

# **Disclaimers**

abpro

This presentation (this "Presentation") is provided for informational purposes only and has been prepared to assist interested parties in making their own evaluation with respect to a potential business combination between Abpro Corporation ("Abpro") and Atlantic Coastal Acquisition Corp. II ("ACAB") and related transactions (the "Proposed Business Combination") and for no other purpose.

No representations or warranties express or implied are given in or respect of this Presentation. To the fullest extent permitted by law in no circumstances will Abpro, ACAB or any of their respective subsidiaries stockholders affiliates representatives partners directors officers employees advisers or agents be responsible, or liable for any direct indirect or consequential loss or loss of profit arising from use of this Presentation its contents its omissions reliance on the information contained within it or on opinions communicated in relation thereto or otherwise arising in connection therewith. This Presentation does not purport to be all-inclusive or to contain all of the information that may be required to make a full analysis of Abpro or the Proposed Business Combination. Viewers of this Presentation should each make their own evaluation of Abpro and of the relevance and adequacy of the information and should make such other investigations as they deem necessary.

### Forward-Looking Statements

This Presentation contains certain forward-looking statements within the meaning of the federal securities laws with respect to the Proposed Business Combination, including statements regarding the benefits of the Proposed Business Combination, the anticipated timing of the Proposed Business Combination, the products and services offered by Abpro and the markets in which it operates and Abpro's projected future results. These forward-looking statements generally are identified by the words "believe", "project", "expect", "anticipate", "estimate", "intend", "strategy", "future", "opportunity", "plan", "may", "should", "will be", "will be", "will continue", "will likely result" and similar expressions, Forward-looking statements are predictions, projections and other statements about future events that are based on current expectations and as a result, are subject to risks and uncertainties. Many factors could cause actual future events to differ materially from the forward-looking statements in this Presentation, including but not limited to: (i) the risk that the Proposed Business Combination may not be completed in a timely manner or at all, which may adversely affect the price of ACAB's securities; (ii) the risk that the Proposed Business Combination may not be completed by ACAB's business combination deadline and the potential failure to obtain an extension of the business combination deadline if sought by ACAB; (iii) the failure to satisfy the conditions to the consummation of the Proposed Business Combination, including the receipt of the requisite approvals of ACAB's and Abpro's stockholders, the satisfaction of the minimum trust account amount following redemptions by ACAB's public shareholders and the receipt of certain governmental and regulatory approvals; (iv) the lack of a third party valuation in determining whether or not to pursue the Proposed Business Combination; (v) the occurrence of any event change or other circumstance, that could give rise to the termination of the agreement and plan of merger; (vi) the effect of the announcement or pendency of the Proposed Business Combination on Abpro's business relationships, performance and business generally; (vii) risks that the Proposed Business Combination disrupts current plans of Abpro and potential difficulties in Abpro's employee retention as a result of the Proposed Business Combination; (viii) the outcome of any legal proceedings that may be instituted against Abpro or against ACAB related to the agreement and plan of merger or the Proposed Business Combination; (ix) the ability to maintain the listing of ACAB's securities on The Nasdag Stock Market LLC; (x) the price of ACAB's securities may be volatile due to a variety of factors including changes in the competitive and regulated industries in which Abpro plans to operate, variations in performance across competitors, changes in laws and regulations affecting Abpro's business and changes in the combined capital structure; (xi) the ability to implement business plans forecasts and other expectations, after the completion of the Proposed Business Combination and identify and realize additional opportunities; (xii) the enforceability of Abpro's intellectual property rights including its copyrights patents trademarks and trade secrets and the potential infringement on the intellectual property rights of others; (xiii) risks related to Abpro's ability to achieve and maintain profitability and generate cash; (xiv) costs related to the Proposed Business Combination and the failure to realize anticipated benefits of the Proposed Business Combination or to realize estimated pro forma results and underlying assumptions, including with respect to estimated stockholder redemptions; (xv) the potential inability of Abpro to manage growth effectively; (xvi) Abpro's dependence on senior management and other key employees; (xvii) risks related to general economic conditions, including demand, interest rates, inflation, supply chains and the effect of the conflicts in Ukraine and the Middle East; (xviii) cyberattacks on ACAB's or Abpro's information technology systems; (xix) the ability to attract and retain staff with the skills and expertise needed; (xx) increases in the cost of labor and research and development; (xxi) the effects of natural disasters, adverse weather conditions or public health crises; geopolitical, economic and climate-or weather-related risks in regions with a significant concentration of Abpro's operations; (xxii) the inability to successfully bring Abpro's products to market (including obtaining regulatory approval); and (xxiii) the early termination of any of Abpro's existing agreements to develop its products; (xxiv) the acceptance and efficacy of Abpro's products; (xxv) damage to Abpro's reputation through the actions or inactions of third parties; investigative or legal actions. The foregoing list of factors is not exhaustive. You should carefully consider the foregoing factors and the other risks and uncertainties described in the "Risk Factors" section of ACAB's Registration Statement on Form S-1 filed on December 2, 2021 (as amended), ACAB's Annual Report on Form 10-K for the year ended December 31, 2023, ACAB's Quarterly Reports on Form 10-Q for the quarters ended March 31, 2024 and June 30, 2024, the Registration Statement (as defined below) and the proxy statement/prospectus to be contained therein and the other documents filed by ACAB from time to time with the U.S. Securities and Exchange Commission (the "SEC"). These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements and ADAB assume no obligation and do not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise. Neither Abpro nor ACAB gives any assurance that either Abpro or ACAB respectively will achieve its expectations.

### Additional Information and Where to Find It

This document relates to the Proposed Business Combination between Abpro and ACAB. ACAB filed a registration statement on Form S-4 relating to the Proposed Business Combination (the "Registration Statement") which will includes a proxy statement/prospectus of ACAB. The proxy Statement/prospectus will be sent to all ACAB and Abpro stockholders. ACAB will also file other documents regarding the Proposed Business Combination with the SEC. Before making any voting decision, investors and security holders of ACAB and Abpro are urged to read the Registration Statement, the proxy statement/prospectus contained therein, and all other relevant documents filed or that will be filed with the SEC in connection with the Proposed Business Combination as they become available because they will contain important information about the Proposed Business Combination. Investors and security holders will be able to obtain free copies of the proxy Statement/prospectus and all other relevant documents filed or that will be filed with the SEC by ACAB through the website maintained by the SEC at www.sec.gov. In addition, the documents filed by ACAB may be obtained free of charge by written request to ACAB at Atlantic Coastal Acquisition Corp. II, 6 St. Johns Lane, Floor 5, New York, New York, 10013

### Participants in Solicitation

ACAB and Abpro and their respective directors and officers may be deemed to be participants in the solicitation of proxies from ACAB's stockholders in connection with the Proposed Business Combination. Information about ACAB's directors and executive officers and their ownership of ACAB's securities is set forth in ACAB's filings with the SEC, including ACAB's Registration Statement on Form S-1 filed with the SEC on December 2, 2021. To the extent that holdings of ACAB's securities have changed since the amounts printed in ACAB's Registration Statement on Form S-1, such changes have been or will be reflected on Statements of Change in Ownership on Form 4 filed with the SEC. Additional information regarding the interests of those persons and other persons who may be deemed participants in the Proposed Business Combination may be obtained by reading the proxy Statement/prospectus regarding the Proposed Business Combination when it becomes available. You may obtain free copies of these documents as described in the preceding paragraph.

### Industry and Market Data

This presentation has been prepared by Abpro and ACAB and includes market data and other statistical information from sources believed by Abpro and ACAB to be reliable, including independent industry publications, governmental publications or other published independent sources. Some data is also based on the good faith estimates of Abpro or ACAB, which in each case are derived from its review of internal sources as well as the independent sources described above. Although Abpro and ACAB believe these sources are reliable, Abpro and ACAB have not independently verified the information and cannot guarantee its accuracy and completeness.

### Financial Information; Non-GAAP Financial Measures

The financial information and data contained in this Presentation is unaudited and does not conform to Regulation S-X. Accordingly, such information and data may not be included in, may be adjusted in or may be presented differently in the Registration Statement to be filed by ACAB with the SEC and the proxy Statement/prospectus contained therein. Certain measures in this presentation do not have any standardized meaning as prescribed by Generally Accepted Accounting Principles ("GAAP") in the United States and, therefore, are considered non-GAAP measures. These measures may not be comparable to similar measures presented by other companies and should not be viewed as a substitute for measures reported under U.S. GAAP. These measures are commonly used by Abpro and ACAB to provide shareholders and potential investors with additional information regarding Abpro's or ACAB's liquidity and their ability to finance their operations. You should review Abpro's audited financial statements, which will be included in the Registration Statement.

Please see the Appendix for the accompanying non-GAAP reconciliations.

### No Offer or Solicitation

This Presentation shall not constitute an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No offering of securities shall be made except by means of a prospectus meeting the requirements of the U.S. Securities Act of 1933, as amended.

### Use of Projections

This Presentation contains projected financial information with respect to Abpro and ACAB. Such projected financial information constitutes forward-looking information, and is for illustrative purposes only and should not be relied upon as necessarily being indicative of future results. The assumptions and estimates underlying such financial forecast information are inherently uncertain and are subject to a wide variety of significant business, economic, competitive and other risks and uncertainties. See "Forward-Looking Statements" above. Actual results may differ materially from the results contemplated by the financial forecast information contained in this Presentation, and the inclusion of such information in this Presentation should not be regarded as a representation by any person that the results reflected in such forecasts are achieved.

### Trademarks

Solely for convenience, the trademarks, trade names and service marks may appear in this presentation without the ® and ™ symbols, but any such references are not intended to indicate, in any way, that we forgo or will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensors to these trademarks, trade names and service marks. All trademarks, trade names and service marks appearing in this presentation are the property of their respective owners.

# Table of Contents

Transaction Overview

2 Investment Highlights

**3** Experienced Team

Pipeline and Technology
Platforms

5 Lead Candidates

6 Additional Pipeline Candidates

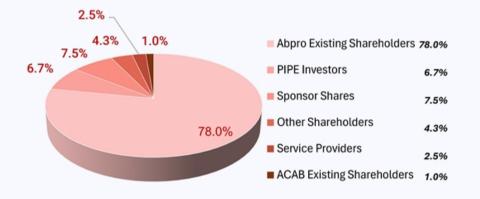
7 Program Development Timeline

8 Appendix

# Transaction Overview

- Atlantic Coastal Acquisition Corp. II (NASDAQ: ACAB) plans to conduct a business combination with Abpro Corporation ("Abpro") at a purchase price of approximately \$500 million
  - Transaction expected to be funded through a combination of \$6.4 million PIPE financing and an estimated \$6.2 million ACAB cash in trust
  - 100% equity rollover by Abpro shareholders, representing an expected ~78% of the Pro Forma Equity Value
  - Net proceeds are expected to fund operations of Abpro, including R&D efforts and clinical development of two lead programs
  - Targeted transaction close is expected Q4 2024, subject to customary closing conditions and approvals

# Illustrative Pro Forma Ownership



## Pro Forma Valuation at Close

(USD millions, except for share data)	
Pro-Forma Shares Outstanding	50.5m
Share Price	\$10.00
Pro-Forma Equity Value	\$505.2
(-) Cash to Balance Sheet	\$8.9
Pro-Forma Enterprise Value	\$496.3

## Sources & Uses

Sources (USD millions)	
Abpro Equity Rollover	\$394.1
Cash in Trust	\$6.2
PIPE Financing	\$6.4
Total Sources	\$406.7
Uses (USD millions) Abpro Equity Rollover	\$394.1
Cash to Balance Sheet	\$8.9
Estimated Transaction Fees	\$3.7
Total Uses	

# **Proprietary Antibody Platform**

- · Antibody Discovery: DiversImmune®
- Antibody Engineering: MultiMab™

# Robust Therapeutic Pipeline of Next Generation Candidates

ABP-150(Claudin18.2/CD3)

Candidate Indication
 ABP-102(HER2/CD3) Breast and gastric cancer
 ABP-201(VEGF/ANG2) Wet AMD and DME
 ABP-110(GPC3/CD3) Liver cancer

# Development & Commercialization Partnerships Established

- Celltrion, Inc. (KRX: 068270)
  - Fully funding development of ABP-102
  - Up to \$1.75B in total payments to Abpro
- Abpro Bio¹

# Experienced Leadership Team and World Class Boards

Gastric cancer

- Industry leaders with wealth of experience from top industry organizations
- · Team with extensive biotechnology experience

1 Abpro Bio Co. Ltd (KOSDAQ: 195990), through its subsidiary Abpro Bio International, Inc.,

# **Experienced Leadership Team**



Ian Chan, MBA CEO, Co-founder

Brown AB; Harvard MBA



Eugene Chan, MD Chairman, Co-founder

Harvard AB; Harvard MD



Miles Suk Co-CEO, Board Member

Michigan State U, BS



Robert Markelewicz, MD Chief Medical Officer

Brown ScB, MMSc, MD



Morgan Stanley



















# Atlantic Coastal Management Team



Shahraab Ahmad Chairman, CEO



**Burt Jordan** President



Jason Chryssicas CFO



Tony Eisenberg CSO

J.P.Morgan

DECCA CAPITAL

**ARCHER** 









Goldman Sachs









# **Experts on Boards**



Robert Langer, PhD<sup>1</sup>
David H. Koch Institute Professor, MIT;
Founder of Moderna, BIND,
Momenta, AIR, others



**Laurie Glimcher, MD<sup>2</sup>**Former President and CEO,
Dana-Farber Cancer Institute



Ron Levy, MD<sup>2</sup>
Professor and Chief,
Division of Oncology,
Stanford School of Medicine



George Tsokos, MD<sup>2</sup>
Professor of Medicine,
Beth Israel Deaconess
Medical Center



Shiv Pillai, PhD<sup>2</sup>
Professor of Medicine, Harvard
Medical School and Massachusetts
General Hospital



Steven Schnittman, MD, PhD<sup>2</sup>
Infectious Disease Specialist;
Ex-NIH/Chief HIV Division;
Ex-VP BMS

<sup>&</sup>lt;sup>2</sup> Scientific Advisory Board member

# **■ Pipeline with Next Generation Candidates**

INDICATION	PROGRAM	TARGET	PRECLINICAL	IND-ENABLING	PHASE 1	PHASE 2	PHASE 3	TOTAL ADDRESSABLE MARKET
DME/Wet AMD	ABP-201	Anti-VEGF/ANG2						\$10.4 Billion <sup>1</sup>
Breast, Gastric Cancer	ABP-102	Anti-HER2/CD3						\$12.1 Billion <sup>2</sup>
Liver Cancer	ABP-110	Anti-GPC3/CD3						\$12.9 Billion <sup>3</sup>
Gastric Cancer	ABP-150	Anti- CLAUDIN18.2/CD3						\$13.11 Billion <sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Prescient and Strategic Intelligence, Wet Age-Related Macular Degeneration Market Overview, March 2019.

<sup>&</sup>lt;sup>2</sup> Research and Markets, Global HER2+ Breast Cancer Market Will Expand to 12.1 Billion in 2030, September 21, 2021.

<sup>3</sup> SNS Insider, Liver Cancer Therapeutics Market to Surpass USD 12,910.02 Million by 2030 Driven by Rising Incidence of Liver Cancer and Advancements in Early Diagnosis, October 25, 2023.

<sup>&</sup>lt;sup>4</sup> Data Bridge Market Research, Global Gastric Cancer Market - Industry Trends and Forecast to 2029, September 2022.



# TECHNOLOGY PLATFORM

# Diversimmune® Discovery Platform

Creates antibody therapies against traditionally difficult targets

Validated by global pharma and research institutions

Proven in **300+** campaigns during early years of development

# GSK

Key role in SAP program via platform for GSK SAP amyloid program in Phase 2 Preclinical results published in:





Immunization







Diversification

Optimization





# Features:

# · Rapid Generation

Proprietary antibody discovery platform that seeks to swiftly produce a diverse array of antibodies

# Target Variety

Targets both clinically validated and novel targets

# Overcoming Challenges

Targets traditionally difficult-to-access antigens

# · Drug-Like Properties

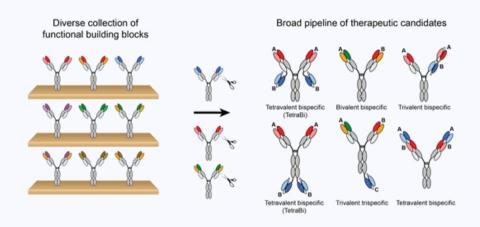
Seeks to ensure generated antibodies possess characteristics conducive to therapeutic development

# · Create "Building-Blocks"

Seeks to deliver functional antibody building blocks with exceptional affinity and specificity to address diseasespecific challenges

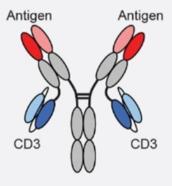
# MultiMab<sup>™</sup> Antibody Engineering **Platform and TetraBi Format**

Enhancing efficacy and safety: fine-tuning antibody product formats for optimal results



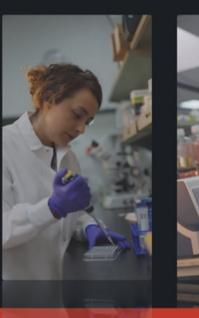
# **Anticipated Advantages of TetraBi Format:**

- Bivalent binding to TAA<sup>1</sup> for potentially increased efficacy
- · Fc modification for reducing toxicity and increasing antibody half life
- Flexible configuration for increased safety and/or maximized efficacy
- · Symmetrical structure for streamlined manufacturing



<sup>1</sup>TAA= Tumor-Associated Antigen

# LEAD PROGRAMS









- ABP-102
- ABP-201



# **ABP-102**

**HER2/CD3 T-Cell Engager** 

Treatment for HER2+ Breast Cancer & Gastric Cancer

# ABP-102: Strategic Partnership with Celltrion



Leading biopharmaceutical company headquartered in Incheon, South Korea; KRX: 068270

# Anticipated Development Plan

- · Investigational New Drug (IND) enabling studies underway
  - Preliminary cyno tox study completed
- 2H 2025: File IND application and Initiate Phase 1/2 clinical trial

### Indication:

Progressive HER2+ Breast and Gastroesophageal Adenocarcinomas

# Design:

First-In-Human, multicenter, open-label, single-agent, Phase 1/2 trial

<sup>1</sup>The proceeds from commercialization are subject to a 50/50 profit split. Amounts that may be paid by third party collaborators, for example upfronts, milestones and/or royalty payments from territorial commercialization partners, are also subject to a 50/50 split. Following commercial approval of ABP-102, we have agreed to reimburse Celltrion 250% of its direct and certain indirect costs and expenses incurred through first commercial sale amounts otherwise due to us under the agreement until our share of these costs has been paid back; provided that we are entitled to a minimum 25% of profit from commercial sales and from third party collaborators regardless of the amount of unreimbursed development costs outstanding (and then 50% once the reimbursement has been made in full). In addition, we are entitled to up to over \$1.75 billion in development and sales milestones. We are responsible for world-wide patent prosecution, with Celltrion reimbursing 50% of our out-of-pocket costs.

# Global Development & Commercialization Partnership Highlights

# **Fully Funded**

 Celltrion funds all development costs, including preclinical and clinical studies

# \$1.75B

 Abpro to receive payments up to \$1.75B, including equity investment, development/commercial milestone payments

# 50%1

Abpro retains a 50% share of profits worldwide

# Addressing Unmet Needs in HER2+ Cancers Treatment: ABP-102 Competitive Landscape

# \$12.1 billion

Projected global HER2+ market size by 2030<sup>1</sup>

# Development Fully Funded

By collaboration partner Celltrion

# Potential Competitive Advantages:

- Current HER2-directed therapies have demonstrated increased chemical off target toxicity (e.g. TKIs and ADCs) and/or reduced efficacy from drug resistance or limited potency requiring combination with chemotherapy (i.e.: mAbs), especially in the relapsed and refractory disease population
- ABP-102 was designed to overcome these challenges as a single-agent therapy that potently engages the patient's natural immune system without toxic chemicals to directly target and destroy the tumor

# Potential benefits of obs ABP-102 in immunooncology

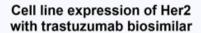
- Activating T cells to kill tumor cells
   TetraBi antibody targets HER2 on tumor cells and CD3 on T cells
- Reduce activity on -low or negative HER2 cells for safety selectively targets HER2-high and intermediate expressing cells
- May improve clinical efficacy
   by inducing T cell infiltration into
   HER2+ tumors, potentially targeting
   various solid tumors with HER2
   overexpression.
- Enhances binding, selectivity for tumor cells, potency, and therapeutic index

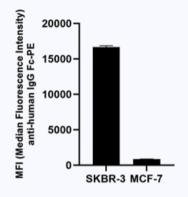
with Dual HER2 binding sites

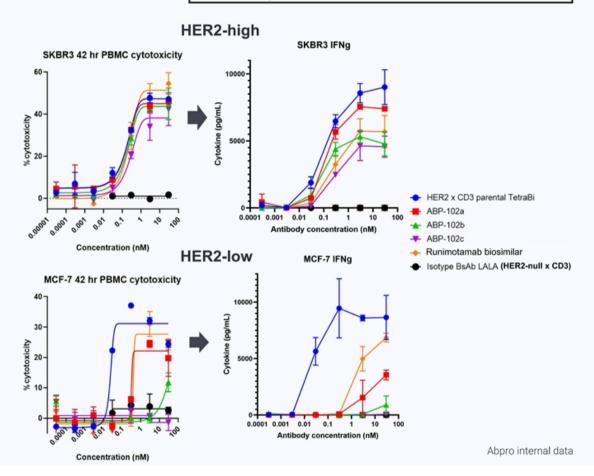
# ABP-102: Potent killing of HER2-high but not HER2-low target cells in vitro

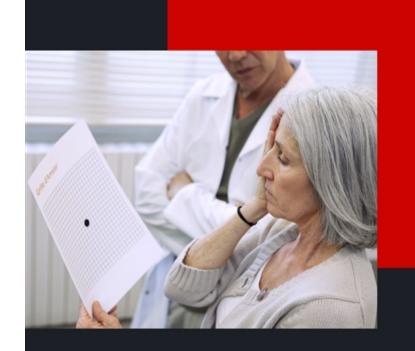
### **HER2** affinity:

HER2 x CD3 parental TetraBi > ABP-102a > ABP-102b > ABP-102c









# **ABP-201**

**VEGF/ANG-2 BISPECIFIC ANTIBODY** 

Treatment for Diabetic Macular Edema ("DME") & Wet Age-related Macular Degeneration ("AMD")

# Addressing Unmet Needs in Wet AMD/DME Treatment: ABP-201 **Competitive Landscape**

# \$10.4 billion

Global Wet AMD market size projection in 20241

# Potential Competitive Advantages:

- Unlike Eylea and Lucentis, ABP-201 seeks to inhibit both VEGF and ANG-2
- · Unlike Vabysmo, ABP-201 has two binding sites for VEGF and ANG-2, designed to more effectively trap each ligand
- ABP-201 has a longer half-life in the eye than Eylea, which contributes to pharmacological durability

- We believe that ABP-201 will require less frequent dosing, providing a significant advantage in the commercial setting.
- We anticipate that ABP-201 will not suffer from drug resistance to the same extent. as drugs that target VEGF alone, as increased signaling by ANG-2 in response to anti-VEGF therapy is one of the primary mechanisms of resistance to VEGF inhibitors.

Prescient and Strategic Intelligence, Wet Age-Related Macular Degeneration Market Overview, March 2019.

Risk-adjusted revenues for ABP-201; Does not account for costs Source: Health Advances model and analysis

# ABP-201: Anti-VEGF/ANG2

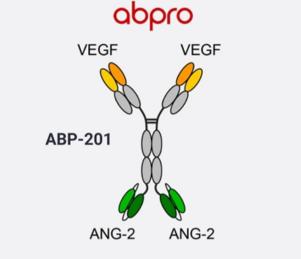
# Target Indication: Wet AMD/DME

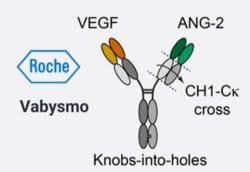
# **Key Characteristics**

- · Dual inhibition of VEGF and ANG-2 to block angiogenesis
- Four high-affinity binding sites for increased potential potency
- · Dual targeting in single molecule for simultaneous inhibition
- · Natural antibody structure for potentially improved dosing
- · Symmetrical structure for efficient manufacturing

# Ligand trap targeting VEGF and ANG-2 for vascular diseases of the eye

- · Formulated for intravitreal injection
- Designed to block blood vessel formation and normalize damaged vessels through co-targeting vascular endothelial growth factor, or VEGF, and angiopoietin-2, or ANG-2

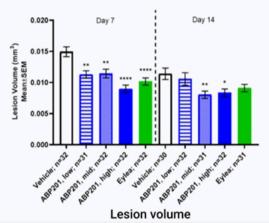


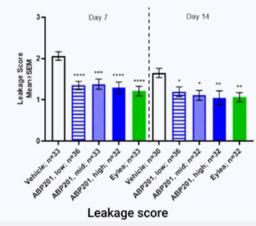


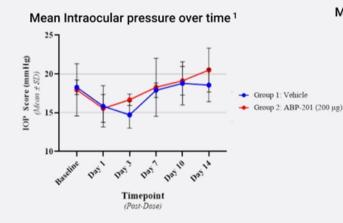
# ABP-201: In Vivo Preclinical Models Have Positive Results

Laser-induced neovascularization model in rats2

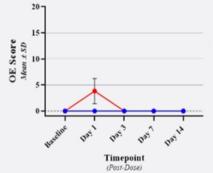
■ ABP-201 significantly reduced vascular lesions comparable to **Eylea in rat models** 







### Mean total ocular examination scores over time1



OE Scores range from 0(no abnormalities) to a maximum of 48

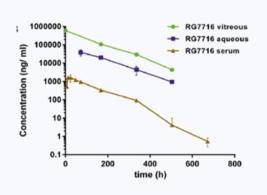
ABP-201 does not induce significant inflammation or intraocular pressure increases in rabbit models

PoweredResearch, Safety, Tolerability, and Pharmacokineti C Study Following Intravitreal (IVT) Delivery of a Novel Compound in Rabbit, April 27, 2021.

<sup>&</sup>lt;sup>2</sup> Ora, Inc., CNV Study with Intravitreally-injected Abpro Test Article ABP201 in Brown Norway Rats, December 20, 2023.

# ABP-201 Exhibits Favorable PK Compared with Vabysmo

# Faricimab PK in **Cyno**

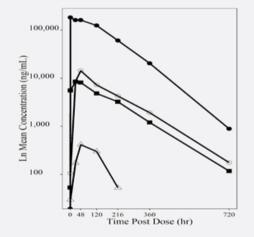


Faricimab(RG7716) 0.5 mg dose in Cyno <sup>1</sup>						
PK parameter	Unit	Serum	Aqueous			
C <sub>max</sub>	μg/ml	3.8	99			
t <sub>max</sub>	h	24	72			
t <sub>1/2</sub>		89.3	68			
t <sub>last</sub>	h	672	672			
AUC <sub>0-tlast</sub>	(ug*h)/ml	295	18100			
AUC <sub>0-inf</sub>	(ug*h)/ml	296	18200			
F	%	12.7	N/A			

◆ Vitreous Humor → Aqueous Humor → Retina → Serum

VS.

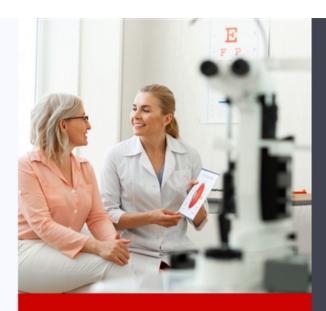
# ABP-201 PK in **Rabbit**



ABP-201 0.2mg dose in Rabbit <sup>2</sup>								
PK parameter Unit Serum Aqueous Vitreous Retina								
C <sub>max</sub>	μg/ml	0.415	14.374	183.357	8.457			
T <sub>max</sub>	h	48	48	1	24			
t <sub>1/2</sub>		38	108	82	106			
AUC <sub>0-tlast</sub>	(ug*h)/ml	52	2529	36922	1777			
AUC <sub>0-inf</sub>	(ug*h)/ml	55	2557	37027	1795			
MRT	(h)	89	165	142	158			

Regula JT, Lundh von Leithner P, Foxton R, et al. Targeting key angiogenic pathways with a bispecific CrossMAb optimized for neovascular eye diseases [published correction appears in EMBO Mol Med. 2019 May;11(5). <sup>2</sup>Study contracted at ContractKinetica, LLC

# ABP-201 Development Strategy



# **Collaboration Highlights:**

- Co-development via a territorial partnership with Abpro Bio<sup>1</sup>
- Abpro retains U.S. and European Union Five commercial rights

# **Current Status:**

 Investigation New Drug (IND) enabling studies underway

# **Anticipated Development Plan**

- Q1 2026: File IND application and Initiate a Phase 1 trial in patients with Wet AMD
- Following the identification of the maximum tolerated dose (MTD) in Phase 1, a larger randomized Phase 2 dose ranging trial to be conducted

<sup>&</sup>lt;sup>1</sup>- Abpro Bio Co. Ltd (KOSDAQ: 195990), through its subsidiary Abpro Bio International, Inc., holds territory rights primarily in Asia and Middle East, and is an equity investor of Abpro Corporation.



# ADDITIONAL T-CELL ENGAGERS

ABP-150: Anti-Claudin 18.2/ CD3 against Gastric Cancer

ABP-110: Anti-GPC3/CD3 against Liver Cancer

# ABP-150: Anti-Claudin18.2/CD3

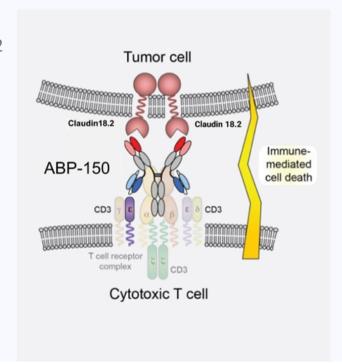
# Target Indication: Gastric Cancer

# **Key Characteristics**

- T-cell engager designed to fight cancer through co-targeting CD3 & Claudin 18.2
- Specific for Claudin 18.2, avoiding binding closely related isoform Claudin 18.1 expressed in the lung.
- Showed potent killing in in vitro T cell-mediated killing assays in preclinical studies
- · Showed potent efficacy in in vivo efficacy models
- Well tolerated in preclinical efficacy models

# \$13.11 billion

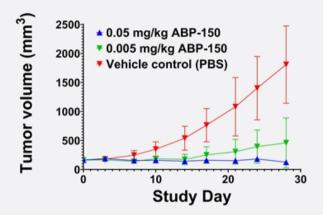
Global gastric cancer market size projection by 2029<sup>1</sup>



Data Bridge Market Research, Global Gastric Cancer Market - Industry Trends and Forecast to 2029, September 2022

# ABP-150: in vivo Efficacy and Safety Profile in Preclinical **Models**

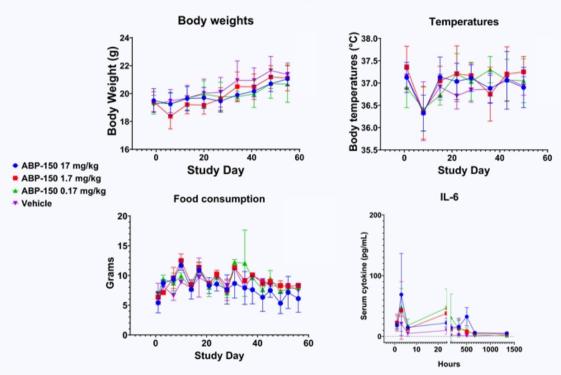
Potent in vivo efficacy in gastric cancer xenograft mouse model1



NUGC-4 tumor cells mixed with human PBMCs and implanted subcutaneously in the same bolus into NSG mice.

### <sup>1</sup>Abpro internal data.

# ABP-150 is well tolerated in a preclinical tox model<sup>1</sup>



Representative toxicity data from human CD3-transgenic mouse model. In this model, ABP-150 can bind both the transgenic human CD3 on mouse T cells and mouse claudin 18.2 on gastric epithelial cells. Upper left: Body weight measurements over time. No significant decrease in body weight with ABP-150 administration. Lower left: Amount of food consumed over time. No differences in food consumption between ABP-150-treated animals and placebo controls. Upper right: Body temperatures over time. No fever response with ABP-150 treatment. Lower right: IL-6 levels in blood over time. ABP-150 administration does not significantly increase IL-6, a major cytokine associated with triggering cytokine release syndrome (CRS).

# ABP-110: Anti-GPC3/CD3

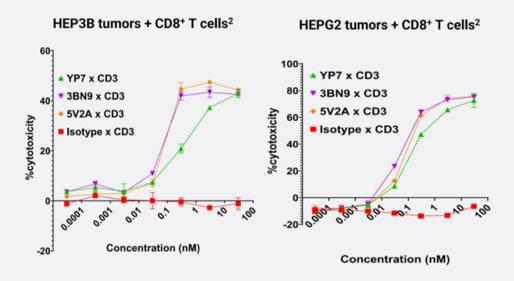
# Target Indication: Hepatocellular Carcinoma- Liver Cancer

# Designed to provide in-vitro T-cell dependent cellular cytotoxicity (TDCC) against liver cancer cells

- Showed high TDCC in both GPC3-expressing HepG2 and Hep3B cell lines in preclinical models
- Elicited stronger TDCC compared to original YP7 x CD3 bispecific in preclinical models

# \$12.9 billion

Global liver cancer market size projection by 2030<sup>1</sup>

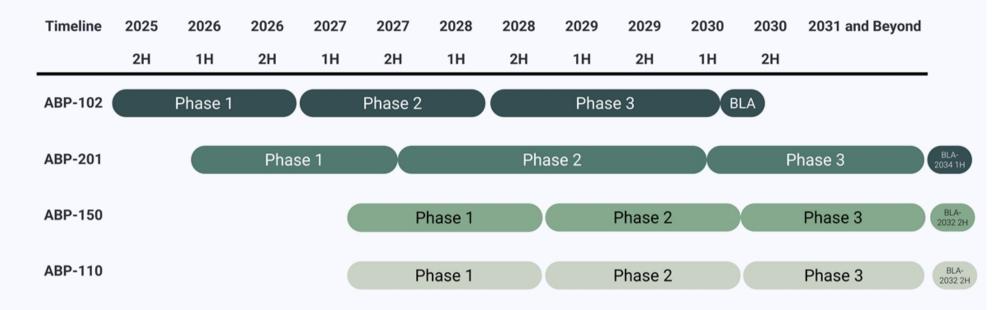


- YP7 is originally in-licensed from NIH at early stage
- 3BN9 x CD3 and 5V2A x CD3 are Abpro's improved BsAbs

SNS Insider, Liver Cancer Therapeutics Market to Surpass USD 12,910.02 Million by 2030 Driven by Rising Incidence of Liver Cancer and Advancements in Early Diagnosis, October 25, 2023.

<sup>&</sup>lt;sup>2</sup> Abpro internal data

# **Anticipated Clinical Development Timeline**



Anticipated Upcoming Milestones	IND-Enabling Study Completion	GLP-Tox Study Completion
ABP-102	2Q 2024	1Q 2025
ABP-201		4Q 2025

# **Appendix**

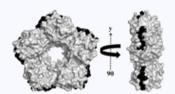
- Additional Data for Abpro Technology Platform
- Additional Key Team Members
- Additional Data for ABP-102(HER2/CD3)
- Additional Data for ABP-201(VEGF/ANG2)

# Additional Data for Abpro Technology Platform

# **Diversimmune Platform**

# Case study: Amyloid\*:

Preclinical results from functional therapeutic antibodies generated with DiversImmune ® platform, via a project for GSK, published in Nature<sup>1</sup> and The New England Journal of Medicine<sup>2</sup>



Abpro generated a therapeutic mAb "Abp1" against Amyloid used by GSK, featuring high affinity and specificity in ways other approaches can not

Conformational epitope recognized by Abp1 (highlighted in black)

\*Amyloid plagues, composed of misfolded proteins, are a hallmark feature in the brains of individuals with Alzheimer's disease, contributing to the neurodegenerative process

1 https://www.nature.com/articles/nature09494

# nature

# LETTER

### Antibodies to human serum amyloid P component eliminate visceral amyloid deposits

KarlBodini\*, Stephan Elimerichi\*, Melvyn C. Kahani\*, Glenys A. Tennenei\*, Andrzej Loesch\*, Janet A. Gibertsoni\*, Winston L. Hutchinsoni\*, Palma P. Manglonde\*, J. Nath Gallimore\*, David J. Millar\*, Sanne Minogue\*, Amar P. Dhildon\*, Graham W. Taylor\*, Arthur R. Bradweil\*\*, Aviva Petref\*, Julian D. Gillmore\*, Umoto Bedoend\*, Marina Botof\*, Philip N. Hawkins\* & Mark R. Pepel.

### METHODS SUMMARY

Induction of murine AA amyloidosis using amyloid enhancing factor and repeated casein injections, estimation of amyloid load in vivo and in vitro, and quantification of human SAP in serum and tissue extracts, were conducted as previously reported 46,10. Sheep and mouse anti-human-SAP antibodies were raised by immunization with isolated pure human SAP26 and mouse anti-human-SAP hybridomas were cloned by standard methods; Abp1 was produced by AbPro.



ORIGINAL ARTICLE

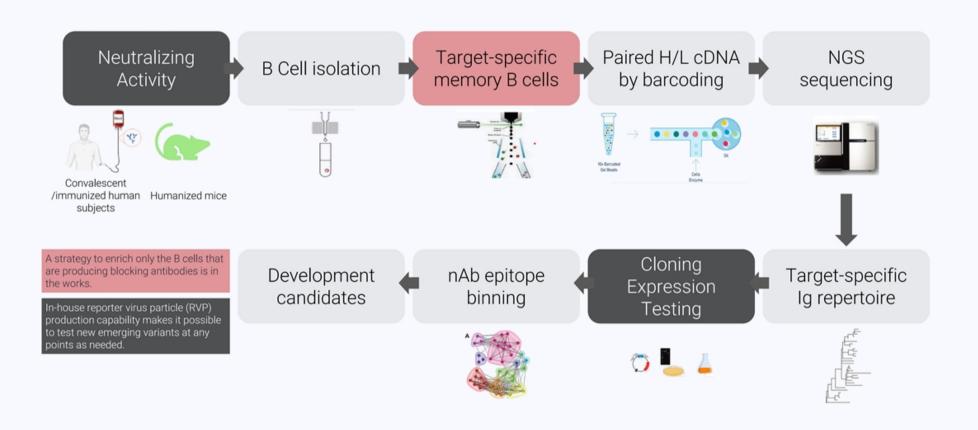
# Therapeutic Clearance of Amyloid by Antibodies to Serum Amyloid P Component

Duncan B. Richards, D.M., Louise M. Cookson, B.Sc., Alienor C. Berges, Pharm.D., Sharon V. Barton, M.Sc., Thirusha Lane, R.N., M.Sc., James M. Ritter, D.Phil., F.Med.Sci., Marianna Fontana, M.D., James C. Moon, M.D., Massimo Pinzani, M.D., Ph.D., Julian D. Gillmore, M.D., Ph.D., Philip N. Hawkins, Ph.D., F.Med.Sci., and Mark B. Pepys, Ph.D., F.R.S.

<sup>2</sup> https://www.neim.org/doi/full/10.1056/NEJMoa1504942

# **Neutralizing Antibody B cell Cloning Discovery Platform**

Timeline: < 2 months



# abpro 34

# Anticipated Advantages of TetraBi Format Over First- and **Second-Generation T-Cell Engagers**

Antibody Characteristics	Antigen  CD3  1st Generation  Bispecific	2 <sup>nd</sup> Generation Bispecific	Artigen Artigen CD3  Abpro TetraBi	abpro Benefit
Bivalent Binding to Tumor Antigen	8	8	<b>Ø</b>	Stronger binding to the tumor cell, potentially leading to increased efficacy and an expanded patient population
Long Circulating Half-life	8	<b>Ø</b>	<b>Ø</b>	Extends duration of therapeutic effect and reduces frequency of dosing
Fc engineered to reduce CRS	8	<b>⊘</b> ⊗	<b>Ø</b>	Decreases interaction with other immune cells, lowering risk of unwanted side effects
Low Risk of Immunogenicity	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	Natural antibody sequences decrease risk of immune response, which can lead to decreased efficacy
Straightforward Manufacturing	<b>Ø</b>	8	<b>Ø</b>	Symmetrical structure streamlines manufacturing by reducing risk of chain mispairing

# **Additional Key Team Members**

# Additional Key Team Members



Shaun Murphy, PhD VP of Immunology



Askar Kuchumov, PhD VP of Business Development



Mengsha Wang, MBA Director of Corporate Development

Brown PhD. Research Harvard Medical School Joined Abpro in 2014 Previously at Toxikon

Lomonosov Moscow State, BS Wayne State U School of Medicine, PhD Lactocore (Interim CEO), Astrotide (Cofounder/CEO), Cleveland Biolabs (Director of BD)

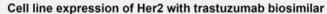
Clark U MSc. Finance, MBA Joined Abpro in 2014

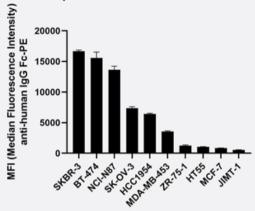


# **Additional Data for ABP-102**

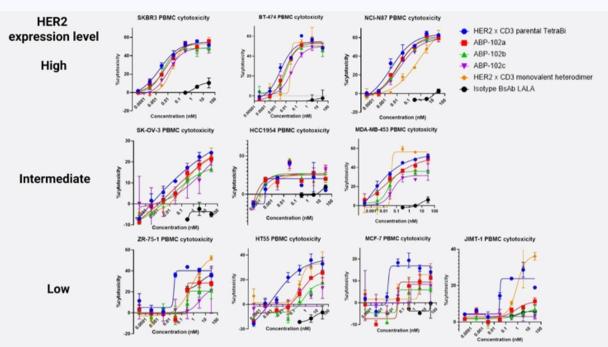
HER2/CD3 T-Cell Engager

# ABP-102: engineered TetraBi antibodies exhibit selectivity in vitro, with potent cytotoxicity on HER2-high cell lines and reduced killing of HER2-low cell lines





Trastuzumab binding by flow cytometry results in a range of HER2 expressing cancer cell lines.1



ABP-102 candidate molecules exhibit preferential killing of HER2-high (SKBR3, BT-474, NCI-N87) and HER2-intermediate (SKOV-3, HCC1954, MDA-MB-453) cell lines, with reduced cytotoxic activity on HER2-low cell lines (ZR-75-1, HT55, MCF-7, JIMT-1).2

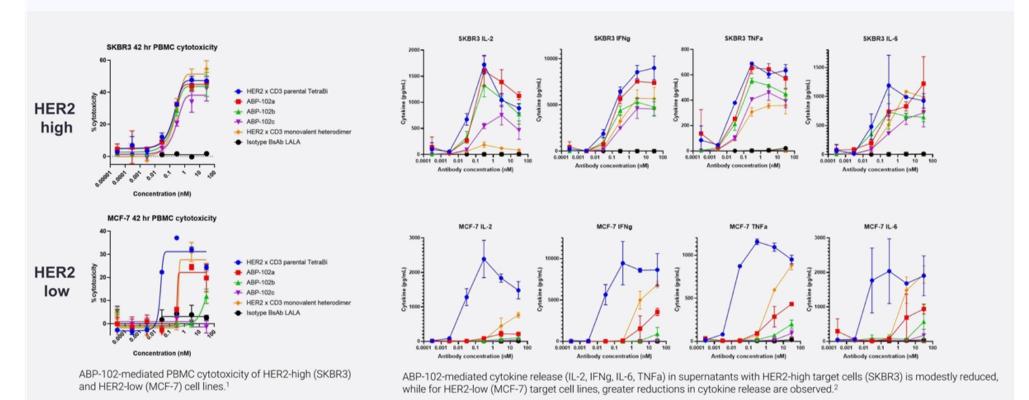
Conclusion: ABP-102 candidate bispecific antibodies have potent cytotoxicity at similar levels as the parental non-affinity-tuned bispecific antibody on HER2-high and HER2-intermediate cell lines. On HER2-low cell lines, ABP102 candidates have reduced cytotoxicity, and exhibit more selectivity than the parental bispecific antibody, reducing the potential for "on-target, off-tumor" toxicity.

<sup>1 (</sup>left panel) Abpro internal data; trastuzumab (1ug/mL) + anti-human IgG Fc specific PE; flow cytometry on BD FACSCelesta.

<sup>&</sup>lt;sup>2</sup> (right panel) Abpro internal data; cytotoxicity of cell lines using PBMCs (10:1 E:T ratio) after 42 hours, readout by CellTiterGlo2.0 reagent (Promega).

# ABP-102: engineered TetraBi antibodies exhibit functional selectivity for T cell activation, including reduced cytokine release for HER2-low expressing cell lines





Conclusion: ABP-102 engineered dual-arm affinity reduction strategy resulted in candidates with reduced cytokine release compared to the parental molecule, reducing the potential for "on-target, off-tumor" toxicity.

1 Abpro internal data; cytotoxicity of cell lines using PBMCs (10:1 E:T ratio) after 42 hours, readout by CellTiterGlo2.0 reagent (Promega).

<sup>2</sup> Abpro internal data; cytotoxicity of cell lines using PBMCs (10.1 E:T ratio) after 42 hours, readout by bead-based multiplex assay for cytokine detection (R&D Systems/Luminex).



# **Additional Data for ABP-201**

VEGF/ANG-2 BISPECIFIC ANTIBODIES

# ABP-201 Exhibits Favorable PK Compared with Eylea

# Eylea 1.2 mg dose in Rabbit

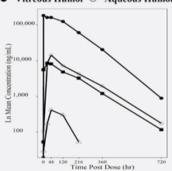
Table 2. PK Parameters of Aflibercept (Eylea) in the Vitreous, Aqueous Humor, and Retina-Choroid of Eyes From New Zealand White Rabbits

PK Parameters	Vitreous	Aqueous Humor	Retina–Choroid
T <sub>1/2</sub> , h*	$94.1 \pm 21.4$	47.9 ± 7.1	58.2 ± 76.9
MRT, h*	$135.8 \pm 30.9$	$69.2 \pm 10.2$	84.0 ± 110.9
C <sub>max</sub> , μg/mL <sup>†</sup>	989.0	108.9	21.9
$T_{\text{max}}$ , $h_1^{+}$	1	48	24
$AUC_{tast}$ , $h \times \mu g/mL^{\dagger}$	135,810.6	13,889.7	2453.1
V/F, mL*	$1.4 \pm 0.1$	-	-
CL/F, mL/h°	$0.01 \pm 0.001$	-	-

Invest Ophthalmol Vis Sci. 2016;57:2612-2617. DOI:10.1167/ iovs.16-19204

## ABP201 0.2 mg dose in Rabbit

◆ Vitreous Humor → Aqueous Humor <del>-</del> Retina → Serum



ABP-201 0.2mg dose in Rabbit <sup>1</sup>					
PK parameter	Unit	Serum	Aqueous	Vitreous	Retina
C <sub>max</sub>	µg/ml	0.415	14.374	183.357	8.457
t <sub>max</sub>	h	48	48	1	24
t <sub>1/2</sub>	h	38	108	82	106
AUC <sub>0-tlast</sub>	(ug*h)/ml	52	2529	36922	1777
AUC <sub>0-inf</sub>	(ug*h)/ml	55	2557	37027	1795
MRT	(h)	89	165	142	158

<sup>1</sup>Study contracted at ContractKinetica, LLC

# Certain Risk Related to ACAB, Abpro and the Business



**Combination** 

All references to the "Company," "we," "us" or "our" refer to the business of Abpro Corporation. and its subsidiaries, taken as a whole, unless the context otherwise requires. The risks noted below are not exhaustive and are qualified in their entirety by disclosures contained in future documents filed or furnished by the Company, Atlantic Coastal Acquisition Corp. II. ("ACAB"), the newly formed company that will become the parent company of the Company and ACAB (the "combined company" or "NewCo") after the proposed business combination and the related transactions contemplated among the parties (collectively, the "Business Combination"), or others, with the U.S. Securities and Exchange Commission (the "SEC"). The risks presented in such filings will include risks with respect to the business and securities of the Company, ACAB, and Newco, as well as risks related to the Business Combination and any related financing, and may differ significantly from and be more extensive than those presented below. Certain risks related to ACAB, Abdro. and the Business Combination include the following:

- ACAB's and Abpro's ability to complete the Business Combinations involving SPACs that could adversely affect ACAB's
  and Abpro's ability to negotiate and complete the Business Combinations;
- · Abpro's success in retaining or recruiting, or changes required in, officers, key employees, or directors following the Business Combination;
- The funds in the trust account being available to ACAB or the combined company;
- · ACAB's or the combined company's ability to obtain additional financing to complete the Business Combination;
- ACAB's public securities' liquidity and trading and those of the combined company;
- . The lack of a market for ACAB's or the combined company's securities;
- . The use of funds not held in the trust account or available to ACAB from interest income on the trust account balance and the trust account not being subject to claims of third parties;
- The impact of macroeconomic conditions and geopolitical crises;
- The number of ACAB shareholders voting against the business combination proposal;
- . The occurrence of any event, change or other circumstances that could give rise to the termination of the business combination agreement;
- The ability to achieve and maintain the listing of the combined company's shares on a national securities exchange following the Business Combination;
- Changes adversely affecting the businesses in which Abpro is engaged, including the risk that the Business Combination disrupts current plans and operations of the Company as a result of the announcement or the consummation of the Business Combination;
- · Management of growth and Abpro's ability to execute on its business strategy and plans;
- · The result of future financing efforts;
- Risks related to regulatory matters, including regulatory approvals and laws and regulations related to anti-corruption, cyber security and privacy;
- Risks related to regulatory approval of Abpro's current or future products and therapies and Abpro's ability to successfully commercialize any these products and therapies in a timely manner or at all, as well as Abpro's ability to accurately anticipate demand and efficacy for its products and therapies;
- . Abpro's future financial performance, including the risk that Abpro's financial results and business metrics are likely to fluctuate on a quarterly and annual basis;
- Market opportunity estimates and growth forecasts are subject to significant uncertainty and are based on assumptions and estimates that may not prove to be accurate;
- . Risks related to Abpro's ability to retain and expand its development agreements, the lack of long-term and binding commitments with co-developers, and its ability to compete effectively,
- · Risks related to international operations and related regulatory risks;
- . Risks related to our intellectual property, including our ability to protect our IP portfolio and risks related potential claims by third parties;
- . Abpro's failure to raise additional capital or generate the significant capital necessary to maintain and expand its operations, and risks related to Abpro's ability to continue as a "going concern";
- Abpro's ability implement and maintain sufficient internal controls over financial reporting and disclosure controls and procedures, and its ability to report its financial results in an accurate and timely manner.
- Fluctuations in the stock price of the combined company's securities;
- Any projections will not have been prepared with a view toward compliance with published guidelines of the American Institute of Certified Public Accountants, and have not been compiled or examined by any registered public accountants nor any other independent expert or outside party;
- Risks related to the limited public company experience among Abpro's management team and risks related to Abpro's ability to operate as a public company and comply with applicable law and regulations and corporate governance matters applicable to public companies, including those required by the SEC and applicable stock exchange;
- . Certain of ACAB's and Abpro's directors and officers and significant stakeholders may have interests in the Business Combination different from the interests of ACAB's or Abpro's shareholders;
- The exercise of discretion by directors and officers ACAB or Abpro in agreeing to changes to the terms, or waivers of closing conditions, in the definitive agreements with respect to the Business Combination and potential conflicts of interest of SPAC's sponsor, directors and officers; and
- Costs related to the Business Combination and the increased costs of being a public company following the consummation of the Business Combination.

42

# Thank you!

# Mission:

Developing antibody therapies to improve the lives of patients facing severe and lifethreatening diseases





https://abpro.com/



IR@abpro.com