31st May 2022

Proteins for Life

Virtual Oncology Webinar

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EXPRES²ION
BIOTECHNOLOGIES

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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

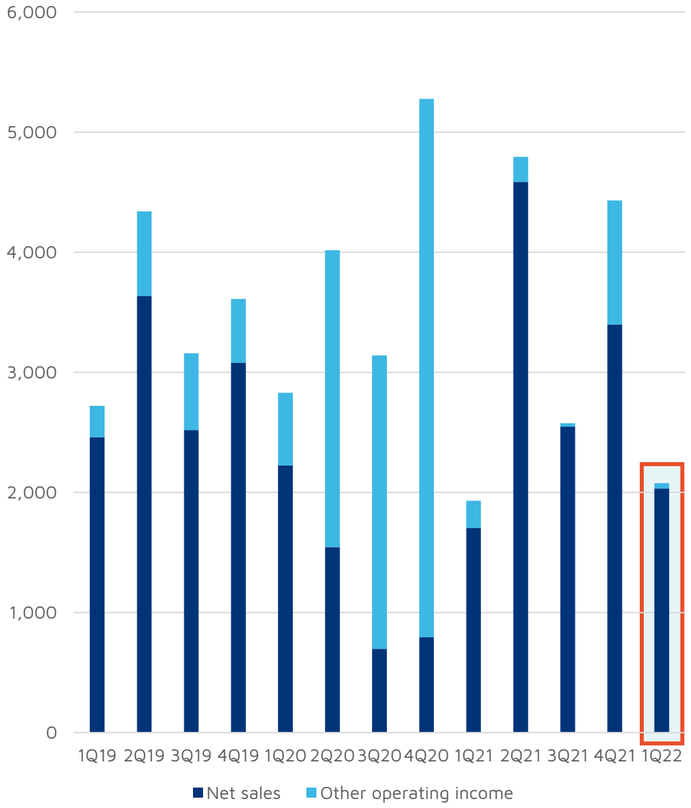
Vaccine development platform with track record and partner validation.
+500 proteins produced while posting +90% success rate

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

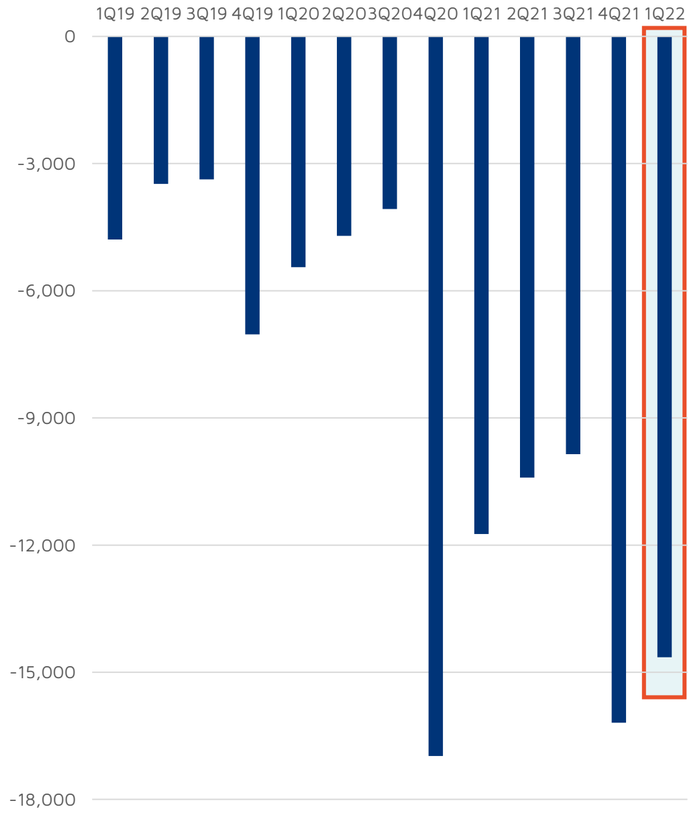
ExpreS²ion is advancing towards key catalysts during 2022, further de-risking the company's pipeline. COVID-19 phase III initiation in H1 2022

Financials as of March 31, 2022 – Fitting the New Strategy

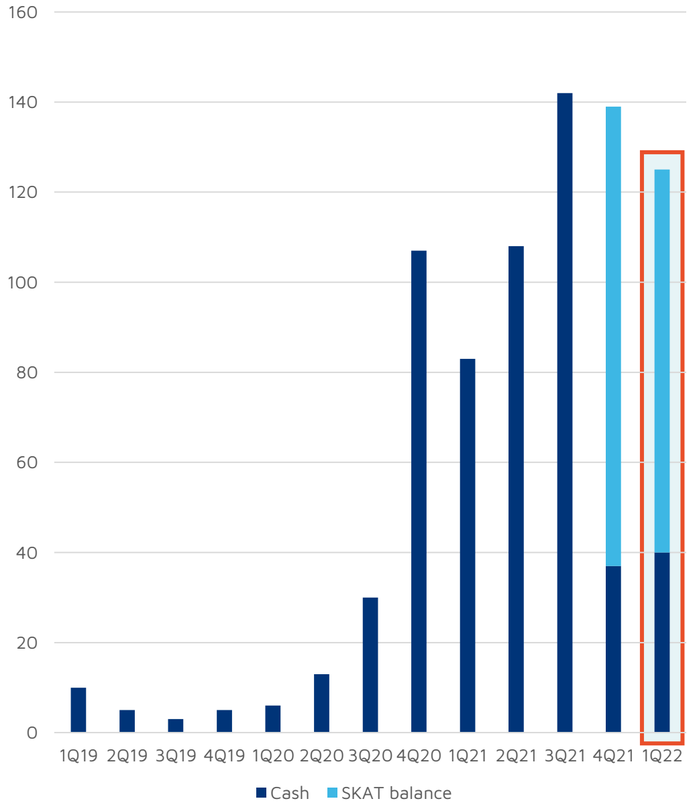
Revenues, SEK `000s



Operating costs, SEK `000s



Cash, including the company's SKAT balance[1], SEK million



[1] At the end of 1Q 2022, the Company had SEK 85.1 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 124.7 million available to fund operations. See page 15 of 1Q 2022 year-end report for more information. Since the end of the quarter, the Company raised an additional approximately SEK 73 million before transaction costs in a rights issue completed on May 5th, 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
Near term value	Coronavirus	ABNCoV2/SARS-CoV-2 cVLP						Phase III initiation: H1 2022	adaptVAC, BAVARIAN NORDIC, PREVENT-nCoV
Oncology asset	Breast Cancer	ES2B-C001/HER2 cVLP				Phase I initiation: 2024			100% ExpreS²ion
	Influenza	Hemagglutinin			Toxicology initiation: 2023				INDIGO
	Malaria:								
	1: Blood-Stage	RH5			Phase Ib readout: H2 2023				MultiViVax, THE JENNER INSTITUTE, OXFORD
	2: Blood-Stage	RH5-VLP				Phase I initiation: 2023			wellcome trust, THE JENNER INSTITUTE, OXFORD
	3: Transmission	Pfs 48/45				Phase I initiation: 2022			OptimalVax, THE JENNER INSTITUTE, 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 Technology & Oncology Program

Technology Platforms

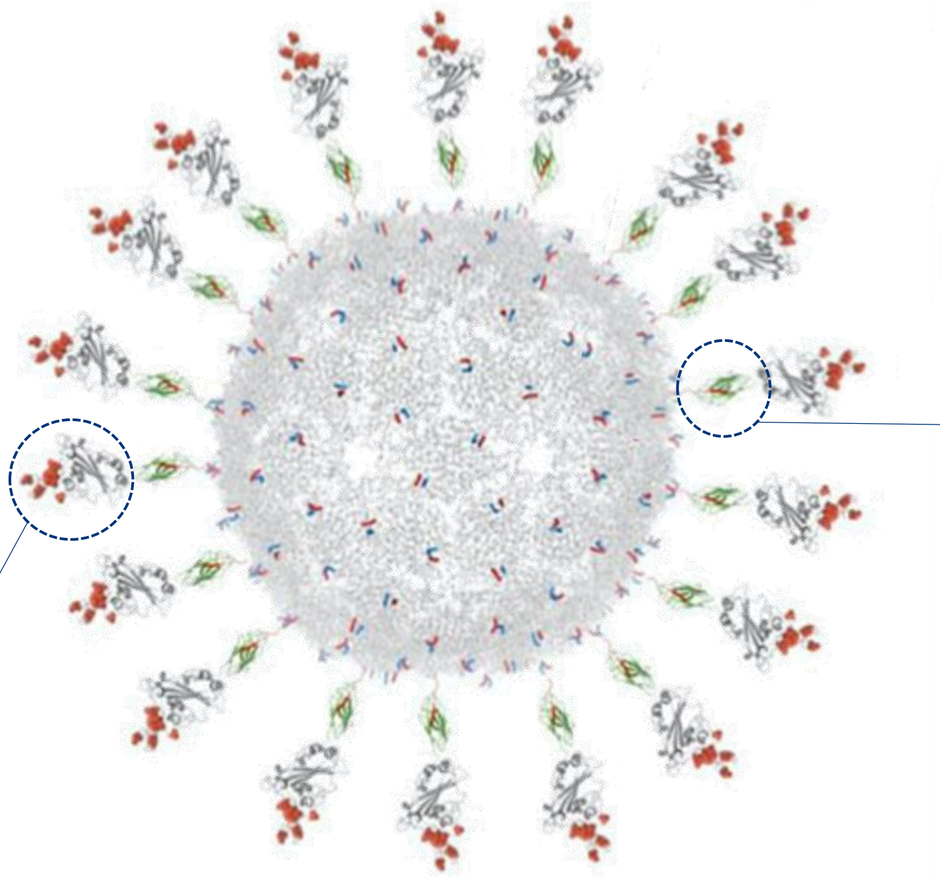
ExpreS^{2}ion's ExpreS^2 and AdaptVac's cVLP are our COVID-19 and Cancer vaccine technologies

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

ExpreS^2 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



ExpreS^2 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: ExpreS^{2}ion Biotech founders invented an Improved Vector System derived from S2 cells; granted patent until 2032 (US); glyco-engineered S2 cells pending patents until 2040.

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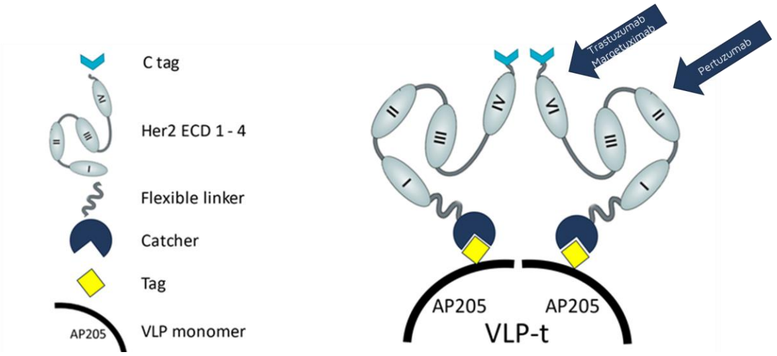
Breast Cancer Overview

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

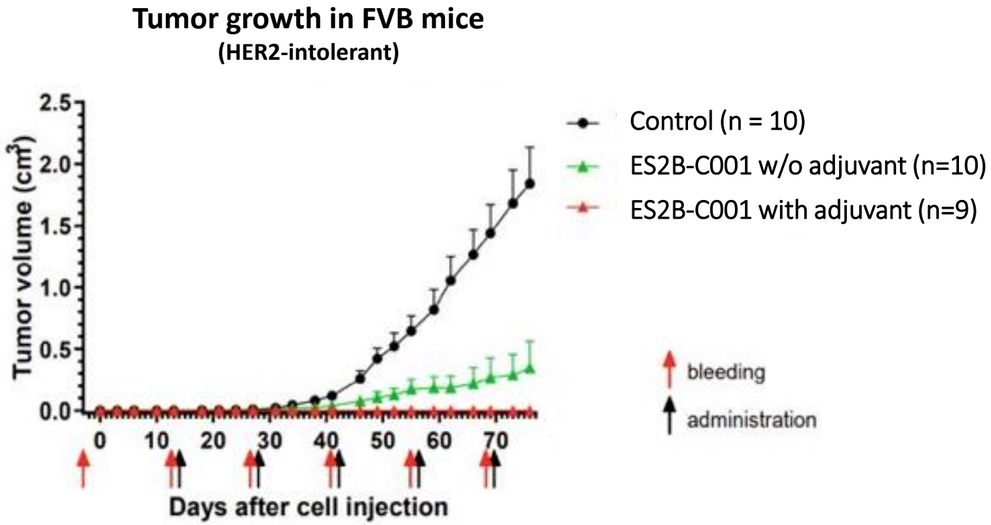
ExpreS²ion's HER2-cVLP vaccine approach offers potential to overcome drawbacks through *internal antibody production*

[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.

ES2B-C001 Preclinical Proof-of-Concept (I)

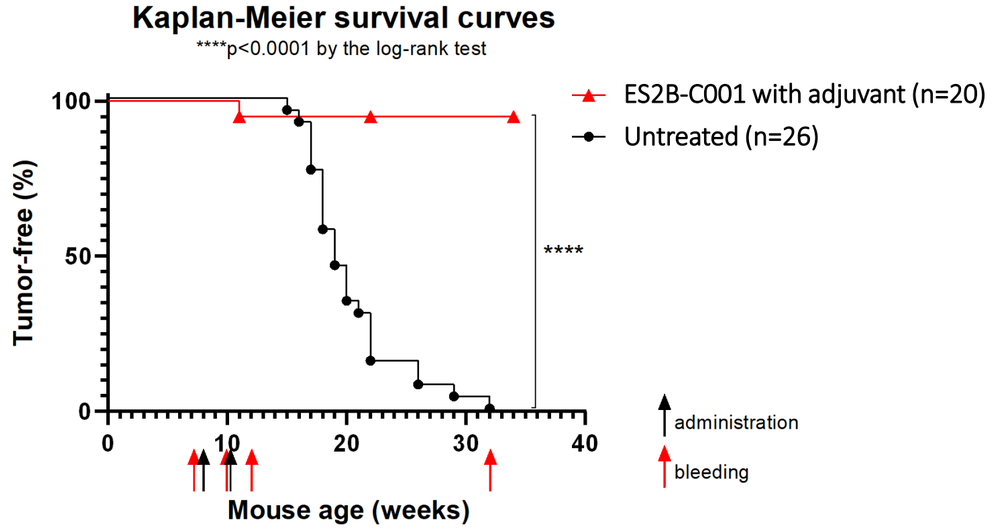
ES2B-C001 has demonstrated proof-of-concept

Effectively inhibited tumor development in FVB mice



- Two weeks after the intramammary fat pad (i.m.f.p.) inoculation of HER2+ 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 blocks tumor development in 7/10 FVB mice

Prevented tumor development in delta16 HER2 tg mice



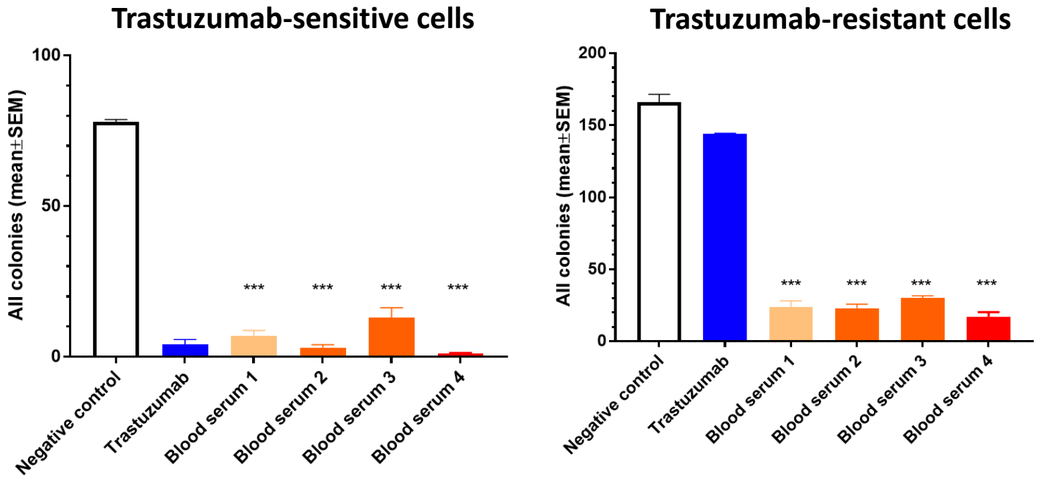
- At mouse aged 6-8 weeks, 2 vaccinations with 2 weeks interval were administered to Delta16 HER2 transgenic mice (HER2-tolerant)
- **Two vaccinations prevented tumor development with 95% efficiency** as compared to a control group, where all mice spontaneously developed tumors within 32 weeks

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

ES2B-C001 Preclinical Proof-of-Concept (II)

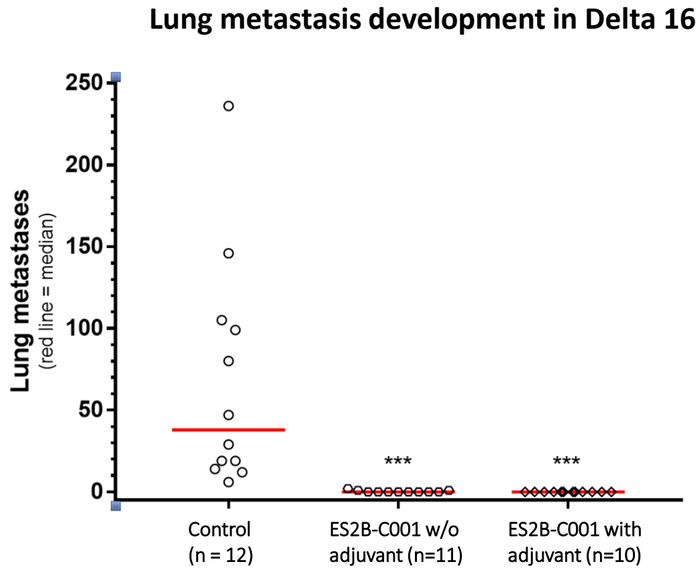
ES2B-C001 has demonstrated proof-of-concept

Overcomes trastuzumab-resistance of tumors *in vitro*



- *In vitro* PoC data in a growth inhibition assay: Blood serum from ES2B-C001-vaccinated mice **significantly inhibited the growth of HER2+ trastuzumab-sensitive as well as trastuzumab-resistant human tumor breast cancer cells**

Inhibited tumor development in delta16 HER2 tg mice



- One week after the intravenous (i.v.) injection of HER2+ tumor cells, the first vaccine administration was given. Repeated every 2nd week during the study
- **All mice vaccinated with E2SB-C001 with adjuvant were tumor-free**
- 73% of mice (8/11) vaccinated with ES2B-C001 without adjuvant were tumor-free, the remaining had 1-2 tumor lung nodules

*** statistical significance (*in vitro* assay: p<0.001 vs negative control, Tukey's test; metastastic outgrowth *in vivo* model: p<0.0001 vs control, Dunn's non parametric, multiple comparisons test)

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Advancing Towards Key Catalysts

On path for value creation

BREAST CANCER (ES2B-C001)

2022				2023		2024	
✓ 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**

Thank you!

Contact:
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