Developing Non-Antibiotic Anti-infectives To Treat Lung Diseases
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.
Our Differentiated Approach

- Innovative, new classes of non-antibiotic anti-infectives with novel targets & MOA’s
- Combat AMR: effective against antibiotic resistant strains
- Clinically develop to maximize the probability of adoption as first-line therapies
- Demonstrate superiority over standard of care Abx
- Focus on hospital cost environment and/or chronic therapies
Focused on Acute Pneumonia as Lead Target Indication

Hospital charges (all-in) for an average of 18.5 ICU Days
$198,000 per patient (30 cases)

VAP - by the numbers
Ventilator-Associated Pneumonia

Survey of 30 cases (median)

<table>
<thead>
<tr>
<th>Category</th>
<th>Median Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>44.4%</td>
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<tr>
<td>Pharmacy</td>
<td>21.0%</td>
</tr>
<tr>
<td>Laboratory</td>
<td>16.3%</td>
</tr>
<tr>
<td>Respiratory Treatment (Mech. ventilation)</td>
<td>9.3%</td>
</tr>
<tr>
<td>Radiology (+CT Scans)</td>
<td>3.3%</td>
</tr>
<tr>
<td>Cardiology</td>
<td>1.9%</td>
</tr>
<tr>
<td>Operating Room</td>
<td>1.4%</td>
</tr>
<tr>
<td>Diagnostics (Blood ECG)</td>
<td>1.9%</td>
</tr>
<tr>
<td>Pulmonary Diagnostic</td>
<td>0.4%</td>
</tr>
<tr>
<td>Orthopedic</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

- **395K** annual *S. aureus* HAP/VAP incidence in US/EU/Japan
- **478K** annual *P. aeruginosa* HAP/VAP incidence in US/EU/Japan

Aridis’ Unique Approach: Immunotherapy for Infectious Diseases

**Antibiotic Vs. Antibody (mAb)**

- Differentiated MOA
- Targeted Immunotherapy
- Natural, Fully Human mAbs
- Attractive Safety Profile
- Long Durability of Action
Human mAb Discovery and Production Technology APEX™

Identify Rare Antibodies and Manufacturing of mAbs up to 1 Year Faster

Patient’s B-cell Repertoire Screening: APEX™ NanoArrays

BREATH™ CHO Master cell line designed for swapping of mAb genes

mAb Productivity Enhancement: APEX™ CRISPR-assisted TF activation

Aridis Pharmaceuticals, Inc.
## Our Therapeutics Development Pipeline

<table>
<thead>
<tr>
<th>Products</th>
<th>Targets</th>
<th>Pre-Clinical</th>
<th>IND</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR-301 mAb</td>
<td>Gram (+) Bacteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pneumonia &amp; Blood Stream Infections</td>
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<tr>
<td>(Salvecin)</td>
<td>S. aureus a-toxin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR-101 mAb</td>
<td>Gram (-) Bacteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HAP/VAP</td>
</tr>
<tr>
<td>(Aerumab)</td>
<td>P. aeruginosa LPS O11</td>
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</tr>
<tr>
<td>AR-501 mAb</td>
<td>Gram (-) &amp; (+) Iron Acquisition Systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cystic Fibrosis</td>
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<tr>
<td>(Panaecin)</td>
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<tr>
<td>AR-401 mAb</td>
<td>Gram (-) A. baumannii</td>
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<td></td>
<td></td>
<td></td>
<td>Bacteremia</td>
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<tr>
<td>PARTNERED-PRODUCTS</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>AR-105 mAb</td>
<td>Gram (-) Bacteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pneumonia HAP/VAP</td>
</tr>
<tr>
<td>(Aerucin)</td>
<td>P. aeruginosa Alginate</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR-201 mAb</td>
<td>Resp. Syncitial Virus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>RSV</td>
</tr>
</tbody>
</table>

**PARTNERED-PRODUCTS**

**Hepalink**

**SERUM INSTITUTE OF INDIA**
AR-301 Overview

HAP/VAP caused by Gram (+) *Staphylococcus aureus*
AR-301 Mechanism of Action: Targets S. aureus α-Toxin

Toxin Inhibition Represents a differentiated and Proven Mechanism of Action for mAbs

- Anti-toxin monoclonal antibody approach is a proven MOA, e.g.
- Commercial products:
  - C. difficile mAb Bezlotoxumab (Merck)
  - Anthrax mAb Raxibacumab (GSK)
- Products under development:
  - S. aureus mAb MEDI 4893 (Astra Zeneca)
Proxy Data from AstraZeneca Supports AR-301’s MOA

- AstraZeneca’s MEDI4893 and AR-301 both have identical targets & MOA, but are being developed for different treatment modality.

- **AstraZeneca’s MEDI4893**
  - Prophylactic
  - At-risk (non-infected) Asymptomatic

- **Aridis’ AR-301**
  - Pre-emptive
  - Lung colonized, High risk Asymptomatic

- **AstraZeneca’s MEDI4893**
  - Treatment for Acute
  - Full-on lung infection
  - Ventilator-assoc. pneumonia

- **AstraZeneca’s MEDI4893**
  - Phase 2 Results (n=196)*:
    - ↓ Risk of VAP 32%
    - ↓ Risk of VAP 47% (<65 yrs old)

- **Aridis’ AR-301**
  - Phase 3 (n=240)
  - [data 1H2021]

*Data presented at ECCMID2019 Amsterdam
Clinical Strategy in Acute Pneumonia Treatment Setting

Use Adjunctive Modality to Differentiate and Show Superiority vs. Antibiotics Alone

Superiority Trial Design

- Allows for clear demonstration of differentiation & benefits
- Provides necessary rationale for adoption as first-line treatment
- With positive data, provides for value-based premium reimbursement
## Recently Completed AR-301 Phase 2 Trial

| **Design** (ClinicalTrials.gov ID NCT01589185) | ▪ Randomized, double-blind, placebo-controlled, single ascending dose of AR-301  
▪ 31 sites across EU and U.S. |
<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Patients</strong></td>
<td>▪ 48 patients with HAP or VAP caused by <em>S. aureus</em></td>
</tr>
</tbody>
</table>
| **Groups** (all groups received standard of care “SOC” antibiotics) | ▪ SOC [antibiotics alone] + Placebo (n=16)  
▪ SOC + AR-301 (1 mg/kg) (n=6)  
▪ SOC + AR-301 (3 mg/kg) (n=8)  
▪ SOC + AR-301 (10 mg/kg) (n=10)  
▪ SOC + AR-301 (20 mg/kg) (n=8) |
| **Primary Endpoint** | ✓ Safety and pharmacokinetics |
| **Secondary Endpoints** | ✓ Time to removal of ventilator (VAP patients)  
✓ Microbiological cure  
✓ Shorter time to eradication  
✓ Days in ICU  
✓ Hospitalization days  
▪ All-cause mortality  
▪ Clinical cure rate  
✓ = Data trend in favor of adjunctive treatment benefit  
▪ = No trend |
Adjunctive AR-301 treated groups were well tolerated and comparable safety profile to antibiotics alone (placebo) group.

- Few adverse events (AEs) deemed related to study drug (2.8%)
- No serious adverse events (SAEs) related to AR-301
- Deaths were deemed unrelated to AR-301 treatment (n=6)
AR-301 Phase 2 Efficacy: Time on Mechanical Ventilation

Significant Reduction in Ventilation Days with Adjunctive AR-301 Treatment

Treatment effect on mechanical ventilation days

Phase 2a: AR-301 Data

Trend toward significantly lower ventilation days in all AR-301 treated patients.

Ventilation days in microbiologically confirmed intent-to-treat population (VAP patients) are shown.

p < 0.01 for placebo vs. AR-301 (pooled) based on post-hoc analysis of VAP patients.

Francois, B. et al. 2018 Intensive Care Medicine. 44(11):1787-1796
AR-301 Phase 2 Efficacy: Time on Mechanical Ventilation

Significant Reduction in Ventilation Days with Adjunctive AR-301 Treatment

Phase 2: AR-301 Data

Aggregated AR-301 treated VAP groups exhibited lower probability of requiring mechanical ventilation vs. placebo.

Francois, B. et al. 2018 Intensive Care Medicine. 44(11):1787-1796
AR-301 Ph 2: ICU Days Reduction & Estimated Cost Savings

Trend Towards Reduction in ICU Days with Adjunctive AR-301 Treatment

**ICU Days (Median)**

<table>
<thead>
<tr>
<th>Cohorts</th>
<th>Placebo</th>
<th>1 mg/kg</th>
<th>3 mg/kg</th>
<th>10 mg/kg</th>
<th>20 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=</td>
<td>16</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

17.5 Days
9.5 Days
11.5 Days
19.0 Days
14.0 Days
12.8 Days Med.

All patients in the Study (47 cases)

**AR-301: Phase 1/2a Interpretation**

Restrepo Study (2010)

\[
\frac{\$198,000}{18.5 \text{ days}} = \frac{\$10,700}{1 \text{ ICU day}}
\]

Source: Publication

**ICU Savings: ~ $50,290**

Days in ICU go from 17.5 Days to 12.8 Days

\[
\frac{\$10,700}{1 \text{ day}} \times \sim 4.7 \text{ days} = \sim $50,290
\]

Aridis Pharmaceuticals, Inc.
Ongoing Global Phase 3 Pivotal Trial of AR-301 in *S. aureus* VAP

- 1-to-1 randomized, double-blind, placebo-controlled, single dose IV infusion
- Enrolling 240 patients with VAP caused by *S. aureus* across 160 sites in 22 countries
- Evaluating the potential of adjunctive AR-301 (20 mg/kg) to SOC antibiotics vs. antibiotics alone
- Primary endpoint of clinical cure rate at day 21
- Interim results of 120 patients in 2020 and final data readout in 1H2021
AR-105 is different in MOA, target, patient population from AR-301

Clinical Study & Outcome

- P. aeruginosa HAP/VAP study similar in study design to on-going AR-301 Ph3
- AR-105 Ph2 top-line results: Primary endpoint of clinical cure at 21 not met
  - Analysis of full study set is on-going
- No read-through between AR-105 program & on-going AR-301 Ph3 study
AR-501 Overview

Chronic Treatment of Lung Infections in Cystic Fibrosis
AR-501: Inhaled Non-Antibiotic Small Molecule Anti-infective

- Diversifies pipeline and complements the immunotherapy programs
- Gallium functions as an iron analog, subverts multiple key functions in bacteria

AR-501 targets multiple iron Sequestering systems in bacteria

- Low drug resistance
- Biofilm activity
- Broad spectrum
- Once/week inhaled formulation
- Extensive preclinical efficacy & safety data package
A single intravenous (IV) dose of gallium resulted in statistical significant improvement in lung function.

**Phase 2 Outcome of IV Gallium Provides Strong Rationale for Inhaled Delivery**

Inhaled (local) delivery is expected to achieve significantly higher lung concentration, higher therapeutic index and lower systemic exposure.

Data from U. Washington
Goss, C. et al. 2018 N. Am. Cystic Fibrosis Conference Abstract #307
On-going Phase 1/2 Trial of AR-501 (Funded by CF Foundation)

### Phase 1 Healthy Volunteers

- **(1H-2019) Single Ascending Dose**
  - 6 mg → 20 mg → 40 mg
  - 18 patients
    - AR-501
  - 6 patients
    - Placebo

- **(2H-2019) Multiple Ascending Doses**
  - 6 mg → 20 mg → 40 mg
  - t = 0, 1, 2, 3, 4 weeks
  - 18 patients
    - AR-501
  - 6 patients
    - Placebo

### Phase 2 Cystic Fibrosis Patients

- **(2H-2020) Single Ascending Doses**
  - 6 mg → 20 mg → 40 mg
  - 18 patients
    - AR-501
  - 6 patients
    - Placebo

- **(2021) Multiple Ascending Doses**
  - 6 mg → 20 mg → 40 mg
  - t = 0, 1, 2 weeks
  - 18 patients
    - AR-501
  - 6 patients
    - Placebo

### Primary Endpoint: Safety and PK

### Secondary Endpoints:
- Lung function of CF patients (changes to FEV1)
- Sputum bacteriology

### Data Readout:
- Phase 1 healthy subjects in 1H20
- Phase 2a CF subjects in 2021
Key Upcoming Milestones

Near-term clinical data readouts on multiple programs

- **AR-301**
  - Toxin Blocker
  - Initiated 2018
  - Phase 3
  - n = 240
  - 2019: Phase 3 Interim Data
  - 2021: Phase 3 Full Data

- **AR-101**
  - Immune modulating
  - Initiated 2018
  - Phase 2/3
  - (TBD)
  - 2020

- **AR-501**
  - Cystic Fibrosis
  - Initiated 2018
  - Phase 1/2a
  - n=96
  - 2019: Phase 1 Full Data
  - 2020: Phase 2 Full Data

*AR-301, AR-105, and AR-101 to be developed and marketed in China by Shenzhen Arimab Biopharmaceuticals Co., Ltd. (jointly owned subsidiary created by Aridis and Shenzhen Hepalink Pharmaceutical Group Co., Ltd.). These programs are also licensed for the developing world and emerging markets SIBV, a subsidiary of the Serum Institute of India, Ltd.*
>150 Years of Combined Drug Development Experience, Contributed to Launching Commercial Products with Multi-billion Dollars Annual Sales: Lipitor®, Herceptin®, Xolair®, Rituxan®, Synagis®, Flumist®, Primaxin®, Vectibix®, Avastin®

- **Vu Truong, Ph.D.** – CEO
  Aviron, MedImmune

- **Paul Mendelman, M.D.,** – CMO
  Takeda, Merck

- **Mike Nazak, C.P.A** – CFO
  Coherus, Intekrin, Connectics

- **Steve Chamow, Ph.D.** – VP R&D
  Genentech, Abgenix, Intradigm, Scios

- **Liz Leininger, Ph.D.** – VP RA
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