Aridis Pharmaceuticals Fireside Chat

Analyst Day & 2021 Outlook Event

Dec .4th, 2020

EVENT AGENDA

- Welcome comments by CEO: 5 min
- Ventilator Associated Pneumonia: Louise Chen (15 min)
- Cystic Fibrosis: Carl Byrnes/Vernon Bernardino (15 min)
- COVID-19: Jonathan Aschoff (15 min)
- APEX Platform: Jason McCarthy (15 min)
- Open Q&A: Audience and analyst questions across all indications/molecules (10 min)

Forward-Looking Statements

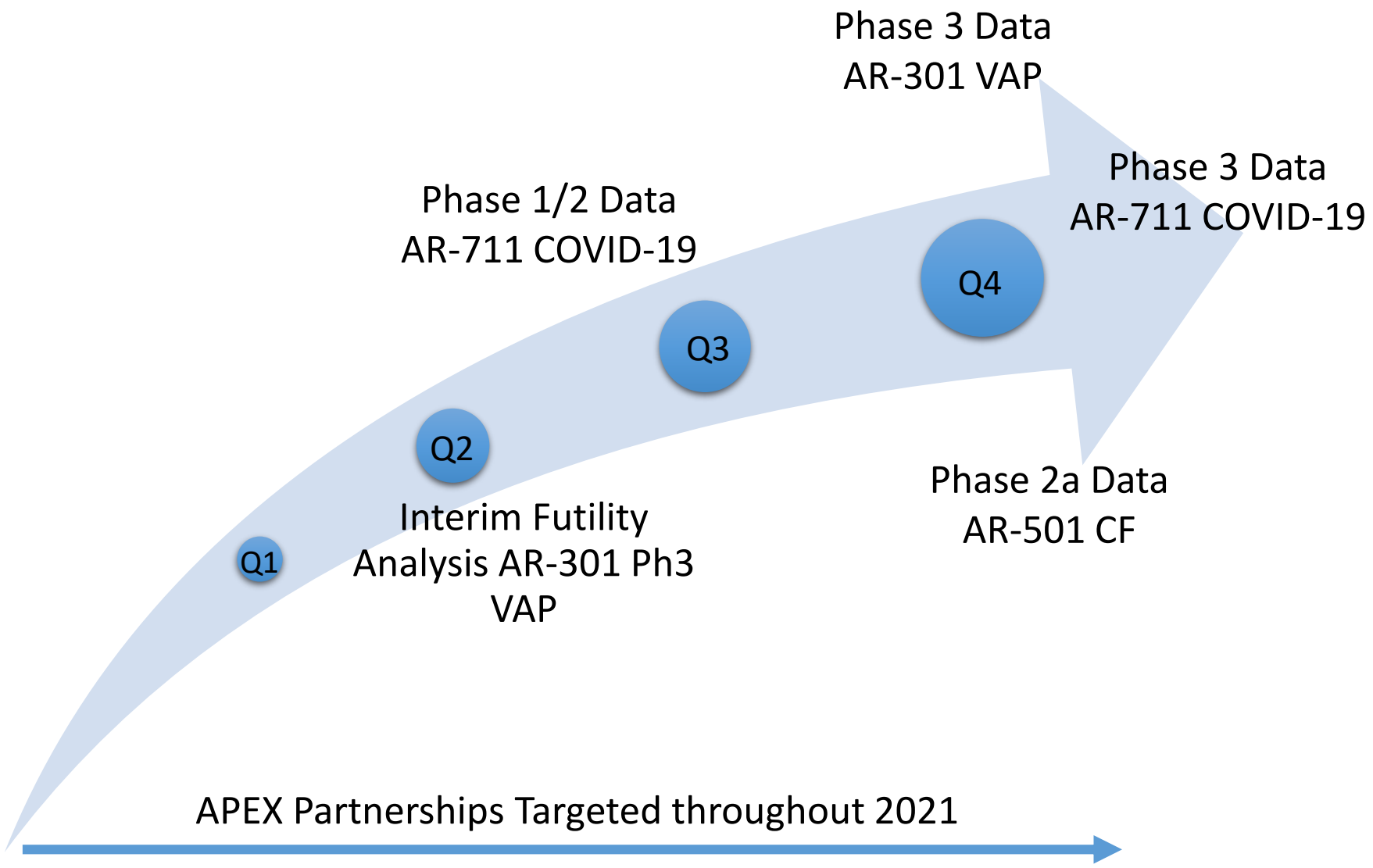
These forward-looking statements relate to future events or future financial performance of the Company. All such forward-looking statements involve risks and uncertainties and are not guaranties of future performance. An investment in the securities of Aridis is speculative in nature, involves a high degree of risk, and should not be made by an investor who cannot bear the economic risk of its investment for an indefinite period of time and who cannot afford the loss of its entire investment. These include many important factors that affect our ability to achieve our stated objectives including, but not limited to:

- The timing of regulatory submissions;
- Our ability to obtain and maintain regulatory approval of our existing product candidates and any other product candidates we may develop, and the labeling under any approval we may obtain;
- Approvals for clinical trials may be delayed or withheld by regulatory agencies;
- Pre-clinical and clinical studies will not be successful or confirm earlier results or meet expectations or meet regulatory requirements or meet performance thresholds for commercial success;
- The timing and costs of clinical trials, the timing and costs of other expenses;
- Our ability to obtain funding from third parties;
- Management and employee operations and execution risks;
- Loss of key personnel;
- Competition;
- Market acceptance of products;
- Intellectual property risks;
- Assumptions regarding the size of the available market, benefits of our products, product pricing, timing of product launches;
- The uncertainty of future financial results;
- Risks associated with this offering;
- Our ability to attract collaborators and partners;
- Our reliance on third party organizations.

We operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this presentation may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

Except as required by law, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this presentation to conform these statements to actual results or to changes in our expectations.

Welcome! 2021 is a Strong Year for Aridis

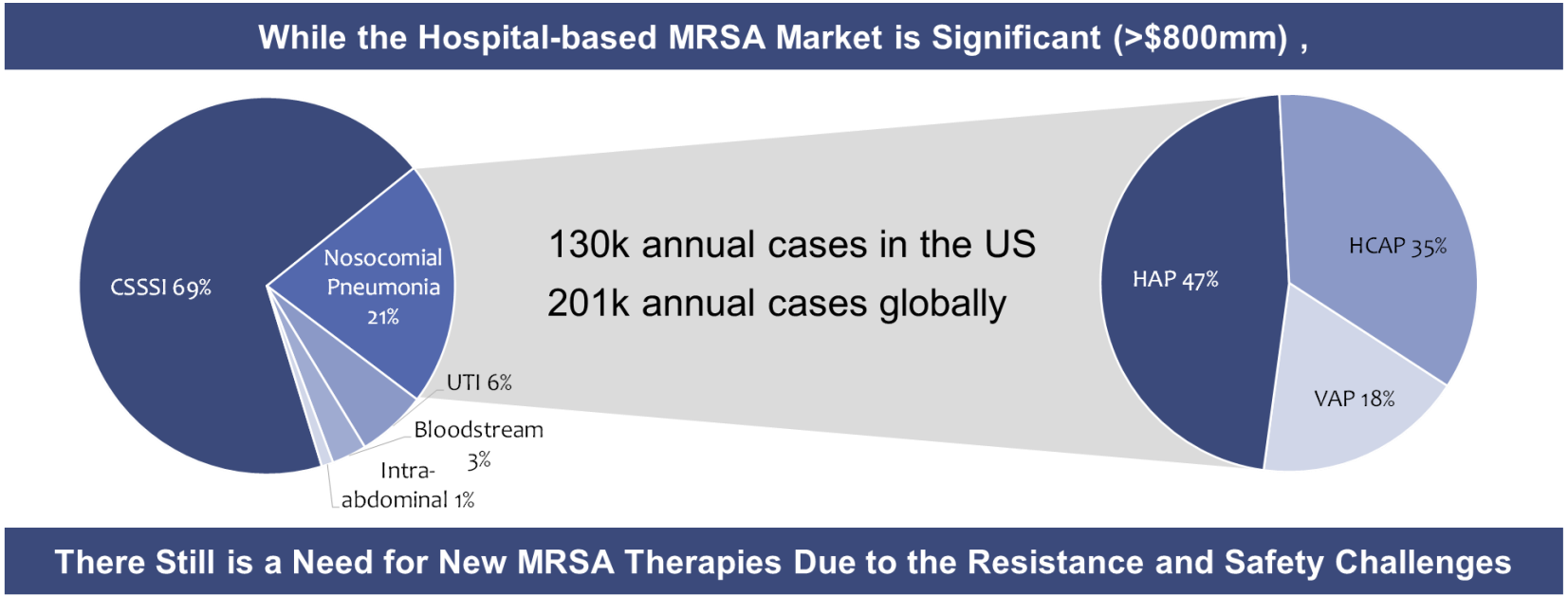


AR-301 Phase 3 Program for *S.aureus* VAP

Louise Chen, Cantor Fitzgerald

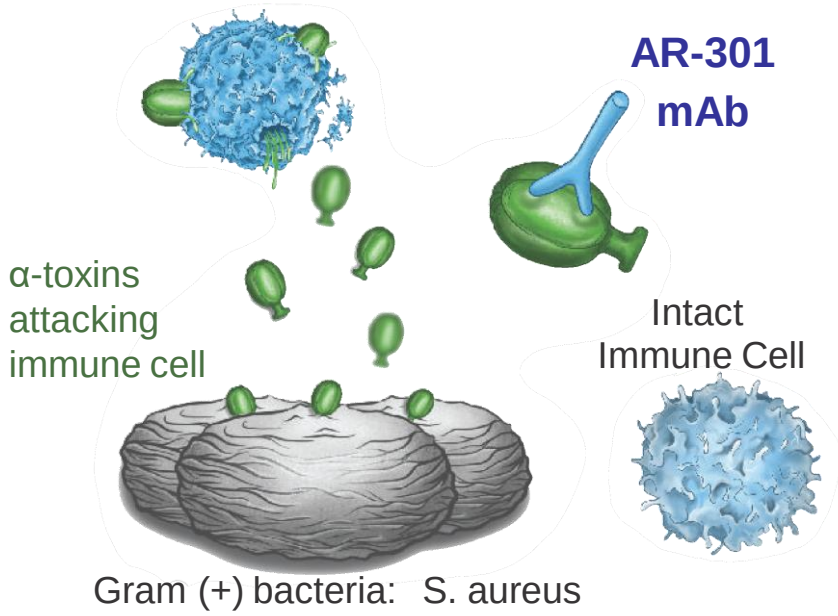
Hospital Acquired Bacterial Pneumonia Treatment Landscape

- Hospital-based MRSA typically treated with broad spectrum anti-MRSA agents (vancomycin, linezolid)
- Significant need for new anti-MRSA agents given *S. aureus* resistance of 40% – 50%
- Additional unmet needs: new treatment options with better safety profile and *clear demonstration of efficacy improvement over SOC Abx*



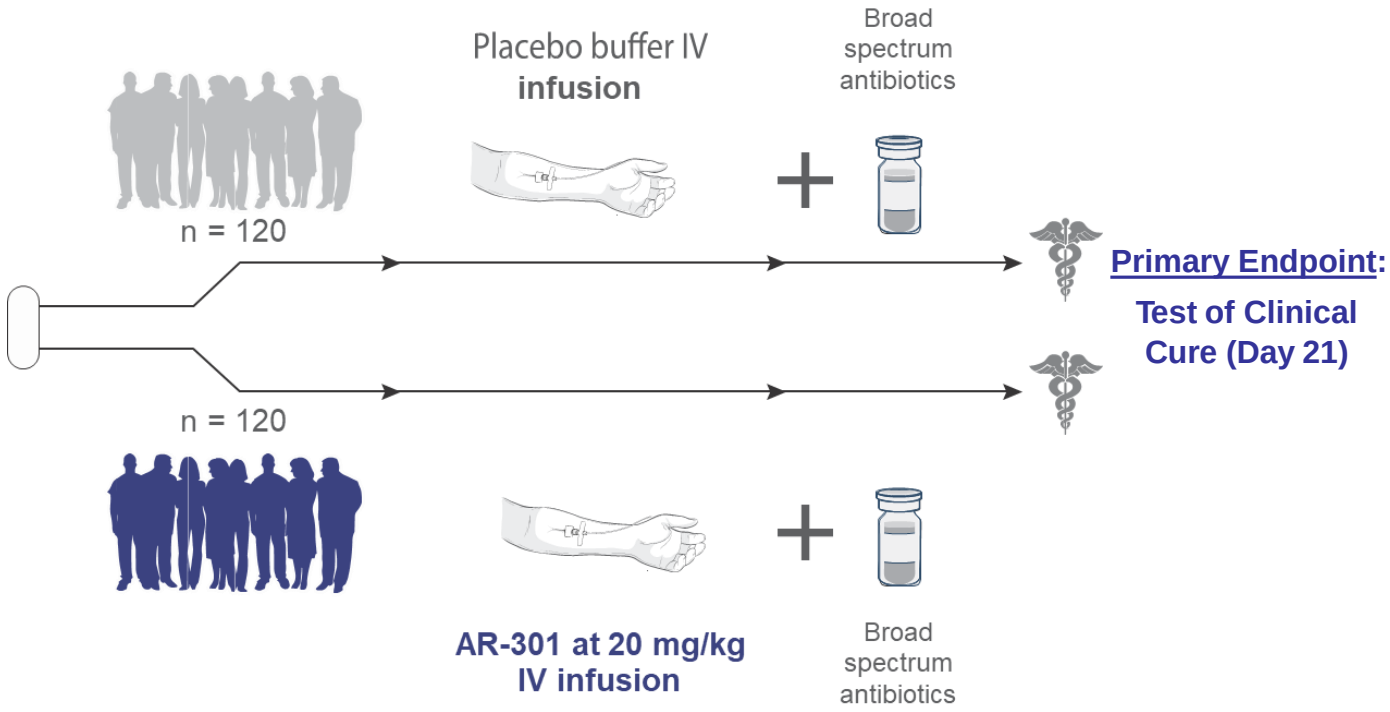
AR-301 Product Profile

- Differentiated immunotherapy approach to treating *S. aureus* bacterial pneumonia
- MOA: neutralization of *S. aureus* toxin, effective vs. MDR strains
- Phase 3 program with prior positive Phase 2a data demonstrating safety & efficacy trend
- Proxy data from AstraZeneca's *S.aureus* alphatoxin mAb 'suvratoxumab' for pre-emptive treatment showed positive Phase 2 results in ventilated patients



AR-301 Phase 3: Trial Design

- Superiority trial design
- Single IV infusion of AR-301 + SOC ***versus*** SOC alone
- Global study involving >125 sites in 20 countries (U.S., EU, Asia)
- Primary endpoint = clinical cure rate at day 21
- **2021 Goalposts:**
  - Interim results of 120 patients in 1H2021
  - Final data readout YE2021



(ClinicalTrials.gov ID NCT03027609)

VAP Fireside Chat

Louise Chen

Dr. Hasan Jafri, CMO ARDS

Dr. Vu Truong, CEO ARDS

AR-301 Phase 3 Design: Powering Assumptions

- Primary Endpoint of clinical cure has been agreed upon by FDA and EMEA
- Clinical cure is a composite endpoint composed of 3 parts:
  - Mortality
  - Ventilation time
  - Resolution of pneumonia
- **N= 240 ensures a >> 90% power to show a 20% absolute benefit** in day 21 clinical cure rate with a p ≤ 0.05**

Primary Endpoint: Clinical Cure Rate

Study Power	Control (SOC)*	AR-301 + SOC	Absolute Difference**	Evaluable per group	Total Enrolled
80%	75%	95%	20%	n = 55	n = 110
90%	75%	95%	20%	n = 69	n = 138

Rationale for 20% absolute clinical cure rate benefit

(i) Considered clinically meaningful to physicians

(ii) phase 2 trial demonstrated statistical trend towards benefit in ventilation time and microbiological eradication

(iii) this magnitude of benefit is supported by preclinical mouse models

Inhaled Anti-infectives for Cystic Fibrosis

Carl Byrnes, Northland Securities

Important Disclosure:

The analyst responsible for preparing this research report receives compensation that is based upon various factors including Northland's institutional trading commissions and total revenues which may be generated by Northland's investment banking activities.

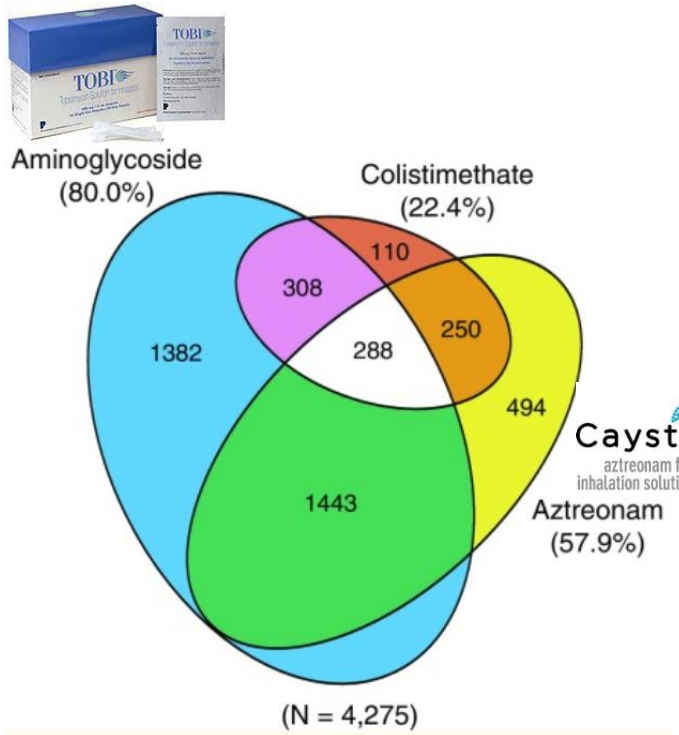
Northland Securities makes a market in the subject company's security: ARDS

Northland Securities intends to seek compensation for investment banking services from the subject company in the next three months: ARDS

Cystic Fibrosis Infection Treatments Landscape

CF has a prevalence of 30,000 patients in the US, typically diagnosed in childhood.

- CF patients suffer from chronic respiratory infections secondary to their underlying disease state.
- And require lifelong treatment, with regimens comprised of:
  - CFTR channel correctors that rectify genetic mutation;
  - And *chronic treatment with inhaled antibiotics for secondary lung infections*.
- Two SOC inhaled antibiotics - tobramycin (TOBI®) and aztreonam (Cayston®) - dominate the market (~$700m market).
- The SOC inhaled antibiotics are old (TOBI® - 20 years and Cayston® - 10 years) and have significant limitations.



Ann Am Thorac Soc. 2019 May; 16(5): 534–539

Limitations of Existing SOC Inhaled Antibiotics

Existing SOC inhaled therapies have limitations and numerous challenges, including:

- Limited coverage of problematic pathogens such as MRSA, non-tuberculous mycobacterium, *Aspergillus fumigatus*, and others;
- Increased development of resistance, giving rise to acute pulmonary exacerbations such as *tobramycin-resistant pseudomonas.*
- Alternating monthly treatment cycles of TOBI® and Cayston®;
- Demanding dosing regimen (TOBI® is a TID drug);
- Subset of CF patients cannot tolerate inhaled antibiotics;
- IV-administered antibiotics have safety issues including renal impairment and hearing loss.

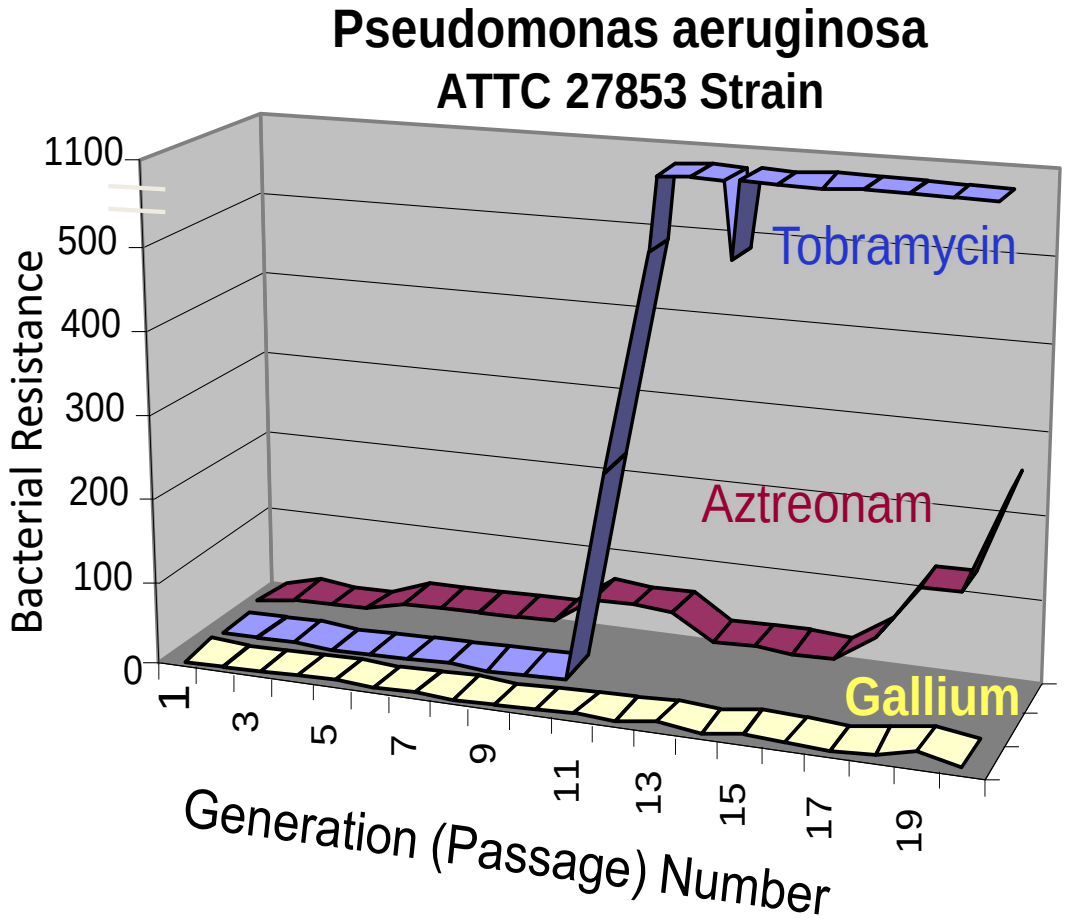
Addressing an Unmet Medical Need

Ideal characteristics of next-gen antibiotic:

- Effective against MDR bacterial strains;
- Low rate of resistance development;
- Synergistic with other antibiotic therapies;
- Does NOT interfere with macrophage activity;
- Convenient dosing;
- Safe and well-tolerated.

AR-501 Product Profile

- Novel chronically administered inhaled anti-infective
  - √ Broad spectrum, with activity against NTM, fungi, MRSA
  - √ Effective against MDR bacterial strains;
  - √ Low rate of resistance development;
  - √ Synergistic with other antibiotic therapies
  - √ Attractive once/week inhaled formulation
- Intravenous (IV) formulation of gallium demonstrated safety and statistical significance improvement in lung function in Phase 2 study in CF (U. Wash)
- Phase 1 study of AR-501 showed favorable safety and tolerability; phase 2a trial results 2H2021

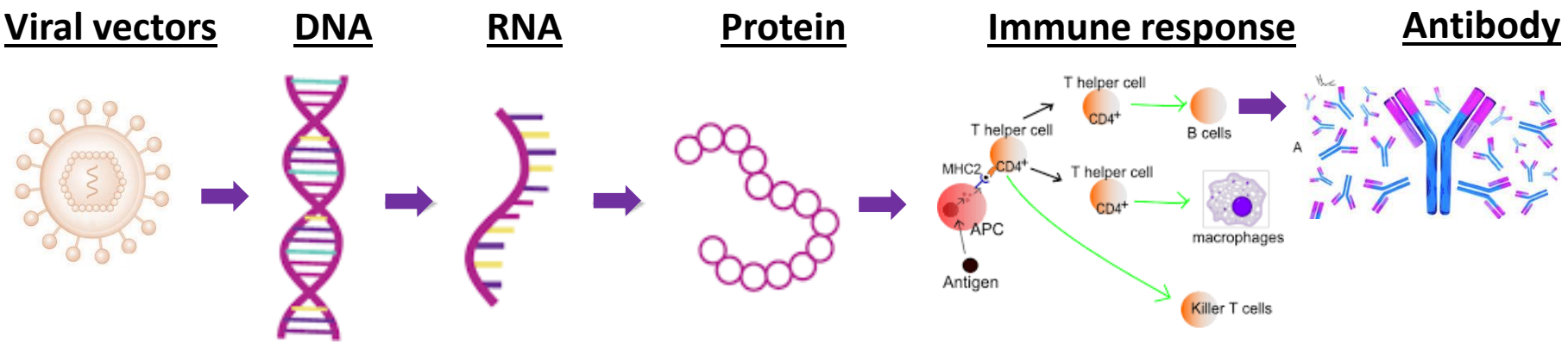


Cystic Fibrosis Fireside Chat

Carl Byrnes & Vernon Bernardino

Dr. Hasan Jafri, CMO ARDS

Dr. Vu Truong, CEO ARDS



AZN **INO** **MRNA, PFE** **NVAX, JNJ** **REGN, LLY,**
ARDS

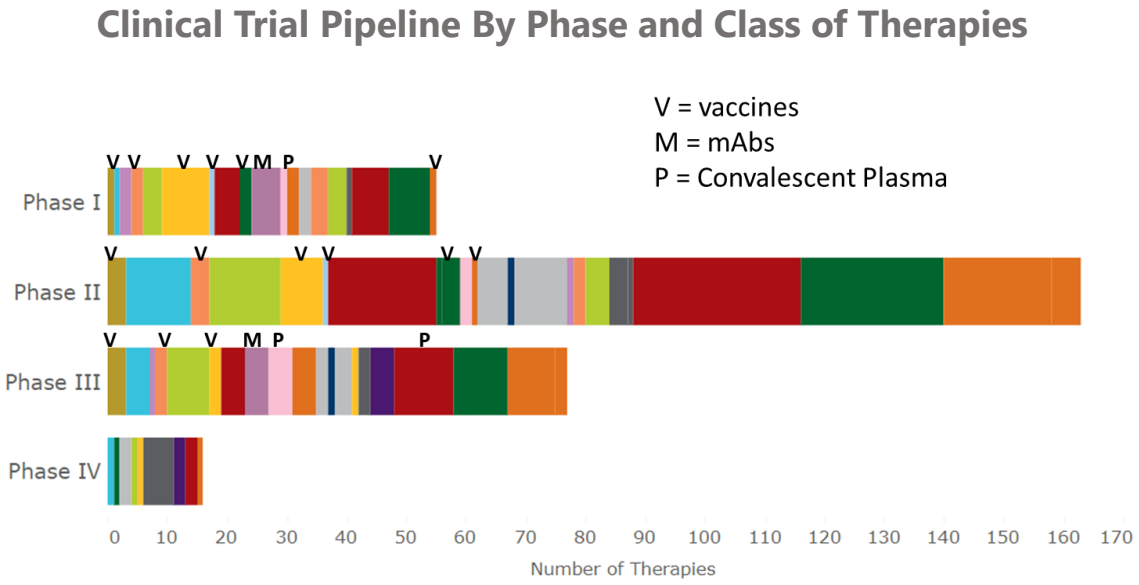
COVID-19 mAb

Jonathan Aschoff, Ph.D., Roth Capital

Disclosure:
ROTH makes a market in shares of Aridis Pharmaceuticals, Inc. and as such, buys and sells from customers on a principal basis.“

COVID-19 Vaccine & Treatment Landscape

- Unprecedentedly large pipeline of candidates
- Strong vaccine data from Pfizer, Moderna, AstraZeneca has validated SARS-CoV-2 spike protein as a clinically relevant target
- Commercial roll outs of 5-6 candidates will likely start by 1H21
- Monoclonal antibodies: REGN & Eli Lilly mAbs have already received EUA in US in 4Q20
- Second generation candidates will likely be more beneficial and could be the ultimate market leaders



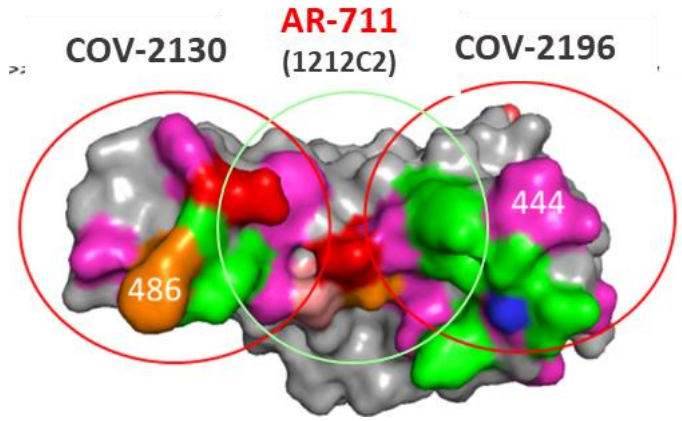
BIO.org data 25Nov2020

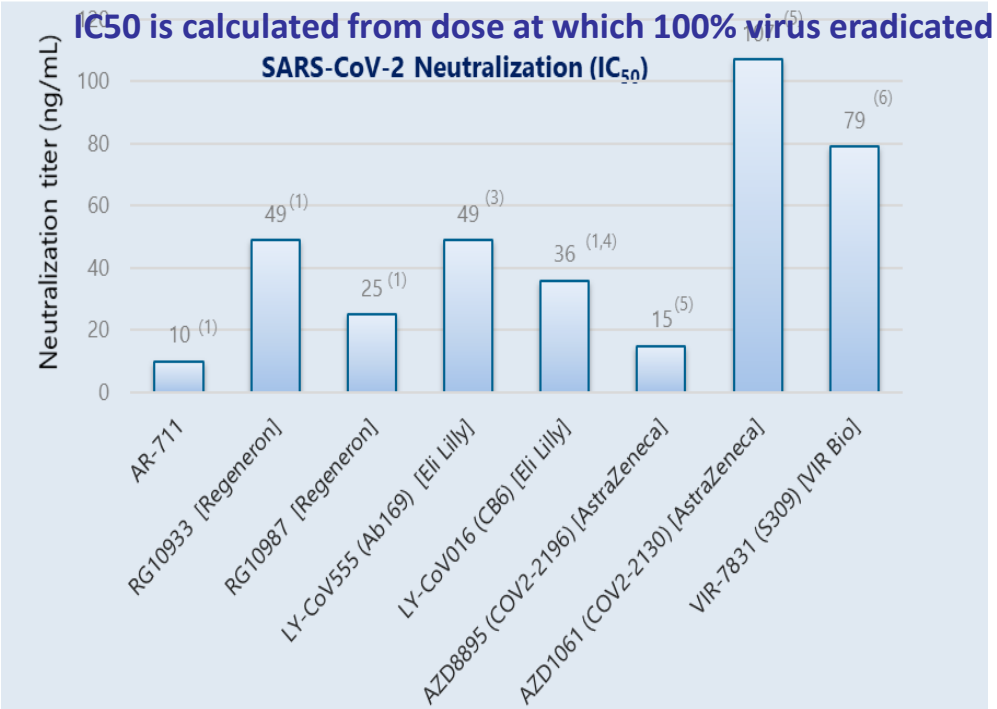
COVID-19 unmet medical needs

- A vast majority of COVID-19 patients are not hospitalized, but need treatment
- There is a lack of an effective therapy that can lower the barrier to treatment and facilitate expansion of treatment coverage
- Mab programs in late-stage clinical testing require too high of a dose to be effective and offer relatively moderate clinical benefits

What is AR-711

1. AR-711 is a monoclonal antibody targeting a highly conserved epitope on the receptor-binding domain of the SARS-Cov2 spike protein, Aridis' APEX platform-aided development
    - Because Aridis used this highly conserved epitope, AR-711 is active against all known isolates of SARS-Cov-2
2. High affinity & neutralization potency, effective against D614G strain
3. Inhaled liquid aerosol dosage presentation is designed for at-home, self-administration and is compatible with a variety of commercially available nebulizers
4. Therapeutically effective in animal testing at ~1,000-fold lower dose than parenterally administered mAbs
5. Half-life extended for up to 1 year of antiviral protection
6. Reduced effector function to mitigate risk of antibody disease enhancement (ADE)
7. Aridis is on track to initiate and complete patient enrollment of a Phase 1,2,3 study by YE21





1. Side-by-side experimental data. RGN109333, RGN10987, and CB6 mAbs were manufactured from sequence information
2. Regeneron's RG10933 and RG10987, also denoted REGN-CoV2; doi:10.1126/science.abd0827
3. Eli Lilly's LY-CoV555, also denoted LY3819253; doi.org/10.1101/2020.09.30.318972
4. Eli Lilly's LY-CoV016, also denoted CB6; doi.org/10.1038/s41586-020-2381-y
5. AstraZeneca's AZD8895 and AZD1061, also denoted AZD7442; doi.org/10.1038/s41586-020-2548-6
6. Vir Biotechnology's VIR-7831; doi.org/10.1038/s41586-020-2349-y

* No SPR or BLI monomeric binding affinity data available. Reported ELISA EC_{50} for AZD8895 (8 pM) and AZD1061 (10 pM)

AR-711 Expected Product Profile When on Market

- Self-administered, single dose treatment designed for sustained efficacy
- Enhanced lung bioavailability and therapeutic index using local, inhaled delivery
  - Substantially reduce the dose required to achieve treatment benefits
  - Reduce manufacturing capacity burden and cost of treatment
- Proprietary formulation engineered to protect mAbs from the physical stresses associated with aerosol generation from delivery devices
- Facilitate expansion of treatment coverage by
  - enabling self-administration on an outpatient basis
  - being compatible with various widely available, cost effective delivery devices
- Wide reimbursement coverage expected, as AR-711 may reduce/prevent future hospitalization at a highly competitive cost

COVID Mab's Fireside Chat

Dr. Jonathan Aschoff

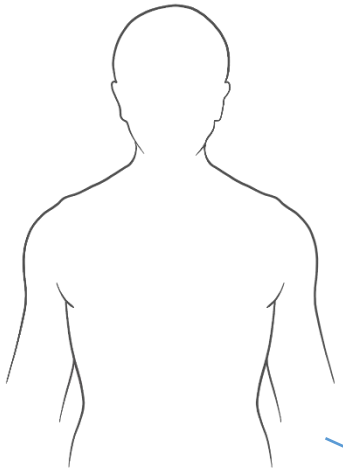
Dr. Hasan Jafri, CMO ARDS

Dr. Vu Truong, CEO ARDS

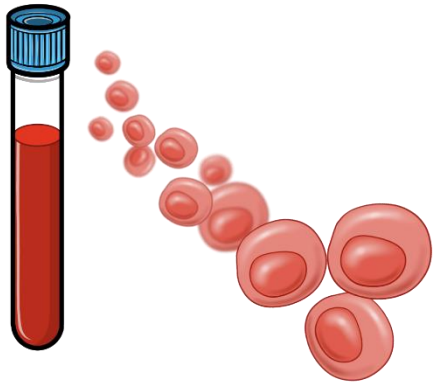
mAb Discovery Platform Technologies

Dr. Jason McCarthy, PhD.

Antibody Discovery and Production Challenge



Immunized or Convalescent



Immunized

Size of B-cell repertoire
~1x 10^6 or more unique cells

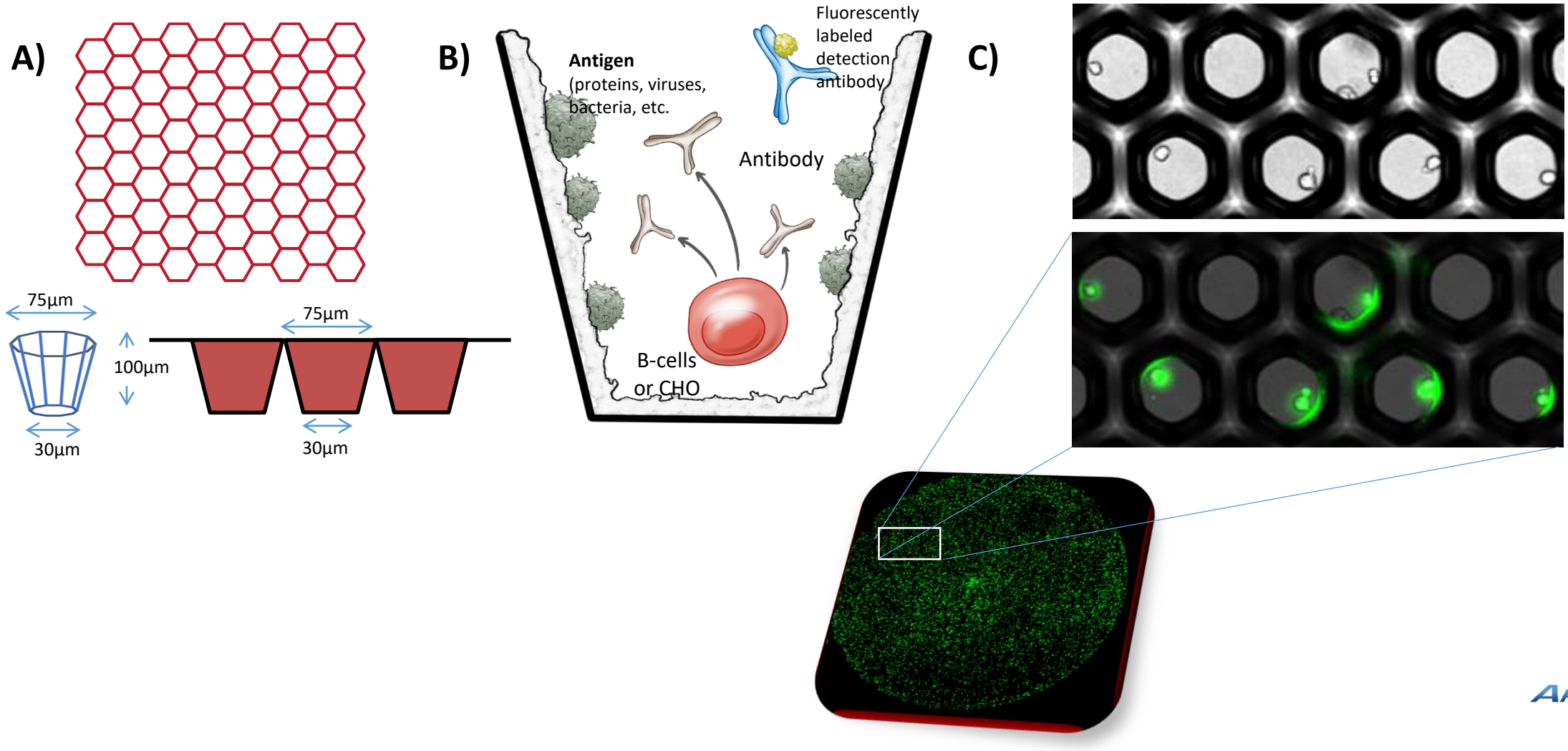
CHALLENGE # 1

Rapid **functional** screening of **entire** repertoire for potent, rare B-cell

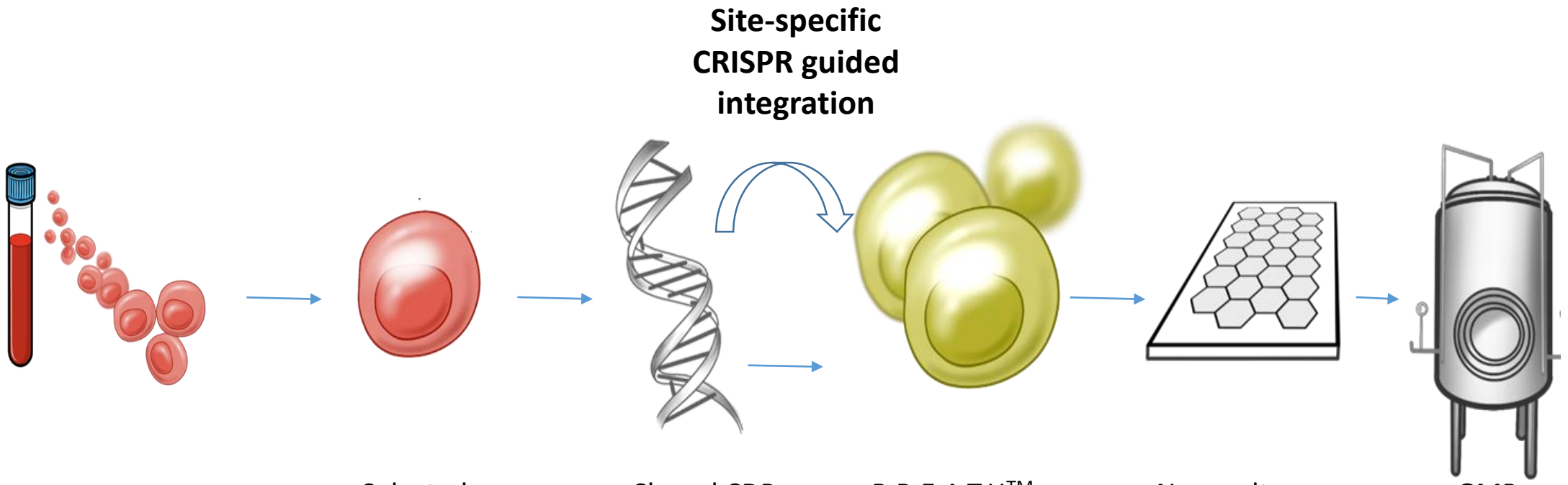
CHALLENGE # 2

Rapid production of mAb at high titer

Addressing Challenge # 1: Screening Entire B-cell Repertoire for Rare B-Cells



Addressing Challenge # 2: Rapid Production of MAbs Using CRISPR



APEX Platform Fireside Chat

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Dr. Vu Truong, CEO ARDS

Open Q&A Session

Analyst &/or Audience Questions Across all Aridis' Indications and Molecules