ExpreS²ion Biotech Holding AB

Økonomisk Ugebrev / Investor Pitch

April 2022

Proteins for Life

Bent U. Frandsen, CEO

EXPRES²ION BIOTECHNOLOGIES

A prospectus has been prepared in connection with the Rights Issue, which is referred to in this Presentation, and has been reviewed and approved by the Swedish Financial Supervisory Authority. Such approval shall not be regarded as an approval of the Company or as support for the shares offered. The prospectus contains a description of the risks and rewards associated with an investment in the Company and potential investors are recommended to read the prospectus in its entirety before making an investment decision. The prospectus has been prepared in Swedish and English and is available on the Company's web page, www.expres2ionbio.com.

Disclaimer

This company presentation (the "**Company Presentation**"), which is personal to the recipient, is issued by ExpreS^{2}ion Biotech Holding AB (the "**Company**"). The Company Presentation has been prepared for information purposes only and is not to be relied upon in substitution for the exercise of independent judgement. The Company Presentation may not be reproduced, redistributed, passed on or published, in whole or in part, to any other person for any purpose. Unless otherwise stated, the Company is the source for all data contained in the Company Presentation. Such data is provided as at the date of this Company Presentation and is subject to change without notice. The Company Presentation (together with any further information which may be provided to the addressee) is made available on the condition that it is for use only by the addressee specified above for the sole purpose of evaluating the Company and shall not be passed on to any other person or copied or reproduced, copied, distributed, disclosed or published in whole or part and shall be immediately returned along with any other copies or destroyed at any time at the request of Company. The Presentation does not constitute a prospectus within the meaning of the Regulation (EU) 2017/1129 (as amended) ("**Prospectus Regulation**") and has not been reviewed or approved by any regulatory authority or stock exchange. The Presentation does not constitute an offer or invitation to sell or purchase, or any solicitation of any offer to purchase or subscribe for, any securities of the Company in Sweden, the United States or any other jurisdiction. Neither the Presentation, nor any part of it, shall form the basis of, or be relied upon in connection with, any contract or commitment whatsoever. Any public offering of securities of the Company in Sweden is made pursuant to a prospectus prepared in accordance with the Prospectus Regulation applicable in any member state and approved by the Swedish Financial Supervisory Authority. A prospectus relating to the Rights Issue as referred to in the Presentation is available on the Company's web page. By receiving this Company Presentation and/or attending a presentation concerning the contents hereof you acknowledge that you will be solely responsible for your own assessment of the Company and that you will conduct your own analysis and be solely responsible for forming your own view of the potential future performance of the Company. This Company Presentation includes forward-looking statements. All statements other than statements of historical fact included in this Company Presentation, including, without limitation, those regarding the Company's financial position, business strategy, management plans and objectives for future operations are forward-looking statements. These forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause the Company's actual results, performance, achievements or industry results to be materially different from those expressed or implied by these forward-looking statements. Forward-looking statements speak only as of the date of this Company Presentation and the Company expressly disclaim any obligation or undertaking to release any update of, or revisions to, any forward-looking statements in this Company Presentation as a result of any change in expectations or any change in events, conditions or circumstances on which these forward-looking statements are based. No representation is made that any of these forward-looking statements or forecasts will come to pass or that any forecast result will be achieved.

Investment Highlights

Key player in advanced protein sciences, with deep pipeline of novel vaccines addressing high-value markets

High-potential pipeline of key focus, backed up by Contract Research Organization (CRO) business, that has generated SEK 60 million since IPO in 2016

Vaccine development platform with track record and partner validation.
+500 proteins produced while posting +90% success rate

Global vaccine market rapidly growing, from USD 33bn (2019) to USD 187bn (2021), corresponding to 460% growth

ExpreS²ion is advancing towards key catalysts during 2022, further de-risking the company's pipeline. COVID-19 phase III initiation in H1 2022

Management Team

>200 years of professional skills and experience from the *life sciences* industry

Management

- **Bent U. Frandsen**, Chief Executive Officer
- **Keith Alexander**, Chief Financial Officer
- **Dr. Max Soegaard**, VP R&D and Technology
- **Dr. Mette Thorn**, VP Preclinical Development
- **Dr. Mattis F. Ranthe**, Chief Medical Officer

Board of Directors

- **Dr. Martin R. Jensen**, Chairman & Co-founder
- **Dr. Allan Rosetzsky**, Member of the Board
- **Jakob Knudsen**, Member of the Board
- **Dr. Karin Garre**, Member of the Board
- **Sara Sande**, Member of the Board

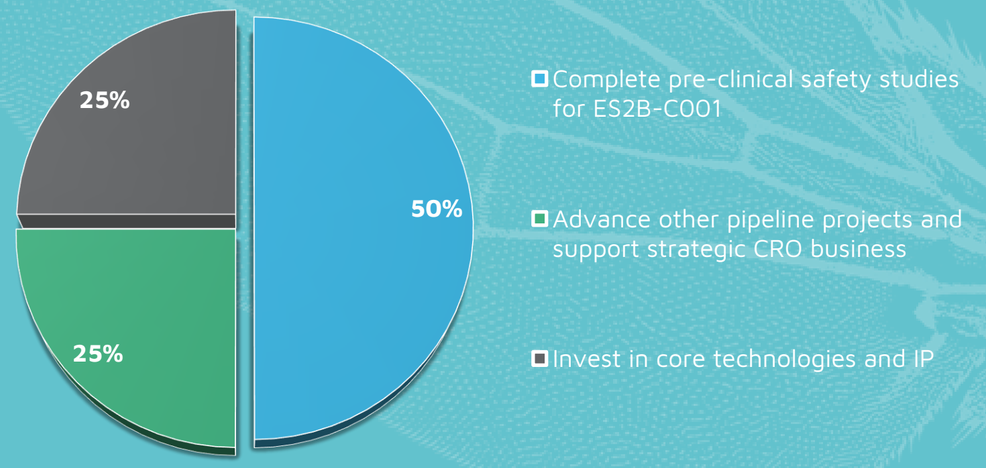
Rights Issue

De-risking the pipeline development

- Maximum number of new shares to be issued: 5,841,273
- Subscription price of SEK 12.50 per share
- Three rights for every eight shares; Two rights entitles subscription for one new share
- Subscription period: April 19, 2022 to May 3, 2022
- Subscription commitments of 2.5% and guarantee undertakings of 97.5% of the Rights Issue

Raising approx. 73 million SEK in gross proceeds

Use of Proceeds



VWAP = Volume-Weighted Average Share Price

A prospectus in relation to the Rights Issue has been published by the Company and is available on the Company's web page.

ExpreS²ion's Business Model

High-potential pipeline and revenue generating CRO business

ExpreS² Platform for Protein Expression

+500 different proteins have been produced with the ExpreS² platform, while posting a success rate exceeding 90% across +100 clients and partners.

Novel Pipeline Development

Independent

- Fully-owned development of novel protein therapeutics and vaccines
- After human PoC, targeting partner externally for further development

Collaboration

- Partner with leading research organizations to source and develop novel programs
- Potential to fully acquire programs for independent development

Significant upside potential: intermediate/long-term

Contract Research Organization (CRO)

Services

- Early-stage R&D for leading academic, research, and biotech organizations
- Protein feasibility, delivery, and transfer to GMP production

Licensing & Kit Sales

- Fully out-license rights to ExpreS² technology
- Sell test kits and reagents for research or diagnostic applications

Revenue-generating business: current and long-term payments

Technology Platforms

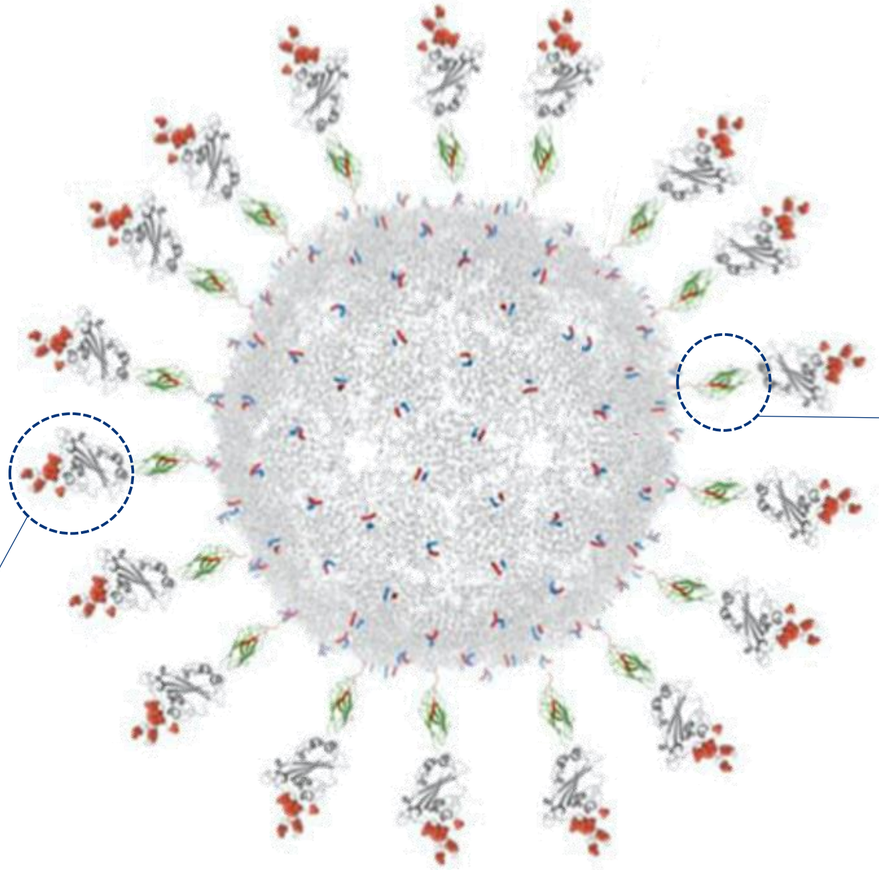
ExpreS²ion's ExpreS² and AdaptVac's cVLP platform

Cell line derived from *Drosophila melanogaster* (fruit fly) S2 cells[1]

ExpreS² platform

Combines S2 cells with patented expression vectors (add a specific gene into a target cell and command the cell to produce the gene encoded protein), adapted culture agents and reagents (stimulating cell growth)

100% ownership



ExpreS² protein (antigen) combined with AdaptVac's cVLP containing no viral genetic material causing an immune reaction

Particle (VLP) technology

AdaptVac's proprietary virus-like particles (VLP) technology securely attaches our proteins to the surface of a capsid (outer protein protective shell of a virus), mimicking a virus to elicit an immune response

34% ownership

[1] Schneider I (1972). "Cell Lines Derived from Late Embryonic Stages of *Drosophila melanogaster*". *J. Embryol. Exp. Morphol.* 27: 363–365.
Note: ExpreS²ion Biotech founders invented an Improved Vector System derived from S2 cells; granted patent until 2032 (US); glyco-engineered S2 cells pending patents until 2040.

ExpreS² and AdaptVac's VLP

The platforms combined enable powerful vaccines to handle a wide range of diseases

ExpreS², advantages in discovery manufacturing

- ✓ **Rapid delivery (3-6 months) of high-quality and uniform proteins,** important competitive advantage, considering time-to-market and patent expiry
- ✓ **Higher yields,** i.e. amount of protein per manufacturing batch, compared to competing systems
- ✓ **Homogeneous manufacturing batches,** high batch-to-batch consistency, a requirement in pharmaceutical development

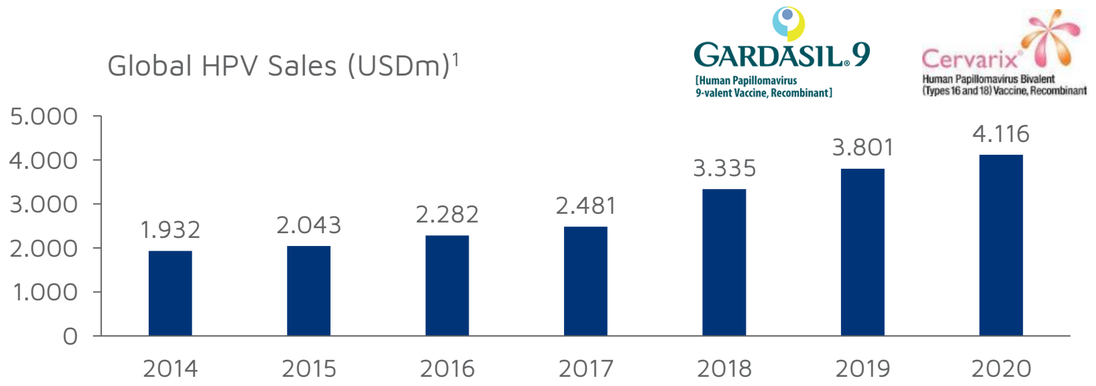
AdaptVac's cVLP platform, high immunogenic potential

- ✓ **Full length proteins**: Exceptionally strong attachments can hold entire complex proteins; other VLP approaches can only support fragments (single epitopes)
- ✓ **High density display** on surface (180 attachment sites): Increased, faster, focused immune response
- ✓ **Directional attachment** (vs random orientation in other systems)

Proprietary process and expertise has established ExpreS²ion as the leader in specialty protein production

- ✓ **20+ years of experience**
- ✓ **Over 90% success rate, over 500 proteins expressed**
- ✓ **Go-to source for challenging proteins**

VLPs have track record of success of commercial success in cancer



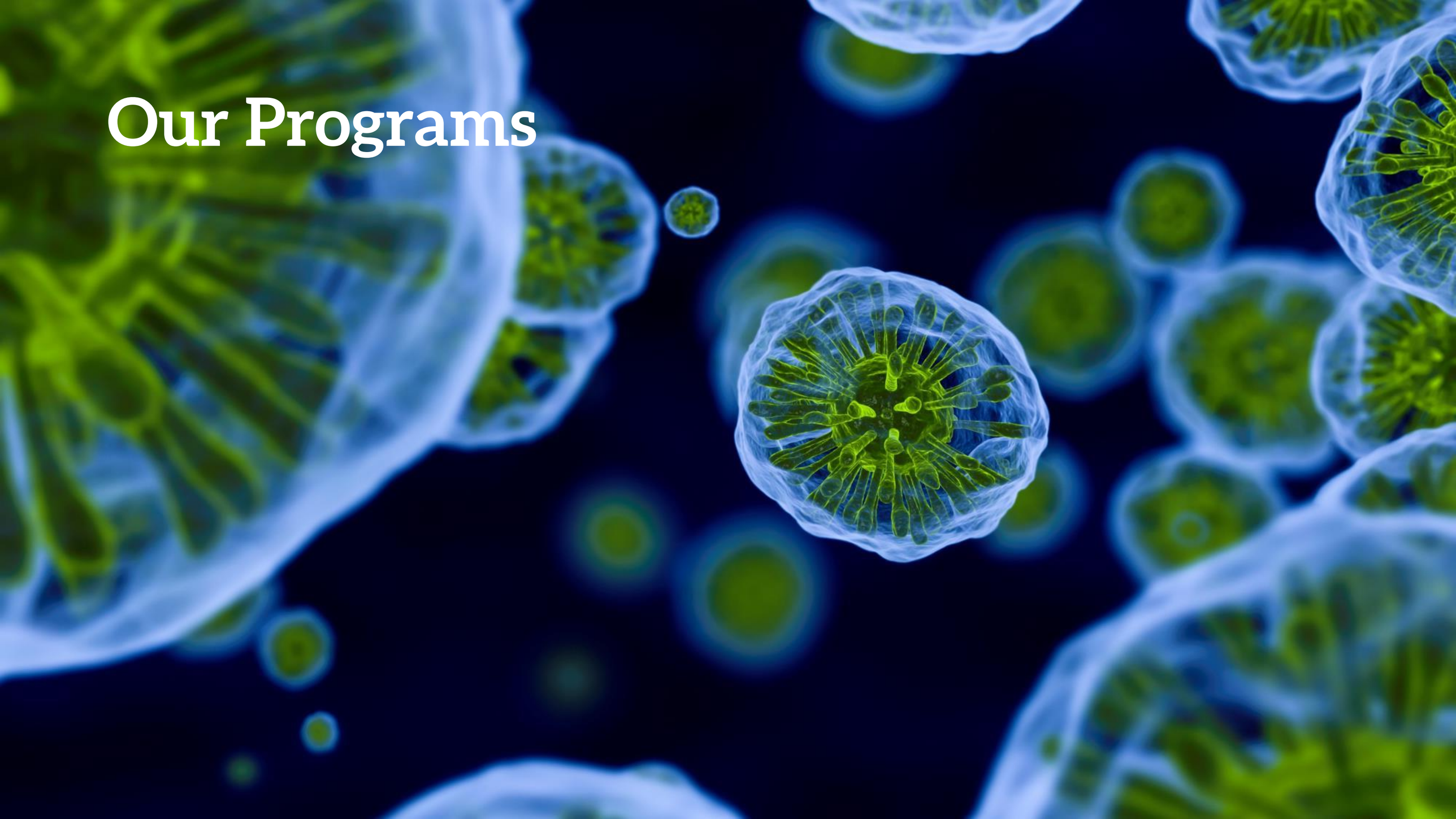
[1] GlobalData, 2022

Deep Pipeline for Value Creation

DISEASE	Project/Target	Development Progress: Discovery	Pre-clinical Pharmacology	cGMP / Tox	Phase I	Phase II	Phase III	Partner/Funding
Coronavirus	ABNCoV2/SARS-CoV-2 cVLP						Phase III initiation: H1 2022	adaptVAC, BAVARIAN NORDIC, European Commission PREVENT-nCoV
Breast Cancer	ES2B-C001/HER2 cVLP				Phase I initiation: 2024			100% ExpreS²ion
Influenza	Hemagglutinin			Toxicology initiation: 2023				European Commission INDIGO
Malaria:								
1: Blood-Stage	RH5			Phase Ib readout: H2 2023				European Commission MultiViVax, THE JENNER INSTITUTE, UNIVERSITY OF OXFORD
2: Blood-Stage	RH5-VLP				Phase I initiation: 2023			wellcome trust, THE JENNER INSTITUTE, UNIVERSITY OF OXFORD
3: Transmission	Pfs 48/45				Phase I initiation: 2022			European Commission OptimalVax, THE JENNER INSTITUTE, UNIVERSITY OF OXFORD
4: Placenta-Borne	VAR2CSA					Phase II initiation: 2023		UNIVERSITY OF COPENHAGEN, EBERHARD KARLS UNIVERSITÄT TÜBINGEN
5: Blood-Stage	CYRPA complex							Walter+Eliza Hall Institute of Medical Research, DISCOVERIES FOR HUMANITY

Note: AdaptVac is a joint venture between ExpreS²ion (34% owned) and NextGen Vaccines (66% owned)

Our Programs



EXPRES²ION BIOTECHNOLOGIES

Breast Cancer Overview

The ES2B-C001 vaccine can offer significant benefits compared to current treatment options

Monoclonal antibodies are the cornerstone of treatment for HER2+ breast cancer (>USD 11bn sales)[1]

- Target the HER2 receptor on tumor cells to reduce proliferation and induce tumor cell destruction

Herceptin® trastuzumab

PERJETA® pertuzumab

Serious drawbacks exist with these therapies[2]

- **Resistance** to monoclonal antibodies may develop
- **Potential for cardiac toxicity**
- **Repeated administration required**: 28-day half-life requires administration every 3rd week until remission or resistance develops, costs USD 30-50k

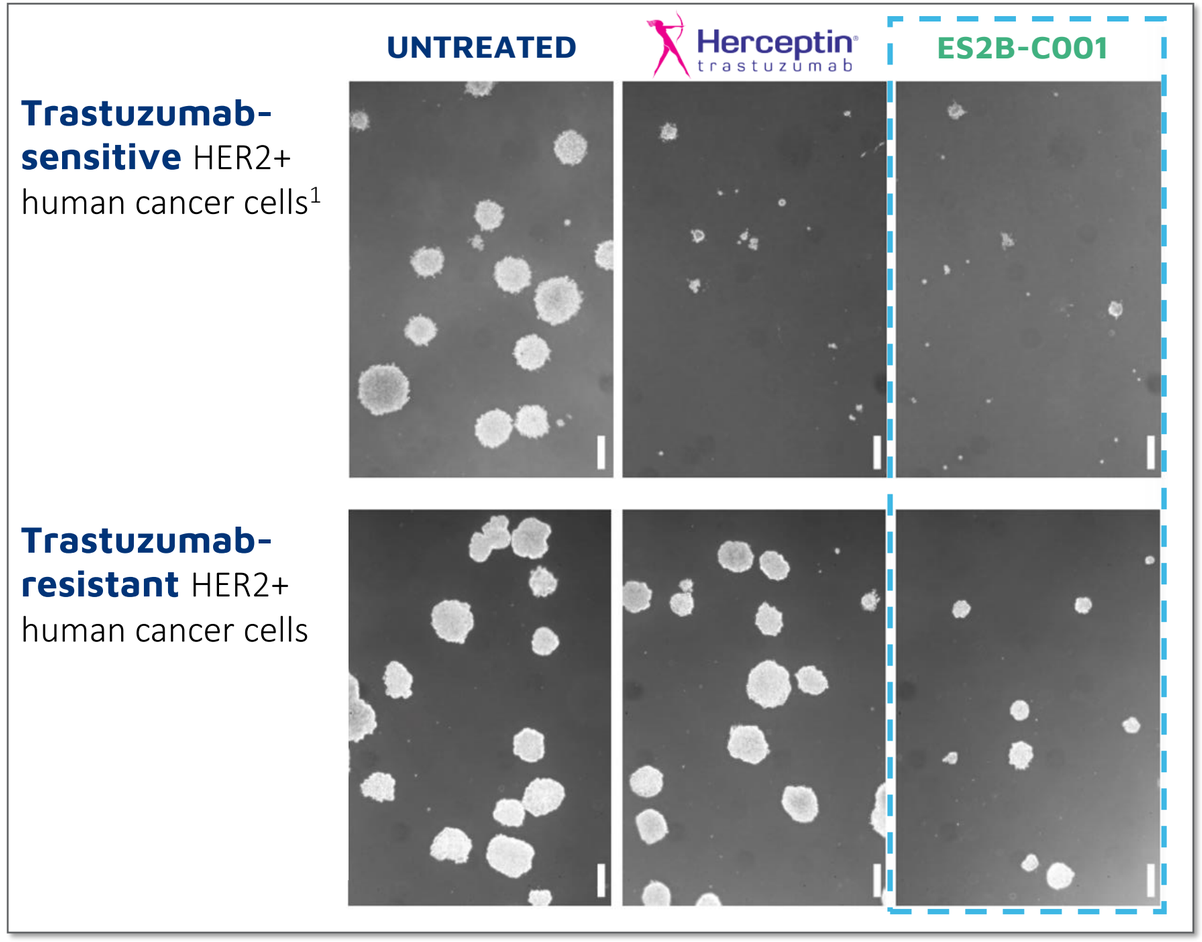
ExpreS²ion's vaccine-like approach offers potential to overcome drawbacks through *internal antibody production*

[1] GlobalData, 2022
[2] Pallerla et al. 2021. Cancer Vaccines, Treatment of the Future: With Emphasis onHER2-Positive Breast Cancer, International Journal of Molecular Sciences.; Krasniqi et al. 2019. Immunotherapy in HER2-positive breastcancer: state of the art and futureperspectives, Journal of Hematology & Oncology.

EXPRES²ION BIOTECHNOLOGIES

ES2B-C001 Overcomes Herceptin Resistance

The soft agar human cancer cell growth inhibition assay provides *in vitro* evidence



Both Herceptin (trastuzumab) and ES2B-C001 inhibited growth in the trastuzumab-sensitive cells

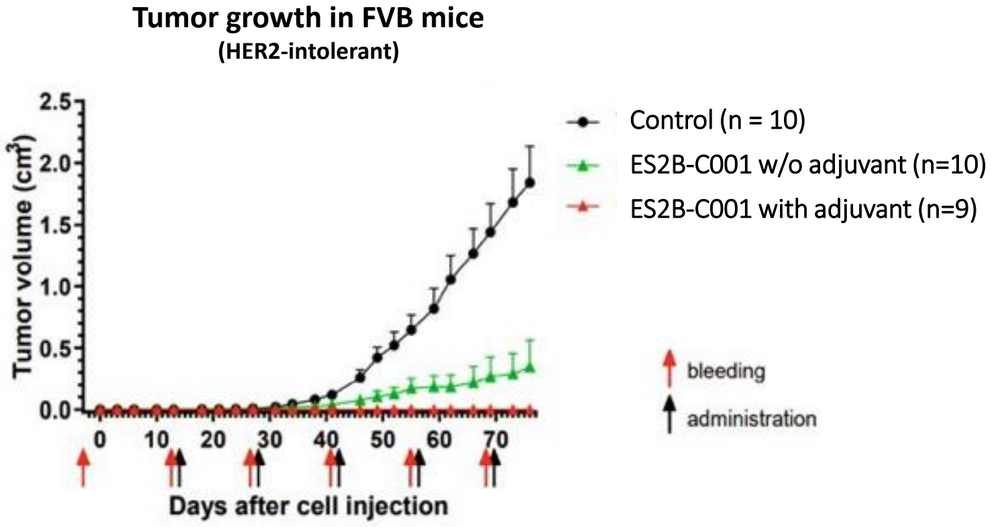
Only ES2B-C001 inhibited growth in the trastuzumab-resistant cells; cells were unresponsive to Herceptin

Note that this data was generated for AdaptVac's predecessor vaccine candidate (HER2-VLP very similar to ES2B-C001)
Source: Palladini, A. et al. (2018), "Virus-like particle display of HER2 induces potent anti-cancer responses", OncoImmunology, pub. Vol 7, no 3

ES2B-C001 Preclinical Proof-of-Concept

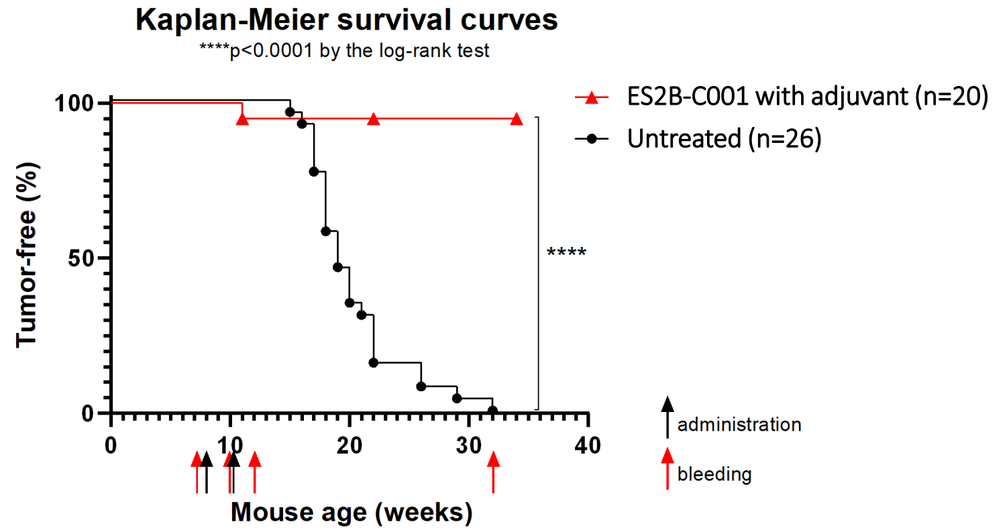
ES2B-C001 has demonstrated animal proof-of-concept

Effectively inhibited tumor development



- Two weeks after the inoculation of tumor cells, the first vaccine administration was given. Repeated every 2nd week during the study
- **ES2B-C001 formulated in an adjuvant totally blocks tumor development. ES2B-C001 without adjuvant partly blocks tumor development** and if tumors develop, growth is significantly inhibited

Prevented tumor development with 95% efficiency



- At mouse age 6-8 weeks, 2 vaccinations with 2 weeks interval were administered to Delta16 mice
- **Two vaccinations prevented tumor development with 95% efficiency** as compared to a control group, where all mice spontaneously developed tumors

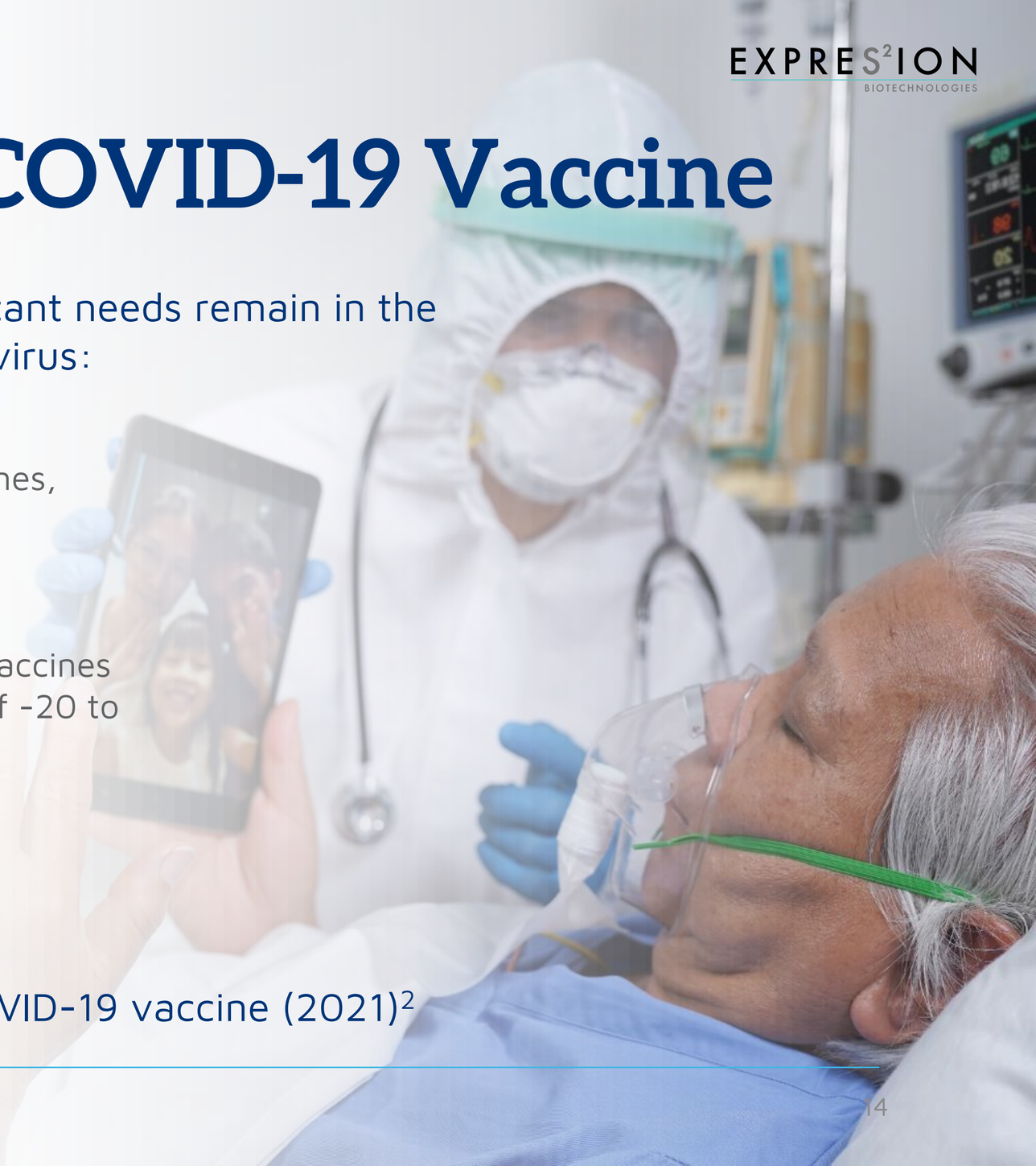
Note: FVB mice are mice being challenged with tumors, while Delta16 mice spontaneously develop tumors and have been inoculated with tumor cells to accelerate tumor development

EXPRES²ION BIOTECHNOLOGIES

The 2nd Generation COVID-19 Vaccine

With **over 6 million deaths worldwide**[1], significant needs remain in the global long-term fight against the SARS-CoV-2 virus:

- Uncertain duration of effect with current vaccines, expected to need repeated boosters
- Storage and handling requirements for many vaccines create logistical constraints (requires storage of -20 to -80 degrees Celsius)
- Potential mutated variants may require rapid development of new vaccines



Global market size of **USD 137 billion** for the COVID-19 vaccine (2021)[2]

[1] WHO Coronavirus (Covid-19) Dashboard
[2] Meticulous Market Research, 2021

CORONAVIRUS

ABNCoV2 COVID-19 Vaccine

Successful completion of Phase II study, and initiation of Phase III in H1 2022

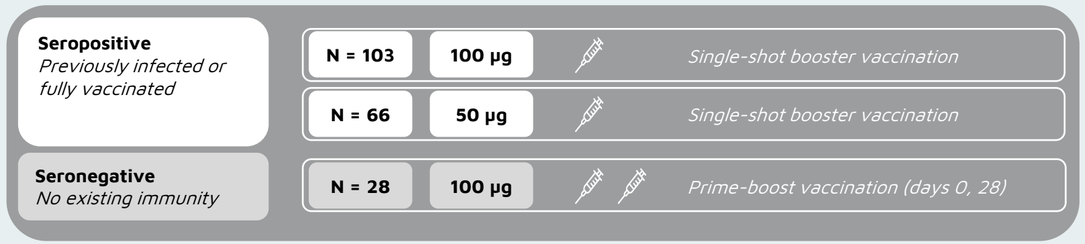
Phase II: Safe & highly efficacious against SARS-CoV-2

- **Favorable safety profile: Vaccine was generally well-tolerated, with no related serious adverse events reported**
- No relevant difference in the safety profile between subjects receiving the low (50 µg) or high dose (100 µg) of ABNCoV2
- **Booster vaccination with ABNCoV2 found no difference in responses in variants of concern** (Wuhan, α, β and δ)
- **Strong booster response for both 50µg and 100µg doses**
- **Seronegative antibody titers >90% efficacy, confirms Phase I results**
- Phase I data documented up to 12 times higher compared to the levels achieved after COVID-19 infection - significantly higher than the virus neutralization levels reported for leading mRNA COVID-19 vaccines

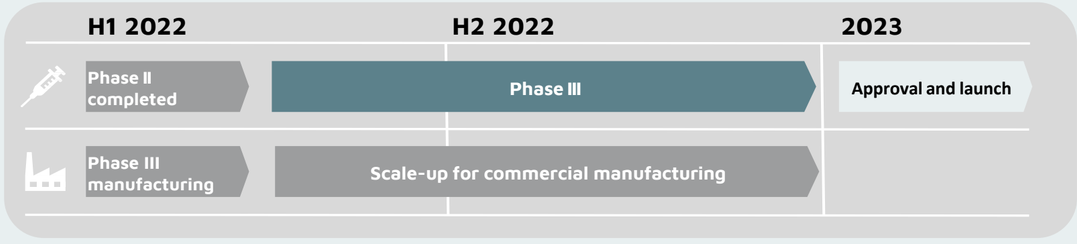
Phase III: Initiation of pivotal study in H1 2022

- **Bavarian Nordic plan Phase III study initiation H1 2022, granted DKK 800m funding**
- An overall agreement has been made with regulatory authorities on the trial design
- Approx. 4,000 seropositive subjects who will receive a booster vaccination with 100µg ABNCoV2 or an mRNA-based vaccine, aiming to demonstrate non-inferiority of ABNCoV2 to the licensed mRNA vaccine
- Manufacturing of vaccine bulk for the trial has been completed, filling now ongoing at BN's own manufacturing line
- **Trial planned for initiation in H1 2022 and with anticipated completion before year-end**

Phase II



Phase III



Partnership with Bavarian Nordic

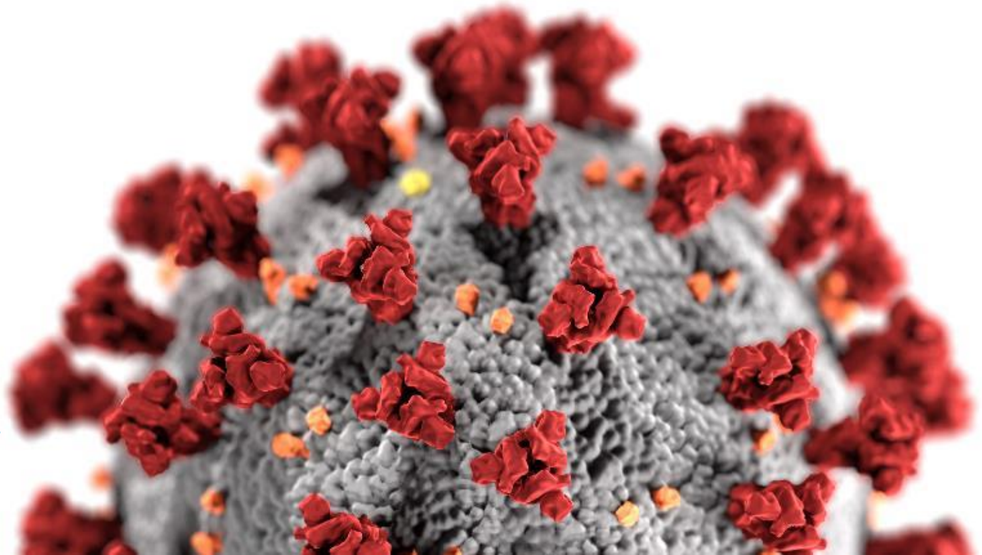
ABNCoV2 is already out-licensed with near-term revenue streams supporting ExpreS²ion

AdaptVac receive from Bavarian Nordic

- EUR 4 million upfront (paid in July 2020)
- Up to EUR 136 million in development and sales milestones
- Single- to double-digit-% royalties of Bavarian revenues

ExpreS²ion receive from AdaptVac

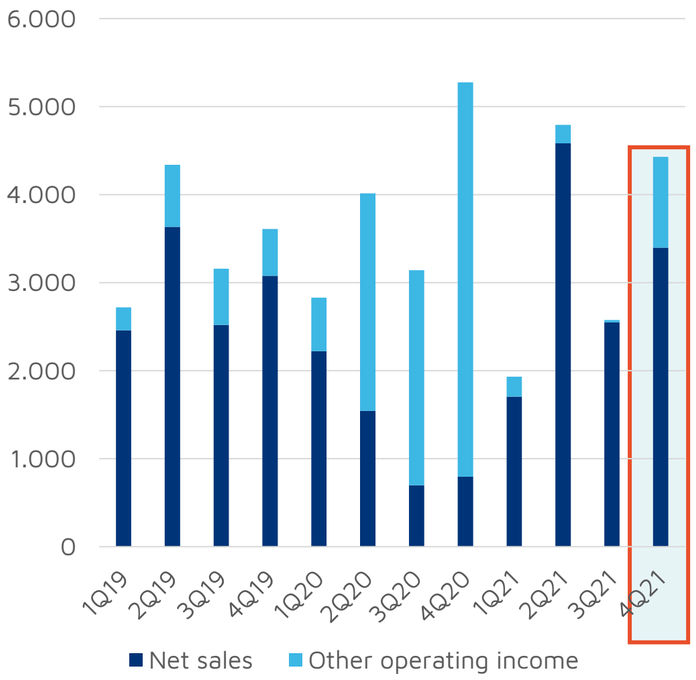
- 34% ownership of AdaptVac
- Up to EUR 2 million in commercial milestone payments
- Lower double-digit percentage of AdaptVac royalties



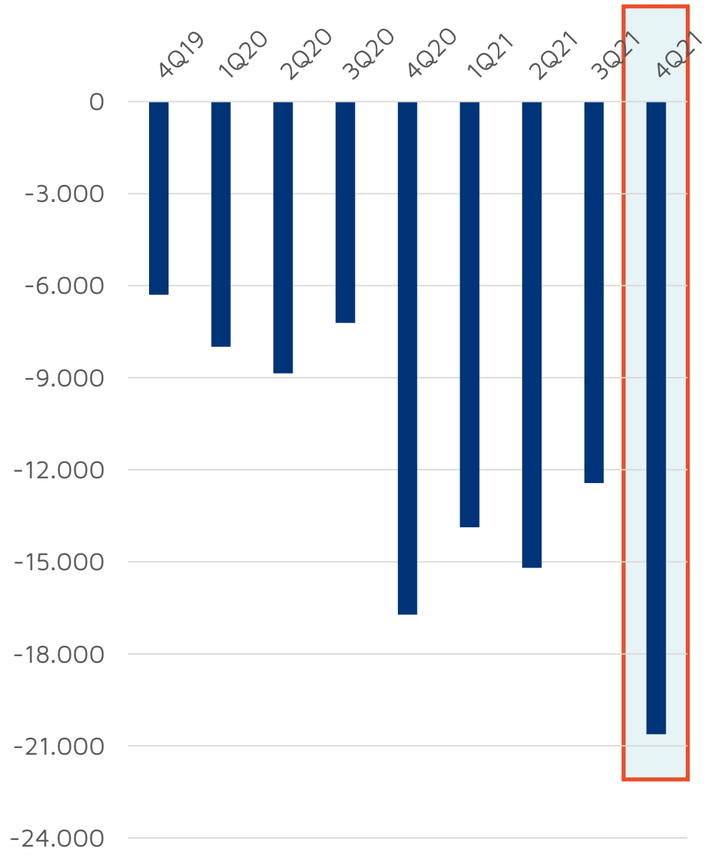
Financials and Outlook

Financials – Fitting the New Strategy

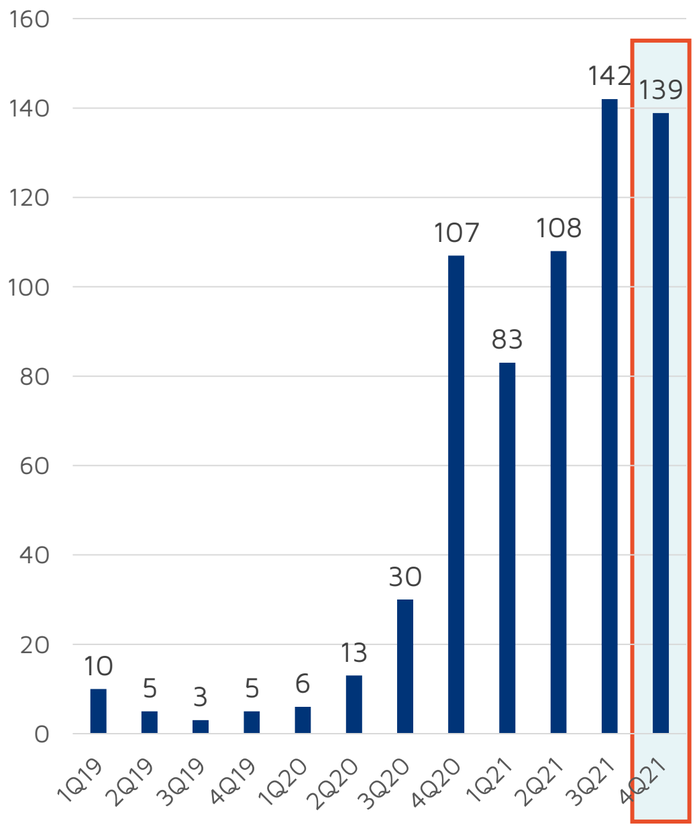
Revenues, SEK `000s



Operating costs, SEK `000s



Cash balance[1], SEK million



[1] At the end of 2021, the Company had SEK 101.8 million in its SKAT account (interest-free tax asset with Denmark's tax authorities), shown in other short-term investments. When combined with cash and bank, the company had SEK 138.9 million available to fund operations. See page 14 of 2021 year-end report for more information..

Rights Issue – what do I need to do?

Subscription in new shares

Investors with or without preferential rights can subscribe for new shares through their:

1. Own registered accounts – where you either can register interest in new shares through:
    a) Your bank respectively (etc. Avanza, Nordnet), where you will find a notice that a rights issue is ongoing in one of your stocks
    b) Or by sending in an issue report with an attached notice of payment to Vator securities, the issue report can be found through Vator Securities webpage, under issuer services and current offerings, or through ExpreS²ion's webpage, under investor relations, IPO and Rights issues. The issue report can be sent to Vator Securities either by email at: emissioner@vatorsec.se or by regular mail to the address: Emissioner / ExpreS²ion, Kungsgatan 34, 111 35 Stockholm.

    How to subscribe to new shares, with option b:

    1. Download the issue report either on Vator securities or ExpreS²ion's homepage.
    2. Fill in the necessary information, Bank, Account nr., number of shares interested, (and in case of preferential rights, the number of rights exercised). There are two types of form. (A) for existing shareholders (with preferential rights), and (B) for new shareholders (without preferential rights).
    3. Submit the issue report either by mail or email.

2. Custody accounts – where you as an investor need to register interest through your custody bank and follow their routines. (Danish investors who hold shares in Danish accounts must subscribe for shares through their custody accounts).

Timetable

Event	Timing
Last day of trading in shares including right to receive subscription rights	11 April 2022
First day of trading in shares excluding right to receive Subscription rights	12 April 2022
Record date for participation in the Rights Issue	13 April 2022
Prospectus published	13 April 2022
Subscription period	19 April - 3 May 2022
Trading in Subscription rights	19 April - 28 April 2022
Trading in BTAs (Paid subscribed New shares)	19 April 2022 until the Rights Issue is registered with SCRO
Announcement of final outcome in the Rights Issue	On or around 5 May 2022

Advancing Towards Key Catalysts

	2022	2023	2024
 **CORONAVIRUS (ABNCoV2)**	✓BN Phase II study initiation (Q3'21) ✓BN Phase II study readout H1 2022 **BN Phase III study initiation H1 2022** **BN Phase III initial readout H2 2022**	**BN ready for market launch** (subject to regulatory approval)	
 **BREAST CANCER (ES2B-C001)**	✓Executed in-licensing (Feb 2021) ✓Preclinical animal studies initiated (Q2) **Preclinical animal proof-of-concept results H1 2022** GMP manufacturing batch	Preclinical safety studies readout Filing of clinical study application H2 2023	**Initiation of first human clinical study 2024** **Outlicensing window opens pending human data**
 **INFLUENZA**	✓Advance/support further development of one or more candidates in 2022	**cGMP/Preclinical safety studies initiation 2023**	
 **MALARIA**	✓Phase IIa results from the Rh5 vaccine published in 2021 ✓RH5 Additional phase I study in a malaria endemic region in Africa launched during 2021, with alternative adjuvant **Pfs 48/45 phase I study initiation 2022**	**RH5-VLP phase I initiation 2023** **RH5 phase I study readout H2 2023**	

Note: Timeline for ABNCoV2 is based on Bavarian Nordic's communicated timeline, and is subject to potential revision

Thank you!

Contact:
info@expreS2ionbio.com

Proteins
for Life

EXPRES²ION
BIOTECHNOLOGIES