vaccibody

Webcast

July 12, 2021

Non-Confidential

Forward-looking statement

This announcement and any materials distributed in connection with this presentation may contain certain forward-looking statements. By their nature, forward-looking statements involve risk and uncertainty because they reflect the company's current expectations and assumptions as to future events and circumstances that may not prove accurate.

A number of material factors could cause actual results and developments to differ materially from those expressed or implied by these forward-looking statements.

Today's presenters from Vaccibody and Adaptive Biotechnologies

Chief Executive Officer Vaccibody
Michael Engsig

M.Sc. Biochemistry and G.D.Bus.Admin.

- Extensive experience from leading early-stage drug discovery through commercial development
- Launched products across all major geographical areas.
- Takeda and Nycomed, PPD

Chief Innovation & Strategy Officer, Vaccibody
Agnete B. Fredriksen

M.Sc. in Molecular Biology and Ph.D. in Immunology

- Designed and created the first Vaccibody™ molecules
- Co-founder of Vaccibody AS (2007)
- Served as CSO 2007-2021, leading the scientific strategy

Chief Scientific Officer Vaccibody
Mikkel W. Pedersen

M.Sc. in Human Biology and Ph.D. in Cancer Biology

- Long experience in drug discovery and development
- Previous role as CSO of Symphogen, now a subsidiary of Servier

Chief Medical Officer Vaccibody
Siri Torhaug

MD, Oncology specialist

More than 20 years experience within Clinical development and pharma scientific and medical affairs:

- Oslo university hospital
- Novartis
- AstraZeneca

Chief Scientific Officer, Adaptive Biotechnologies
Harlan Robins

B.Sc. and Ph.D. in Physics

- Prior to co-founding Adaptive, Harlan served in various roles in the Computational Biology Program at Fred Hutch, including as a Full Member and the Head of the program from April 2016 to June 2019.

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Agenda

1. **Collaboration and license agreement with Adaptive Biotechnologies**
2. Adaptive Biotechnologies' technology platform
3. VB10.COV2 - Vaccibody's SARS-CoV-2 vaccine program
4. VB10.COV2 – Phase I trial preparations
5. VB10.NEO N-02 update, outlook and Q&A

Overview of Vaccibody

- Leading vaccine platform taking advantage of differentiated technology to address a broad range of diseases
  - *"targeting antigens to antigen presenting cells, generating unique rapid, strong and long-lasting immune response"*

- Highly advanced oncology pipeline with two Phase 2 assets including VB10.NEO, an individualized vaccine targeting tumor specific epitopes, as well as VB10.16, an off the shelf vaccine
  - Significant collaboration with Genentech to support development of key oncology assets

- 2-arm COVID-19 vaccine strategy focused on providing protection against current and future Variants of Concern
  - Collaboration with Adaptive Biotechnologies to generate broadly protective T cell based immunity against multiple SARS-CoV-2 antigens

- Highly experienced management team with track record of success

Adaptive Biotechnologies - Vaccibody collaboration and license agreement

- Exclusive license to COVID-19 vaccines based on Adaptive's set of validated shared T cell epitopes
- Vaccibody leads development, manufacture and commercialization of the vaccine products
- Clinical trial with second-generation SARS-CoV-2 RBD as well as T cell based vaccine candidates, planned for Q4 2021

Unmet need for COVID-19 intervention

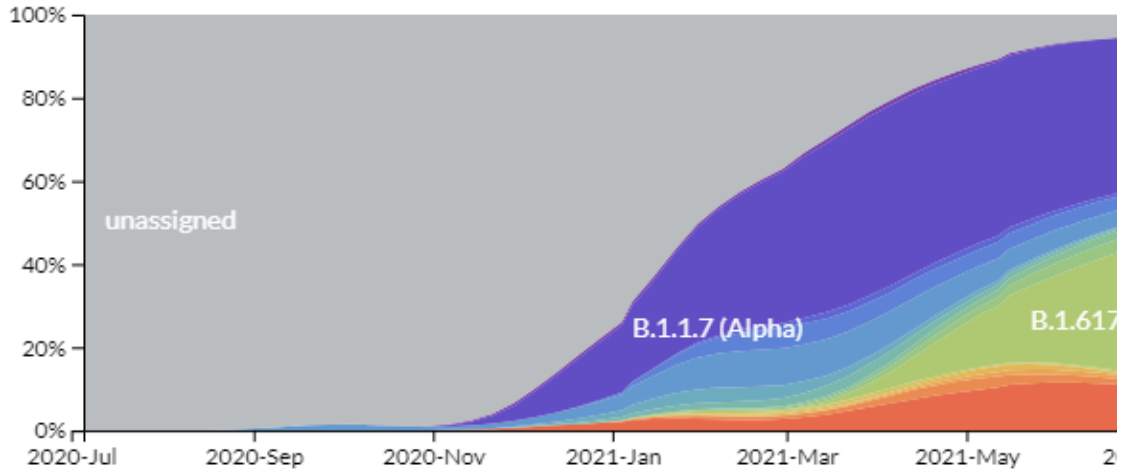
Is there cause for concern?

Genetic variants of SARS-CoV-2 continues to emerge

- A decline in efficacy is observed over time
- Continued emergence of variants are expected
  - Increased transmissibility and/or infectivity
  - Reduced sensitivity to antibody-based immunity

Current variants of concern (VoC) include

- Alfa B.1.1.7 (First described in England)
- Beta B.1.351 (First described in South Africa)
- Gamma P.1 (First described in Brazil)
- Delta B.1.617.2 (First described in India)



Source: gisaid.org

A matter of time before emerging variants escape immunity from current vaccines based on the original Wuhan WA1/2020 Spike sequence?

Commercial opportunities

2nd generation rapid vaccine generated matching novel VoC

- Vaccibody's RBD vaccine may offer rapid and strong levels of neutralizing antibody responses specifically targeting novel VoC

3rd generation universal broadly protective T cell vaccine

- Increasing evidence of the importance of broad T cell responses against COVID-19 also offering long-term memory responses with limited sensitivity to viral mutations
- Vaccibody aims to boost and broaden the most clinically relevant and conserved T cell responses against multiple SARS-CoV-2 epitopes identified by Adaptive Biotechnologies
- Aim to induce long-lasting protective immunity across all population groups and across current and future variants

Therapeutic vaccines

- Rapid onset of broad T cell-based immunity opens potential for safe, effective, easy-to-administer drug to reduce severity and clear infection

Adaptive is the partner of choice

Adaptive applied its immune medicine platform to identify and validate immuno-dominant T-cell epitope hotspots

Sequence information using samples from more than 6500 patients impacted by COVID-19 plus 150,000+ SARS-CoV-2 specific TCR-antigen pairs across the viral genome

Launched T-Detect™ COVID, which is the first-in-class T-cell-based clinical test for Covid-19 with FDA Emergency Use Authorization

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Adaptive Biotechnologies – Powering the Age of Immune Medicine

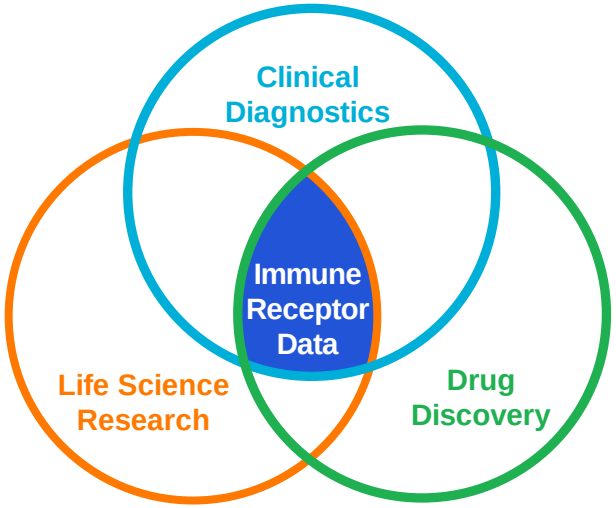
Translating the genetics of the adaptive immune system into clinical products to diagnose and treat disease

At a Glance

- Founded in 2009
- Nasdaq listed (ADPT)
- Commercial stage biotechnology company
- 650+ employees
- 600+ publications to date
- 58B+ immune receptors characterized to date in our proprietary clinical immunomics database

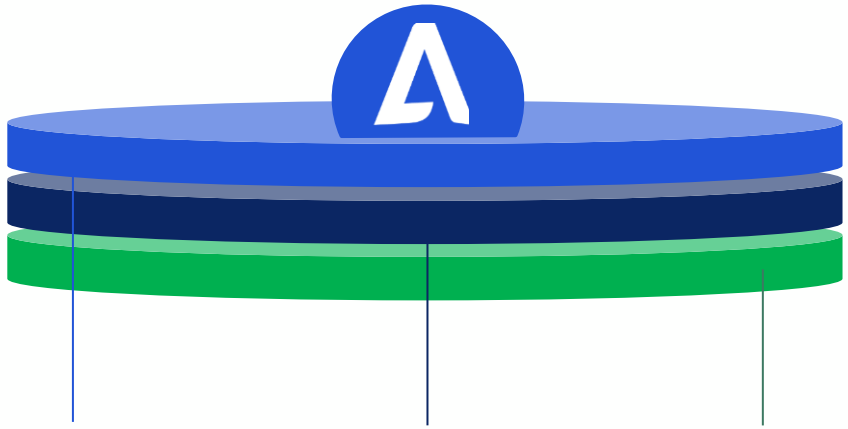
"One" Immune Medicine Platform

Synergistic Data Interplay



Uniquely positioned as a clinical product development engine

Moats Around our Platform



Clinically validated technology and applications with strong IP

Computational biology & machine learning

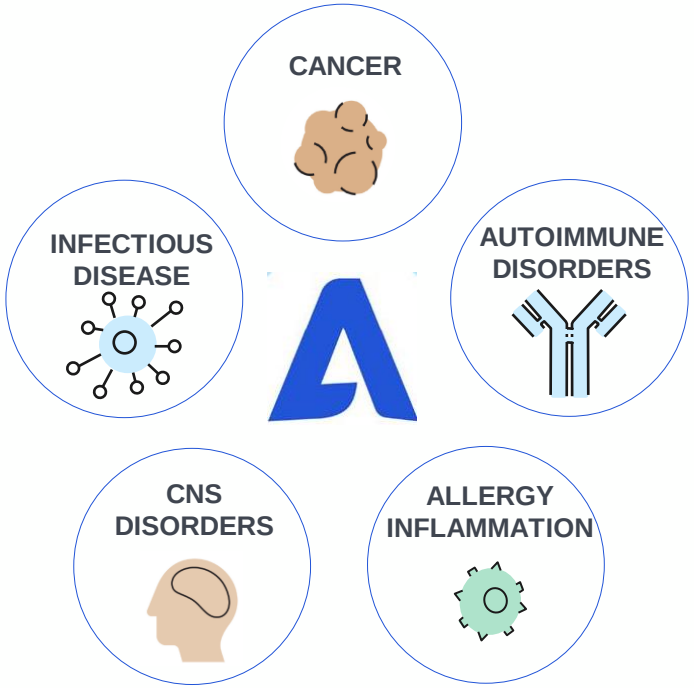
Clinical Immunomics database

Speed

Scale

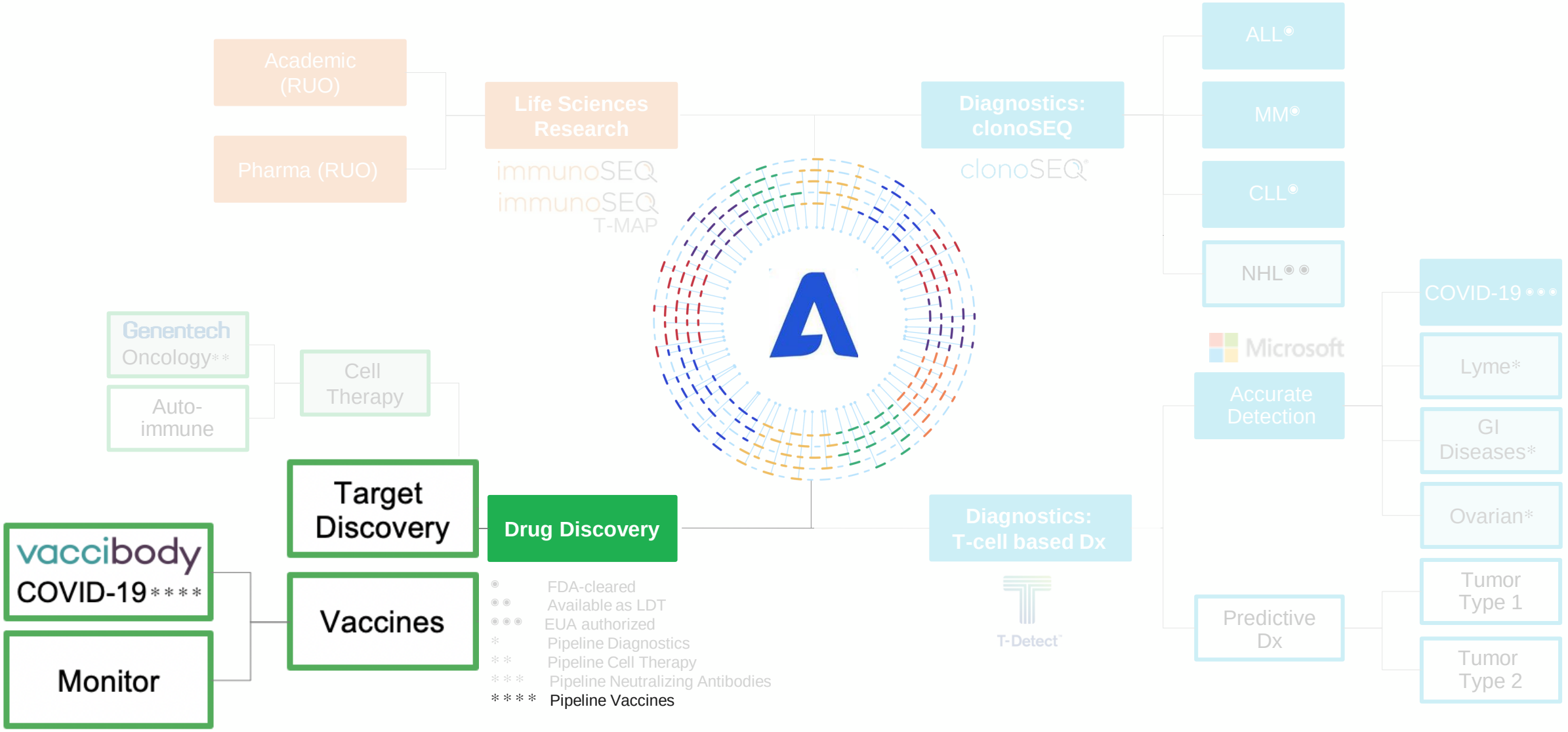
Precision

Broad Applications



We use the immune system as the source-code for immune medicine

Multiple opportunities for growth



Target discovery to inform vaccine design and development

Three data sources to develop an accurate T-cell signature

1. **Map TCRs to Antigens**
   Oncology, Infectious Diseases, AIID
2. Sequence blood from 1000s of **disease** cases vs. 1000s **healthy controls**
3. ADPT immunomics database **58B+ receptor sequences**

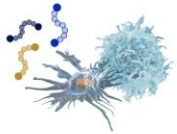
Microsoft Machine Learning Infrastructure

Prediction Models + Algorithms

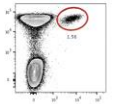
Library of Validated T-cell Epitopes

Map TCRs to 1000s of antigens

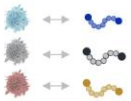
Identify query antigens (peptides or transgene) of interest
Neoantigens, tumor-associated, viral or autoimmune antigens



Incubate antigens with immune cells
Antigen specificities are determined based on peptide pool design



Sort T cells by marker of interest
pMHC-TCR interactions induce activation marker expression

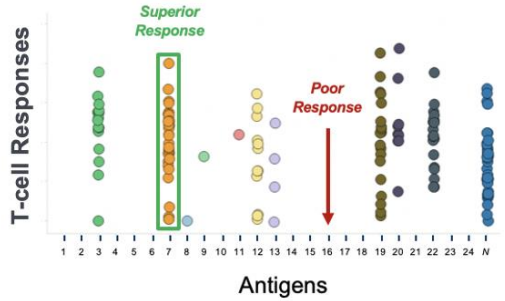


Match T cell clones to specific antigens
Based on the presence of specific sequences in designated pools

Antigen 1
YRFVQGKDWGLKKFIRRDFLL

Antigen 2
VKIGDFGLATEKSRWSGSHQF
...

Antigen *N*
PVQLWVDSTPWPGTRVRAMA



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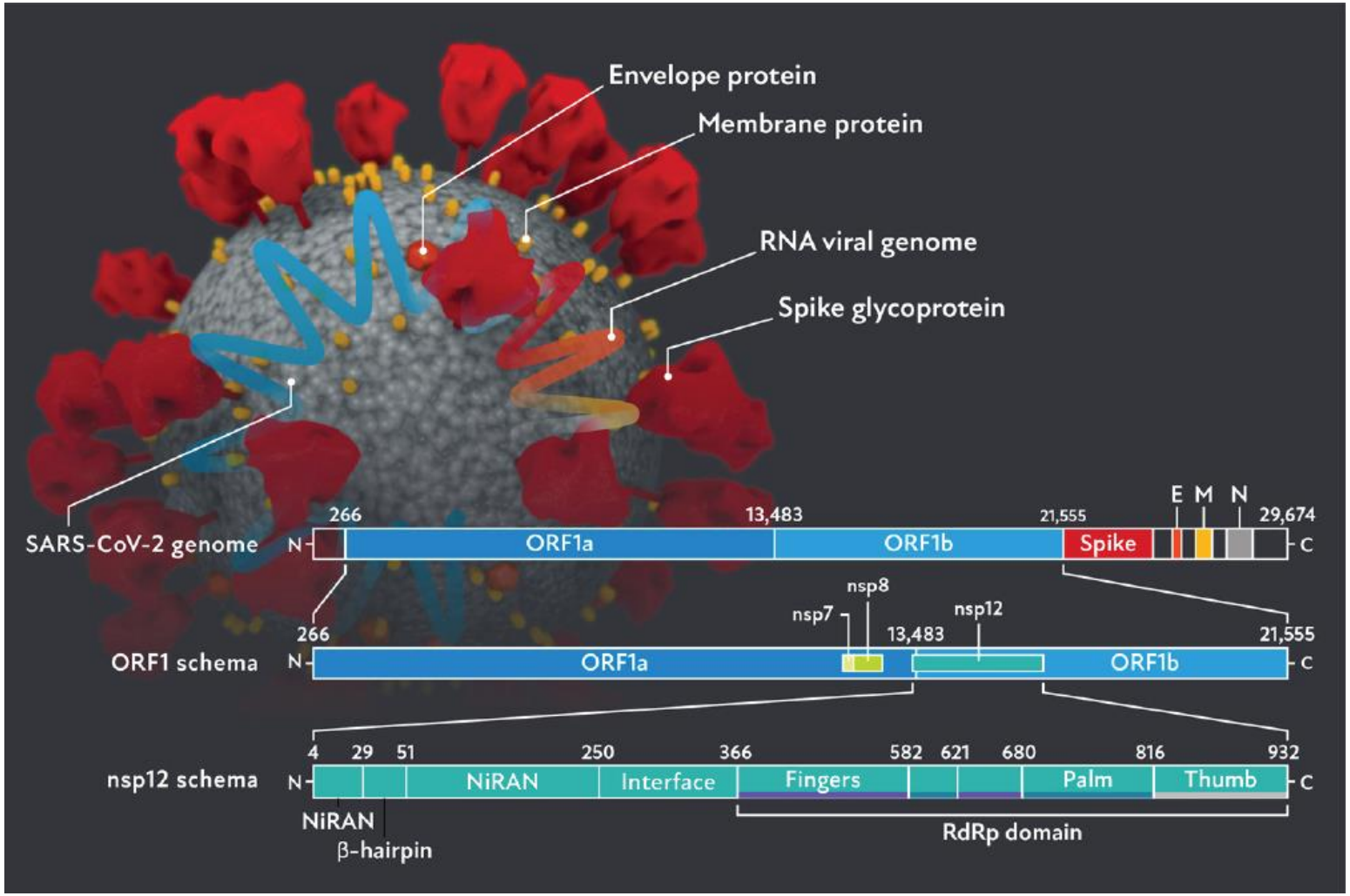
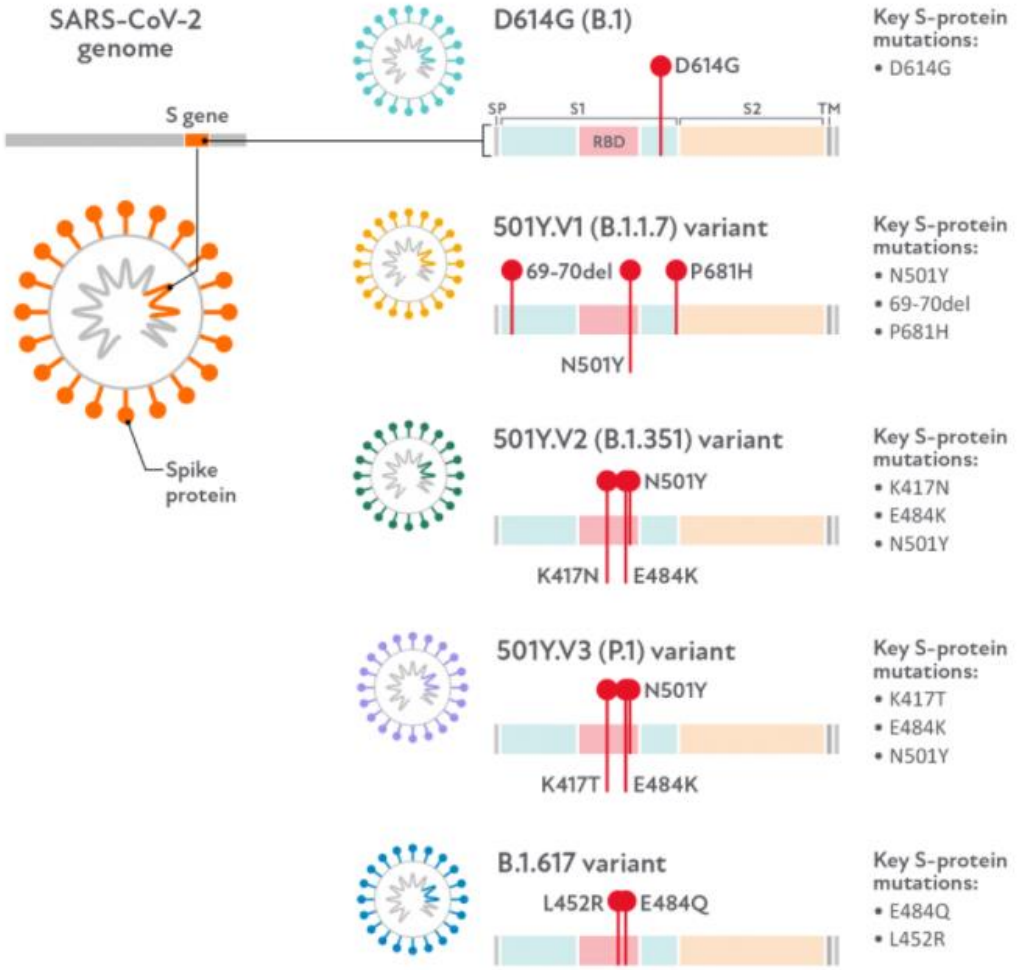
Structure & genome of SARS-CoV-2



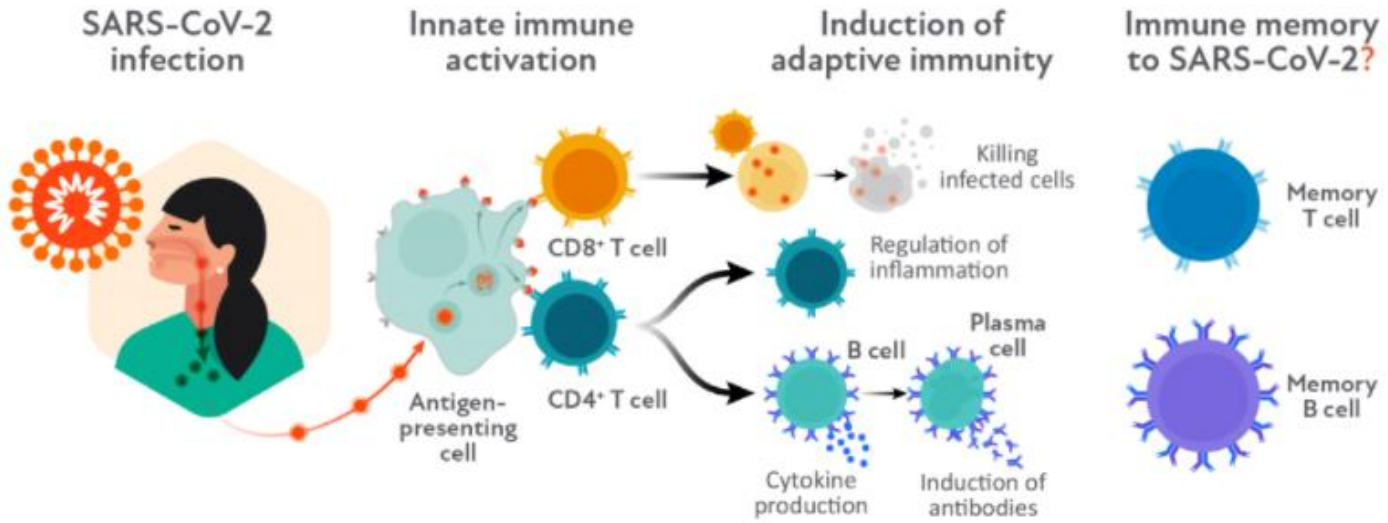
Adapted from Alanagreh L, et al. *Pathogens*. 2020;9(5):331. doi:10.3390/pathogens9050331.

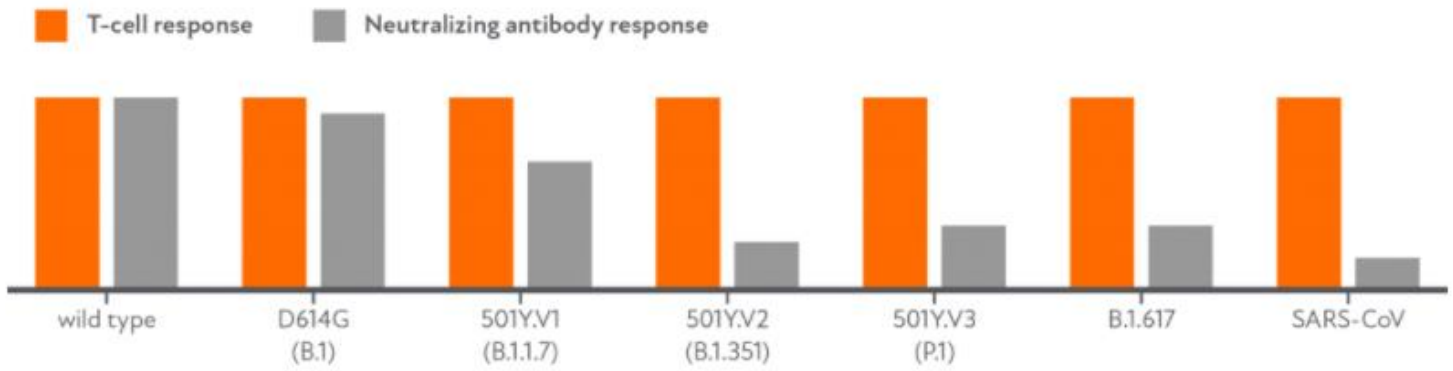
Emergence of SARS-CoV-2 variants has made it even more important to understand how the virus interacts with the adaptive immune system



Adapted from Zhang L, et al., 2020, Rambaut A., et al., 2020, Tegally H, et al., 2020, and Toovey OTR, et al., 2021.

Comparing T-cell responses to neutralizing antibody responses in SARS-CoV-2 variants





- Follicular helper T cells and CD4+ T cells help establish the B-cell and antibody response, including nAb.
- Evidence suggests that relatively few mutations allow SARS-CoV-2 variants to escape the nAb response, but the T-cell response to SARS-CoV-2 variants remains consistently high.

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Adapted from Cox et al., Yadav et al., Hoffmann et al., Garcia-Beltran et al., Tarke, et al., Redd et al., and Madhi, et al., Stephens et al.

Validation of SARS-CoV-2 specific T-cell epitopes to inform vaccine design

Three data sources to develop an accurate T-cell signature

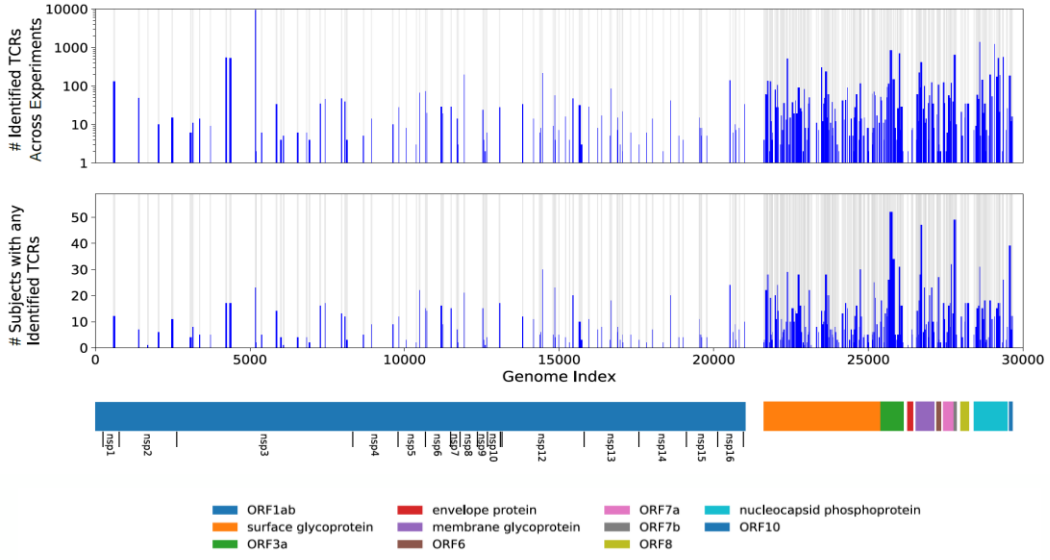
1. **Map TCRs** to Class I + Class II **SARS-CoV-2 antigens** including to the full Spike protein + human endemic coronaviruses
2. Sequence blood from **4,000+ COVID-19** cases + **3,500+ healthy controls**
3. ADPT immunomics database **58B+ receptor sequences**

Microsoft Machine Learning Infrastructure

Prediction Models + Algorithms

Validated SARS-CoV-2 T-cell Epitopes

Map TCRs to SARS-CoV-2 antigens

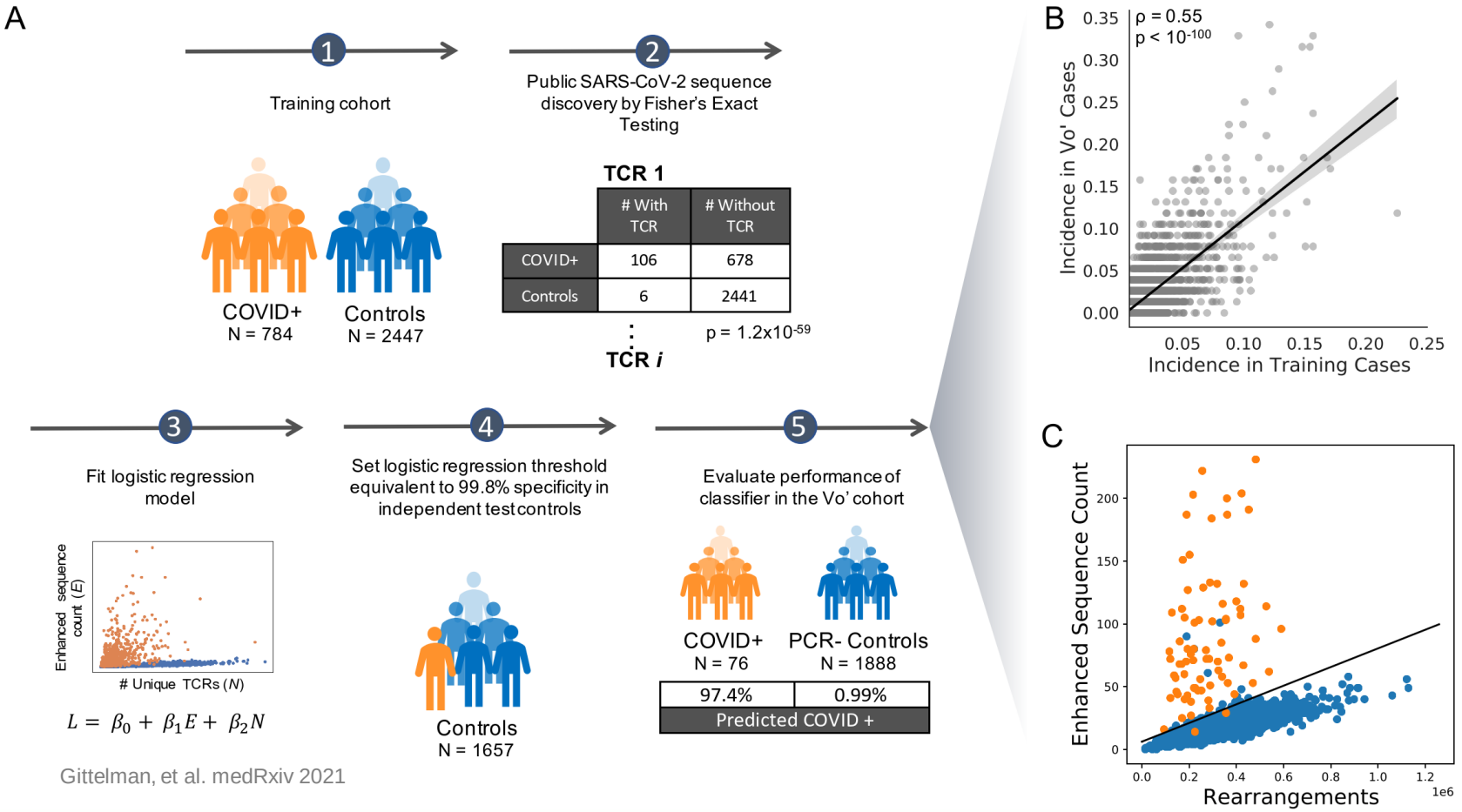


- Library of 150,000+ SARS-CoV-2 specific TCR-antigen pairs across virus genome from over a hundred patient samples
- Validate SARS-CoV-2 specific of immuno-dominant T-cell epitope ‘hotspots’
- Prioritization of epitopes are used to inform vaccine design

Infectious Diseases – COVID population-level approach to identify and validate public, diagnostic T-cell receptors

Train model on large case/control cohorts, identify unique TCR signals to make model, test in other studies

Application in Vo', Italy cohort (~2500 subjects) demonstrates 97.4% sensitivity and 99% specificity



Gittelman, et al. medRxiv 2021

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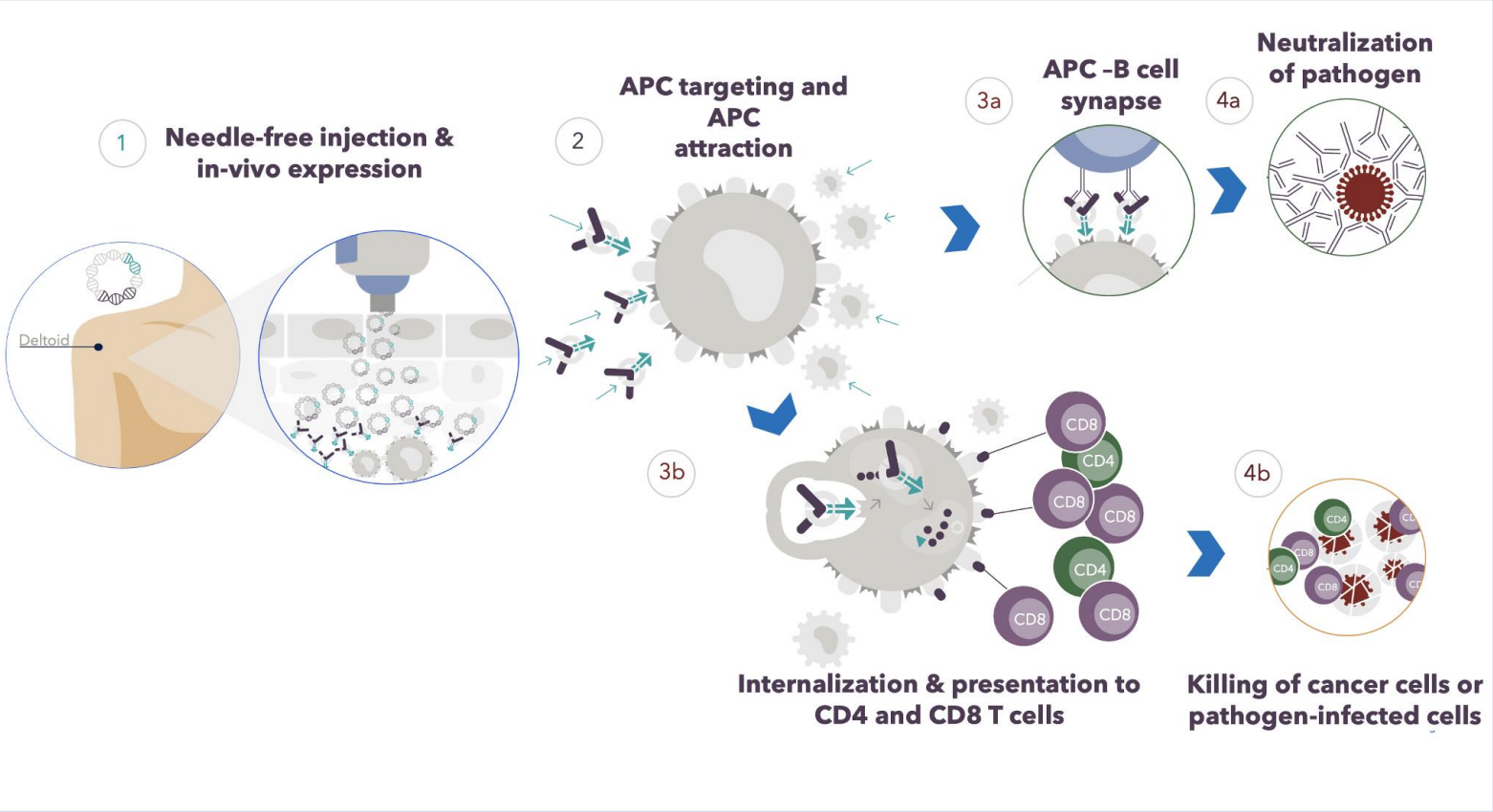
Vaccibody's DNA-based APC targeting vaccine creates rapid, strong and broad immune responses



Vacibody Platform Attributes

2nd gen COVID-19 vaccine

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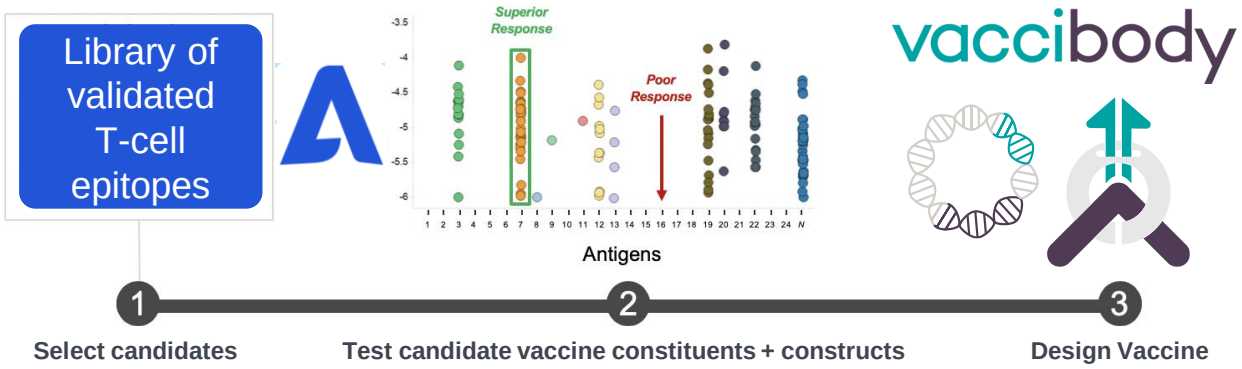
- Dendritic cells (DCs) / **APC targeting** (MIP1a) contributes to **dominant CD8 T-cell responses**
- **Faster production times** and **better scaling** vs. RNA or protein
- **DNA thermal stability** obviates cold chain distribution with **more favorable COGS**
- **Lower** production, **manufacturing costs**
- **Needle-free**, painless **administration**

Antigen selection, vaccine design and immune monitoring

Adaptive mapped TCRs to SARS-CoV-2 antigens at scale to inform the design and development of the second- generation vaccine by Vaccibody



- Validated T-cell epitopes cover multiple SARS-CoV-2 antigens and HLAs
- Include naturally processed, presented and immunogenic epitopes
- Encode immunodominant T cell epitopes
- Inform the design of Vaccibody's second generation COVID-19 vaccine

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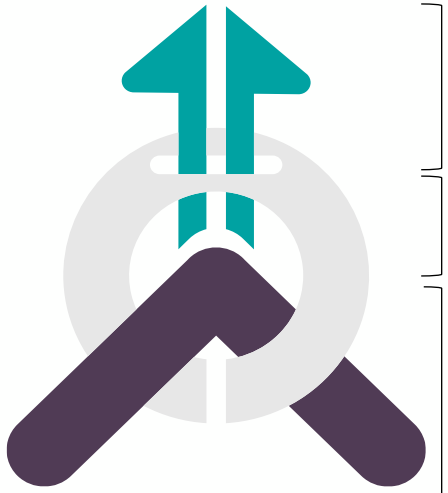
Vaccibody's SARS-CoV2 vaccines

- **Exploit the protective role of both the humoral and cellular immune system**

VB2129 - RBD candidate

RBD vaccine tailored to the B1.351 (Beta) VoC to generate RBD-specific antibody and T cell immunity



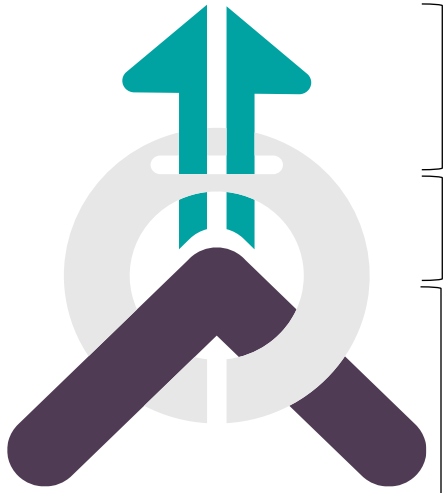
Targeting unit

Dimerization unit

Antigen unit
B1.351 VoC RBD
- K417N, E484K and N501Y mutations

VB2210 - T cell candidate

T-cell epitope vaccine inducing broadly protective T cell responses



Targeting unit

Dimerization unit

Antigen unit
Validated T cell epitopes identified by *Adaptive Biotechnologies*

VB2129

- VoC RBD candidate

Non-clinical studies

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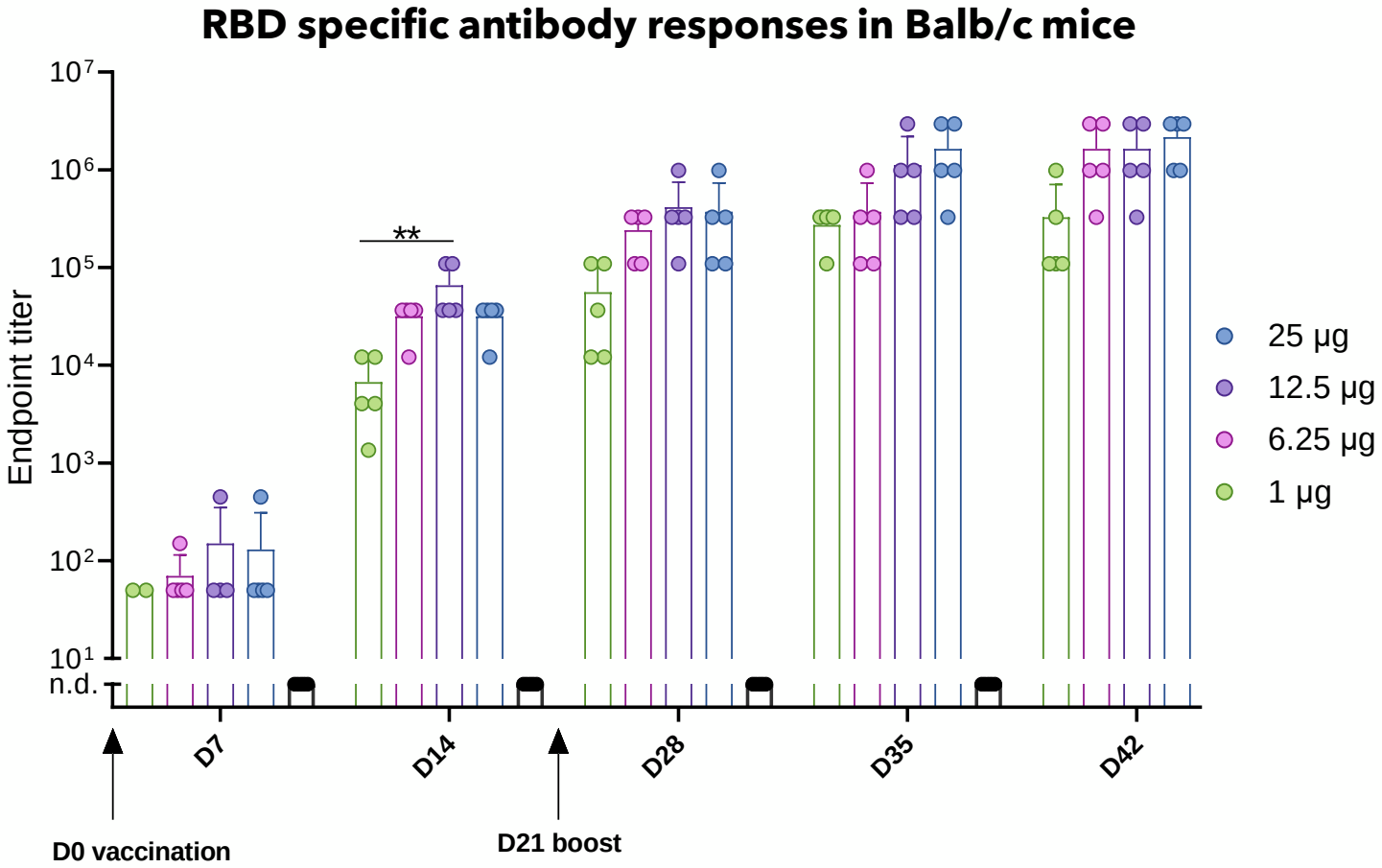
VB2129 induces rapid, strong and persistent antibody responses

Rapid, strong and long-lasting antibody responses induced after vaccination with the B1.351 RBD specific vaccine

- Rapid: Ab detected already day 7 after one vaccination even with low dose (1µg)
- Strong responses: >10^6 endpoint titer
- Confirming the results achieved with the previously published Vaccibody RBD vaccine against Wuhan WA1/2020

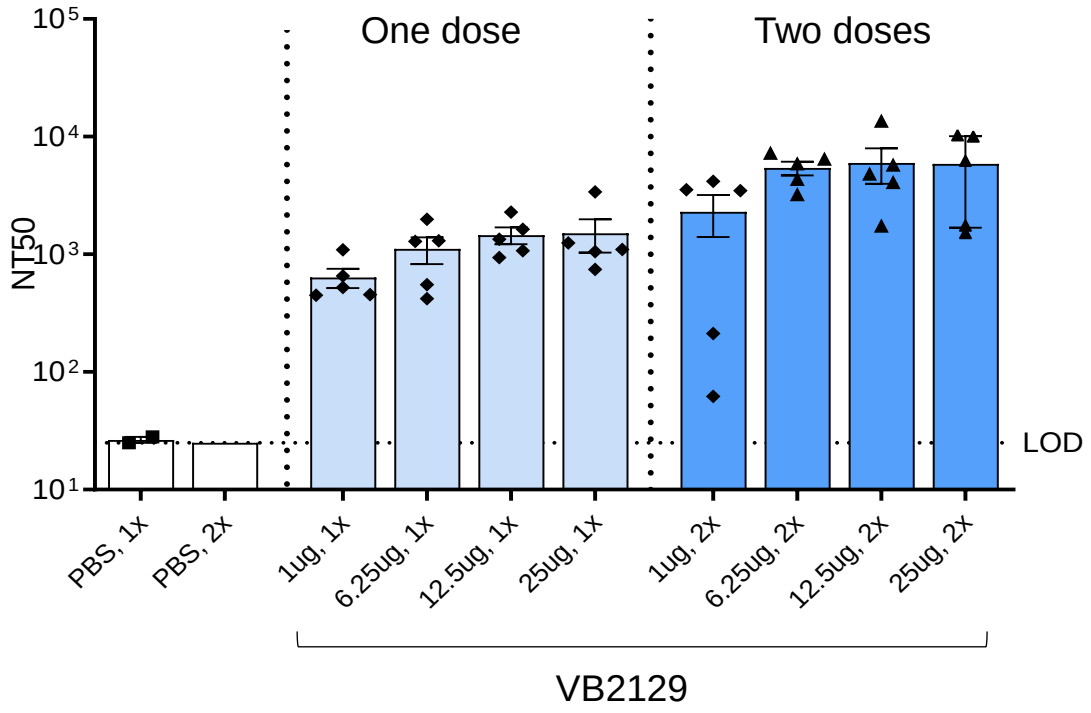


**(p<0.01), Tukey's multiple comparisons test

VB2129 induces potent virus neutralization responses across VoC

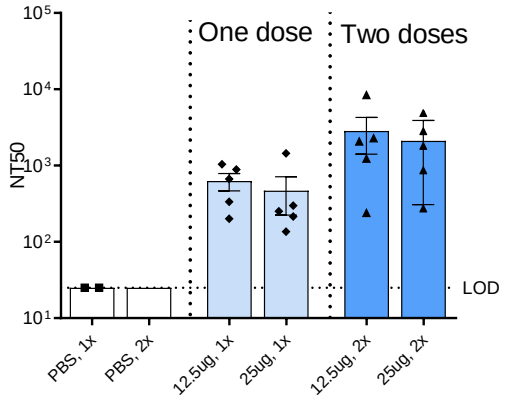
Beta – South African VoC

Pseudovirus neutralization assay

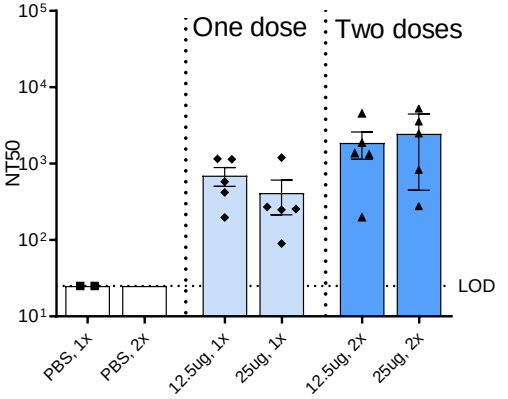


NT50: Neutralization titers that achieved 50% neutralization

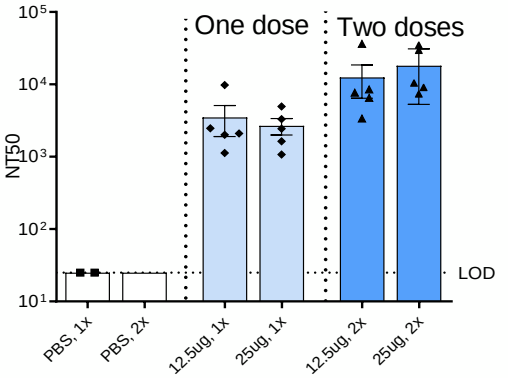
Wuhan
Original strain



Alpha
UK VoC



Gamma
Brazilian VoC



VB2210
- T-cell candidate

Non-clinical studies

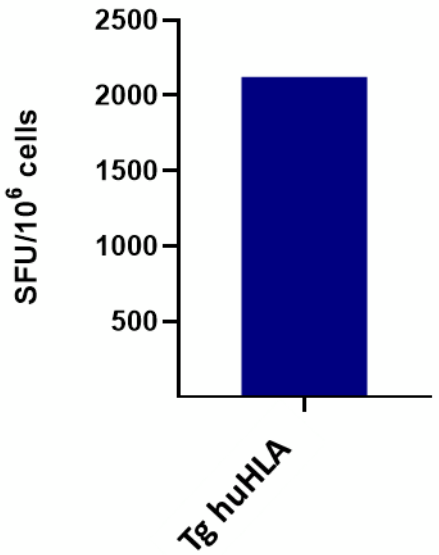
Strong immunogenicity of VB2210 in 3 mouse models

Tg huHLA
BALB/c
C57BL/6

Day 0

Day 14

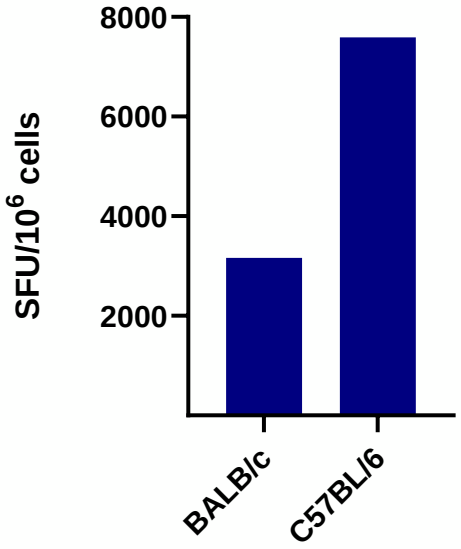
IFN-γ ELISpot



Animals
Transgenic mice expressing human HLA

Dose 50 µg

Recall peptides
Pools only for HLA restricted epitopes



Animals
C57BL/6 and BALB/c wt

Dose 25 µg

Recall peptides
Pools overlapping all the epitopes included in the construct

- VB2210 induces strong responses post 1 vaccination against HLA specific epitopes in humanized HLA tg mice
- The strong T cell responses observed in two additional mice models show the breadth of the T cell response independent of MHC selection

Preclinical summary

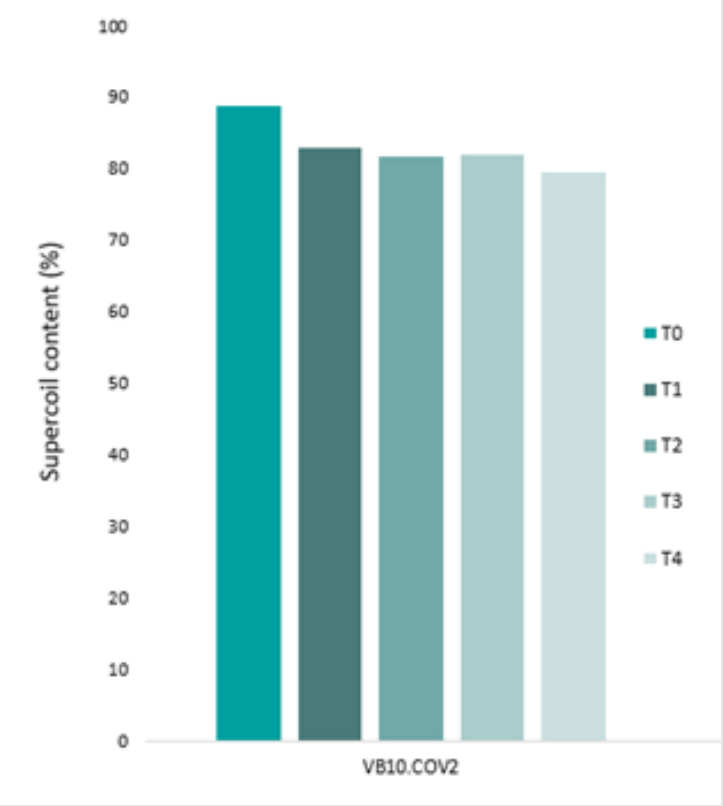
- VB2129 and VB2210 are two DNA vaccines designed using Vaccibody's modular and APC targeted technology
- VB2210 contains T cell epitopes validated by Adaptive Biotechnologies
- Preclinical data confirm induction of strong T cell responses against multiple SARS-CoV-2 antigens in several mouse models
- VB2129 contains the RBD domain of the South African VoC B1.351
- Preclinical data demonstrate induction of rapid, strong and persistent neutralizing antibody responses in animal models by VB2129

Product Supply for Phase 1/2 trial

- Vaccibody is using an already established manufacturing process to ensure rapid supply of clinical trial material for the VB-D-01 trial
- Manufacturing is progressing as planned for both COV-2 candidates
- Initial stability data indicate long-term thermal stability of the VB10.COV2 candidate(s).
  - 4 weeks at 37ºC,
  - 10 weeks at 25ºC
  - More than 52 weeks at 2-8ºC

Stability of VB10.COV2

- Stability testing of VB10.COV2 under stressed conditions at 37ºC for 4 weeks (T0, T1, T2, T3 and T4)
- Stability indicating parameter is the monomeric supercoiled topology



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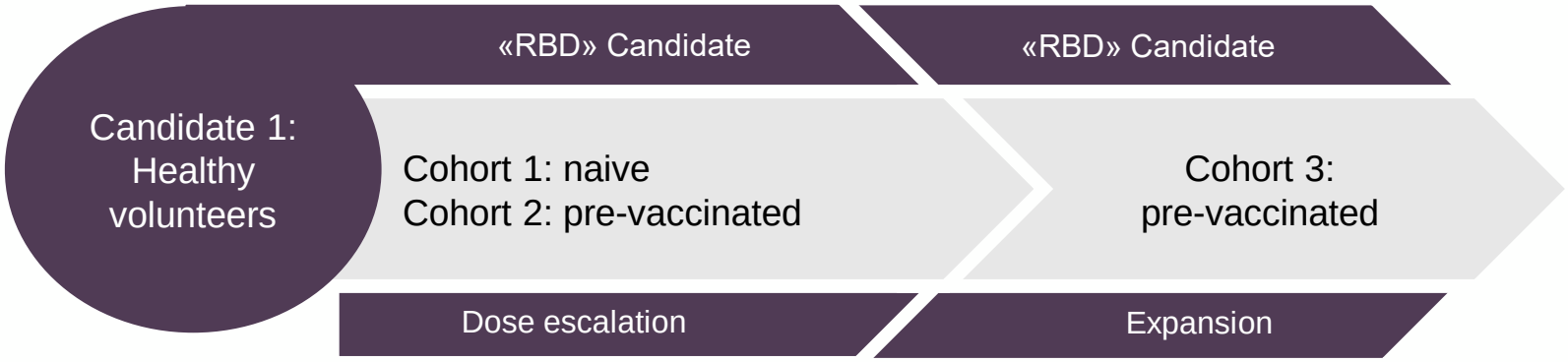
Two-armed phase 1/2 trial to evaluate second-and third generation SARS CoV-2 virus vaccine candidates

- Planned initiation of an open label dose-escalation and dose expansion trial
- Objective: evaluate safety, reactogenicity and immunogenicity of the two candidates

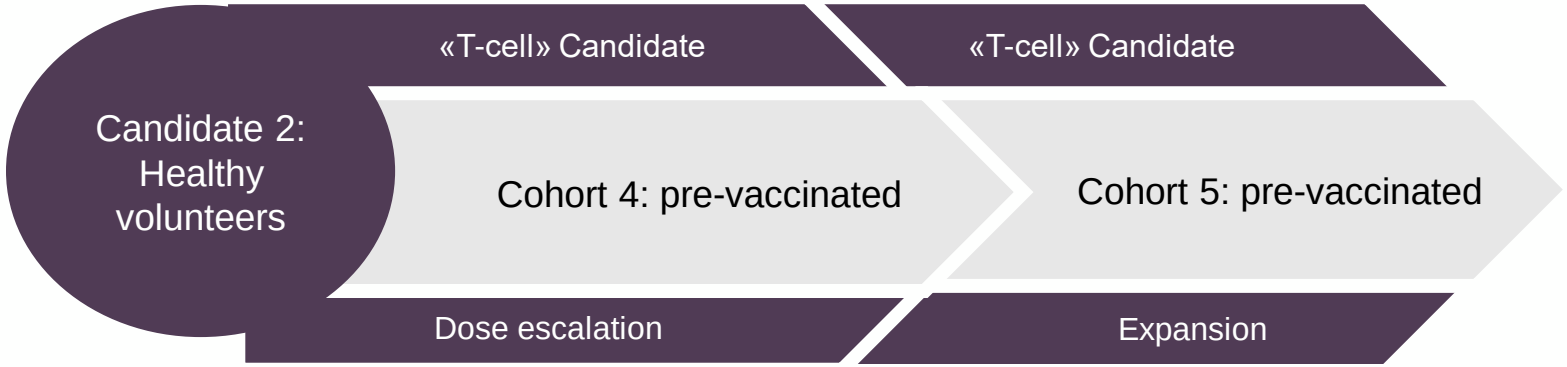
- Submission of CTA application is planned for Q3 2021
- As a result of frequent consultations and meeting with the Norwegian Medicines Agency, a fast approval is expected
- First subject dosed is planned for early Q4 2021

- Up to 200 subjects are planned to participate
- The trial will run in Norway at Oslo University Hospital and Haukeland University Hospital, Bergen

VB-D-01 investigating two candidates as prime in vaccine naive and a booster in previously vaccinated subjects



A Phase 1/2, open label, dose escalation trial to determine safety and immunogenicity of two SARS CoV-2 virus vaccine candidates (C1) and (C2) in healthy adult volunteers



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Pipeline

Broad oncology coverage and strong partnerships. Leveraging platform within infectious diseases

Program	Indication	Discovery	Preclinical	Phase I	Phase II	Phase III	Partnerships
Oncology							
Individualized							
VB10.NEO	Melanoma, lung, bladder, renal, head & neck				●		Genentech [1] Nektar [2] Therapeutics [2]
VB10.NEO	Locally advanced and metastatic tumors			●			Genentech [1, 3]
Off the shelf							
VB10.16	HPV16 positive cervical cancer[4]				●		
Undisclosed	Undisclosed targets within shared antigens	●					
Infectious disease							
VB10.COV2	SARS-CoV-2			●			Adaptive Biotechnologies [5]
Undisclosed	Undisclosed targets within infectious disease	●					

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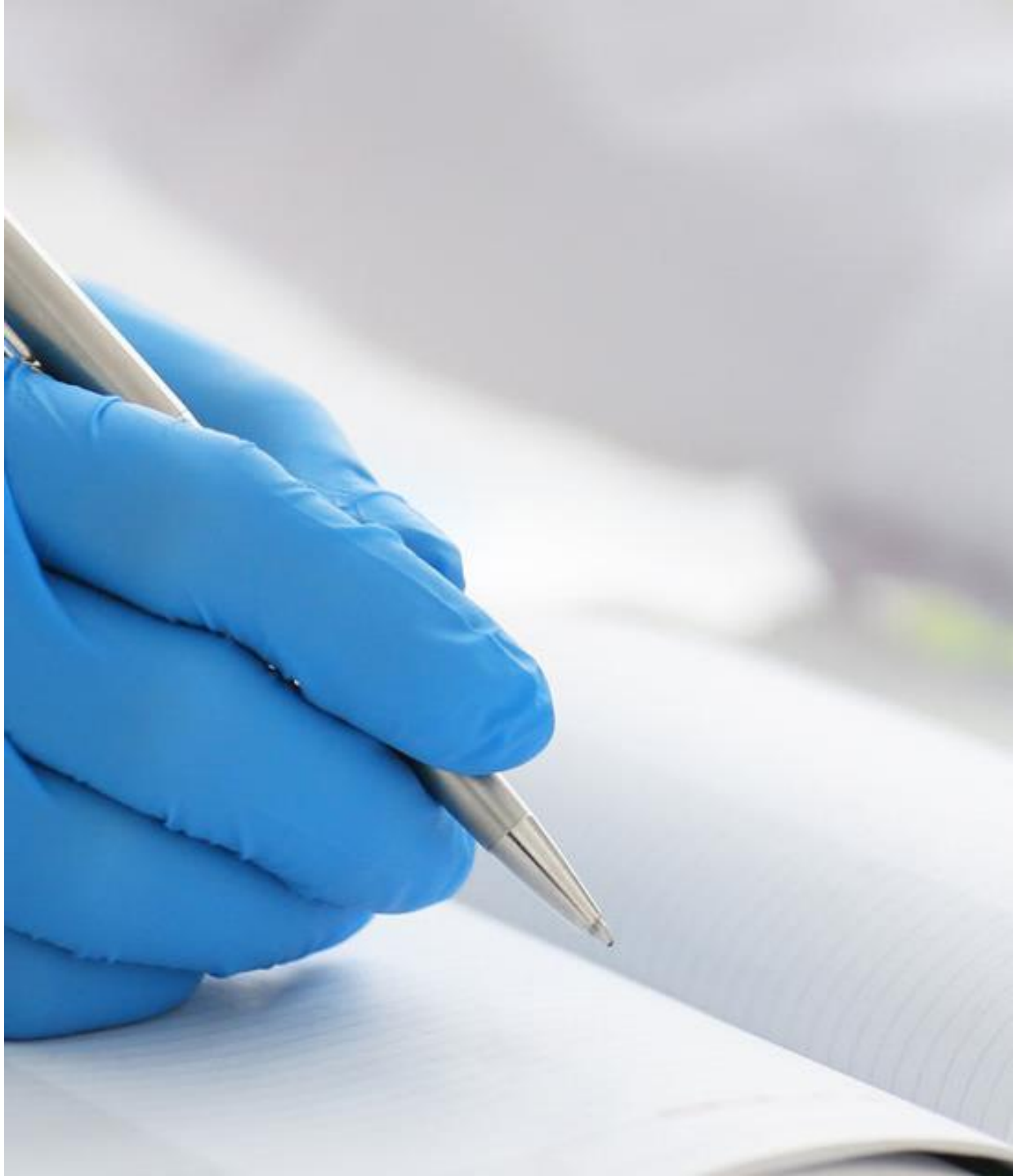
1) Genentech has an exclusive license to VB10.NEO; 2) Collaboration with Nektar Therapeutics on combining NKTR-214 (bempegaldesleukin) with VB10.NEO in trial arm 5B (SCCHN); 3) In combination with atezolizumab; 4) Roche supplies atezolizumab; 5) SARS-CoV-2 T cell epitopes excl. licensed from Adaptive

Strong financial foundation for achieving our vision

- By end of the 1st quarter of 2021, Vaccibody had a cash position of USD 179.7 million

- Vaccibody has initiated a process to explore a possible listing on the Nasdaq (US)



VB10.NEO: Exclusively licensed to Genentech

Global, oncology collaboration between Vaccibody and Genentech to develop individualized neoantigen cancer vaccines across multiple tumor types

vaccibody

Conduct clinical Phase1b trial combining VB10.NEO with *atezolizumab*

→

Genentech
A Member of the Roche Group

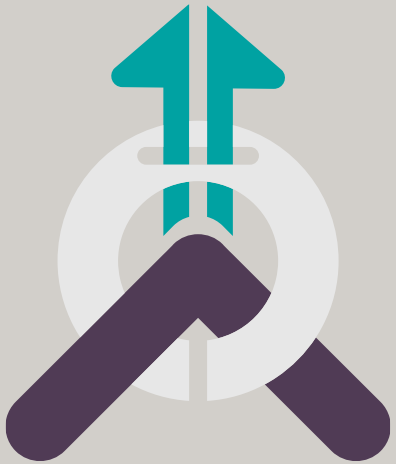
Responsible, and bear all costs, for all further clinical, regulatory, manufacturing and commercialization activities for VB10.NEO

The Genentech collaboration was announced October 1st, 2020

VB10.NEO: Vaccibody's individualized cancer vaccine – potentially best in class

- **Targeting antigen presenting cell**
- **Proprietary neoantigen selection method**
- **Encouraging immunogenicity and clinical data**
  Phase I/IIa in >50 patients with melanoma, NSCLC, SCCHN, RCC and urothelial cancer
- **100% manufacturing success rate**
  Flexible, rapid and cost-effective manufacturing of targeted VB DNA vaccine
- **Well tolerated**

VB10.NEO



Fully personalized vaccine against the patient's individual cancer specific mutations

VB N-02: Dose escalation trial of VB10.NEO & atezolizumab (Tecentriq®)

Combining VB10.NEO & atezolizumab in the individualized treatment of solid tumors

VB N-01 - combining VB10.NEO & Checkpoint inhibitor (CPI), preliminary data show encouraging immunogenicity with neoepitope-specific CD8 dominating immune responses in patients with clinical response

Last patient first dose Feb 2021

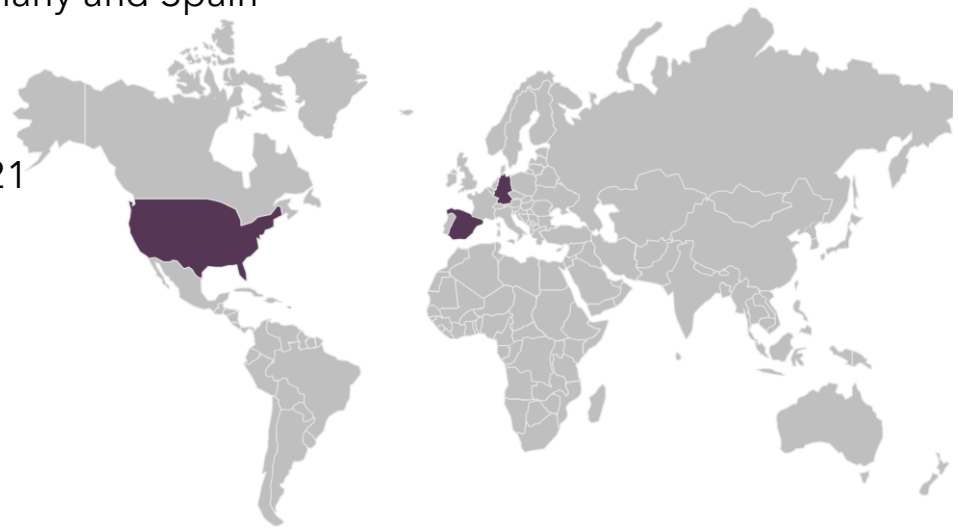
VB N-02 – combining VB10.NEO & atezolizumab in the treatment of solid tumors, further exploring the potential of the individualized neoantigen treatment

VB N-02: VB10.NEO & atezolizumab (Tecentriq®) treatment in various solid tumor indications

Trial initiated and first US site activated

Protocol title: A phase 1B, open-label, dose-escalation trial of the safety of and antigen-specific immune responses elicited by VB10.NEO in combination with atezolizumab in patients with locally advanced and metastatic tumors

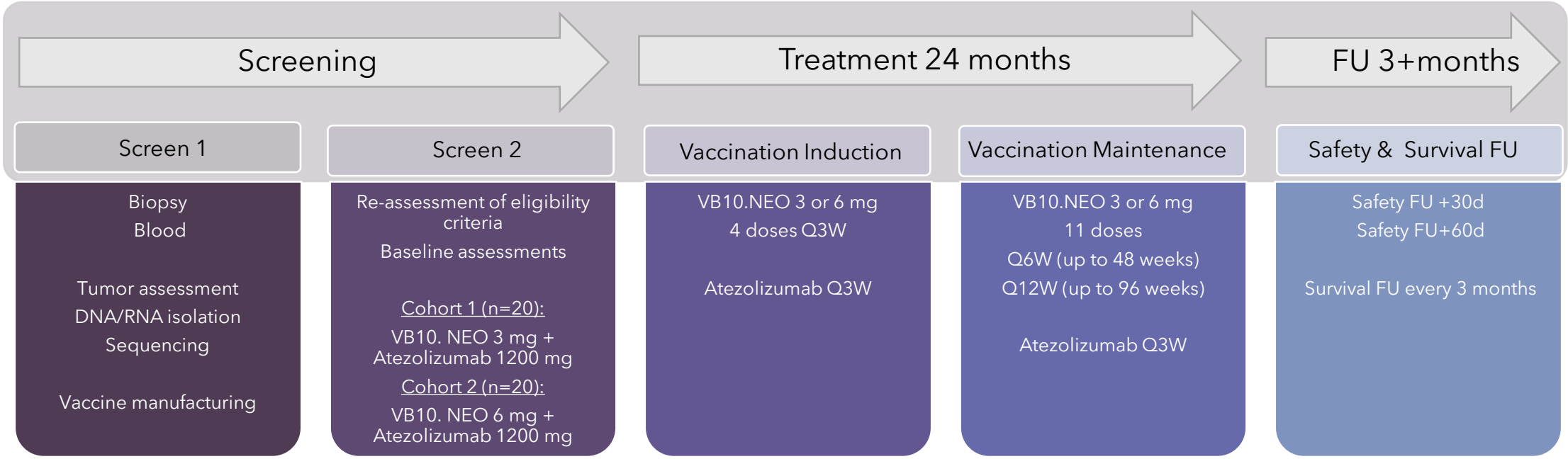
- Collaboration partner: Genentech
- Site initiations started to support enrollment of patients as planned this year
- 40 patients planned to be enrolled at 10 sites across three countries: USA, Germany and Spain
- IND* and IRB** approval achieved for first US site
- CTA*** submissions sent in for Germany and Spain. Approvals expected H2 2021
- To be posted at www.clinicaltrials.gov in July 2021



*IND = Investigational New Drug Application
**IRB = Institutional Review Board
***CTA = Clinical Trial Application

VB N-02 Objectives, Endpoints and Trial Design

- Primary objective: Safety and tolerability of VB10.NEO in combination with atezolizumab
- Biomarkers: Number and magnitude of antigen-specific T-cell responses
- Efficacy: ORR (Complete and Partial Response), DOR, PFS, OS



Accomplishments and news flow guidance

Selected accomplishments

July 2020
First patient dosed in VB C-02 Phase II trial of VB10.16 in combination with Roche's atezolizumab in advanced cervical cancer

October 2020
Worldwide, exclusive collaboration with Genentech on VB10.NEO

December 2020
Launch of Infectious Disease strategy

July 2021:
VB10.NEO – initiation of VB N-02, Phase Ib trial

VB10.CoV2 – Adaptive Biotechnologies - exclusive T cell epitope agreement, and pre-clinical update

News flow guidance

2H 2021:
VB10.16 – fully enrolled VB C-02 trial in cervical cancer

2H 2021:
VB10.16 – interim clinical data for first patients from VB C-02 trial in cervical cancer

2H 2021:
Pre-clinical update from the infectious disease initiative

Q&A

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