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): January 10, 2025

BARINTHUS BIOTHERAPEUTICS PLC

(Exact name of registrant as specified in its charter)

England and Wales	**001-40367**	**Not Applicable**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(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)

☐ Pre-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:

Title of each class	Trade Symbol(s)	Name of each exchange on which registered
American Depositary Shares Ordinary shares, nominal value £0.000025 per share*	BRNS	The Nasdaq 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 2.02. Results of Operations and Financial Condition

On January 10, 2025, Barinthus Biotherapeutics plc (the "Company") released the following preliminary information about its cash, cash equivalents and restricted cash as of December 31, 2024.

The Company's preliminary estimated cash, cash equivalents and restricted cash are expected to be $112 million as of December 31, 2024.

The preliminary estimates of cash and cash equivalents reflect management's current views and may change as a result of management's review of results and other factors. The preliminary estimates may not ultimately be indicative of its results for such period and actual results may differ materially. No independent registered public accounting firm has audited, reviewed or compiled, examined or performed any procedures with respect to these preliminary estimated results, nor have they expressed any opinion or any other form of assurance on these preliminary estimated results.

Item 2.05. Costs Associated with Exit or Disposal Activities.

On January 10, 2025, the Company announced a restructuring plan that aims to prioritize its immune tolerance research and development programs. The Company is planning a 65% reduction in workforce, which is subject to consultation with employee representatives in the UK regarding the plan. The Company anticipates that the majority of the reduction in workforce will occur in the UK and be completed during the first half of 2025. The Company estimates that the pre-tax costs of such reduction in workforce relating to employee severance and other employee-related costs may be in the region of $2.5 million with the majority of such costs being incurred in the first half of 2025. The estimates of the restructuring costs that the Company expects to incur and potential operating expense reductions, and the timing thereof, are subject to a number of assumptions and actual results may differ.

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

In connection with the restructuring, the Company will terminate the employment of Graham Griffiths effective as of June 30, 2025 and the employment of Gemma Brown effective as of April 30, 2025. Further plans for the re-organized team will be communicated in due course.

In connection with these changes, the Company intends to enter into severance agreements with Mr. Griffiths and Ms. Brown, reflecting substantially the terms set forth in their respective service agreements.

Item 7.01. Regulation FD Disclosure.

On January 10, 2025, the Company issued a press release titled "Barinthus Bio Announces Strategic Focus in Immunology and Inflammation (I&I) and Provides a Financial Update." A copy of the press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

On January 10, 2025, 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 Items 2.02 and 7.01 of this Form 8-K (including Exhibits 99.1 and 99.2) 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 in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

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 "expect," "will," 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 preliminary estimated cash and cash equivalents and future expectations, plans and prospects, including the Company's product development activities and clinical trials and the estimates of costs that the Company expects to incur in connection with the restructuring and the timing thereof. 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 ability to execute on its strategy, regulatory developments, the risk that the Company may not achieve the anticipated benefits of its pipeline prioritization and corporate restructuring, the Company's ability to fund its operations and access capital, the Company's preliminary estimates of its cash and cash equivalents, including the risk that final financial results may differ materially from the Company's preliminary estimates, and other risks identified in the Company's filings with the Securities and Exchange Commission (the "SEC"), including its Annual Report on Form 10-K for the year ended December 31, 2023, its Quarterly Reports on Form 10-Q and subsequent filings with the SEC. The Company cautions you not to place undue reliance on any forward-looking statements, which speak only as of the date they are made. The Company expressly disclaims any obligation to publicly update or revise any such statements 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.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

99.1	Press Release dated January 10, 2025.
99.2	Corporate Deck dated January 10, 2025.
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

Date: January 10, 2025

By: /s/ William Enright

William Enright

Chief Executive Officer

Barinthus Bio Announces Strategic Focus in Immunology and Inflammation (I&I) and Provides a Financial Update

- *Prioritizing VTP-1000 development in celiac disease, Phase 1 data expected in mid-2025*
- *Postponing further clinical development of VTP-300 in chronic hepatitis B (CHB) until a partner is identified*
- *Extending the cash runway to the start of 2027 by reducing costs, including an approximate 65% reduction in workforce and expected closure of the U.K. site*
- *Future operations will be focused at the U.S. site in Germantown, Maryland*

OXFORD, United Kingdom and GERMANTOWN, MD, United States, Jan. 10, 2024 (GLOBE NEWSWIRE) -- Barinthus Biotherapeutics plc (NASDAQ: BRNS) ("Barinthus Bio," or the "Company"), today provided a strategic business and financial update. Barinthus Bio is a clinical-stage biopharmaceutical company developing novel immunotherapeutic candidates that guide T cells to control disease.

Strategic Business Focus and Restructuring:

- The Company will prioritize I&I indications, including antigen-specific immune tolerance.
- The Company plans to extend the cash runway to the start of 2027 by reducing costs, including a reduction in headcount by approximately 65% across both sites, and streamlining the operating costs of the business.
- As part of the restructuring, two of the executive leadership team members based in the U.K., the Chief Operating Officer, Graham Griffiths and Chief Financial Officer, Gemma Brown, will leave the Company. Further plans for the re-organized team will be communicated in due course.
- The Company will not invest in VTP-300 in chronic hepatitis B beyond the completion of the ongoing Phase 2b HBV003 clinical trial and will seek potential partners able to take advantage of its differentiated ability to achieve sustained HBsAg loss and functional cure in patients with low levels of HBsAg.

Financial Update:

- Cash, cash equivalents and restricted cash are expected to be $112 million as of December 31, 2024.[1]
- Based on management's current assumptions and taking into account expected cost savings from the corporate restructuring, the Company believes its available resources will fund its operations to the start of 2027.

Anticipated 2025 Corporate Milestones:

Celiac disease:

- Announcement of single ascending dose data from AVALON, the first-in-human Phase 1 clinical trial evaluating the safety, tolerability, pharmacokinetics and pharmacodynamics of VTP-1000 in adults with celiac disease expected in the middle of 2025.
- Initiation of multiple ascending dose portion of the Phase 1 clinical trial expected in the third quarter of 2025.

Chronic hepatitis B:

- Announcement of results from Phase 2b HBV003 clinical trial evaluating additional dosing of VTP-300 and low-dose nivolumab timing in people with chronic hepatitis B infection expected in the second quarter of 2025.

- Announcement of results from the Phase 2a IM-PROVE II clinical trial evaluating VTP-300, low-dose nivolumab and Arbutus' imdusiran in people with chronic hepatitis B infection expected in the second quarter of 2025.

Prostate cancer:

- Announcement of results from Phase 1 PCA001 clinical trial evaluating safety and efficacy of VTP-850 in men with rising prostate-specific antigen (PSA) after definitive local therapy for prostate cancer (*i.e.*, biochemical recurrence) expected in the second quarter of 2025.

"Entering 2025, we have decided to focus on broadening the potential of our SNAP-TI platform to address autoimmune diseases to enable us to maximize value for shareholders. We expect initial Phase 1 clinical data from VTP-1000 in celiac disease in mid-2025 and intend to develop further SNAP-TI products in other indications, both by ourselves and with partners," said Bill Enright, Chief Executive Officer of Barinthus Bio. "Although we achieved the major goal of functional cure in a subset of patients with chronic hepatitis B (CHB) in recent interim readouts of the VTP-300 studies, we have decided to seek potential partners for furthering VTP-300 development, as we believe that this is the best route to leverage a combination of the technologies required and to get VTP-300 to patients as soon as possible. As a result of our shift in strategy, we have made the difficult decision to reduce our presence in the U.K. significantly and to reduce our workforce to align the business appropriately. I am immensely proud and grateful for what our team of talented employees has achieved and would like to thank them for their part in advancing Barinthus to where we are today, especially Gemma Brown and Graham Griffiths our CFO and COO, respectively. This team is one of the best I've had the pleasure to work with."

[1] The preliminary estimates of cash, cash equivalents and restricted cash reflect management's current views and may change as a result of management's review of results and other factors. The preliminary estimates may not ultimately be indicative of its results for such period and actual results may differ materially. No independent registered public accounting firm has audited, reviewed or compiled, examined or performed any procedures with respect to these preliminary estimated results, nor have they expressed any opinion or any other form of assurance on these preliminary estimated results.

About Barinthus Bio

Barinthus Biotherapeutics (NASDAQ: BRNS) is a clinical-stage biopharmaceutical company developing novel immunotherapeutic candidates designed to guide the immune system to overcome autoimmunity and chronic infectious diseases. Helping people living with serious diseases and their families is the guiding principle at the heart of Barinthus Bio. With a focused pipeline built around its proprietary platform technologies, Barinthus Bio is advancing immunotherapeutic product candidates in autoimmunity and infectious diseases, including: VTP-1000, utilizing our SNAP-Tolerance Immunotherapy (SNAP-TI) platform and is designed to treat people with celiac disease and VTP-300, that utilizing its ChAdOx/MVA platform designed as a potential component of a functional cure for chronic HBV infection. Barinthus Bio is also conducting a Phase 1 clinical trial for VTP-850, a second-generation immunotherapeutic candidate designed to treat recurrent prostate cancer. Barinthus Bio's differentiated technology platforms and therapeutic approach, coupled with deep scientific expertise and focus on clinical development, uniquely positions the company to navigate towards delivering treatments that improve the lives of people with autoimmunity and chronic infectious diseases. For more information, visit www.barinthusbio.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," "expect," 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 pipeline prioritization and restructuring, preliminary estimated cash, cash equivalents and restricted cash, future expectations, plans and prospects, and the terms and timing of the anticipated officer transition and reduction in force. Any forward-looking statements in this press release are based on Barinthus Bio 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, including the risk that the timing for preliminary, interim or final data or initiation of its clinical trials may be delayed, the risk that interim or topline data may not reflect final data or results, Barinthus Bio's ability to execute on its strategy, regulatory developments, the risk that Barinthus Bio may not achieve the anticipated benefits of its pipeline prioritization and corporate restructuring, Barinthus Bio's ability to fund its operations and access capital, Barinthus Bio's cash runway, including the risk that its estimate of its cash runway may be incorrect and the risk that the costs incurred in connection with the pipeline prioritization and restructuring may exceed its estimates, global economic uncertainty, including disruptions in the banking industry, the conflicts in Ukraine, Israel and Gaza, and other risks identified in Barinthus Bio's filings with the Securities and Exchange Commission, including its Annual Report on Form 10-K for the year ended December 31, 2023, its Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. Barinthus Bio cautions you not to place undue reliance on any forward-looking statements, which speak only as of the date they are made. Barinthus Bio expressly disclaims any obligation to publicly update or revise any such statements 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.

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Barinthus Biotherapeutics Corporate Presentation

Guiding the Immune System to Cure Disease

January 2025

BARINTHUS BIOTHERAPEUTICS

Disclosure

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 and initiation of clinical trials, 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, including the risks of the timing for preliminary, interim or final data or initiation of our clinical trials may be delayed, the risk that interim or topline data may not reflect final data or results, our ability to execute on our strategy, regulatory developments, the risk that we may not achieve the anticipated benefits of our pipeline prioritization and corporate restructuring, our ability to fund our operations, and access capital, our cash runway, including the risk that our estimate of our cash runway may be incorrect, global economic uncertainty, including disruptions in the banking industry, and other risks, uncertainties and other factors identified in our filings with the Securities and Exchange Commission (the "SEC"), including our Annual Report on Form 10-K for the year ended December 31, 2023, 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.

Our Mission

To advance the next generation of immunotherapies for autoimmunity and inflammatory diseases.

BARINTHUS BIOTHERAPEUTICS

Company Overview

About us

- Barinthus Bio is developing **immunotherapies for autoimmunity and other inflammatory diseases ("I&I" area)**
- Publicly traded on Nasdaq under ticker BRNS
- Current focus leveraging SNAP-TI platform to restore immune tolerance
- Barinthus Bio's legacy portfolio based on viral vector platforms to be advanced with partner support

SNAP-TI Platform

- Differentiated platform for antigen-specific immune tolerance, potentially more effective & patient friendly
- Aims to reduce inflammation & restores the natural state of immune non-responsiveness to healthy tissue
- Lead candidate for Celiac disease (VTP-1000) in ongoing Phase 1 clinical trial with data readout expected in mid-2025
- Advancing undisclosed preclinical candidates based on SNAP-TI platform for other indications within I&I area

Financials

- Strong balance sheet:
  - Cash of $112 million.[1]
  - Outstanding ordinary shares: 40.2 million.[1]
  - Estimated cash runway into 2027.[1]
  - No debt or outstanding warrants.

[1] As of December 31, 2024; preliminary estimate based on management's current views and may change as a result of management's review of results and other factors. The preliminary financial estimate of the Company's cash as of December 31, 2024, may not ultimately be indicative of the Company's results for such periods and actual results may differ materially from those described above. No independent registered public accounting firm has audited, reviewed or compiled, examined or performed any procedures with respect to these preliminary results, nor have they expressed any opinion or any other form of assurance on these preliminary estimated results.

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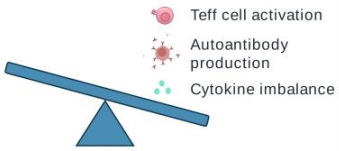
Antigen-Specific Immune Tolerance (ASIT) is a Targeted, Disease-Modifying Approach to I&I Diseases

I&I Diseases

Result of an imbalance of the immune system, wrongly attacking our own tissues



Indication Areas:

- Autoimmune diseases
- Allergy
- Transplant rejection
- Other inflammatory diseases

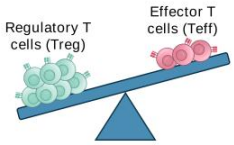
I&I Therapeutics are Evolving

Novel broad-acting therapeutics showing potential in certain I&I diseases

- Broad T cell and B cell depletion
- Anti-cytokine antibodies
- Treg cell therapies and promoters

ASIT, a promising targeted approach

Addressing underlying disease by increasing Treg/Teff ratio



Current challenges

- Limited antigen coverage
- Often requires IV administration
- Tolerability and ADAs
- Adequacy of Treg response

SNAP-TI designed to address each

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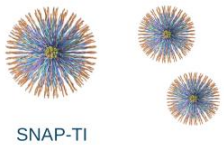
SNAP-TI Designed to Promote Antigen-Specific Tolerance

Characteristics and Mechanism of Action



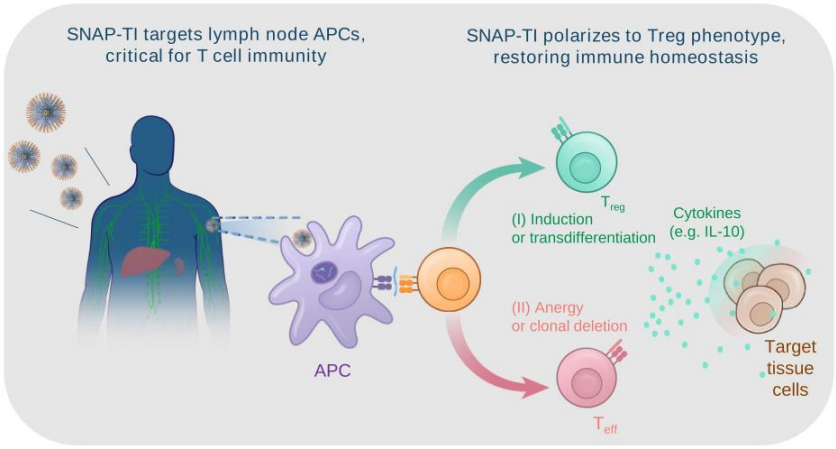
SNAP-TI

Self-Assembling Nanoparticle

- Co-delivery of multiple disease-associated antigens and an immunomodulator
- Nanoparticles of precise composition for ease of manufacturing

Enables

- Broad antigen coverage
- Patient friendly intramuscular/subcutaneous routes
- Based on preclinical data, potentially improved tolerability and increased Treg/Teff ratio



APC: Antigen presenting cell Teff: Effector T cell
Treg: Regulatory T cell

SOURCE: Based on unpublished preclinical data, Barinthus Bio, Data on File.

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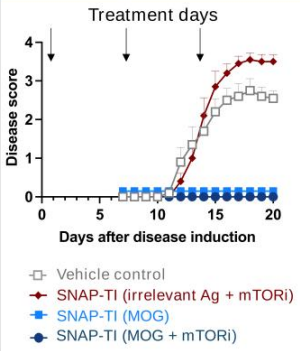
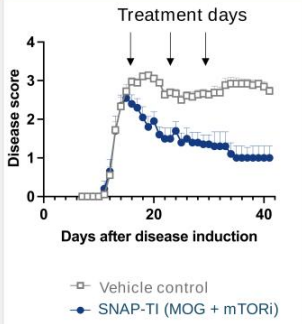
SNAP-TI Ameliorates Disease by Increasing Treg:Teff Ratio

Preclinical Results in EAE, a mouse model of Multiple Sclerosis (MS):

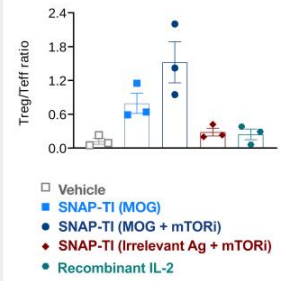
Protection against disease onset[1]



Reverses established disease[1]



Increased Treg:Teff ratio[1]



Efficacy is antigen-specific (T cell mediated)

Protection against re-challenge suggests immune memory

mTOR inhibitor rapamycin:
- improves Treg:Teff ratio
- prevents toxicity associated with exposure to disease antigen
- prevents Anti-drug Abs

MoA and disease amelioration observed in multiple CD4- (e.g., MS) and CD8- (e.g., T1D) driven mouse disease models

[1] Unpublished preclinical data, Barinthus Bio, Data on File.

EAE: Experimental autoimmune encephalomyelitis
MOG: myelin oligodendrocyte glycoprotein

mTORi: mechanist target of rapamycin
T1D: Type 1 diabetes

I&I Portfolio With Anticipated Near-Term Clinical Milestones

Harnessing the power of antigen-specific immunotherapies to target large market opportunities in areas of high unmet need.

Product Candidate*	Therapeutic For	Preclinical	Phase 1	Phase 2	Phase 3	Status/Anticipated Upcoming Milestones[1]
VTP-1000	Celiac disease					Phase 1 single ascending dose data (Q3 2025)

We believe that the SNAP-TI platform has the potential to impact multiple additional I&I indications.

*Barinthus Bio has worldwide rights for all product candidates.
These are estimated timelines only and our pipeline may be subject to change.

[1] Based on management's current estimates on expected clinical data milestones.

VTP-1000

Celiac Disease Therapeutic

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Guiding the immune system to cure disease

Celiac Disease: A Large and Growing Market

Everyone likely knows someone suffering from Celiac Disease

~1%	Of people have Celiac Disease worldwide.[1]	~80 million people.
~60%	Of patients are not able to adhere to a strict Gluten-Free Diet.[2]	~48 million people.
~20%	Of patients are Non-Responsive.[3]	**~16 million people's symptoms** continue despite avoiding gluten.
~7.5%	Increasing incidence per year.[4]	Increasing financial burden on healthcare systems.

[1] Celiac Disease Foundation. 2024.
[2] Rubin, G., et al. (2009) Aliment Pharmacol Ther. 30(4), 315-330.
[3] Leffler, DA., et al (2007) Clin Gastroenterol Hepatol. 5(4),445-450.
[4] King, JA., et al. Am J Gastroenterol (2020). 115(4):507-525

0 current FDA or EMA approved treatments.

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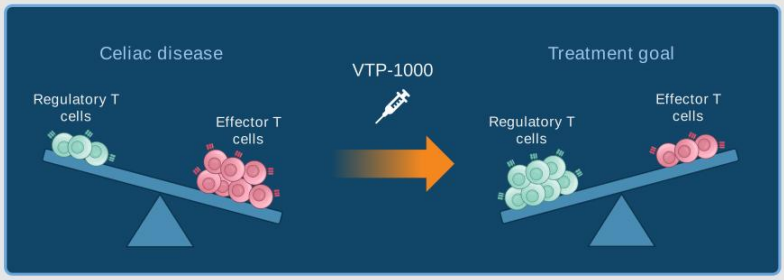
Celiac Disease: A Loss of Immune Tolerance to Gluten

Celiac disease is triggered by an immune response to gluten that damages the small intestine and can cause long-lasting health problems.

- In celiac disease, effector T cells attack the lining of the small intestine, overwhelming the regulatory T cells that usually prevent autoimmunity and unwanted inflammation.
- VTP-1000 aims to induce tolerance to gluten by reducing effector T cells and increasing regulatory T cells in a disease-specific manner to guide the immune system to tolerate gluten.
- The overall goal is to prevent symptoms (and other consequences) associated with inadvertent gluten ingestion in people with celiac disease.



VTP-1000 aims to restore the natural state of tolerance to gluten

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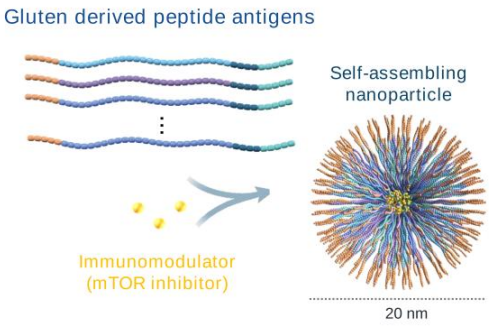
VTP-1000: Clinical Stage Celiac Disease Immunotherapy

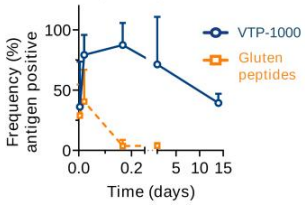
- Celiac disease has well-defined gluten-derived antigens
- Clinical POC in field that ASIT can mediate efficacy in Celiac
- VTP-1000 comprises key antigens from gluten proteins and the mTOR immunomodulator rapamycin
- VTP-1000 is administered by the IM route (simpler clinical paradigm)
- Preclinical data suggest nanoparticle and immunomodulator provide potential key advantages of
  - Improved Treg skewing
  - Reduced risk of antigen-associated inflammation
- Status: Phase 1 trial ongoing



VTP-1000 Preclinical Data Showed Potential Differentiated Profile

VTP-1000 accesses majority of APCs in lymphoid and disease tissue

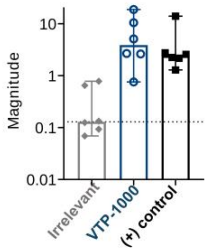
VTP-1000 traffics to draining lymph nodes and remains detectable in APCs past day 15



Other tissues
- ✓ Liver
- ✓ Spleen
- ✓ Intestines

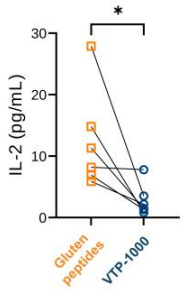
VTP-1000 antigens recognized by Celiac disease subjects (n=6)

Irrelevant antigens or VTP-1000 incubated with subject whole blood and assessed for recognition by T cells



VTP-1000 observed to reduce IL-2 and other inflammatory cytokines*

Gluten peptides or VTP-1000 incubated with subject (n=6) blood



*IL-1, IL-6, IL-8, TNF, IFNg, etc.

[1] Unpublished preclinical data, Barinthus Bio, Data on File.

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AVALON: Phase 1 – Trial Design, Initiated Q3 2024

Objective: Evaluating safety and tolerability of single and multiple doses of VTP-1000 in participants with Celiac disease

Part A – Single Ascending Dose (N=18)

Part B – Multiple Ascending Dose (N=24)

- Sequential dosing levels: 7-day gap from first 2 participants at each level and safety review before escalation to next dosing level.

Dose Levels	VTP-1000 (Part A/B)	Placebo
1	N=4/6	N=2
2	N=4/6	N=2
3	N=4/6	N=2

Key Inclusion Criteria

- Diagnosis of celiac disease as confirmed by positive serology and intestinal histology.
- Well-controlled, gluten restricted diet ≥12 months.

Key Primary Endpoints

- Safety: incidence of AEs and SAEs.
- Changes from baseline in anti-tissue transglutaminase immunoglobulin A antibodies.

Other Outcome Measures

- Serum cytokine (IL-2) concentrations.

Next anticipated milestone:

Single ascending dose data: Q3 2025

Study Reference: NCT06310291

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VTP-1000: The First Step Towards a Growing Pipeline

SNAP-TI Supporting Package

- ☑ Preclinical proof-of-concept in a variety of disease models:
  - Multiple Sclerosis
  - Vitiligo
  - Type 1 diabetes
- ☑ VTP-1000 GLP Tox complete
- ☑ VTP-1000 Phase 1 trial ongoing

Key Design Features

Optimal Design
- Self assembling 20 nm nanoparticle.
- Large loading capacity of a broad range of targetable antigens.

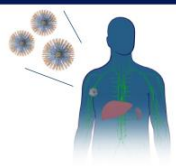
Lymph Node Targeting
- Optimally accesses lymph node APCs.
- Key for T cell immunity.

Co-delivered Immunomodulator
- Efficacy: Enhanced Treg/Teff ratio.
- Safety: Prevents antigen associated toxicity.

Ease of Route of Administration
- Intramuscular/subcutaneous injection.
- Key for patient compliance.

Broad Applicability:

- Range of disease-associated antigens
- Various disease mechanisms
- Different tissues



Diverse targetable indications
- e.g., Celiac, Type 1 diabetes, Rheumatoid arthritis, Vitiligo, Primary biliary cholangitis and more…

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Viral Vector Platform Programs

Program Looking for Partners to Advance

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Guiding the immune system to cure disease

Barinthus Bio's Programs Based on Viral Platforms

For more information about these programs, please visit: www.barinthusbio.com/pipeline/

Viral Programs	Product Candidate*	Therapeutic For	Preclinical	Phase 1	Phase 2	Phase 3	Partner	Status/Anticipated Upcoming Milestones
Infectious Diseases	VTP-300 ◆ ✓	Chronic Hepatitis B						Phase 2b HBV003 primary analysis data (Q2 2025) Phase 2a IM-PROVE II data (Q2 2025)
Cancer	VTP-800/850 ✓	Prostate cancer						Phase 1 data (Q2 2025)
Prophylactic Vaccines	VTP-500 ✓	MERS					CEPI	Initiation of Phase 2
	VTP-400 ✓	Zoster					CanSinoBIO (China)	Phase 1 ongoing

◆ Data supporting proof-of-concept announced ✓ Existing human clinical data

ChAdOx ChAdOx + MVA

*Barinthus Bio has worldwide rights for all product candidates.
These are estimated timelines only and our pipeline may be subject to change
ChAdOx: Chimpanzee Adenovirus Oxford
MVA: Modified vaccinia ankara.

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VTP-300

Hepatitis B Virus (HBV) Therapeutic

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Guiding the immune system to cure disease

Chronic HBV Infection Represents a Large Market Opportunity

There is an urgent need to develop effective therapeutic strategies to cure chronic HBV infection.

~254M Patients are chronically infected with HBV.[1]

1.2M New HBV infections per year.[1]

~ 13% Patients are diagnosed.[1]

Limitations of Current Treatments

- Existing therapies typically require chronic treatment.
- Standard of care nucleos(t)ide analogs (NUCs) are slow-acting with low cure rates.[2]
- Pegylated interferon has significant side effects.[3]
- Less than 10% of patients achieve a functional cure with existing therapies.[4]

HBV: hepatitis B virus
[1] WHO, Global hepatitis report, 2024 [2] Broquetas T and Carrion JA, Hepat Med. 2002;14:87-100. [3] Van Zonneveld M, et al, Aliment Pharmacol Ther. 2005;21(9):1163-71. [4] Boyd A, et al, Viruses. 2021 Jul 11;13(7):1341

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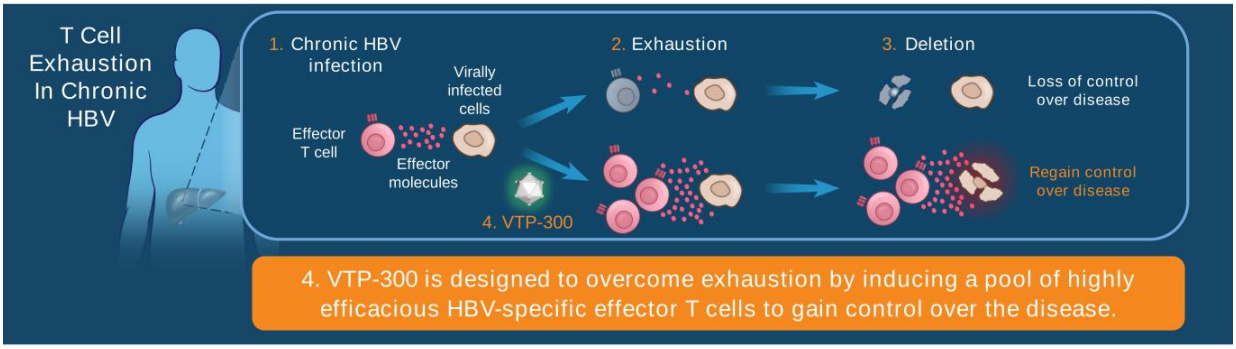
Chronic HBV Infection Leads to T Cell Exhaustion

1. Chronic exposure to HBV and HBsAg can lead to T cell exhaustion.

2. Exhausted T cells lose their functions, resulting in decreased secretion of cytokines and killing molecules.

3. In severe stages of exhaustion, HBV specific T cells can be deleted, leading to the loss of HBV-specific T cell response and no control of the disease.



4. VTP-300 is designed to overcome exhaustion by inducing a pool of highly efficacious HBV-specific effector T cells to gain control over the disease.

HBsAg: Hepatitis B surface antigen

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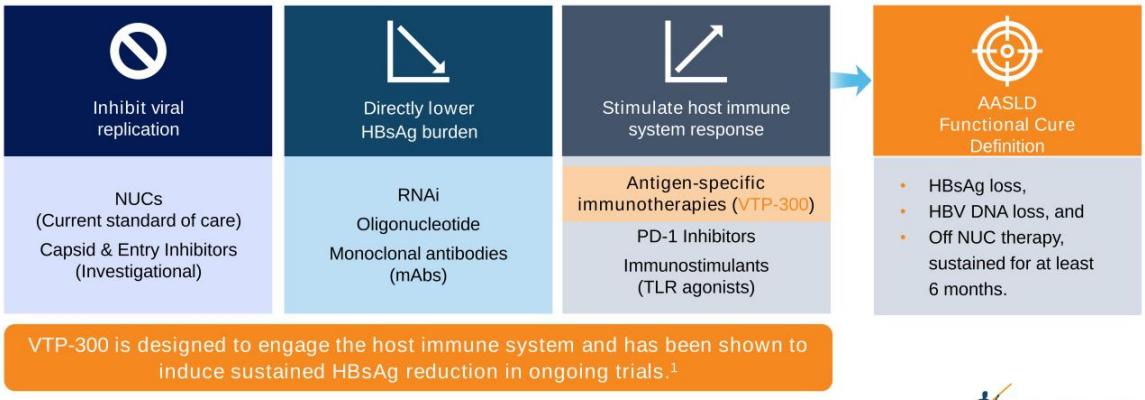
A Combined Approach is Needed for Functional Cure

Experts agree that a functional cure will likely require a combination of agents with complementary mechanisms of action. VTP-300 is an investigational antigen-specific immunotherapy based on viral vectors designed to stimulate a host immune response by inducing disease-specific effector T cells.

Three potential components to a functional cure



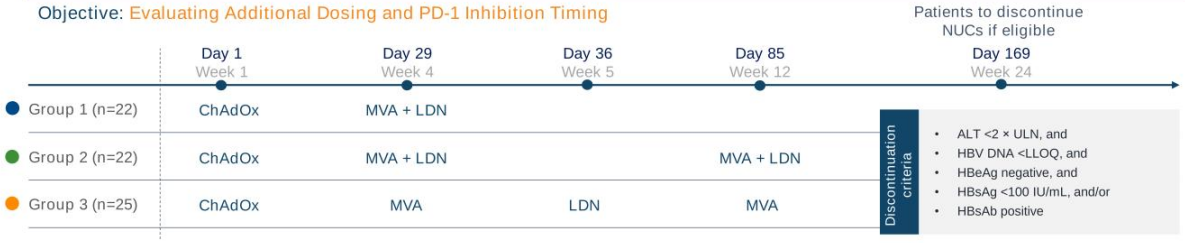
VTP-300 is designed to engage the host immune system and has been shown to induce sustained HBsAg reduction in ongoing trials.[1]

[1] Based on interim data, data cut off date: April 15, 2024. HBsAb: Hepatitis B surface antibody

HBV003: Phase 2b Trial – Enrolment Complete

VTP-300 + Low-dose nivolumab (LDN), N=69, with baseline HBsAg ≤200 IU/mL*

Objective: Evaluating Additional Dosing and PD-1 Inhibition Timing



Discontinuation criteria

- ALT <2 × ULN, and
- HBV DNA <LLOQ, and
- HBeAg negative, and
- HBsAg <100 IU/mL, and/or
- HBsAb positive

Inclusion Criteria

- HBV DNA ≤1,000 IU/mL.
- HBsAg ≤200 IU/mL.*
- On NUCs for ≥6 months.

Primary Endpoint

- % participants with a greater than 1 log HBsAg reduction at 6 months after initiation of therapy.

Secondary Endpoints

- Safety: incidence of AEs and SAEs.
- T cell response.

HBV003 results will inform treatment dosing regimen

Group 1: Mirrors Group 3 in HBV002 to further support response effect observed.
Group 2: Assesses if additional dose of MVA-HBV with LDN at Day 85 further reduces HBsAg.
Group 3: Assesses if delaying LDN until after MVA-HBV is more optimal (plus adds option of 2nd MVA-HBV dose).

Next anticipated readout:

Q2 2025

Study Reference: NCT05343481
ALT: Alanine aminotransferase; LLOQ: lower limit of quantification; ULN: upper limit of normal; HBeAg: Hepatitis B e Antigen.
*Inclusion criteria were amended in 2023 to focus on participants with HBsAg ≤200 IU/mL, as such data now focuses on this group.

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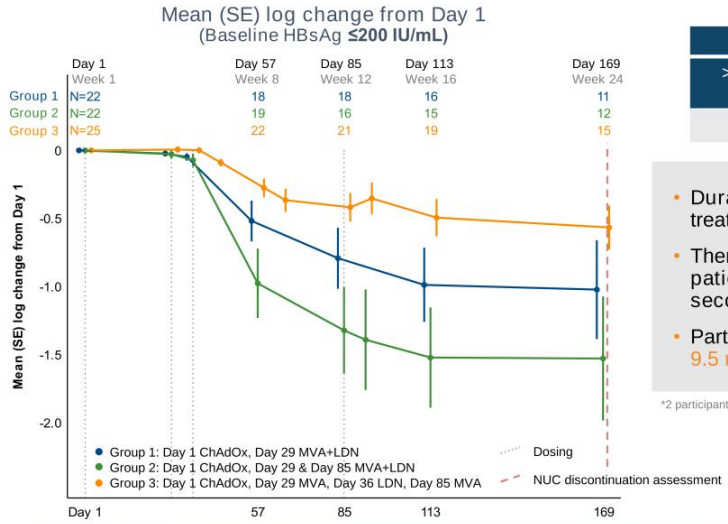
HBV003: Durable HBsAg Declines Observed



Participants, baseline HBsAg ≤200 IU/mL	
>1 log reduction at Day 169	HBsAg loss (<LLOQ), any time
29% (11/38)	8*

- Durable HBsAg declines were observed in all treatment groups.
- There was a trend toward stronger responses in patients who received LDN at the time of the second VTP-300 dose (Groups 1 & 2).
- Participants have maintained HBsAg loss for up to 9.5 months.

*2 participants achieved HBsAg loss after Day 169.

Interim data, presented at AASLD 2024. Data cut off was September 30, 2024, for lab data and October 8, 2024, for clinical data.

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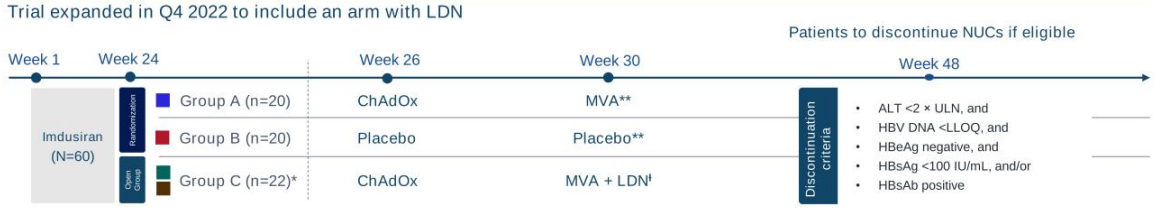
IM-PROVE II: Phase 2a – Collaboration with Arbutus

Imdusiran (RNAi) + VTP-300 +/- LDN, N=60 – Enrolment complete

Trial expanded in Q4 2022 to include an arm with LDN



Inclusion Criteria

- HBV DNA ≤20 IU/mL.
- HBsAg ≥100 to <5,000 IU/mL.
- On NUCs for at least 1 year.

Next anticipated readout:

Q2 2025

Primary Endpoints

- Safety: incidence of AEs and SAEs.

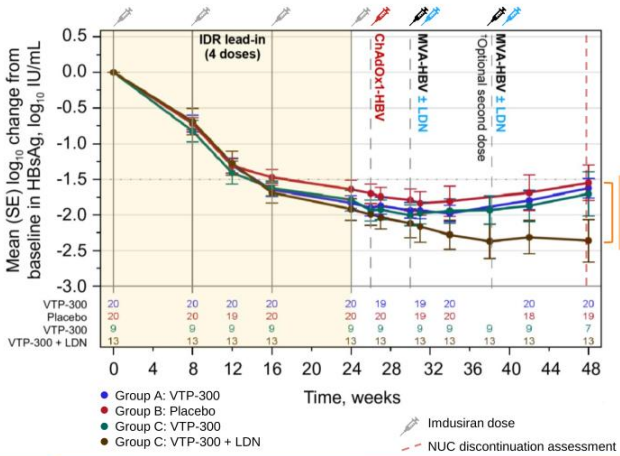
Secondary Endpoints

- Change in HBsAg concentration from baseline.
- Proportion of participants with a change in HBsAg from baseline meeting 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.

LDN: Low-dose nivolumab ALT: Alanine aminotransferase; LLOQ: lower limit of quantification; ULN: upper limit of normal.
*13/22 participants received VTP-300+LDN, 9/22 received VTP-300.
**Additional MVA/Placebo to be dosed at Week 38, if patients have experienced a ≥0.5 log drop in HBsAg from Week 26 to Week 34.
‡Additional MVA+LDN to be dosed at Week 38, if patients have HBsAg ≥10 IU/mL at Week 34.

IM-PROVE II: Imdusiran, VTP-300 and LDN Showed Significantly Greater HBsAg Decline

Mean HBsAg Change from Baseline by Treatment Group



Statistically significant difference*

	Group C (N=22)**	
Treatment	Imdusiran lead in, VTP-300 + LDN	Imdusiran lead in, VTP-300
Participants	13/22	9/22

- **Group C participants receiving imdusiran, VTP-300 and LDN had a significantly greater mean HBsAg log_{10} decline at Week 48** compared with all other groups.
- Participants in Group C who received VTP-300 + LDN were **more likely to reach HBsAg values <100 and <10 IU/mL**.

*P=0.017. ANCOVA adjusted for baseline HBsAg.
**Some participants were not eligible for LDN under the trial criteria.

Interim data, presented at AASLD 2024.

VTP-300 Trials Overview – Q4 2024 Update

Key updates in these data from those previously presented at EASL in the second quarter of 2024 include:

EASL June 24'	AASLD Nov 24'	HBV003 – Phase 2b
21	38	participants out to week 24.
4	8	participants have had achieved HBsAg loss at any time.
-	2/6	participants met criteria for functional cure to date.
-	2/6	participants off NUC therapy seroconverted to HBsAb positivity.
Durable HBsAg declines continue to be observed in all treatment groups.		
Participants have maintained HBsAg loss for up to 9.5 months.		

EASL June 24'	AASLD Nov 24'[1]	IM-PROVE II – Phase 2a
38	58	participants out to week 48.
11	11	participants out to week 72.
1	1	VTP-300 participant (Group A) reached HBsAg undetectable at Week 72.
-	3	VTP-300 + LDN participants (Group C) achieved HBsAg loss by Week 48.
Participants receiving VTP-300 + LDN (Group C) had a significantly greater mean HBsAg $\log_{10}$ decline at Week 48 compared with all other groups.		
More participants receiving VTP-300 + LDN had HBsAg <10 IU/mL at Week 48 than other groups.		

Next anticipated readout for both trials:

Q2 2025

[1]Only updated data on Group C were presented at AASLD in November 2024.

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Company Highlights

Guiding the immune system to cure disease

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Financial Overview and Catalysts

Guiding the immune system to cure disease

Cash
$112 million[1] as of December 31, 2024
No debt or outstanding warrants
Estimated cash runway into 2027[1]

Expected near-term catalysts[2]

- Q2 2025
  - VTP-850 (Prostate): Phase 1 results
  - VTP-300 (HBV): Phase 2b HBV003 primary analysis
  - VTP-300 (HBV): Phase 2b IM-PROVE II data
- Q3 2025
  - VTP-1000 (Celiac): Phase 1 single ascending dose data

[1] As of December 31, 2024; preliminary estimate based on management's current views and may change as a result of management's review of results and other factors. The preliminary financial estimate of the Company's cash as of December 31, 2024, may not ultimately be indicative of the Company's results for such periods and actual results may differ materially from those described above. No independent registered public accounting firm has audited, reviewed or compiled, examined or performed any procedures with respect to these preliminary results, nor have they expressed any opinion or any other form of assurance on these preliminary estimated results.
[2] Based on managements current estimates on expected clinical data milestones.

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Thank You

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