Jefferies Healthcare Conference

June 9, 2023

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This presentation contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. Statements in this presentation that are not statements of historical fact are forward-looking statements. Words such as "may," "will," "should," "expect," "plan," "anticipate," "seek," "could," "intend," "target," "aim," "project," "designed to," "estimate," "believe," "predict," "potential" or "continue" or the negative of these terms or other similar expressions are intended to identify forward-looking statements, though not all forward-looking statements contain these identifying words. Forward-looking statements include statements concerning, among other things, our belief that our existing cash resources will be sufficient to fund our operations into the second half of 2024; the future of the COVID-19 landscape including the expectation of continued evolution and emergence of new variants and subvariants; our ongoing research and clinical development plans, including with respect to VYD222; the timing, progress and results of our preclinical studies and clinical trials of our product candidates, including the clinical trial design, objectives and anticipated data readouts from our VYD222 program; our expectation that our platform will rapidly and perpetually deliver a stream of monoclonal antibodies to keep pace with viral evolution and protect vulnerable populations from COVID-19; our expectation to engage in continuous monitoring of viral evolution coupled with rapid antibody discovery and engineering to address the evolving SARS-CoV-2 threat; our expectations regarding the size of target patient populations and the potential market opportunity for our product candidates, as well as our market positioning; our expectations regarding the clinical utility and market acceptance of anti-SARS-CoV-2 monoclonal antibodies ("mAbs") and our product candidates; our belief that a mAb therapeutic that offers more robust protection against current SARS-CoV-2 variants would be an important addition to the COVID-19 medicine cabinet, especially for vulnerable populations; our expectations regarding the scope of any approved indication for our product candidates; our ability to successfully commercialize our product candidates; our belief that serum virus neutralizing titers are predictive of protection against symptomatic COVID-19 and have potential to be used as surrogates of clinical efficacy in future trials, potentially accelerating the clinical development path; the potential for an emergency use authorization ("EUA") or other regulatory approval of any of our product candidates; our plans to generate a robust pipeline of product candidates which, if authorized or approved, could be used in prevention or treatment of serious viral threats, starting with COVID-19 and expanding into influenza and other high-need indications; and other statements that are not historical fact. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. These forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from the results described in or implied by the forward-looking statements, including, without limitation: our ability to gain alignment with the applicable regulatory authorities on the clinical trial design and development pathway for VYD222 and the timing thereof; the timing and progress of our discovery, preclinical and clinical development activities; our ability to generate and utilize tools to discover and develop a pipeline of antibodies to treat current and potential future SARS-CoV-2 variants; the impacts of the COVID-19 pandemic on our business and those of our collaborators, our clinical trials and our financial position; unexpected safety or efficacy data observed during preclinical studies or clinical trials; the predictability of clinical success of VYD222 or other product candidates based on neutralizing activity in pre-clinical studies; variability of results in models used to predict activity against SARS-CoV-2 variants of concern; clinical trial site activation or enrollment rates that are lower than expected; changes in expected or existing competition; changes in the regulatory environment; the uncertainties and timing of the regulatory approval process, including the outcome of our discussions with regulatory authorities concerning our clinical trials and platform-based approach to development; whether we are able to successfully monitor, analyze, engineer and optimize new product candidates and create a stream of monoclonal antibodies to keep pace with viral evolution; whether VYD222 or any other product candidate or combination of candidates is able to demonstrate and sustain neutralizing activity against predominant SARS-CoV-2 variant(s); whether we are able to successfully submit an EUA in the future, and the outcome of any such EUA submission; whether our research and development efforts will identify and result in safe and effective therapeutic options for infectious diseases other than COVID-19; and whether we have adequate funding to meet future operating expenses and capital expenditure requirements. Other factors that may cause our actual results to differ materially from those expressed or implied in the forward-looking statements in this presentation are described under the heading "Risk Factors" in our most recent Annual Report on Form 10-K for the year ended December 31, 2022 filed with the Securities and Exchange Commission (the "SEC"), and in our other filings with the SEC, and in our future reports to be filed with the SEC and available at www.sec.gov. Such risks may be amplified by the impacts of the COVID-19 pandemic. Forward-looking statements contained in this presentation are made as of this date, and we undertake no duty to update such information whether as a result of new information, future events or otherwise, except as required under applicable law.

THERE IS AN URGENT NEED FOR NEW THERAPEUTICS THAT PROTECT IMMUNOCOMPROMISED PEOPLE FROM COVID-19

INVIVYD

"Now, many people who are not well-protected by vaccines are in a dangerous and isolating situation—especially because the arsenal of effective COVID-19 treatments is shrinking for everyone as the virus evolves.[1]"

"The withdrawal of Evusheld is a disaster for our immunocompromised patients and illustrates the hard fight ahead against this virus.[2]"

Sources: 1. https://time.com/6251474/immunocompromised-covid-19-evusheld-fda/; 2. https://www.axios.com/2023/02/07/immunocompromised-covid-risk-left-behind-again

MILLIONS OF IMMUNOCOMPROMISED PEOPLE ARE IN URGENT NEED OF NEW THERAPEUTICS THAT PROVIDE PASSIVE IMMUNITY TO COVID-19

INVIVYD

8-18M people in the U.S.[1-3]

14M people in the E.U.[4]

are estimated to be immunocompromised due to a medical condition or immunosuppressive medication or treatment

Organ transplant recipients

Bone marrow transplant recipients

People on immuno-suppressive drugs (e.g., MS, RA, IBD)

Leukemia patients

Myeloma patients

People with uncontrolled HIV

Examples of populations that may not mount an adequate immune response to COVID-19 vaccination[5]

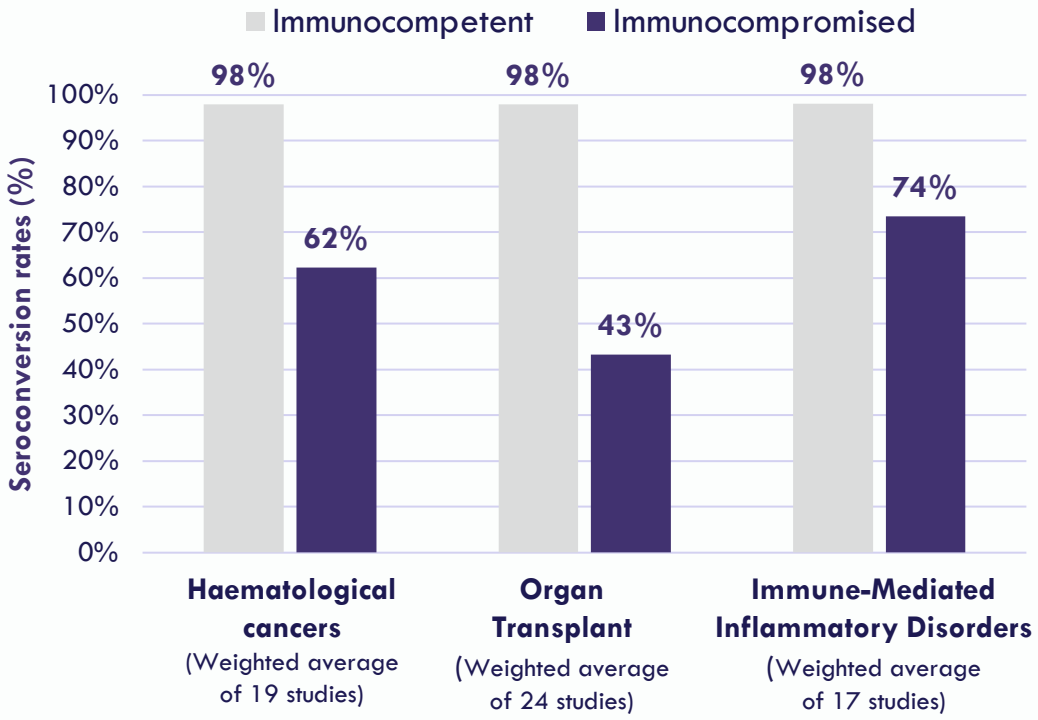
Sources: 1. Harpaz JAMA 2016; 2. Patel Emerg Infect Dis 2020; 3. U.S. Census Bureau Data; 4. European Cancer Patient Coalition: https://ecpc.org/joint-statement-on-the-protection-of-immunocompromised-patients/; 5. Lee BMJ 2022; https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-care/underlyingconditions.html; MS, multiple sclerosis; RA, rheumatoid arthritis; IBD: inflammatory bowel disease

MANY IMMUNOCOMPROMISED PEOPLE HAVE AN IMPAIRED RESPONSE TO VACCINES AND HAVE LESS PROTECTION AGAINST SEVERE COVID-19 OUTCOMES

INVIVYD

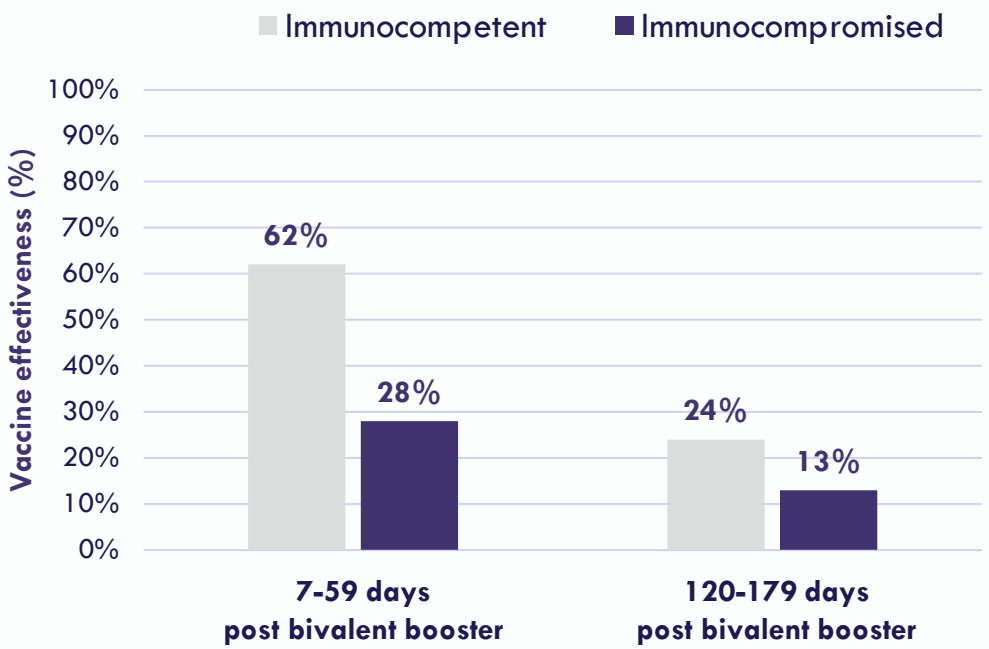
Immunocompromised people are less likely to have detectable SARS-CoV-2 antibodies following vaccination than immunocompetent people

Seroconversion rates (detectable Abs) in immunocompromised people vs. immunocompetent controls after two COVID-19 vaccine doses[1] [*pre-Omicron*]



Immunocompromised people generate less protection against severe outcomes than immunocompetent people after bivalent boosters

Vaccine effectiveness against COVID-19-associated hospitalizations after bivalent booster compared with no vaccination[2]



Source: 1. Lee BMJ 2022 ; 2. Centers for Disease Control and Prevention, Estimates of Bivalent mRNA Vaccine Durability in Preventing COVID-19–Associated Hospitalization and Critical Illness Among Adults with and Without Immunocompromising Conditions — VISION Network, September 2022–April 2023; Abs, antibodies

EVEN IN PRIMARILY IMMUNOCOMPETENT POPULATIONS, VACCINE EFFECTIVENESS (VE) HAS WANED IN THE FACE OF VIRAL EVOLUTION

INVIVYD

45.7% VE against symptomatic Omicron B.1.1.529 at ≥10 wks after two doses of the BNT162b2 vaccine followed by a BNT162b2 booster

VE against symptomatic COVID-19 in primarily immunocompetent[1]

Monovalent (BNT162b2)	2-4 wks after 2nd dose	≥25 wks after 2nd dose	2-4 wks after booster	**≥10 wks** after booster
Delta B.1.617.2	90.9%	62.7%	95.1%	89.9%
Omicron B.1.1.529	65.5%	8.8%	67.2%	45.7%

4-29% VE against infection with more recent Omicron variants up to 26 weeks from mRNA bivalent booster

VE against SARS-CoV-2 infection in primarily immunocompetent[2]

Bivalent Booster	**Up to 26 wks** from bivalent booster
Omicron BA.4/5 dominant phase	29%
Omicron BQ dominant phase	20%
Omicron XBB dominant phase	4%

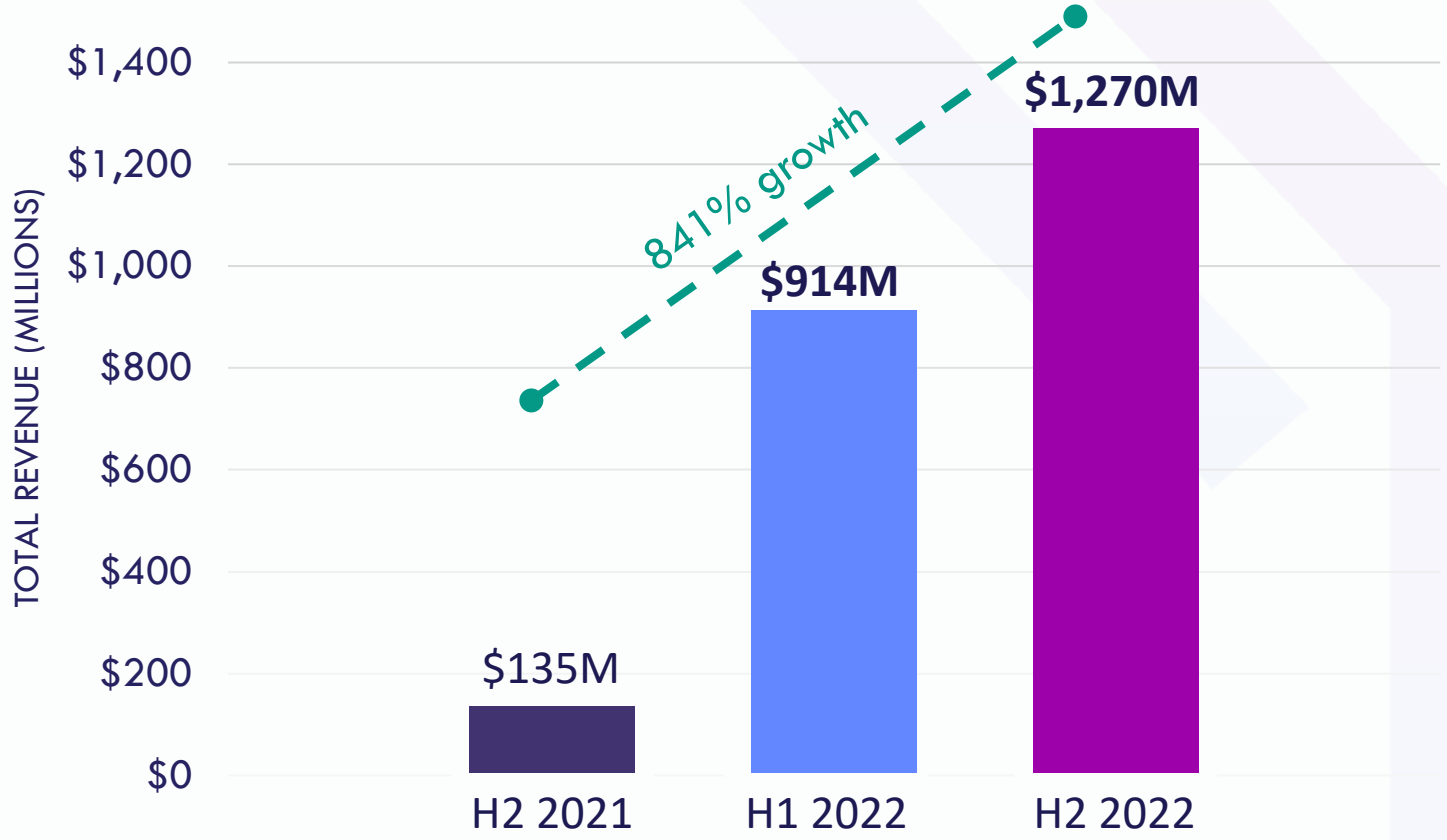
A monoclonal antibody (mAb) therapeutic that offers more robust protection against current variants would be an important addition to the COVID-19 medicine cabinet, especially for vulnerable populations

Sources: 1. Andrews N Engl J Med 2022; 2. Shrestha Open Forum Infectious Diseases 2023

WE BELIEVE PREVENTION OF COVID-19 IN VULNERABLE POPULATIONS IS A LONG-TERM, POTENTIALLY LARGE OPPORTUNITY

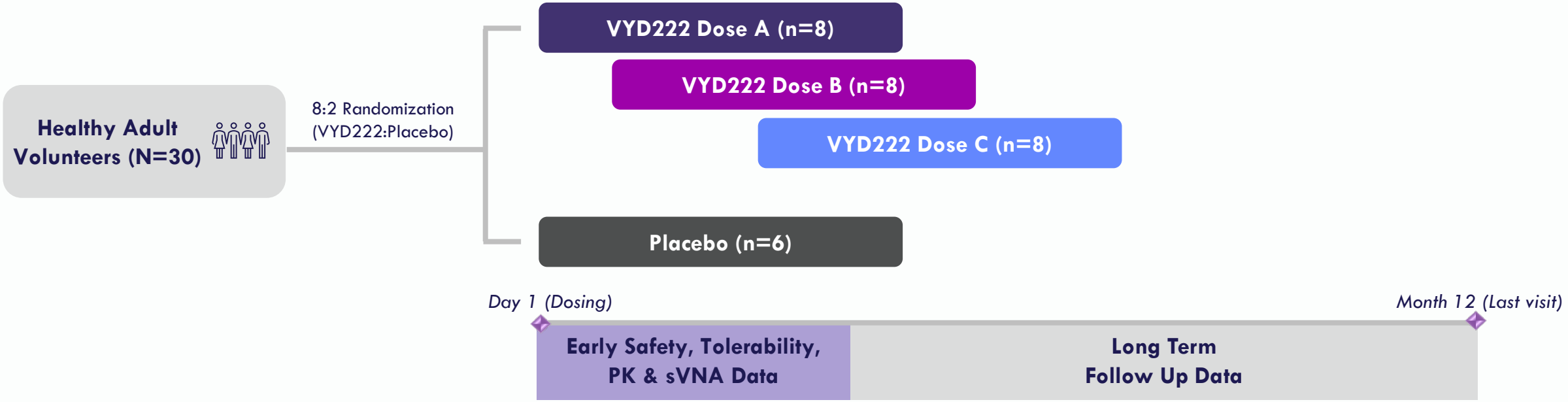
INVIVYD

$2.2B in total revenue of Evusheld® in 2022, a mAb previously authorized to protect vulnerable populations from COVID-19



Sources: Results publicly reported by AstraZeneca.

ONGOING PHASE 1 TRIAL OF VYD222 WITH INITIAL DATA READOUTS PLANNED FOR Q2 2023



OBJECTIVES:

- Primary: Safety and tolerability through 12 months
- Secondary: Pharmacokinetic (PK) and immunogenicity assessments
- Exploratory: Serum virus neutralizing activity (sVNA)

KEY DESIGN ELEMENTS:

- Dose-ranging trial will evaluate three different doses, each administered as a single IV push. All doses are designed to provide durability in the face of viral evolution and flexibility at the time of regulatory submission.
- Trial is designed to potentially enable rapid advancement into a pivotal Phase 3 trial.

Source: Clinicaltrials.gov (NCT05791318); IV, intravenous

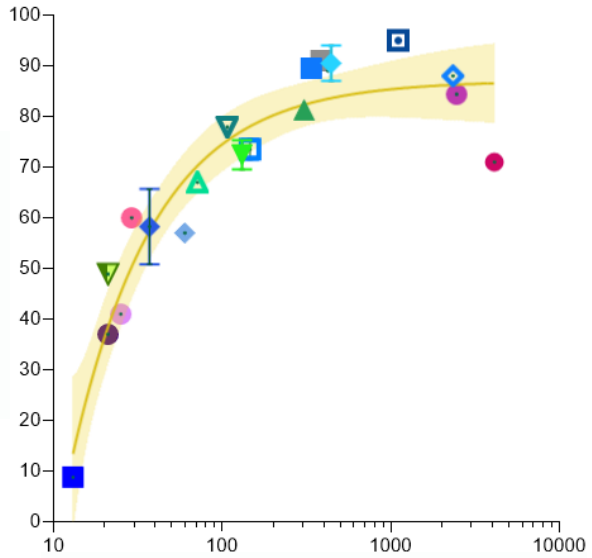
SERUM VIRUS NEUTRALIZING ANTIBODY TITERS MAY PREDICT PROTECTION AGAINST SYMPTOMATIC COVID-19

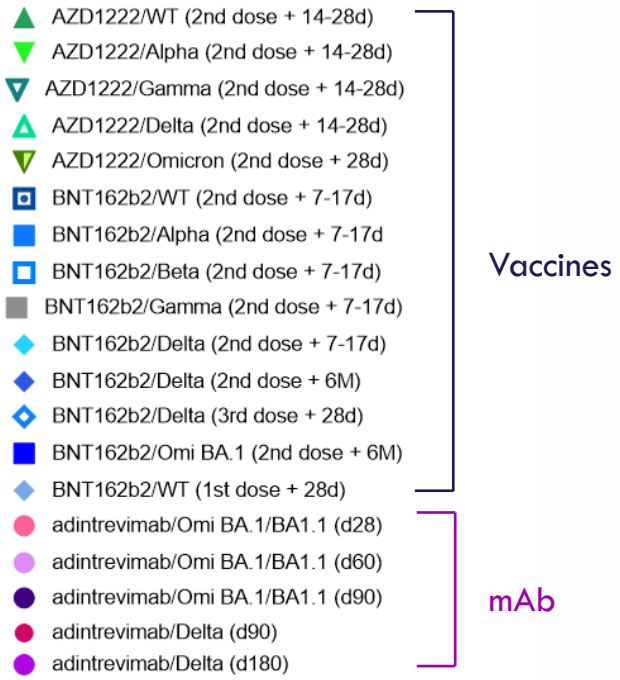
INVIVYD

Serum neutralizing titers (either mAb or vaccine-induced) correlate with protection against symptomatic SARS-CoV-2 infection across multiple variants

Reported protection against symptomatic COVID-19 (%)

(Data from Phase 2/3 trials and real-world vaccine effectiveness studies)





Strong scientific rationale for using surrogates of clinical efficacy in future trials, potentially accelerating clinical development path

Source: Schmidt Sci Transl Med 2023; FRNT, focus reduction neutralization test

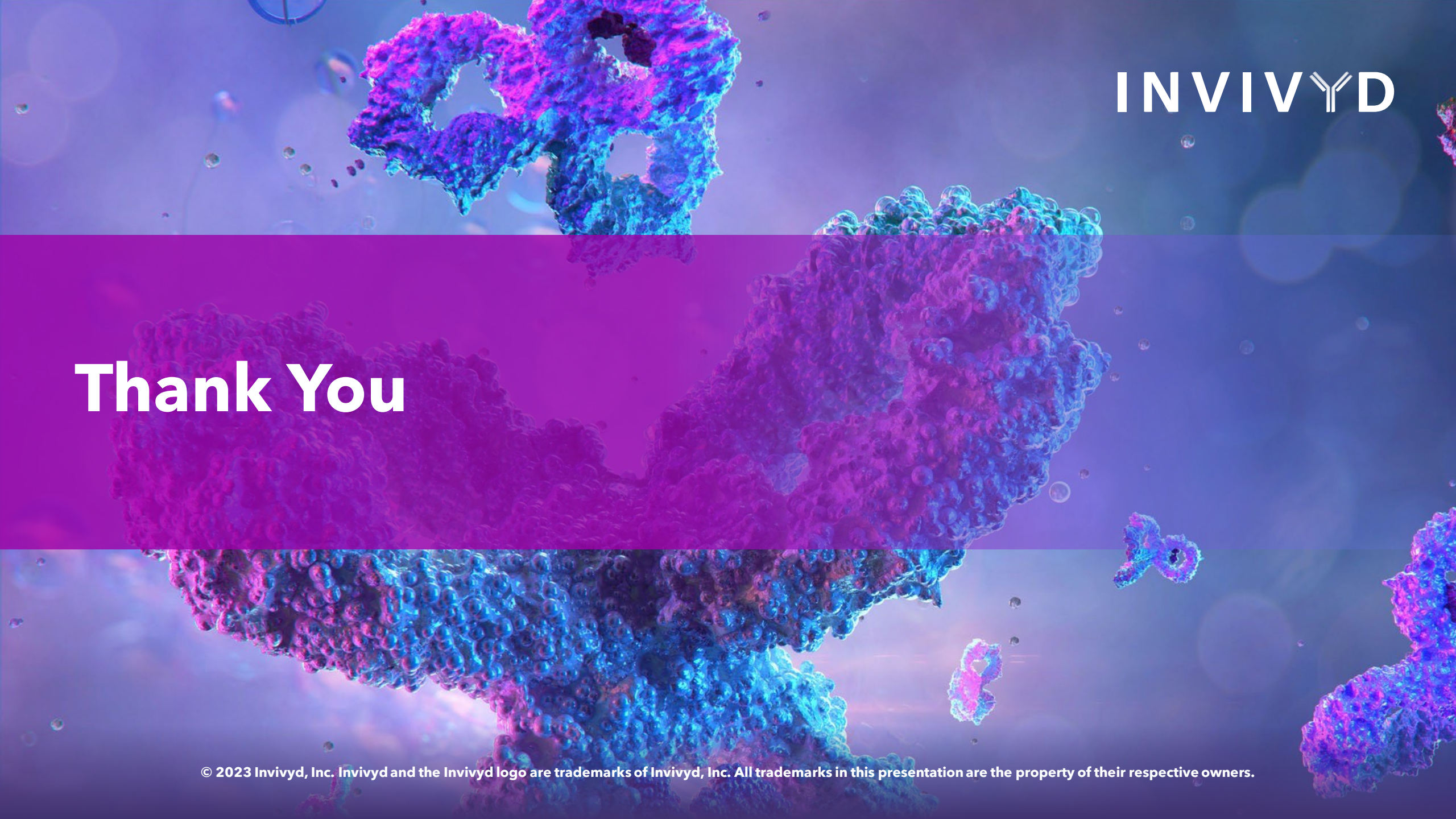
INVIVYD IS POSITIONED TO POTENTIALLY FULFILL A LARGE UNMET NEED

INVIVYD

Providing vulnerable populations, such as immunocompromised people, with protection from COVID-19 is a long-term, large opportunity

Initial data readout from Phase 1 VYD222 clinical trial planned for Q2 2023, including early insights into serum virus neutralizing activity

Well capitalized with $333.4 million in cash, cash equivalents and marketable securities as of March 31, 2023 expected to support operating runway into second half of 2024



Thank You