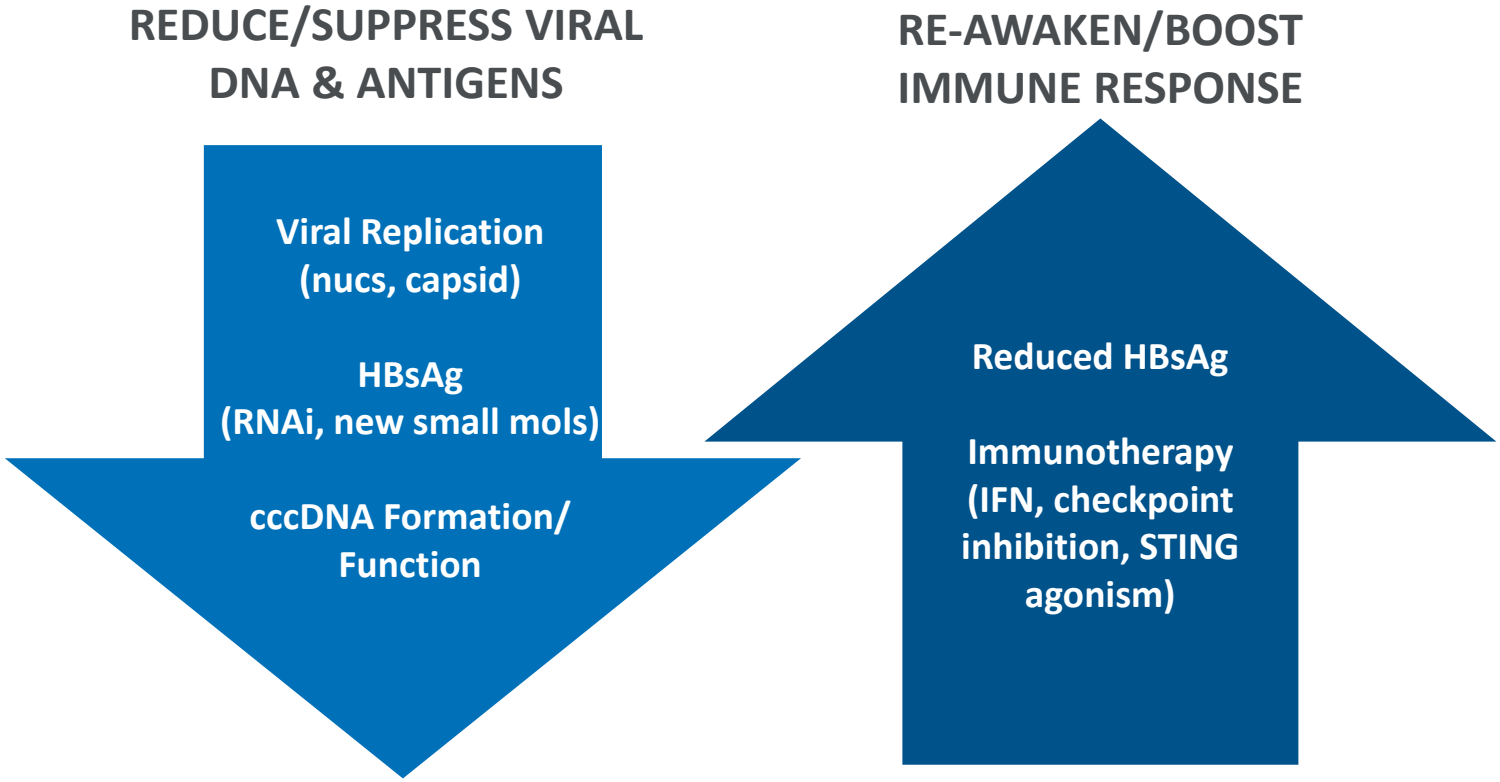
Current Therapies for Chronic HBV Infection

	Pegasys (PegIFN)	Baraclude (Entecavir)	Viread (Tenofovir)
Dosing Duration	48-weeks	Chronic	Chronic
HBV DNA undetectable (<60-80IU/ml)	14-19%	67-90%	76-93%
HBsAg Loss	~3-4%	~1-2%	~1-3%
Side Effect Burden	High	Low	Low

EASL HBV Clinical Practice Guidelines, 2012 - Pegasys,, Baraclude and Viread Package Inserts

Keys to Therapeutic Success in HBV Are Known

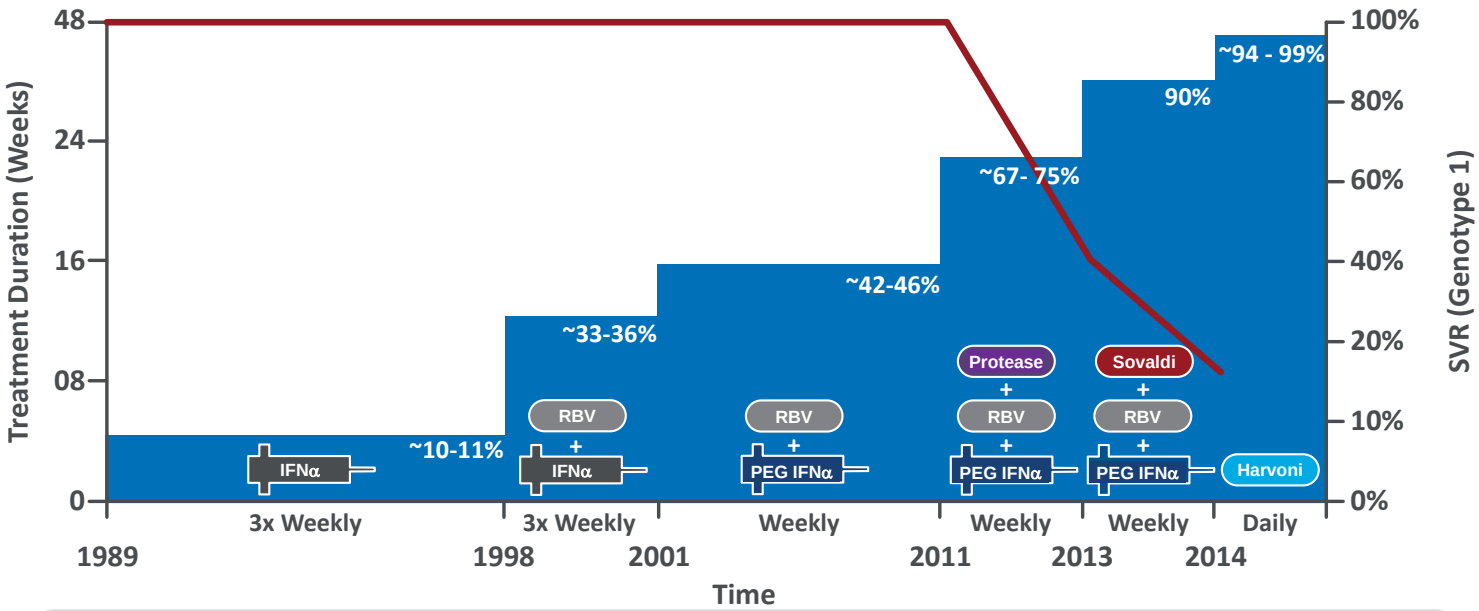
Solution: Combinations of Drugs With Complementary MOAs



A combination approach to these key factors will drive cures

Near Term HBV Goal: Substantial Cure Rates

HCV History Provides a Roadmap



Goal is combination treatment with finite duration to achieve cures

HBV and LNP to Drive Value for Arbutus

- Hepatitis B Opportunity
- Arbutus HBV Pipeline
- Future Development
- Lipid Nanoparticle (LNP) Delivery Technology
- Upcoming Milestones

Arbutus Pipeline Has The Necessary Components

Candidate	Stage of Development: Research	IND Enabling	Phase I	Phase II	Next Milestone
ARB-1467 *RNAi*					**2H17**: Cohort 4 data **4Q17**: New combo study
AB-423 *Capsid Inhibitor 1.0*					**4Q17:** Healthy volunteer data **4Q17:** Initiate HBV patient study
AB-506 *Capsid Inhibitor 2.0*					IND (or equivalent) filing
AB-452 *HBV RNA Destabilizer*					IND (or equivalent) filing
GalNAc RNAi					Candidate nomination
Checkpoint inhibitor					Lead optimization
cccDNA Targeting Agent					Lead optimization

HBV and LNP to Drive Value for Arbutus

- Hepatitis B Opportunity
- Arbutus HBV Pipeline
  - RNA Interference (RNAi)
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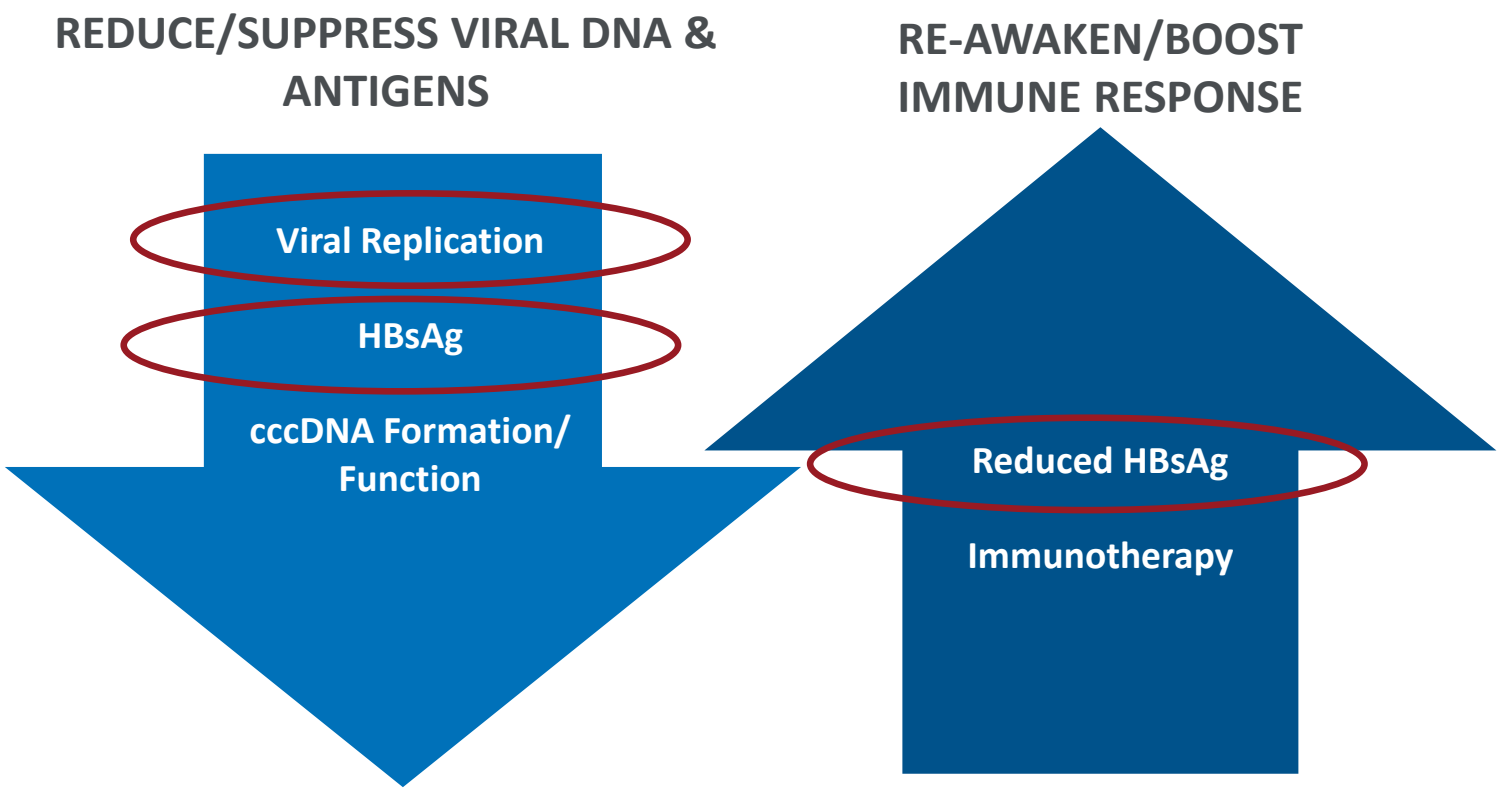
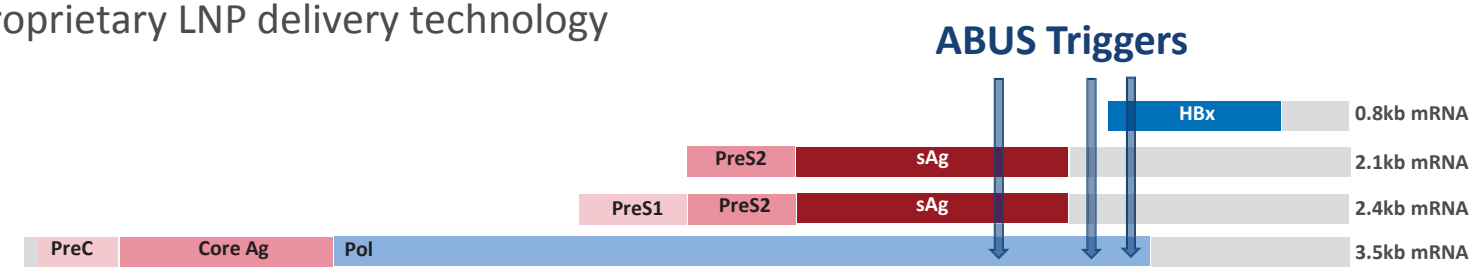
RNAi Role in Keys to Therapeutic Success in HBV

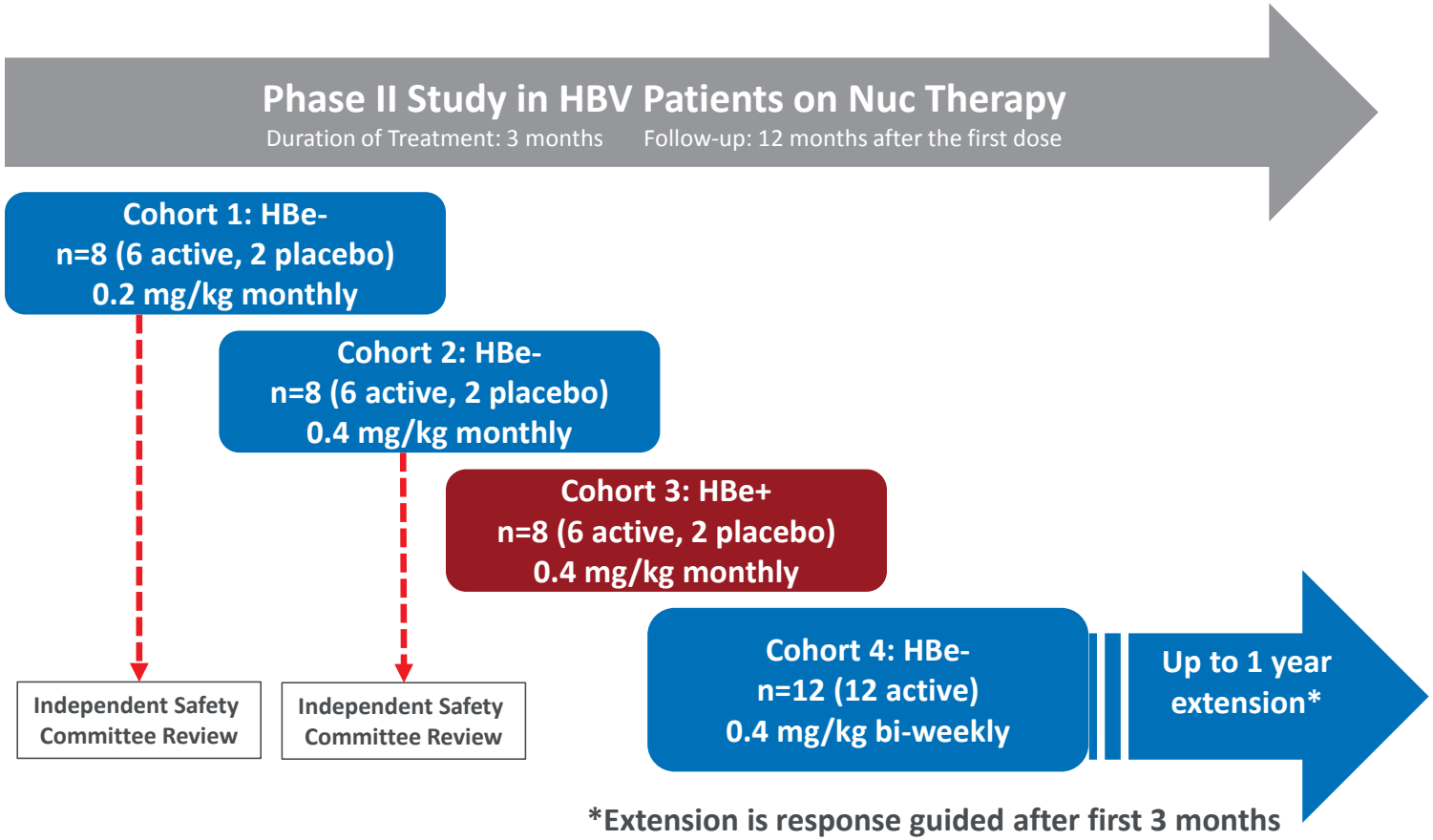


ARB-1467 Has a Multi-Faceted Impact on HBV

- Unique 3-trigger design targets all HBV transcripts and prevents production of all antigens
- Preclinical studies show that ARB-1467 reduces:
  - HBV DNA
  - HBsAg
  - HBeAg
  - HBV core protein
  - cccDNA
- Employs proprietary LNP delivery technology



ARB-1467 Phase II: Measuring HBsAg Reduction



*Extension is response guided after first 3 months

ARB-1467 Drives Significant HBsAg Reduction

Reductions of ≥ 1.0 log10 in 5/11 patients (after 3 doses at 0.4 mg/kg)

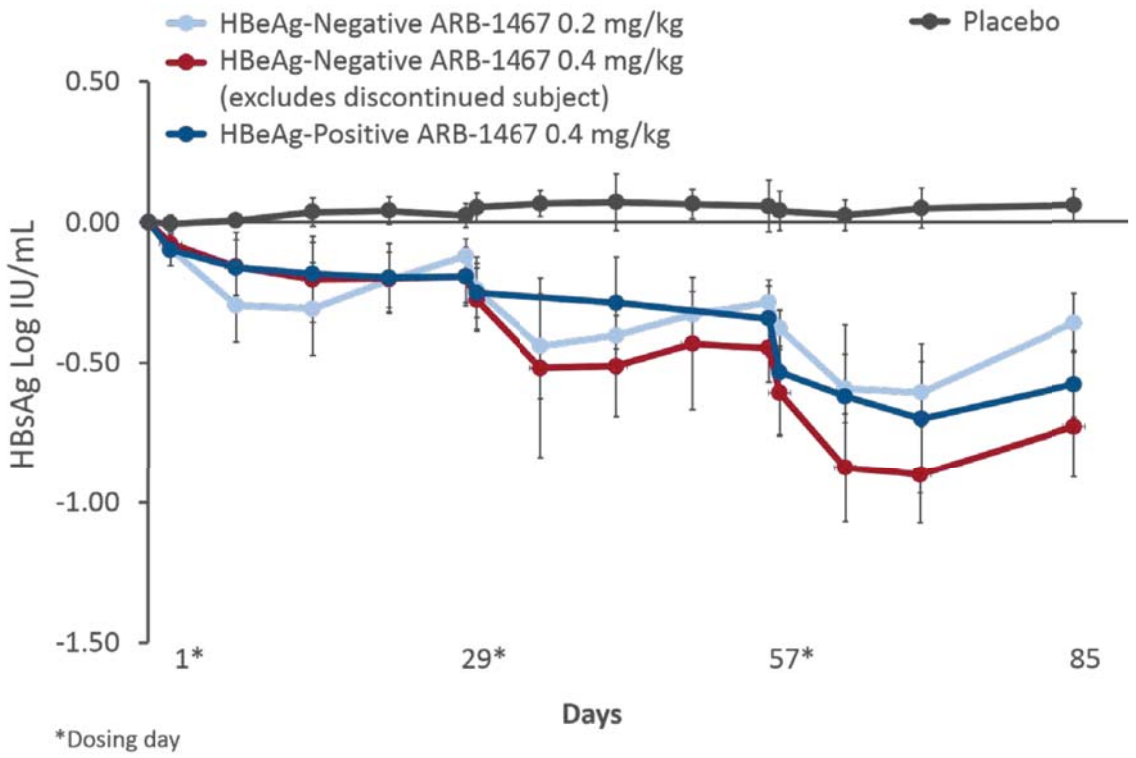
- Potential to achieve greater reductions with continued dosing
- 17/18 patients in Cohorts 1-3 received all three monthly doses

Cohort	ARB-1467 (mg/kg)	HBeAg	Multiple Dose HBsAg Reduction (log_{10} IU/mL)				
			N	Mean[a]	Max[c]	>0.5 log[c]	>1.0 log[c]
1	0.2	Negative	6	-0.6	-1.3	5	1
2	0.4	Negative	5[d]	-0.9	-1.3	4	3
3	0.4	Positive	6	-0.7	-1.6	4	2
Placebo	N/A		6[e]	0.0	-0.1	0	0

[a] The mean serum HBsAg reduction is the nadir value of the arithmetic mean of all values observed at each time point.
[b] Maximum HBsAg reduction is the best single reduction among all patients in a cohort.
[c] Number of patients reaching this threshold
[d] Multiple dose results in Cohort 2 exclude one patient that discounted at day 36 due to "HBV blip" associated with acute HEV infection
[e] Placebo results are based on six subjects (two from each cohort).

ARB-1467 Multi-Dosing Shows Additive, Stepwise HBsAg Reduction

HBsAg Mean Log (IU/mL) Change from Baseline



ARB-1467 Next Steps to Advance Development

- Potential for greater HBsAg reductions with more frequent, continued dosing
  - Cohort 4: biweekly dosing, extended dosing
- 2017 Studies planned to assess longer duration and combination with immune stimulator to maximize HBsAg reduction
- Future combinations will include multiple Arbutus agents

ARB-1467 Cohort 4 data in 2H17
Longer term ARB-1467 studies with nucs and IFN to begin in 4Q17

HBV and LNP to Drive Value for Arbutus

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  - Core Protein/Capsid Inhibitor
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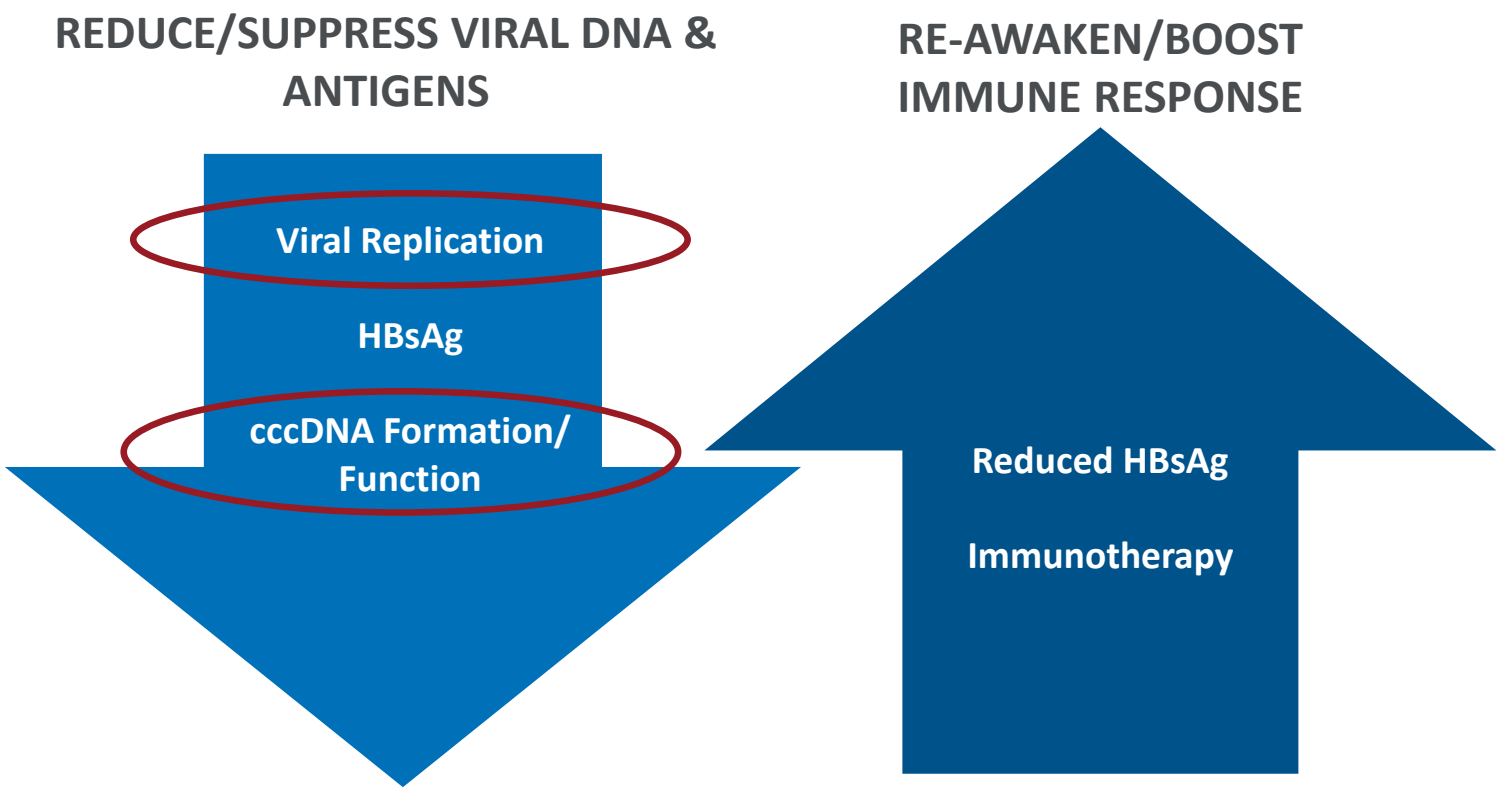
Capsid Role in Keys to Therapeutic Success in HBV



Core Protein/Capsid Formation Inhibitor Program

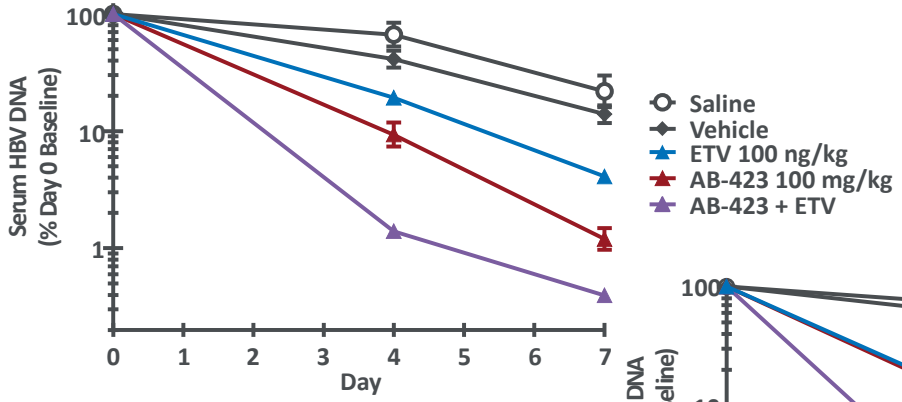
Adds a Direct Antiviral Mechanism to Complement SOC and RNAi

- Oral small molecule direct antiviral agent
- Dual action: blocks DNA replication interferes with cccDNA formation
- Complementary to approved agents (nucs and IFN) and RNAi in preclinical combo studies
- Healthy volunteer Phase I study underway
- 2nd generation capsid with greater potency nominated for clinical development (AB-506)

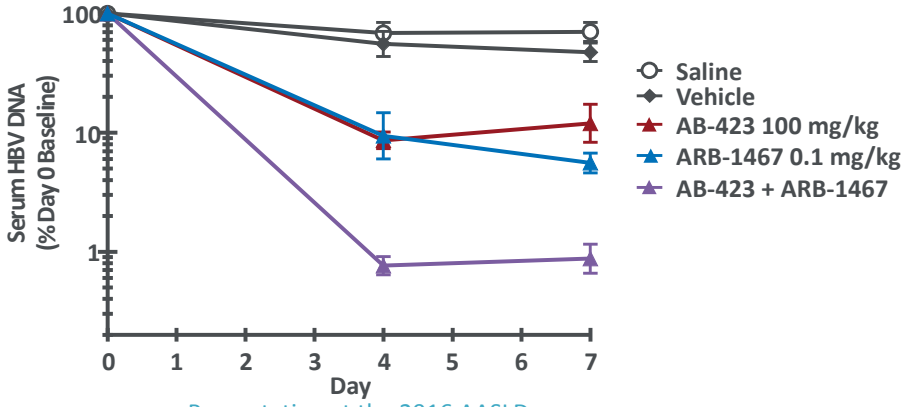
MAD study in HBV patients to start in 4Q17

AB-423 Complements Nucs and RNAi

- Antiviral effects of AB-423 alone or in combination with Entecavir (ETV) or ARB-1467 (RNAi agent) in the HDI mouse model



Presentation at the 2016 EASL



Presentation at the 2016 AASLD

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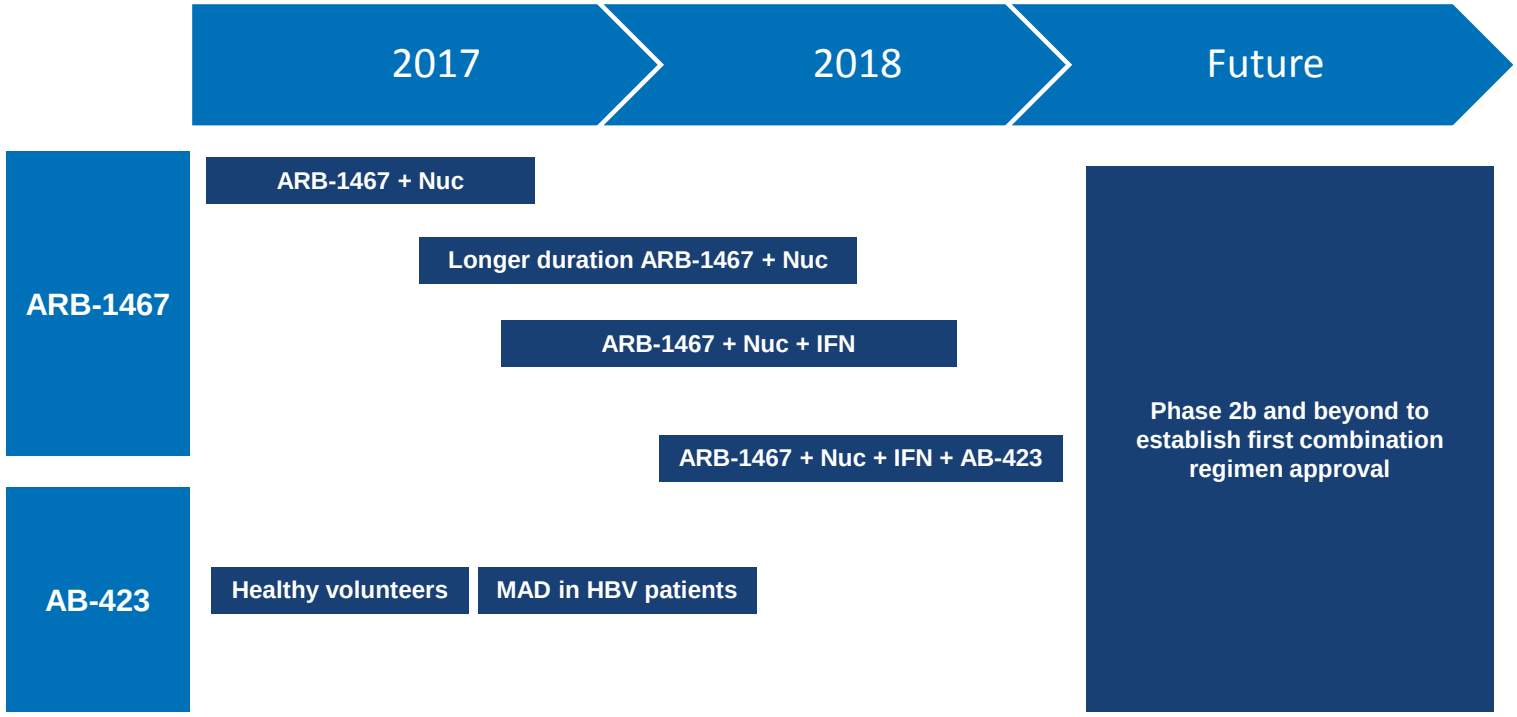
Pipeline Progression to Drive Value



Research pipeline to produce more clinical programs, additional combination options

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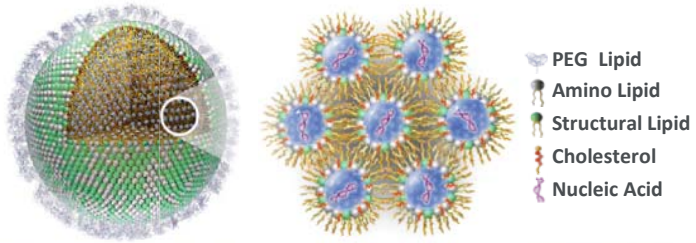
Proprietary LNP Platform Technology

Arbutus is the Leader in LNP-Enabled Nucleic Acid Delivery

Dominant and Comprehensive IP Position	• Broad portfolio of patents including the recently issued ‘127 patent
Potent and Clinically Validated Technology	• Clinically validated in hundreds of patients • Repeat administration for over 2 years
Royalty Streams and Licensing Deals	• Alnylam's Patisiran (Phase III) • Alexion mRNA program for rare disease • Licensing and other strategic alternatives



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Upcoming Company Milestones

Target	Product	Milestone	Goal
Sept. 2017*	Patisiran (Alnylam)	Phase III results (ABUS to receive royalties on sales) *Timing per public Alnylam comments	Enable filing/approval
Sept. 2017	ARB-1467 (RNAi)	Topline Phase II Cohort 4 (bi-weekly multi-dosing) study results	Faster/greater HBsAg reduction, extended dosing
Oct. 2017	AASLD Conference	6 Abstracts accepted for presentation	Top-line data from clinical/preclinical programs
4Q17	AB-423 (Capsid Inhibitor)	Initiate MAD study in HBV patients	Safety/PK, initial efficacy evaluation
4Q17	ARB-1467	Initiate longer duration studies with nuc and IFN	Maximize HBsAg reduction

Financial Highlights

- Market capitalization: ~$200 million
- Daily trading volume (3 month average): ~150,000
- Cash as of 6/30/17: $115.6 million
  - Cash runway into late 2018
  - Opportunity to significantly extend runway with non-dilutive funding
- Shares outstanding: 55.0 million basic, 60.6 million fully diluted

Current cash is expected to fund the company into late 2018

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