



BiondVax
Pharmaceuticals Ltd.

NASDAQ: BVXV | January 2022

SAFE HARBOR STATEMENT

This communication contains forward-looking statements within the meaning of the Private Litigation Reform Act of 1995. Words such as “expect,” “believe,” “intend,” “plan,” “continue,” “may,” “will,” “anticipate,” and similar expressions are intended to identify forward-looking statements. All statements, other than statements of historical facts, included in this communication regarding strategy, future operations, future financial position, future revenue, projected expenses, prospects, plans and objectives of management are forward-looking statements. Examples of such statements include, but are not limited to, statements regarding execution of an additional agreement with the Max Planck Society and the University Medical Center Göttingen; the therapeutic and commercial potential of nanosized antibodies (NanoAbs); and the timing of proof-of-concept studies and clinical trials in NanoAbs. These forward-looking statements reflect management's current views with respect to certain current and future events and are subject to various risks, uncertainties and assumptions that could cause the results to differ materially from those expected by the management of BiondVax Pharmaceuticals Ltd. Risks and uncertainties include, but are not limited to, the risk that BiondVax will not execute an additional agreement with the Max Planck Society and the University Medical Center Göttingen or that it will be delayed; the risk that the therapeutic and commercial potential of NanoAbs will not be met; the risk of a delay in the preclinical and clinical data for NanoAbs, if any; the risk that BiondVax and EIB will not reach agreement with respect to the restructuring of the loan from European Investment Bank; the risk that BiondVax may not be able to secure additional capital on attractive terms, if at all; the risk that the European Investment Bank may accelerate the loans under its finance contract with BiondVax; risks relating to the COVID-19 (coronavirus) pandemic; BiondVax's ability to acquire rights to additional product opportunities; BiondVax's ability to enter into collaborations on terms acceptable to BiondVax or at all; timing of receipt of regulatory approval of BiondVax's manufacturing facility in Jerusalem, if at all or when required; the risk that the manufacturing facility will not be able to be used for a wide variety of applications and other vaccine and treatment technologies, and the risk that drug development involves a lengthy and expensive process with uncertain outcomes. More detailed information about the risks and uncertainties affecting the Company is contained under the heading “Risk Factors” in the Company's prospectus supplement filed with the Securities and Exchange Commission on December 28, 2021. BiondVax undertakes no obligation to revise or update any forward-looking statement for any reason.

DEVELOPING INNOVATIVE NANOSIZED ANTIBODY (NANOAB) COVID-19 THERAPY

Significant potential for value creation

- New strategic **collaboration with world-renowned Max Planck Institute** & University Medical Center Göttingen (UMG) scientists affords access to unique biophysics know-how and IP to generate NanoAbs that exhibit **significant competitive advantages**
- BiondVax to lead development and commercialization of Covid-19 NanoAb with **exclusive worldwide license**; Initial human clinical trial results expected in 2023
- In-vitro data shows **neutralization of COVID-19 variants of concern** including Delta, and based on in-silico studies, Omicron, at significantly lower dose levels than existing antibody treatments
- These NanoAbs are also **stable at very high temperatures** and will be developed for convenient **inhalation administration** targeting the virus **directly** in the lungs and airways
- Broader collaboration for **NanoAb pipeline** targeting additional large & validated addressable markets*

COLLABORATION WITH MAX PLANCK

Capabilities to develop significant clinical and commercial advantages

BIONDVAX

- Infectious disease & recombinant protein drug development experience: from lab to Phase 3 clinical trial
- Manufacturing, quality, int'l regulatory experience
- GMP NanoAb manufacturing facility
- Top-tier big pharma & biotech leadership expertise

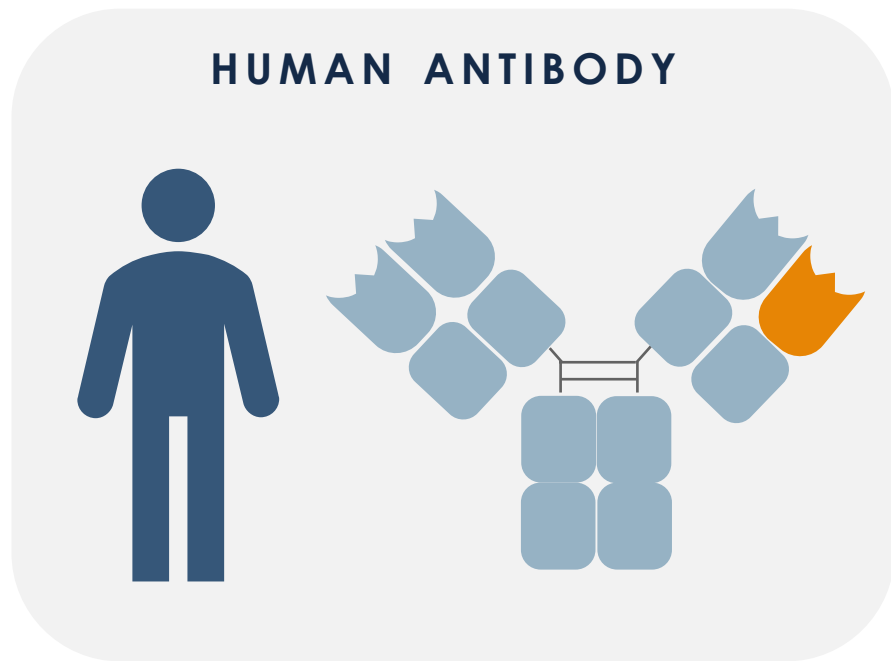
MAX PLANCK⁽¹⁾

- World-class science & access to leading scientists
- NanoAb platform for development of promising potent therapeutics
- Patents covering NanoAbs & their manufacturing

Exclusive worldwide license for COVID-19 asset⁽²⁾ & option to exclusively license additional NanoAbs⁽³⁾ developed through collaboration

1. Includes Max Planck Institute of Biophysical Chemistry, and the University Medical Center Göttingen (UMG) | 2. Definitive agreements signed December 22, 2021. | 3. Term sheets signed October 19, 2021. Definitive agreements anticipated by end of January 2022

THE SCIENCE OF NANOSIZED ANTIBODIES (NANOAB)



Alpaca-derived nanosized VHH-Antibodies (NanoAbs) are often referred to as **Nanobodies***

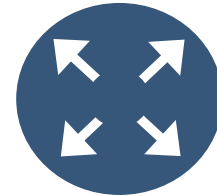
NANOAB VALUE PROPOSITION

Multiple crucial advantages compared to monoclonal antibodies (mAbs) & oral therapies



CONVENIENT & FLEXIBLE

- Hyperthermostability = longer shelf life, easier storage & distribution
- Multiple, easier routes of administration
- Faster, lower-cost production = accelerated development
- Reaches smaller targets mAbs cannot reach
- Validated targets of existing but less convenient therapies

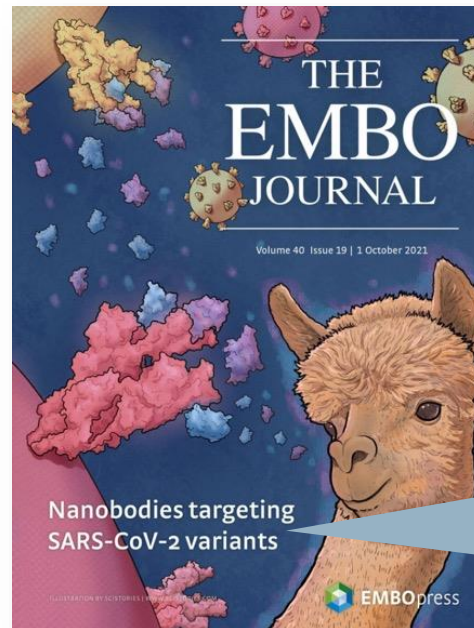


CLINICAL BENEFITS

- Adaptable half life
- Lower immunogenicity and directly targeted = potentially safer & lower dose
- Superior specificity & binding affinity can increase efficacy

COVID-19 NANOAB CANDIDATE HAS A STRONG COMPETITIVE EDGE

- Max Planck & UMG scientists are leaders in designing and optimizing NanoAbs
- **Result: >100x stronger** neutralization of variants of concern at low concentrations vs leading mAb⁽¹⁾
- Hyperthermostability to 95°C (200°F)
- **Direct targeting** potential via convenient inhalation administration



SCIENTIFIC COLLABORATORS AT MAX PLANCK & UMG



**PROF. DR. DIRK
GÖRLICH**

- **Director** Max Planck Institute for BioPhysical Chemistry
- >25K peer-reviewed citations



**PROF. DR. MATTHIAS
DOBBELSTEIN**

- Fellow Max Planck Institute for BioPhysical Chemistry
- UMG Head of Department

& AUTHORS OF:

“ Neutralization of SARS-CoV-2 by highly potent, hyper-thermostable, & mutation-tolerant nanobodies⁽²⁾ ”

CREATING AN INNOVATIVE NANOAB PIPELINE

Extending from a promising
COVID-19 therapeutic...

...to multiple, significant
derisked opportunities ⁽²⁾

COVID
19

Lead candidate
demonstrating **strong
competitive edge**⁽¹⁾

ASTHMA

PSORIASIS

PSORIATIC
ARTHRITIS

MACULAR
DEGEN

- **Validated targets** of existing mAb treatments
- Short time to value generation, lower risk than mAbs
- **Large markets** growing at attractive CAGRs

1. Based on laboratory research at Max Planck Institute for Biophysical Chemistry (MPG) and University Medicine Göttingen (UMG); |

2. Term sheets signed October 19, 2021; Final agreements anticipated by end of January 2022

COVID-19 MARKET CONTINUES TO GROW

“

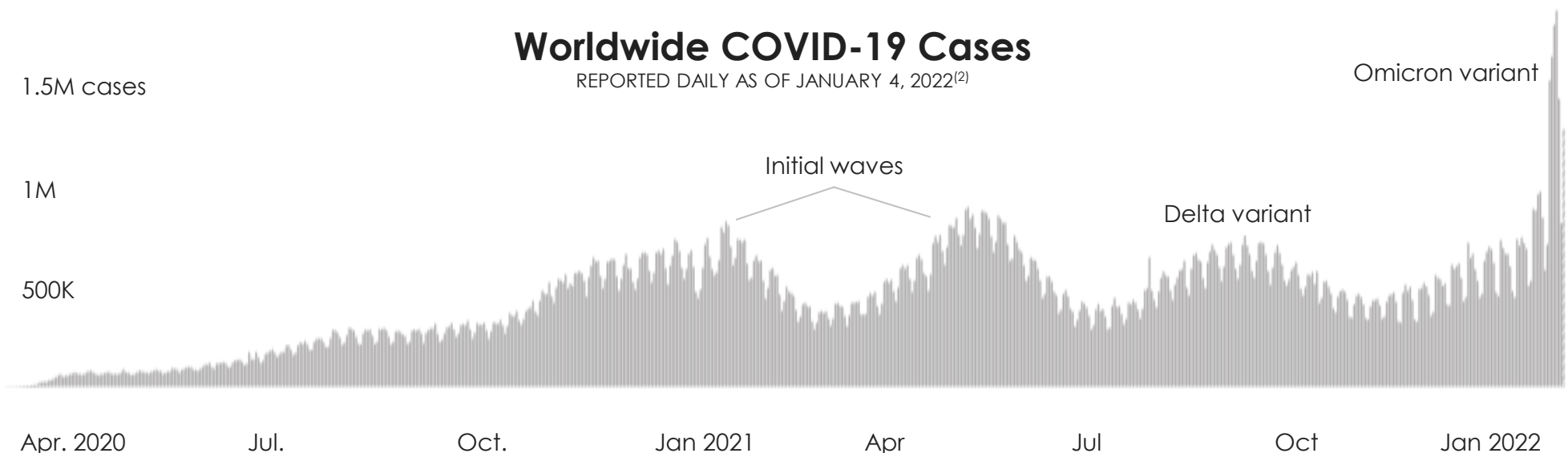


SARS-CoV-2 is unlikely to be eliminated, let alone eradicated; **it will probably continue to circulate indefinitely** in periodic outbreaks and endemics.

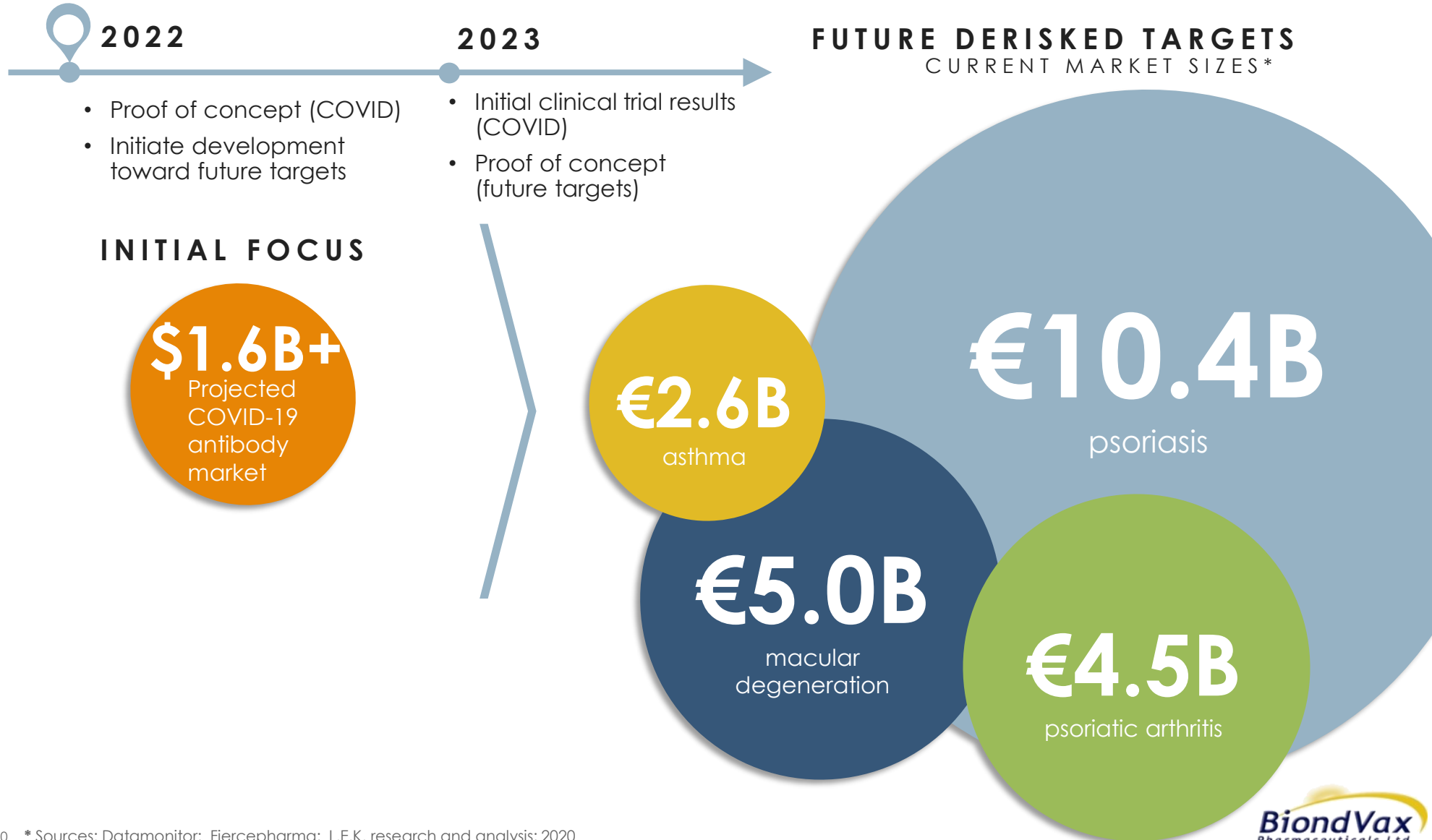
-- ANTHONY FAUCI, December 2021.⁽¹⁾

Worldwide COVID-19 Cases

REPORTED DAILY AS OF JANUARY 4, 2022⁽²⁾



MARKET POTENTIAL & TIMELINE



MARKET COMPARATORS

Adagio (ADGI):

- Dec 2021: Lead mAb candidate ADG20 found ineffective against Omicron leading to over **\$5B** drop in market cap

Vir (VIR)

- In partnership with GSK received emergency use authorization for mAb Sotrovimab
- **\$4.5B** Market Cap Jan 2022

Pardes (PRDS)

- Oral protease inhibitor therapy, in Ph1
- **\$850M** Market Cap Jan 2022

BiondVax:

COVID-19 NanoAb shows potential for significant advantages compared to existing COVID-19 mAbs

VALIDATED THERAPEUTIC USE

First commercial NanoAb is blood disorder therapy Caplacizuma – by Ablynx, acquired by Sanofi in 2018 for **€3.9B**



Uniquely positioned to advance nanosized antibody innovation from R&D through commercialization

**Collaboration
with Max
Planck & UMG**

**GMP biologics
manufacturing
facility**

**Extensive drug
development
expertise**

**Top-tier
pharma
leadership**

GMP MANUFACTURING FACILITY

Well-suited for NanoAb development **AND** production

- Equipped to produce recombinant protein products such as NanoAb
- Single-use equipment enables:
 - Adaptable manufacturing processes for entire NanoAb pipeline
 - Quicker lead times
 - Faster time-to-market for new products
- Designed to meet FDA and EMA reqs & approved cGMP by Israel MoH & EU QP
- Capacity: 10's of millions doses / year



JBP building | Hadassah Ein Kerem Campus | Jerusalem, Israel

EXPERIENCED LEADERSHIP



Amir Reichman
MSc, MBA

CEO

Pharmaceutical engineering & supply chain leadership at GSK Vaccines, Belgium; large capital expenditure projects building vaccines manufacturing sites in Belgium, Italy, Germany, Hungary and USA.

- MSc. Biotechnology Engineering (Ben Gurion University)
- MBA, Finance and Health Care Mgmt. (The Wharton School)
- NeuroDerm (R&D)
- Novartis Vaccines (Global Supply Chain)
- GSK Vaccines (Global Engineering)



Tamar Ben-Yedidia
PhD

CSO

Co-invented and guided BiondVax's original vaccine candidate through 8 clinical trials including pivotal Phase

- PhD (Weizmann Institute of Science)
- Biotechnology General Ltd.



Elad Mark
BSc Engineering, MBA

COO

Built manufacturing sites for recombinant protein in China and mABs for Novartis Singapore

- BSc. Engineering (Afeka Tel Aviv College of Engineering)
- MBA (Open University of Israel)
- Principal bioprocess engineer
- Novartis (Technical Project Manager - Process)



Uri Ben-Or
CPA, MBA

CFO

- BA Business (College of Administration)
- MBA (Bar Ilan University)
- Certified Public Accountant (CPA)
- Glycominds Ltd. (VP Finance)
- Menorah Capital Markets (Comptroller)



Joshua Phillipson
Hon. BSc, MBA

DIRECTOR BUSINESS DEVELOPMENT & IR

- Hon. BSc. (University of Toronto)
- MBA (Ben Gurion University of the Negev)
- Accenture (Business Management Consultant)
- BioData Ltd. (Marketing Manager)

BOARD BRINGS SIGNIFICANT EXPERTISE

North America based

| | |
|--|---|
| Mark Germain Chairman | Aentib Group (Managing Director), Pluristem (Director), Founder, director, chairman, and/or investor in over 20 biotech companies |
| Samuel Moed Director | Bristol Myers Squibb (NYSE: BMY) (Senior Vice President, Corporate Strategy) |
| Adi Raviv, MBA External Director | Capacity Funding LLC (Principal) |
| Jay Green External Director | Glaxo SmithKline (NYSE: GSK) Global Vaccines (Senior Vice President Finance and CFO), Gavi (Advisor for COVAX) |

Israel based

| | |
|--|--|
| Amir Reichman, MBA CEO | NeuroDerm Ltd (Senior Scientist), Novartis Vaccines USA (R&D and Global Supply chain), GSK Vaccines Belgium (Global Supply Chain and Global Engineering) |
| Morris C. Laster, MD Director | BioLineRx (CEO, Director), OurCrowd (Partner), Cll Medical (CEO), Vital Spark (CEO), Kitov Pharmaceuticals (Co-founder, Director) |
| George Lowell, MD Director | ID Biomedical (CSO), Intellivax (Founder), Walter Reed General Hospital (Consultant) |
| Yael Margolin, PhD External Director | Gamida Cell Ltd. (Nasdaq: GMDA) (President, CEO, Director), Denali Ventures LLC (VP) |
| Avner Rotman, PhD Director | Biodar (CEO), Rodar (Founder), Israel Biotech Organization (Chairman, Steering committee) |

SELECT FINANCIALS & CAP TABLE

- **\$17.5M cash** as of December 31, 2021
- **\$24M estimated cash requirement** to COVID clinical proof-of-concept H2 2023
- €24M European Investment Bank (EIB) non-dilutive co-funding agreement
- Government of Israel support

CAP TABLE

As of Dec. 31, 2021

ADS OUTSTANDING

%

| | | |
|--------------------------|------------|------|
| Ordinary ADS | 18,476,214 | 92% |
| Options + RSUs | 1,530,052 | 8% |
| Fully Diluted Shares Out | 20,006,264 | 100% |

SIGNIFICANT POTENTIAL FOR VALUE CREATION

Targeting massive, validated addressable markets with a pipeline of NanoAbs

Strategic collaboration with Max Planck Institute world-leading research organization

Lead candidate to treat COVID-19 has strong competitive edge

Well-positioned to bring innovative therapies to market with unique large pharma competencies

Key catalysts expected in 2022 and 2023



BIONDVAX.COM

Contact: Joshua Phillipson, Investor Relations

✉ j.phillipson@biondvax.com ☎ +972.8.930.2529