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): November 9, 2023

BARINTHUS BIOTHERAPEUTICS PLC

(Exact name of registrant as specified in its charter)

England and Wales (State or other jurisdiction of incorporation) 001-40367 (Commission File Number) Not Applicable (I.R.S. Employer Identification No.)

Barinthus Biotherapeutics plc Unit 6-10, Zeus Building Rutherford Avenue, Harwell, Didcot, OX11 0DF United Kingdom (Address of principal executive offices, including zip code)

+44 (0) 1865 818 808

(Registrant's telephone number, including area code)

Not Applicable

(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)

Dere-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:

<u>Title of each class</u> American Depositary Shares

Ordinary shares, nominal value £0.000025 per share*

Trade Symbol(s) BRNS Name of each exchange on which registered The Nasdag Global Market

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.

*American Depositary Shares may be evidenced by American Depositary Receipts. Each American Depositary Share represents one (1) ordinary share. Not for trading, but only in connection with the listing of the American Depositary Shares on The Nasdaq Global Market. The American Depositary Shares represent the right to receive ordinary shares and are being registered under the Securities Act of 1933, as amended, pursuant to a separate Registration Statement on Form F-6. Accordingly, the American Depositary Shares are exempt from the operation of Section 12(a) of the Securities Exchange Act of 1934, as amended, pursuant to Rule 12a-8.

Item 7.01. Regulation FD Disclosure.

On November 9, 2023, Barinthus Biotherapeutics plc (the Company) issued a press release titled "Barinthus Bio Presents Interim Data from Phase 2b HBV003 Trial and Phase 2a AB-729-202 Trial in Collaboration with Arbutus Biopharma in Chronic HBV Patients at AASLD." A copy of the press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

On November 9, 2023, the Company updated its corporate presentation for use in meetings with investors, analysts and others. A copy of this presentation is furnished as Exhibit 99.2 to this Current Report on Form 8-K. The Company undertakes no obligation to update, supplement or amend the presentation.

The information in Item 7.01 of this Current Report on Form 8-K (including Exhibits 99.1 and 99.2) is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the Exchange Act), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference into any filing by the Company under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 8.01. Other Events

On November 9, 2023, the Company announced data from HBV003, an ongoing Phase 2b trial designed to further evaluate the safety and efficacy of VTP-300 when combined with a low-dose anti-PD-1 antibody, and standard-of-care (SoC) nucleos(t)ide analogue (NUC) therapy. Alongside this, interim data from patients with chronic hepatitis B (CHB) from the Phase 2a AB-729-202 trial combining Arbutus Biopharma Corporation's (NASDAQ: ABUS) RNAi therapeutic candidate, imdusiran (AB-729), with the Company's T-cell stimulating immunotherapeutic candidate, VTP-300, and SoC NUC therapy.

Study HBV003: VTP-300 and Low-dose Nivolumab

HBV003 is designed to obtain critical information on treatment dosing regimen with patients receiving VTP-300 and low-dose nivolumab. All Groups received ChAdOx at Day 1, Groups 1 & 2 received MVA with nivolumab at Day 29 with Group 2 being dosed again at Day 85, Group 3 received only MVA at Day 29, followed by nivolumab at Day 36 and a second MVA dose at Day 85 to evaluate PD-1 inhibition timing. Seventy-four out of a planned 120 virally-suppressed CHB patients on stable NUC therapy have been enrolled in the trial and 57 have reached Day 113. VTP-300 in combination with nivolumab led to HBsAg declines in all treatment groups, particularly in participants with screening HBsAg levels s200 IU/mL.

- >0.5 and >1 log drops have been observed in all groups at Day 113 in 23% and 9% of participants, respectively.
- Participants with an HSAg level of <200 IU/mL at screening were more likely to have >1 log HBAG greductions (31%) compared to those with HBSAg levels >200 IU/mL at Day 1 (2%). Greater mean HBsAg log reductions were observed in Group 2 (ChAdOx-HBV Day 1; MVA-HBV and nivolumab Day 29 and Day 85) but insufficient data for definitive conclusion.
- Greater mean HBsAg log reductions were observed in Group 2 (ChAdOx-HBV Day 1; MVA-HBV and nivolumab Day 29 and Day 85) but insufficient data for definitive conclusic Seven participants have met the criteria for NUC discontinuation; three have discontinued and two have restarted NUC therapy.
- Preliminary safety data suggest VTP-300 in combination with nivolumab has been generally well tolerated, with no treatment-related SAEs observed or reported. Thyroid dysfunction reported in 7 participants attributed to nivolumab administration which has returned to normal in 4 patients.

The HBV003 trial protocol is currently being amended to include only participants with screening HBsAg <200 IU/mL. Participants with screening HBsAg <200 IU/mL have been observed to benefit the most in the preliminary data, with the trial protocol amendment being focused on improving the overall risk/benefit ratio. People with thyroid auto-antibodies, family history of auto-immune thyroiditis, or abnormal thyroid levels will be excluded from trial eligibility to minimize the risk of thyroiditis.

Study AB-729-202: VTP-300 in Combination with Imdusiran (AB-729)

Clinical trial AB-729-202 enrolled forty non-cirrhotic, virally suppressed CHB patients that were on stable NUC therapy. The patients initially received imdusiran (60mg every 8 weeks) for 24 weeks and were then randomized to receive either VTP-300 or placebo at week 26 and 30 (and conditionally at week 38 if they experienced a >0.5 log10 decline in HBsAg between Weeks 26 and 34), in addition to ongoing NUC therapy. The preliminary data include a subset of patients that received the two dose VTP-300 regimen (28/40 patients) and available follow-up data to Week 48 (12/40 patients) and showed the following:

- Robust reductions of HBsAg were seen during the indusiran treatment period (-1.86 log10 mean reduction from baseline after 24 weeks of treatment). This decline in HBsAg is comparable to the declines seen with imdusiran in other clinical trials conducted to date.
- 97% of the indusiran treated patients (33/34) had HBsAg <100 IU/mL at the time of the first VTP-300/placebo dose.
- VTP-300 treatment appeared to contribute to the maintenance of low HBsAg levels in the early post-treatment period, as the mean HBsAg levels in the placebo group begin to increase starting approximately 12 weeks after the last dose of imdusiran.
 All VTP-300 treated patients have maintained HBsAg <100 IU/mL through week 48, 60% have maintained HBsAg <10 IU/mL, and all have qualified to stop NUC therapy.
- Preliminary immunology data suggests HBV-specific T cell IFN-y production was enhanced in patients receiving imdusiran plus VTP-300 compared to placebo.

The preliminary safety data from this trial demonstrated that imdusiran and VTP-300 were both generally well-tolerated. There were no serious adverse events, Grade 3 or 4 adverse events, or treatment discontinuations

Forward Looking Statements

This Current Report on Form 8-K contains forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, which can generally be identified as such by use of the words "may," "will," "plan," "forward," "encouraging," believe," "potential," and similar expressions, although not all forward-looking statements contain these identifying words. These forward-looking statements include, without limitation, express or implied statements regarding: the Company's plans and strategy with respect to its pipeline and product candidates, including VTP-300 and the HBV003 clinical trial, and the potential benefits of VTP-300 for the treatment of chronic HBV. Any forward-looking statements in this Current Report on Form 8-K are based on management's current expectations and beliefs and are subject to numerous risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this Current Report on Form 8-K, including, without limitation, risks and uncertainties related to the success, cost and timing of the Company's pipeline development activities and planned and ongoing clinical trials, the Company's developments, the risk that the Company range not realize the benefits related to its rebranding and name change, the Company's apility to fund its operations and access capital, global economic uncertainty, including disruptions in the banking industry, the conflict in UKrane, and the conflict in

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

<u>99.1</u>	Press Release dated November 9, 2023.
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 99.2
 Investor Presentation dated November 2023

 104
 Cover Page Interactive Data File (embedded within the Inline XBRL document).

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.

Barinthus Biotherapeutics plc

By:

Date: November 9, 2023

/s/ William Enright William Enright Chief Executive Officer



Barinthus Bio Presents Interim Data from Phase 2b HBV003 Trial and Phase 2a AB-729-202 Trial in Collaboration with Arbutus Biopharma in Chronic HBV Patients at AASLD

- · Initial data from the combination of imdusiran and VTP-300 show meaningful reductions of HBsAq levels that were maintained well below baseline.
- · In HBV003, 31% of participants with screening HBsAg level of <200 IU/mL had >1 log HBsAg reductions.
- VTP-300 was generally well-tolerated in both trials.

OXFORD, United Kingdom, Nov. 9, 2023 (GLOBE NEWSWIRE) – Barinthus Biotherapeutics plc (NASDAQ: BRNS), formerly Vaccitech plc, today announced the presentation of data from two HBV clinical trials at The American Association for the Study of Liver Diseases (AASLD) – The Liver Meeting® 2023. The presentations include an oral presentation of data from HBV003, an ongoing Phase 2b trial designed to further evaluate the safety and efficacy of VTP-300 when combined with a low-dose anti-PD-1 antibody, and standard-of-care (SoC) nucleos(()ide analogue (NUC) therapy. Alongside this, a late-breaking poster presentation with interim data from patients with chronic hepatitis B (CHB) from the Phase 2a AB-729-202 trial combining Arbutus Biopharma Corporation's (NASDAQ: ABUS) RNAi therapeutic candidate, imdusiran (AB-729), with Barinthus Bio's T-cell stimulating immunotherapeutic candidate, VTP-300, and SoC NUC therapy. Barinthus Bio is a clinical-stage biopharmaceutical company developing novel T cell immunotherapeutic candidate designed to guide the immune system to overcome chronic infectious diseases, autoimmunity and cancer.

"We believe these early data are very encouraging. In HBV003, VTP-300 in combination with nivolumab continues to show meaningful and sustained HBsAg declines across all treatment groups, with the most prominent declines occurring in patients with lower baseline HBsAg levels at screening," said Bill Enright, Chief Executive Officer of Barinthus Bio. Regarding the combination trial imdusiran with VTP300, Bill added "Although these are preliminary data, we can already see that VTP-300 appears to show a meaningful impact in sustaining low HBsAg in patients after imdusiran treatment, with clear differences shown between placebo and VTP-300. It's very positive that we are seeing that all participants treated with imdusiran and VTP-300 have qualified to stop NUC therapy, which really highlights VTP-300's potential as an important component of a functional cure regimen."

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- · Greater mean HBsAg log reductions were observed in Group 2 (ChAdOx-HBV Day 1; MVA-HBV and nivolumab Day 29 and Day 85) but insufficient data for definitive conclusion.
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The preliminary safety data from this trial demonstrated that imdusiran and VTP-300 were both generally well-tolerated. There were no serious adverse events, Grade 3 or 4 adverse events or treatment discontinuations.

Dr. Karen Sims, Chief Medical Officer of Arbutus Biopharma, commented, "Indusiran consistently delivers compelling efficacy and safety data in multiple Phase 2a populations and combinations. In this trial, all but one patient reached surface antigen levels below 100 IU/mL and one reached <LLOQ (lower limit of quantification) with 24 weeks of indusiran plus NUC therapy alone, which is a meaningful achievement as we believe lowering surface antigen is key to promoting host HBV-specific immune reawakening. As we continue to dose and follow these patients, I look forward to seeing the potential that imdusiran, VTP-300 and NUC therapy can have on achieving a functional cure for patients with CHB."



The presentation for HBV003 and poster for AB-729-202 can be found on the Barinthus Bio website at https://investors.barinthusbio.com/events-presentations.

About Barinthus Bio's VTP-300

VTP-300 is an immunotherapeutic candidate consisting of an initial dose using the ChAdOx vector and a secondary dose(s) using the MVA vector, both encoding multiple hepatitis B antigens, including full-length surface, modified polymerase and core antigens. VTP-300 is the first antigen-specific immunotherapy that has been shown to induce sustained reductions in HBsAg. Barinthus Bio is studying VTP-300 in combination with other agents, including siRNA and low-dose anti-PD-1 antibodies, to control the infection and counterbalance the immune suppression and T cell exhaustion in the liver caused by chronic HBV infection.

About imdusiran (AB-729), Arbutus' Lead RNAi Therapeutic

Indusiran 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. Imdusiran targets hepatocytes using Arbutus' novel covalently conjugated N-Acetylgalactosamine (GalNAc) delivery technology enabling subcutaneous delivery. Clinical data generated thus far has shown single and multiple doses of indusiran to be generally safe and well-tolerated, while also providing meaningful reductions in hepatitis B surface antigen and hepatitis B DNA. Imdusiran is currently in multiple Phase 2a clinical trials.

About Hepatitis B Virus (HBV)

Globally it is estimated that there are more than 300 million people, including up to 2.4 million in the U.S. and 14 million in Europe, living with chronic HBV infection, with the highest prevalence in East Asia and Africa. Approximately 820,000 people die each year from HBV and related complications, such as liver cirrhosis and hepatocellular carcinoma. Due to low HBV diagnosis rates of about 10.5% aware of their infection coupled with strict treatment eligibility guidelines, only 6.6 million (2.2%) people with chronic HBV are receiving treatment and less than 10% will achieve a functional cure with existing therapies.

About Barinthus Bio

Barinthus Bio is a clinical-stage biopharmaceutical company developing novel T cell immunotherapeutic candidates designed to guide the immune system to overcome chronic infectious diseases, autoimmunity, and cancer. Helping people living with serious diseases and their families is the guiding principle at the heart of Barinthus Bio. With a broad pipeline, built around four proprietary platform technologies: ChAdOx, NAVA, SNAP-TI, and SNAP-CI; Barinthus Bio is advancing a pipeline of five product candidate scross a diverse range of therapeutic areas, including: VTP-300, an immunotherapeutic candidate designed to as a potential component of a functional cure for chronic HBV infection; VTP-200, a non-surgical product candidate for persistent high-risk human papillomavirus (HPV); VTP-1000, an autoimmune candidate designed to utilize the SNAP-TI platform to treat patients with celiac disease; VTP-850, a second-generation immunotherapeutic candidate designed to utilize the SNAP-CI platform to treat patients with HPV-related cancer. Barinthus Bio's proven scientific expertise, diverse portfolio and focus on pipeline development uniquely positions the company to navigate towards delivering treatments for people with infectious diseases, autoimmunity and cancers that have a significant impact on their everyday lives. For more information, visit <u>www.barinthusbio.com</u>.



About Arbutus

Arbutus Biopharma Corporation (Nasdaq: ABUS) is a clinical-stage biopharmaceutical company leveraging its extensive virology expertise to identify and develop novel therapeutics with distinct mechanisms of action, which can be combined to provide a functional cure for patients with chronic hepatitis B virus (cHBV). Arbutus believes the key to success in developing a functional cure involves suppressing HBV DNA, reducing surface antigen, and boosting HBV-specific immune responses. Arbutus' pipeline of internally developed, proprietary compounds includes an RNAi therapeutic, indusiran (AB-729), and an oral PD-L1 inhibitor, AB-101. Indusiran has generated meaningful clinical data demonstrating an impact on both surface antigen reduction and reawakening of the HBV-specific immune response. Indusiran is currently in two Phase 2a combination clinical trials. AB-101 is currently being evaluated in a Phase 1a/1b clinical trial. Additionally, Arbutus has identified compounds in its internal PD-L1 portfolio that could also be used in oncology indications. For more information, visit www.arbutusbio.com.

Barinthus Bio's Forward Looking Statements

This press release contains forward-looking statements regarding Barinthus Bio within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, which can generally be identified as such by use of the words "may," "will," "plan," "forward," "encouraging," "believe," "potential," and similar expressions, although not all forward-looking statements contain these identifying words. These forward-looking statements include, without limitation, express or implied statements regarding: Barinthus Bio's plans and strategy with respect to its pipeline and product candidates, including VTP-300 and the HBV003 clinical trial, and the potential benefits of VTP-300 for the treatment of chronic HBV. Any forward-looking statements in this press release are based on Barinthus Bio is management's current expectations and beliefs and are subject to numerous risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this press release, including, without limitation, risks and uncertainties related to the success, cost and timing of Barinthus Bio's pipeline development activities and planned and ongoing clinical trials, Barinthus Bio's ability to execute on its strategy, regulatory developments, the risk that Barinthus Bio and the conflict in Israel and accoss capital, global economic uncertainty, including disruptions in the banking industry, the conflict in Israel and Gaza, and other risks identified in Barinthus Bio's filings with the Securities and Exchange Commission (the "SEC"), including its Annual Report on Form 10-K for the year ended December 31, 2022, its Quarterly Reports on Form 10-Q and subsequent filings with the SEC astratements to reflect any change in expectations or in events, conditions or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements.



Arbutus' Forward-Looking Statements

This press release contains forward-looking statements regarding Arbutus 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 Arbutus' belief that the key to success in developing a functional cure for CHB involves suppressing HBV DNA, reducing surface antigen, and boosting HBV-specific immune responses; Arbutus' future development plans for Arbutus' product candidates; Arbutus' program updates; the expected cost, timing and results of Arbutus' clinical development plans and clinical trials with respect to Arbutus' product candidates; Arbutus' expectations with respect to clinical trial design and the release of data from Arbutus' clinical trials and the expected timing thereof; Arbutus' expectations and goals for Arbutus' clinical trials and any potential benefits related thereto, including with respect to the Phase 2a clinical trial combining indusiran with VTP-300; and the potential for Arbutus' 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 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: the risk that 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, including with Barinthus Bio; and market shifts may require a change in strategic focus; 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, 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 with respect to Arbutus 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 with respect to Arbutus to reflect future results, events or developments, except as required by law.



Barinthus Bio - Contacts:

Investor Contacts: Christopher M. Calabrese Managing Director LifeSci Advisors +1 917-680-5608 ccalabrese@lifesciadvisors.com

Kevin Gardner Kevin Gardner Managing Director LifeSci Advisors +1 617-283-2856 kgardner@lifesciadvisors.com

Media contact: Audra Friis Sam Brown, Inc. +1 917-519-9577 audrafriis@s om

Company contact: Jonothan Blackbourn IR & PR Manager Barinthus Biotherapeutics <u>ir@barinthusbio.com</u>

Arbutus - Investors and Media Lisa M. Caperelli Vice President, Investor Relations Phone: 215-206-1822 Email: <u>lcaperelli@arbutusbio.com</u>

Barinthus Biotherapeutics Corporate Presentation

Guiding the Immune System to Cure Disease

November 2023



This presentation includes express and implied "forward-looking statements," including forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward looking statements include all statements that are not historical facts, and in some cases, can be identified by terms such as "may," "will," "could," "should," "expect," "intend," "plan," "anticipate," "believe," "estimate," "potential," "ongoing," or the negative of these terms, or other comparable terminology intended to identify statements about the future. Forward-looking statements contained in this presentation include, but are not limited to, statements regarding: our product development activities and clinical trials, including timing for readouts of any interim data for any of our programs, our regulatory filings and approvals, our estimated cash runway and cash burn, our ability to develop and advance our current and future product candidates and programs, our ability to establish and maintain collaborations or strategic relationships or obtain additional funding, the rate and degree of market acceptance and clinical utility of our product candidates, and the ability and willingness of our third-party collaborators to continue research and development activities relating to our product candidates. By their nature, these statements are subject to numerous risks and uncertainties, including factors beyond our control, that could cause actual results, performance or achievement to differ materially and adversely from those anticipated or implied in the statements. Such risks and uncertainties, include, without limitation, risks and uncertainties related to: preclinical and clinical studies, the success, cost and timing of our product development activities and planned and ongoing preclinical studies and clinical trials, whether results from preclinical studies and clinical trials will be predictive of the results of future trials, our ability to execute on our strategy, regulatory developments, our ability to fund our operations, global economic uncertainty, including disruptions in the banking industry, and the impact that the COVID-19 pandemic may have on our clinical trials, preclinical studies and access to capital, and other risks, uncertainties and other factors identified in our filinos with the Securities and Exchange Commission (the "SEC"), including our Annual Report on Form 10-K for the year ended December 31, 2022, our Quarterly Report on Form 10-Q for the most recently ended fiscal quarter and subsequent filings with the SEC. You should not rely upon forward-looking statements as predictions of future events. Although our management believes that the expectations reflected in our statements are reasonable, we cannot guarantee that the future results, performance or events and circumstances described in the forward-looking statements will be achieved or occur and actual results may vary. Recipients are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date such statements are made and should not be construed as statements of fact. Except as required by law, we do not assume any intent to update any forward-looking statements after the date on which the statement is made, whether as a result of new information, future events or circumstances or otherwise.

Certain information contained in this presentation and statements made orally during this presentation relate to or are based on studies, publications, surveys and other data obtained from third-party sources and our own internal estimates and research. While we believe these third-party studies, publications, surveys and other data to be reliable as of the date of this presentation, it has not independently verified, and makes no representations as to the adequacy, fairness, accuracy or completeness of, any information obtained from third-party sources. In addition, no independent source has evaluated the reasonableness or accuracy of our internal estimates or research and no reliance should be made on any information or statements made in this presentation relating to or based on such internal estimates and research.



Company Overview

Guiding the immune system to cure disease

- Formerly known as Vaccitech, a spinout company from the Jenner Institute for vaccine research at University of Oxford.
- Backed by leading investment institutions with a validated platform from commercialization of one pipeline asset.
- Headquartered in the UK with office and research facilities in the US.

Our Mission

To advance the next generation of immunotherapies that lead T cells to gain control over disease and improve patients' lives.

BARINTHU

NASDAQ	BRNS
Staff	130 (UK: ~70%, US: ~30%) ¹
Ordinary Shares Outstanding	38,546,594 ²
Cash	\$160.3M ³

¹ As of November 1, 2023 ² As of September 30, 2023 ³ As of September 30, 2023

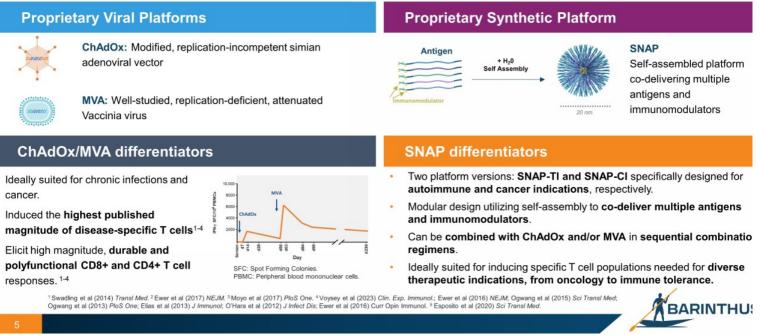
3

Compelling Fundamentals Driving Near and Long-term Growth



Proprietary Platforms and Approach

Working to Create More Effective Antigen-Specific Immunotherapies Through Innovative Technologies



Pipeline

Harnessing the Power of Antigen-Specific Immunotherapies to Treat Infectious Diseases, Autoimmunity and Cancer







HBV: Global, Long-term Need for a Functional Cure

	~300 MILLION	patients are chronically infected with HBV ¹	~0.8 MILI	LION	deaths per ye HBV infection,	ear from acute cancer & cirrhosis ¹
	1.5 MILLION	new infections per year ¹	~39%	~39%		ease in annual from HBV from tatus quo ³
	Less than 10%	get to Functional Cure with existing therapies ²	~25%		of cases of ch progress to liv	ronic HBV infection /er cancer ⁴
	There is ar	n urgent need to develop effective th	erapeutic strategies to	o cure chr	onic HBV infection	on
si	gnificant unmet NUCs a	therapies typically require chronic treatm re slow-acting with low cure efficacy ⁵ ed Interferon has significant side effects ⁶	ent Large mark opportunit VTP-300		~300M Adults chr ~52M - only 15-20	onically infected with HBV)% diagnosed ⁷
IC, <u>Hepatitis B</u> , 2022 (d, A, et al, Viruses. 2021 Jul 11;13(7):1341 VC, et al, Nar Rev Gastroenterol Hepatol. 2023 Aug;20(8):524-37			Jul;14:87-100 N	Barinthus Bio, Data UCs = Nucleos(t)id		BARINTH
8						

VTP-300 Could be Critical Component to a Functional Cure **Regimen for HBV**

VTP-300 is an antigen-specific investigational immunotherapy that could be a critical component to enhancing rates of a functional cure. It is likely that a functional cure will require a combination of agents with complementary mechanisms of action.

Three pote	ential components to a fun	The objective of ongoing and planned clinic to evaluate VTP-300 in combination wi	
Approved	Investigational Investigational		therapies as a component of a function
Inhibit viral replication	Directly lower viral antigen Hepatitis B surface antigen burden (HBsAg)	Stimulate host immune system response	NUCs + VTP-300
NUCs	RNAi	Ag-specific	NUCs + VTP-300 + anti-PD-1
Capsid & Entry Inhibitors	Oligonucleotide	immunotherapies PD-1 Inhibitors	NUCs + RNAi + VTP-300
(Investigational)	Monoclonal antibodies (mAbs)	Immunostimulants (TLR agonists)	NUCs + RNAi + VTP-300 + anti-PE

of ongoing and planned clinical trials is VTP-300 in combination with other a component of a functional cure:

+ RNAi + VTP-300 + anti-PD-1

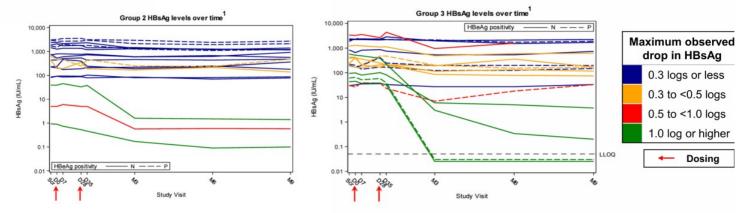
BARINTHU

VTP-300 is designed to engage the host immune system and has been shown to induce sustained HBsAg reduction.

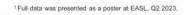
HBV002 – VTP300 Ph 1b/2a; Trial Complete

		Day 1	Day 29	
	Group 1 (N= 10)	MVA-HBV	MVA-HBV	
Randomization	Group 2 (N=18)	ChAdOx-HBV	MVA-HBV	
N=55	Group 3 (N=18)	ChAdOx-HBV	MVA-HBV + LD Nivo	
	Group 4 (N=9)	ChAdOx-HBV + LD Nivo*	MVA-HBV + LD Nivo*	
clusion Criteria		Primary Endpoints		
3V DNA <40 copies		 Safety: incidence of 	AEs and SAEs	
3sAg <4,000 IU/mL		Secondary Endpoints		
n NUCs for 1 year		% participants with% participants with	reduction in HBsAg titre HBsAg Loss	
Study reference: NCT04778904		 Magnitude and avid 	reduction of HBV DNA ity of HBV-specific CD4+ and magnitude of HBV- is induced by each treatment regimen	

HBV002 - VTP-300 Showed Meaningful, Sustained HBsAg Reductions¹



- VTP-300 was administered with no treatment-related SAEs, and infrequent transient transaminitis.
- Significant and durable reductions of HBsAg were seen in both VTP-300 monotherapy (Group 2) and VTP-300 + low-dose nivolumab group (Group 3)
 - Reductions in HBsAg were most prominent in those with lower baseline HBsAg.
 - Non-detectable HBsAg was observed in 2 of 5 Group 3 patients with baseline HBsAg <100 IU/mL at month 3 through month 9.
- · Robust T cell response against all encoded antigens was observed following VTP-300 administration.
- VTP-300 led to a decline in HBsAg in both genotype B and C patients







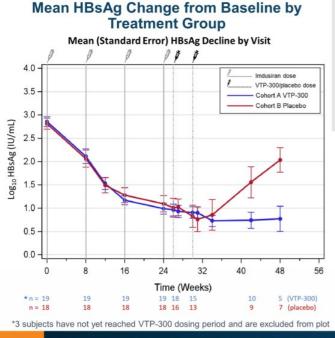
AB-729-202 – Ph2a clinical collaboration with Arbutus; study design

Veek 1 Wee	ek 24	Week 26	Week 30	Week 48			
	Group A (N= 20)	ChAdOx-HBV	MVA-HBV*	 Alanine amino transferase (ALT) <2 × Upper lim of normal (ULN), and 			
AB-729	Group B (N=20)	Placebo	Placebo*				
(N=60)	Group C (N=20)	ChAdOx-HBV	MVA-HBV + LD Nivo**	 HBV DNA <lower (lloq),<br="" limit="" of="" quantification="">and</lower> Hepatitis B e Antigen (HBeAg) negative, and HBsAg <100 IU/mL, and/or HBsAb positive 			
Inclusion Cr	iteria		Primary Endpoints				
HBV DNA ≤2	0 IU/mL		Safety: incidence of AEs and SAEs				
			Secondary Endpoints				
HBsAg ≥100	to <5,000 IU/mL		Change in HBsAg conce	entration from baseline			
On NUCs for	1 year		 Proportion of participants with a change in HBsAg from baseline meeting 				
On NUCs for 1 year Ititional MVA-HBV/Placebo to be dosed at Week 38, if patients have experienced a ≥0.5 log drop IsAg from Week 26 to Week 34. difonal MVA-HBV + Nivo to be dosed at Week 38, if patients have HBsAg ≥10 IU/mL at Week 34. .ow-dose			response criteria (≥0.5, 1, 2, or 3 log10 reduction) Change in HBV DNA, RNA, core-related antigen, HBsAg antibody, HBsAg e-antibody from baseline 				

AB-729-202 Ph 2a – Interim Data¹



Meaningful and Sustained Declines Shown in HBsAg Levels with Imdusiran and VTP-300



Preliminary results:

- Robust reductions of HBsAg were observed during the imdusiran treatment period, with 33/34 (97%) of subjects <100 IU/mL at the time of VTP-300/placebo administration.
- VTP-300 treatment appeared to contribute to maintaining low HBsAg levels in the early post-treatment period.
- All subjects who have reached Week 48 in Group A (N=5) have qualified to stop NUC therapy and remain off-treatment.

Mean HBsAg Change from Baseline and Key Milestones

Study Week	м	ean (SE) Chan N, log ₁₀ I	-			100 IU/mL (%)		10 IU/mL (%)
week				imdu	ısiran 60 mg Q8	W x 4 doses		23008
Baseline	40 2.85 (0.07)		٢	A	NA			
12	39 -1.31 (0.07)		32/39 (82.1)		7/39 (17.9)			
26		34 -1		0.09)	33/34 (97.1)		15/34 (44.1)	
	N	VTP-300	N	РВО	VTP-300	РВО	VTP-300	РВО
34	13	-2.12 (0.13)	13	-2.01 (0.31)	13/13 (100)	11/13 (84.6)	8/13 (61.5)	6/13 (46.2)
48	5	-1.87 (0.41)	7	-1.03 (0.21)	5/5 (100)	4/7 (57.1)	3/5 (60.0)	0/7 (0)

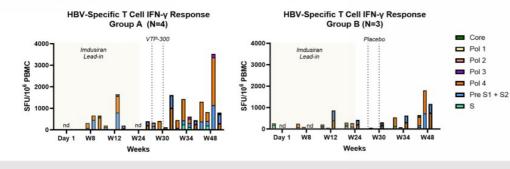
SE = standard error; N = subject number; Week 26 = ChAdOx1-HBV/placebo dose; Week 34 = Eligibility assessed for 2ndMVA-HBV/placebo dose (>0.5 log₁₀ decline in HBsAg between Week 26 and 34).



¹ Based on interim data analysis presented as a poster by Arbutus Biopharma at AASLD, Q4 2023.

AB-729-202 Ph 2a – Interim Data¹

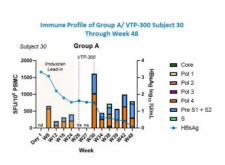
HBV-Specific T Cell Responses and Soluble Immune Biomarkers Increased after VTP-300 dosing



Preliminary results:

- Elevations in HBV-specific T cell IFN-γ production were observed during imdusiran lead-in and after Week 26 dosing for N=7 subjects profiled thus far.
- HBV-specific T cell IFN-γ production was enhanced in subjects receiving VTP-300 (N=4) vs placebo (N=3).
- HBV-specific T cell responses were observed against HBsAg, PreS1/S2 peptides in VTP-300 treated subjects (N=4).
- Transient increases in other plasma immune biomarkers were also observed during imdusiran lead-in and VTP-300/placebo dosing period.

¹Based on interim data analysis presented as a poster by Arbutus Biopharma at AASLD, Q4 2023.



 Subject 30 (Group A/VTP-300) experienced HBsAg decline and enhanced IFN-γ production (via ELISpot) after VTP-300 through Week 48





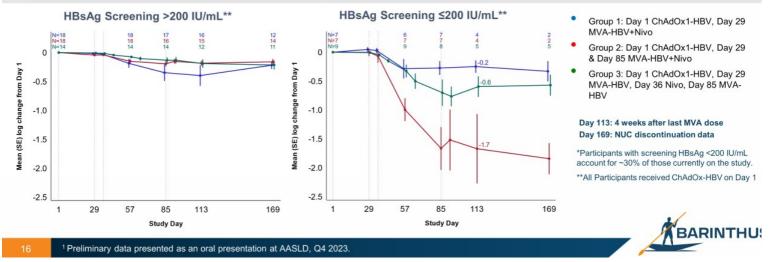
HBV003 – Ph 2b Study Enrolling Patients

Objective: EV	aluating Additio	nal Dosing and PD-1 Inhil	oition Timing		Patients to discontinue NUCs if eligible
	Day 1	Day 29	Day 36	Day 85	Day 169
Group 1 (N= 40)	ChAdOx-HBV	MVA-HBV + LD Nivo			-
Group 2 (N=40)	ChAdOx-HBV	MVA-HBV + LD Nivo		MVA-HBV + LD Nivo	ALT <2 × ULN, and HBV DNA < LLOQ, and HBeAg negative, and HBsAg undetectable, and/or
Group 3 (N=40)	ChAdOx-HBV	MVA-HBV	LD Nivo	MVA-HBV	HBsAg undetectable, and/or HBsAg <100 IU/mL
Inclusion Crit	eria	Primary Endpoint		HBV003 is designed to	o obtain critical information on
Inclusion Crit	aria.	Primary Endnaint		LIDV002 is designed to	a abtain artitical information on
Inclusion Crit HBV DNA ≤1,0		Primary Endpoint % participants with a gre		treatment dosing regi	o obtain critical information on men p 3 in HBV002 to further support
	00 IU/mL			 treatment dosing reginered in the second seco	men p 3 in HBV002 to further support red
HBV DNA ≤1,0	00 IU/mL <4,000 IU/mL	% participants with a gre log HBsAg reduction at	6 months after	 treatment dosing reginered in the second seco	men p 3 in HBV002 to further support red additional dose of MVA-HBV with LD
HBV DNA ≤1,0 HBsAg ≥10 to •	00 IU/mL <4,000 IU/mL	% participants with a gre log HBsAg reduction at initiation of therapy	6 months after	 treatment dosing reginers Group 1: Mirrors Group response effect observe Group 2: Assesses if a nivolumab at Day 85 fue Group 3: Assesses if a 	men p 3 in HBV002 to further support red additional dose of MVA-HBV with LD

HBV003 Ph 2b – Preliminary Data¹

VTP-300 in Combination with Nivolumab Continues to Show Sustained HBsAg Reductions

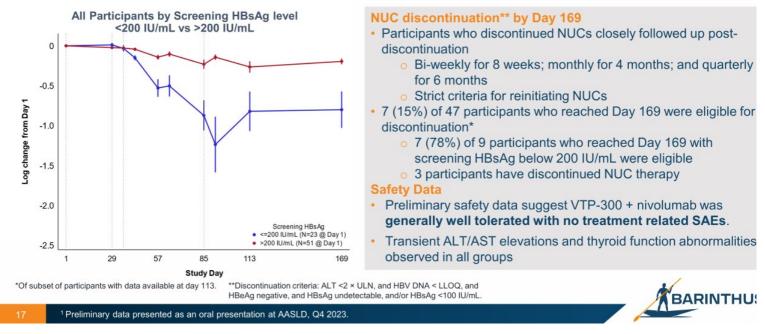
- VTP-300 in combination with nivolumab was observed to lead to HBsAg declines in all treatment groups, with reductions in HBsAg most prominent in patients with screening HBsAg levels <200 IU/mL*.
- >0.5 and >1 log drops were observed in all groups at Day 113 in 23% and 9% of participants.
- Participants with an HBsAg level of <200 IU/mL at Day 1 were more likely to have >1 log HBsAg reductions (31%) vs those with HBsAg levels > 200 IU/mL at Day 1 (2%).
- Protocol being amended to include only participants with screening HBsAg ≤ 200 IU/mL.



HBV003 Ph 2b – Preliminary Data¹

· Preliminary data demonstrated that:

- 54% participants with HBsAg at Screening ≤ 200 IU/mL had a >0.5 log decline from Day 1*
- 31% of participants with HBsAg at Screening ≤ 200 IU/mL had a >1 log decline from Day 1*



VTP-200

Human Papillomavirus (HPV) Therapeutic

BARINTHUS

Persistent HPV Infection Remains a Significant Public Health Problem¹

We are targeting persistent HPV – which can lead to precancerous lesions and cervical cancer¹

HPV is the most common sexually transmitted viral infection in the world¹

Cervical cancer was the 4th most common cancer in women globally in 2020 ² . >95% of cervical cancer is caused by HPV ²	Cervical cancer in the US ³ : ~4,000 deaths per year even with screening & treatment ~12,000 cases per year				
Approximately 291 million women worldwide are infected with HPV ⁴	Cervical cancer worldwide ² : ~342,000 deaths per year ~604,000 cases per year				
 Low vaccination rates in many regions o >3.6M diagnosed persistent high-risk censistent HPV infection Currently no treatment before high-grade 	vical HPV in US and across 5EU annually collectively. ⁶ ion once high-grade lesions develop. ¹				
¹ WHO, HPV vaccines: WHO position paper, 2022 ² WHO, <u>Cervical Cancer</u> ³ Center for Disease Control ⁴ Lancet Infect Dis. 2007 Jul;7(7):453-9. <u>10.1016/S1473-309</u>	9(07)70158-5 9 Psychooncology. 2021 Jan; 30(1): 84–92. doi: 10.1002/pon.5540 9 Barinthus Bio, Data on File				

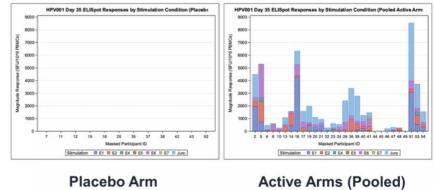
APOLLO (HPV001) – Ph 1b/2 Study Design

Objective: Eva mmunogenici		Objective: Evalua Group	iting safety data, eff Day		unogenicity, dose-response Day 29	
Regions		1, N=16	ChAdOx-HPV	2 x 10 ⁹ vp	MVA-HPV 1 x 10 ⁷ pfu	
Group A (N=3) ChAdOx-HPV 2 x 10 ⁸ vp MVA-HPV 1 x 10 ⁷ pfu Group B (N=3) ChAdOx-HPV 2 x 10 ⁹ vp MVA-HPV 1 x 10 ⁷ pfu Group C (N=3) ChAdOx-HPV 2 x 10 ¹⁰ vp MVA-HPV 1 x 10 ⁸ pfu		2, N=16	ChAdOx-HPV 2 x 10 ¹⁰ vp ChAdOx-HPV 2 x 10 ⁸ vp ChAdOx-HPV 2 x 10 ⁹ vp		MVA-HPV 1 x 10 ⁷ pfu	60 of the Main phase participants will also take part in an immunogenicity
		3, N=8			MVA-HPV 1 x 10 ⁸ pfu	
		4, N=8			MVA-HPV 1 x 10 ⁸ pfu	
		5, N=16	ChAdOx-HPV	2 x 10 ¹⁰ vp	MVA-HPV 1 x 10 ⁸ pfu	sub-study
		6, N=32	6, N=32 Placebo		Placebo	
Inclusion C	riteria Prima	ary Endpoint		Study outp	outs	
High risk HPV • positive for >6		afety: incidence of ondary Endpoints fficacy ose determination udies	5	evaluated at Interim data well tolerated and had end	ta: % clearance of high-risk HP 12 months. a analysis: Interim data showed d with no product-related seriou couraging initial T cell activity res planned to the 12-month primar	VTP-200 was generally s adverse events (SAEs sults. The trial will
Il groups open simu udy Reference: NCT				Final data a	nalysis: Expected Q2 2024.	BARINTI

VTP-200 Demonstrated Favorable Tolerability and T Cell Profile at Interim Analysis

APOLLO (HPV001): Phase 1b/2 Interim Data¹

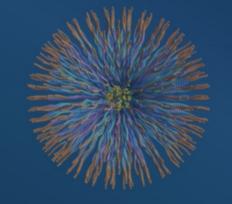
- VTP-200 was generally well-tolerated. No productrelated grade 3 unsolicited adverse events, and no product-related SAEs.
- · Pooled active groups analysis showed:
 - Robust IFNγ responses, with average of >1,000 spot-forming units/10⁶.
 - Strongest T cell responses were observed against the E1, E2 and E6 antigens.
 - Induction of both CD4 and CD8 T cell responses.
- Interim data were presented at IPVC in April 2023.



il 2023.

¹ Data from 58 patients who had reached at least the 6-month time point, immunogenicity results available from a subset of participants who entered the immunogenicity sub-study (N=45). Interim data presented at the International Papillomavirus Conference. Full data expected to be reported in Q2 2024.





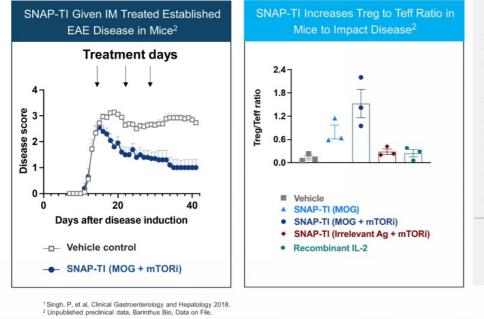
Autoimmune Program

BARINTHUS



SNAP-TI (Tolerance Immunotherapy) Platform

Inducing antigen-specific tolerance to address autoimmune diseases



VTP-1000: Tolerance induction in Celiac

Opportunity: Autoimmune diseases are currently treated with therapies that induce broad immunosuppression resulting in side effects and are not curative.

It is estimated that 1 in 100 people worldwide suffer from celiac disease.¹

Our Solution: SNAP-TI, designed to induce Tregs and reduce the effector T cell response, both specific to the same antigens, without broad immunosuppression.

Immunomodulator and antigens co-delivered by **IM injection** in self-assembled SNAP-TI designed to achieve a favorable antigen-specific Treg to Teffector ratio.

Q4 2023: IND-Enabling studies expected to be completed with regulatory submission planned in Australia before the end of 2023

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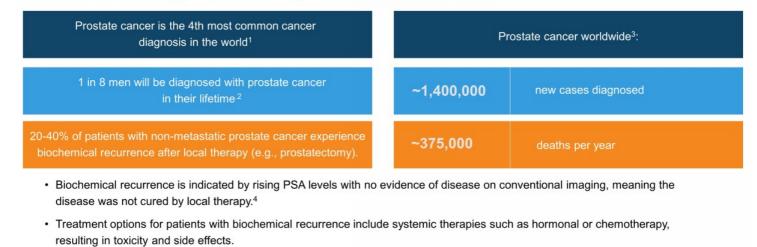




BARINTHUS

VTP-850 for Prostate Cancer

Novel immunotherapy candidate to prevent advanced disease





VTP-850 - a next generation ChAdOx-MVA multi-antigen product candidate designed to induce cytotoxic T cells and prevent advancement to metastatic disease.

BARINTHU

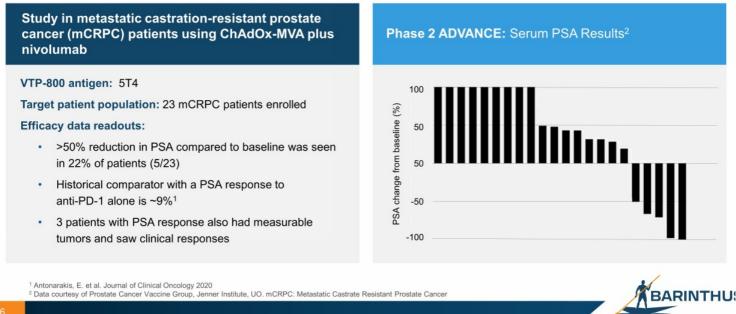
¹ WHO, 2022. ² American Cancer Society, 2023

³World Cancer Research Fund International. 2020. PSA: Prostate Specific Antigen. bciety, 2023 ⁴ Simon Ni, et al. Am Soc Clin Oncol Educ Book, 2022. *Study Reference: NCT05617040

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VTP-800 First-Generation Single-Antigen Immunotherapy Showed Meaningful Reduction in PSA

Phase 2 ADVANCE: VTP-800 + Anti-PD-1 in mCRPC



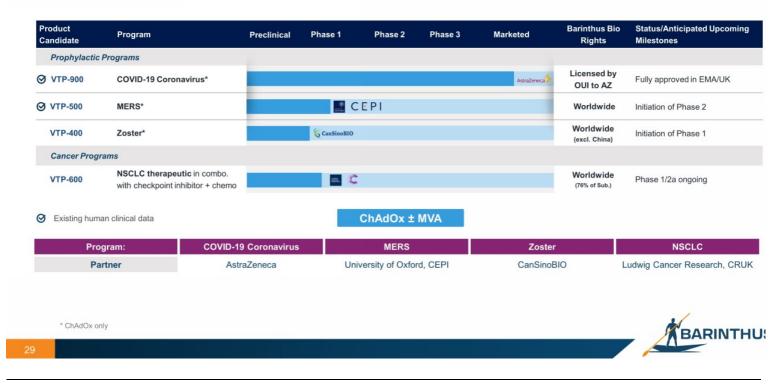
PCA001 – Ph 1/2 Study Design

Ongoing Phase 1/2 study for Multi-Antigen VTP-850, a Next-Generation Candidate

Phase 1: Lead-in I	Phase		Phase 2: Main Phase			
VTP-850 (N=15-18) Objective: Dose finding fe	or Phase 2, evaluation of s	VTP-850 (N=125) Objective: Futility analysis, POC, durability of response rate.				
VTP-850 antigens: • 5T4 • PSA • PAP	Cohort 1 Low dose Cohort 2 Full dose	(N=3-6) IM/IM (N=6) IM/IM	Stage 1 objective: Futility analysis based on PSA response. (N=25*) Dosing: IM + IM/IV⁺		Stage 2** objective: Establish proof of concept based on overall PSA response and duration of response. (N=100)	
• STEAP	Cohort 3 Full dose	(N=6) IM/I∨			Dosing: IM + IM/I∨+	
Inclusion Criteria Hormone sensitive			Primary Endpoints Safety: incidence of AEs and SAEs	2		
	rence after definitive l	local therapy.	Primary Endpoints	5.		
	standard radiography		 PSA response, durability of PSA metastasis-free survival, time to r deprivation therapy. 			
	e opened to enrolment of up to 10 utcome of Phase 1.		ncluding the Phase 1 participants who received the same dos	e regim		
response, Stage 2 will be + Dosing dependent on out	e opened to enrolment of up to 10 utcome of Phase 1.		ncluding the Phase 1 participants who received the same dos	e regim	-	



Barinthus Bio's Partnered Pipeline





Financial Overview & Catalysts

Guiding the immune system to cure disease



Investment Highlights



THANK YOU

Guiding the Immune System to Cure Disease

