Innovative Therapeutics For Respiratory Health

Investor Presentation
2Q-2023

Forward Looking Statement

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.

Corporate Summary

Late clinical stage company focusing on infectious disease product candidates

- Phase 3 asset AR-301 is being developed as an adjunctive treatment in acute pneumonia
- ~$1 Billion market opportunity
- Strong Phase 2 & 3 clinical data in patients, supporting safety & efficacy

Phase 2 asset in cystic fibrosis (AR-501) with top-line data meeting primary & secondary endpoints

Seasoned management team

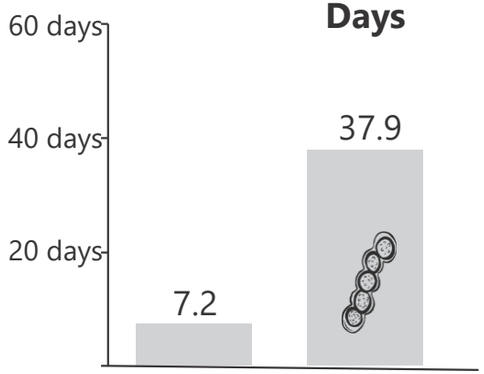
Product Pipeline

Products	Targets	Pre-Clinical	IND	Phase 1	Phase 2	Phase 3	Next Milestone
AR-301 mAb (tosotoxumab)	Gram (+) Bacteria *S. aureus* α -toxin	Pneumonia Treatment					FDA/EMA meeting on Ph3 data 1H23
AR-320 mAb (suvratoxumab)	Gram (+) Bacteria *S. aureus* α-toxin	Pneumonia Prevention					Study on hold
AR-501 (Panaecin)	Gram (-) & (+) Iron Pathways	Cystic Fibrosis					Initiation of Phase 2b/3 1H2024
AR-701 mAb	COVID-19 Virus Spike Protein	COVID-19					TBD
AR-401 mAb	Gram (-) Bacteria *A. baumannii*	Bacteremia					TBD

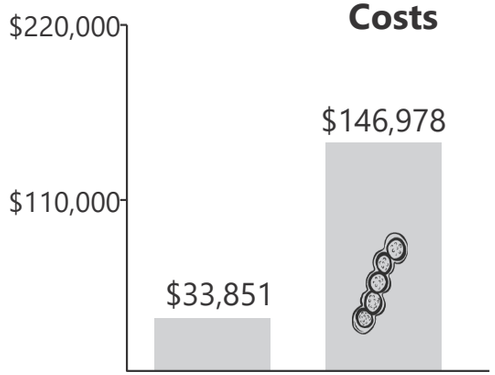
Healthcare Burden of *S. aureus* Bacterial Infections

~252,000 ICU patients
US claims database (2018)*

n=201
Hospital Days



n=394
In-Patient Costs



	Control	Staph
ICU stay	1.1 day	6.9 days
All Cause Mortality	3%	16%

	Control	Staph
	1.1 day	6.9 days
	3%	16%

Survey of 30 cases (median)

Hospital	44.4%
Pharmacy	21.0%
Laboratory	16.3%
Respiratory Treatment (Mech. ventilation)	9.3%
Radiology (+CT Scans)	3.3%
Cardiology	1.9%
Operating Room	1.4%
Diagnostics (Blood ECG)	1.9%
Pulmonary Diagnostic	0.4%
Orthopeadic	0.3%

Restrepo (2010) ICHE 31:509-515

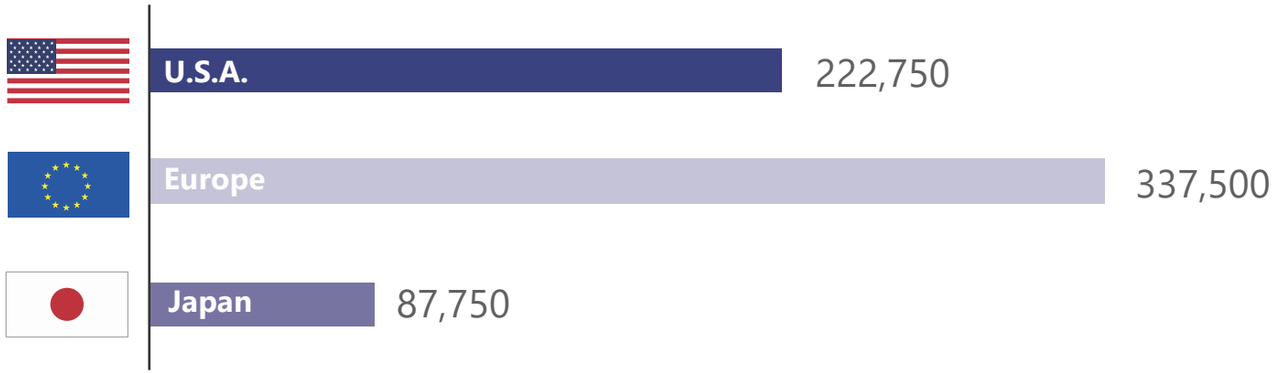
*Kyaw MH et al., 2015 BMC Health Serv Res. 15:241

$6 Billion Market for *S. aureus* HAP/VAP

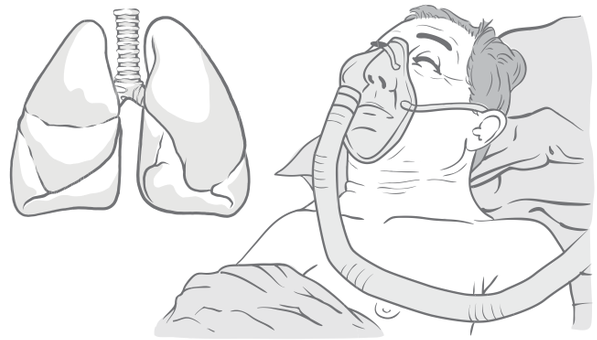
Estimated $6 billion annual healthcare cost burden attributable to *S. aureus* nosocomial pneumonia[3]

AR-301 adressable patient population: 648,000[1]

Potential S. aureus HAP/VAP Patients by Market[1]



AR-320 adressable patient popl'n ~1.8 million[2]



***Sources**

1 Paling FP, BMC Infect Dis. 2017;17(1):643

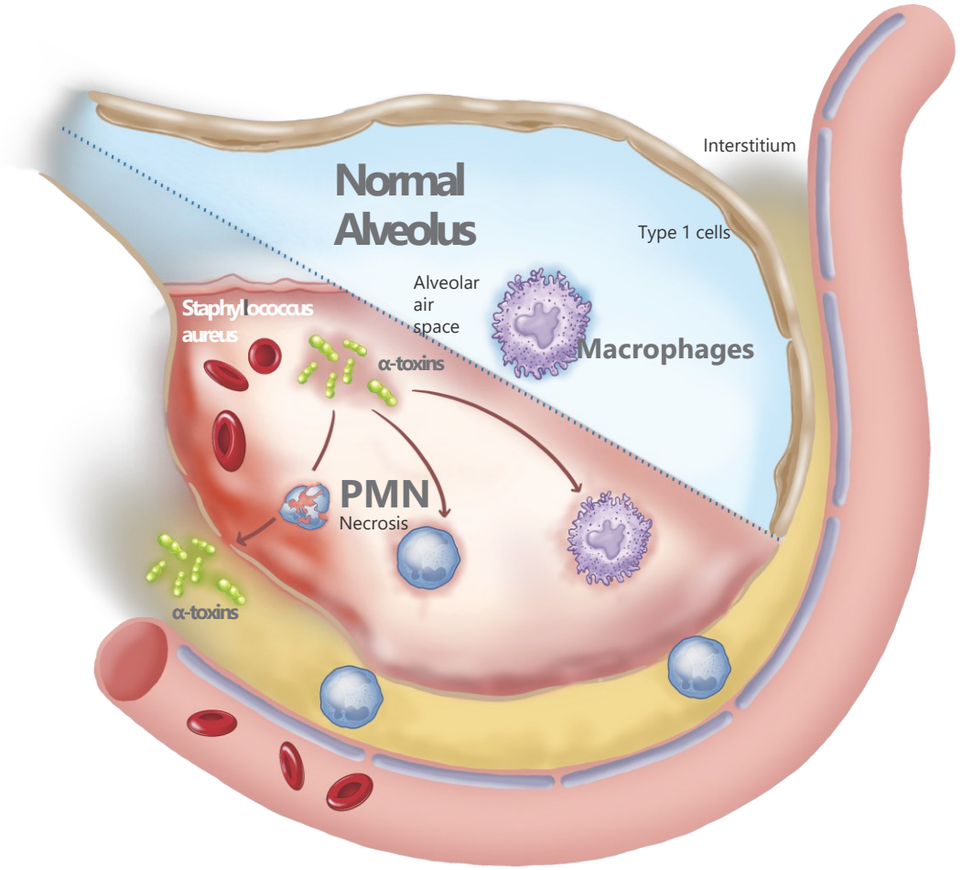
2 Francois, B. et al. Lancet Inf. Dis. 2021; https://doi.org/10.1016/S1473-3099(20)30995-6

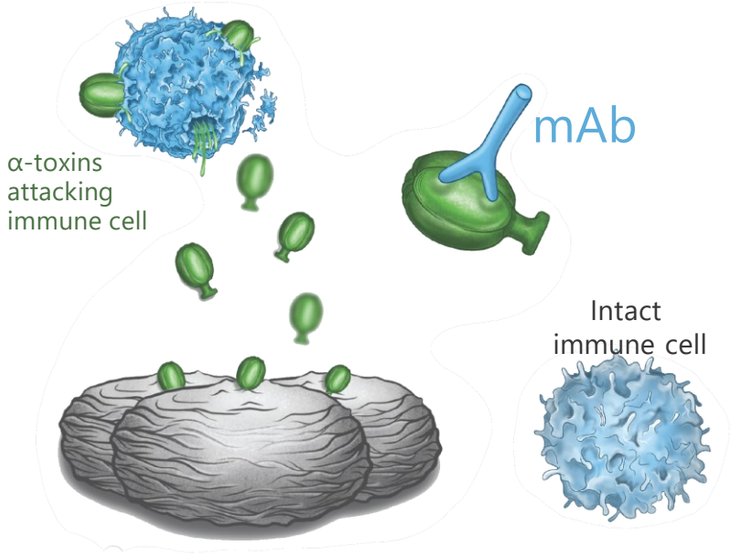
3 Warren DK, Outcome and Attributable Cost of VAP among ICU patients in a suburban medical center, Critical Care Med 2003;31(5):1312-7.

Lifecycle opportunities include surgical site, skin/skin structure, UTI, and BSI infections due to *S. aureus*

AR-301 & AR-320 Mechanism of Action:

Targets *S. aureus* α-Toxin





Gram (+) bacteria: *S. aureus*

Anti-toxin monoclonal antibody approach is a proven MOA, e.g.

Commercialized:

C. Difficile mAb Bezotoxumab (MRK)

Anthrax mAb Raxibacumab (GSK-EBSI)

Host cells killed by α-toxins*

Red blood cells
Neutrophils
Macrophages, Monocytes
T-cells
Pneumoncytes
Endothelial cells

*Toxins 2013, 5(6), 1140-1166

AR-301 (tosatoxumab)

Treatment of *S. aureus* ventilator associated pneumonia

AR-301: Therapeutic Treatment of Acute Pneumonia

Superiority Trial Design

Antibiotics alone

Standard of Care

VS.

Adjunct therapy

Standard of Care + AR-301

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

AR-301 Phase 3 (completed): Trial Design

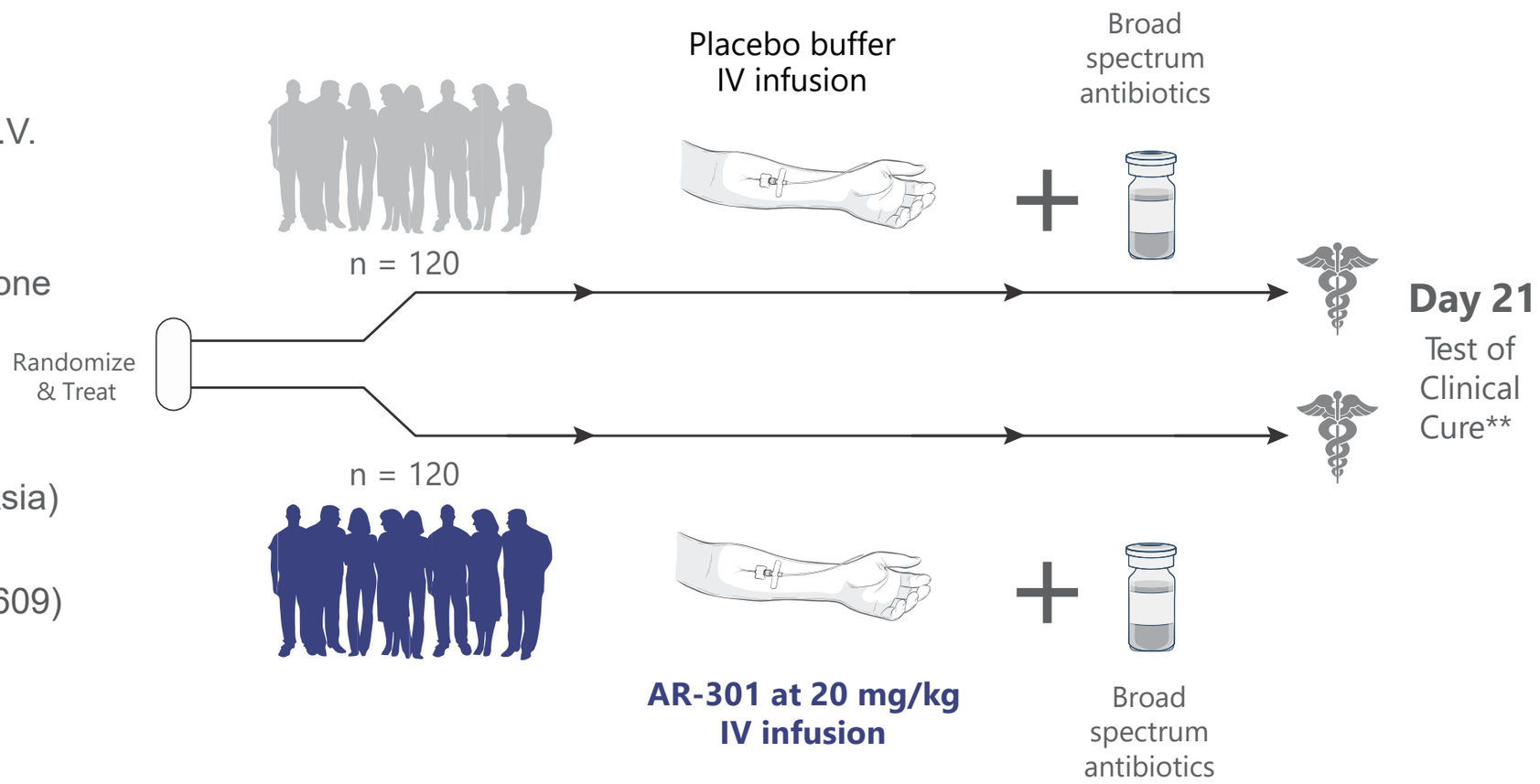
1-to-1 randomized, double-blind, placebo-controlled, single dose I.V.

Evaluating the potential of adjunctive AR-301 (20 mg/kg) to SOC antibiotics vs. antibiotics alone

Targeted 240* patients with VAP caused by *S. aureus* across 125 sites in 20 countries (U.S., EU, Asia)

(ClinicalTrials.gov ID NCT03027609)

Primary endpoint of clinical cure rate at day 21



**Sample size at 90% power (p<0.05) [20% absolute effect size]: n=138

*Dependent on extent of COVID-19 related ICU utilization

AR-301-002 Study Population and Safety Summary

	SOC + Placebo	SOC + AR-301	Overall
Number of Subjects Randomized and Dosed	85	89	174
Full Analysis Set (FAS) Population	85	89	174
Microbiological Full Analysis Set (Micro-FAS) Population*	59	61	120

*Microbiologically confirmed *S. aureus* pneumonia population; prespecified to be the study target population for efficacy

- There were no meaningful imbalances between treatment groups in the Safety population or the micro-FAS population
- There were no SAEs that were deemed related to study drug

	All-Cause Mortality		
Population	Placebo	AR-301	P-value
FAS	18.8% (16/85)	23.6% (21/89)	0.367
micro-FAS	23.7% (14/59)	23.0% (14/61)	0.830
non-micro-FAS	7.7% (2/26)	25.0% (7/28)	0.176

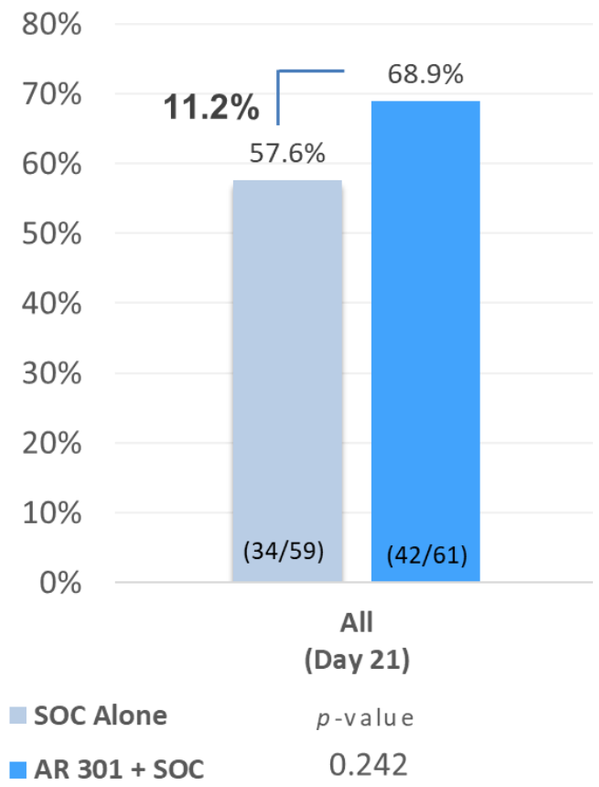
	Pneumonia-Related Mortality	
Population	Placebo	AR-301**
micro-FAS	5.0% (3/59)	1.6% (1/61)

**not statistically significant

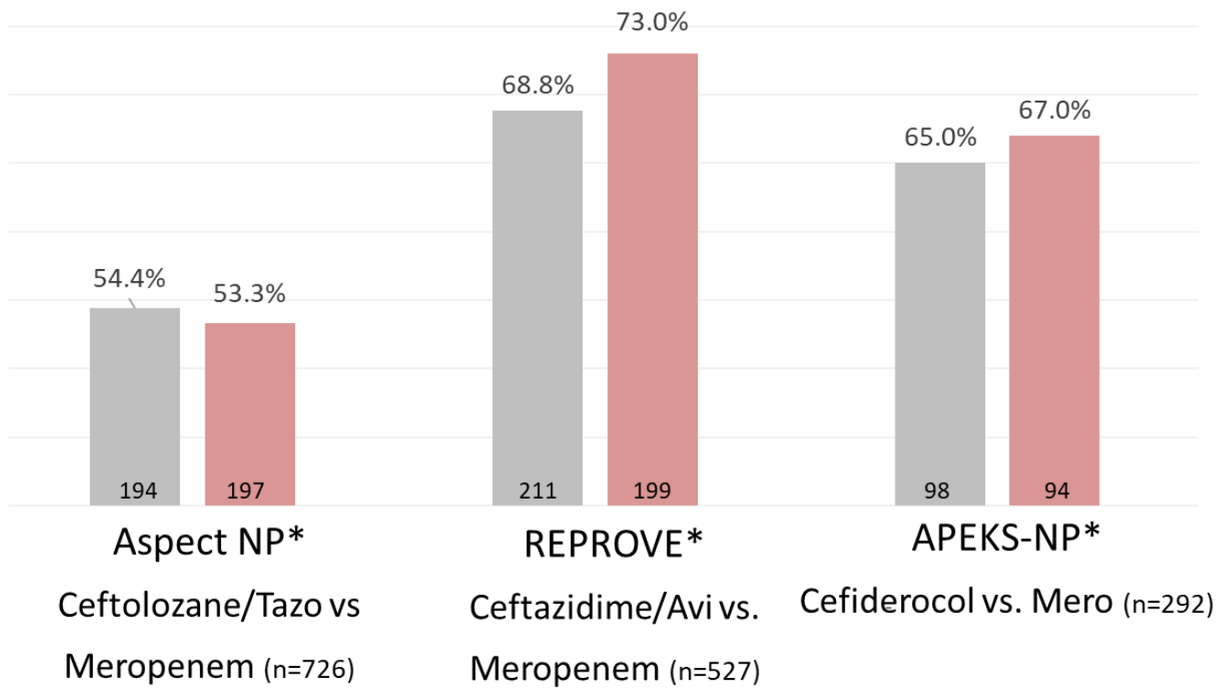
'FAS': Full analysis set; 'mFAS': microbiological full analysis set; 'SOC': Standard of Care antibiotics; 'SAEs': Serious adverse events

AR-301-002 Primary Efficacy

- AR-301 did not reach statistical significance in the primary endpoint



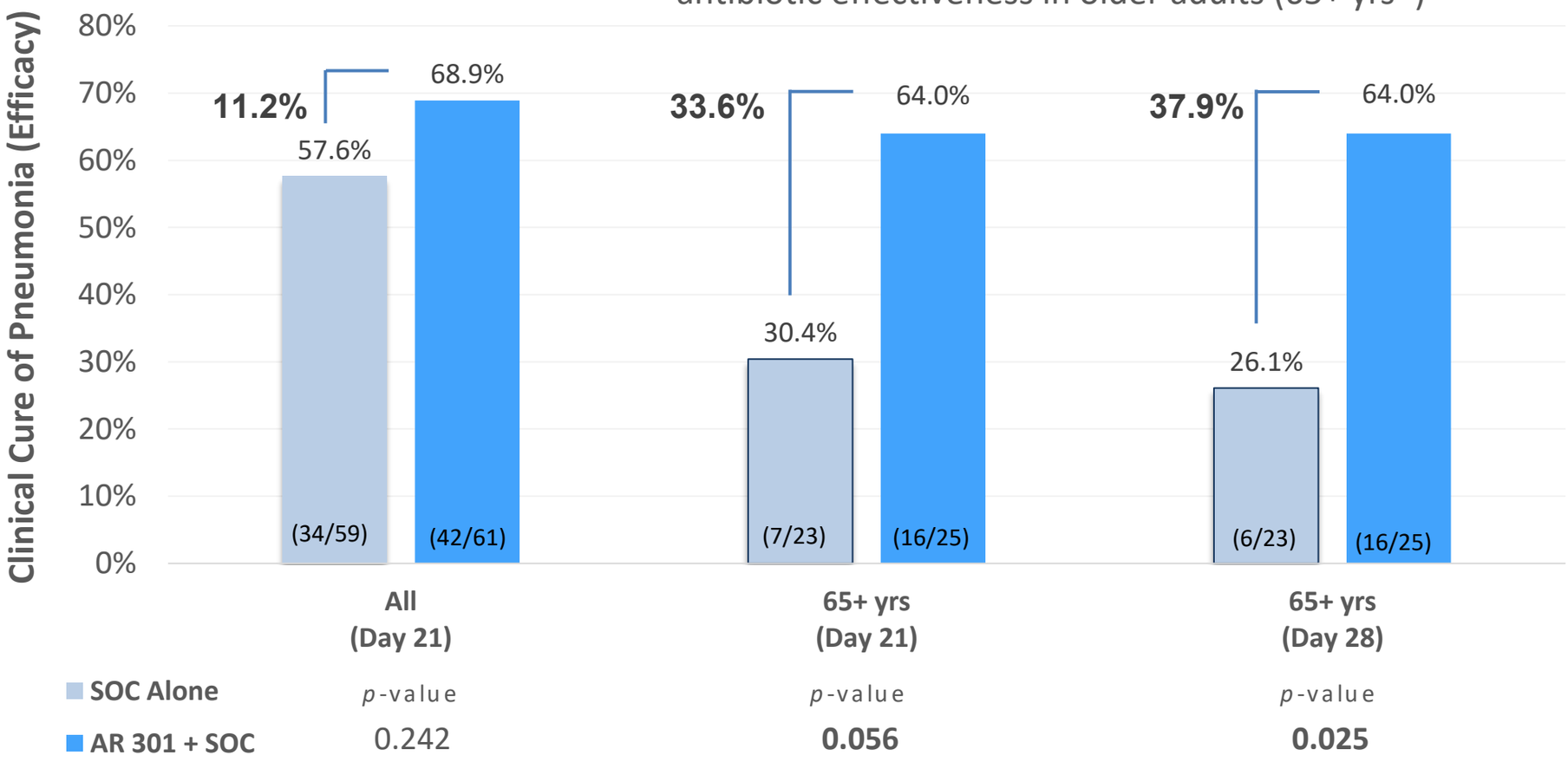
- While trials were designed for non-inferiority, no meaningful improvement was observed in past antibiotic trials



*all are non-inferiority studies HAP/VAP studies, all *p*-value =n.s.

AR-301 Efficacy Was Increased in Older Adults (65+ yrs)

- AR-301 efficacy increase was primarily driven by lower antibiotic effectiveness in older adults (65+ yrs*)



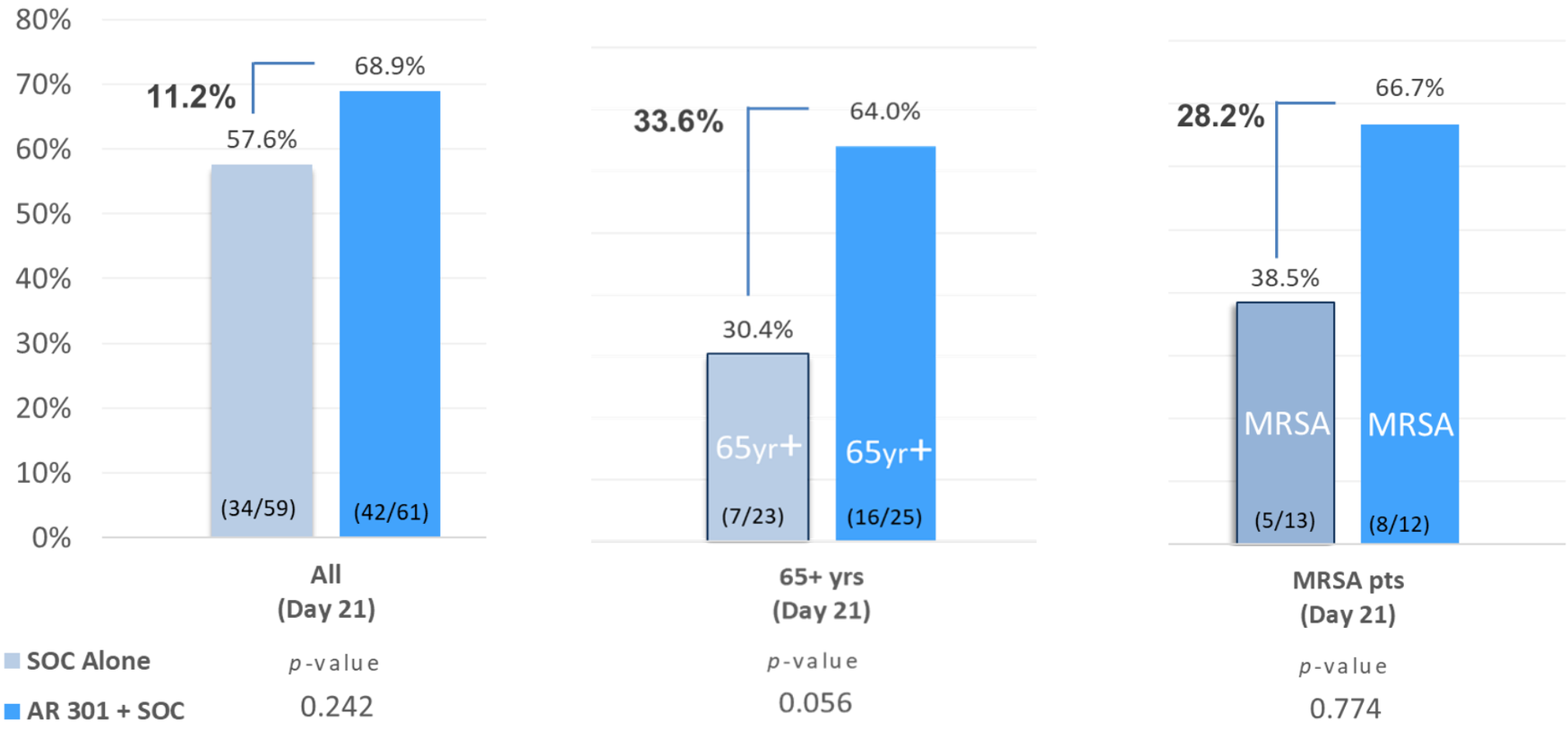
SOC = standard of care antibiotic; all data in mFAS

*Higher clinical cure from SOC Antibiotics in less vulnerable subjects:

- <65 years old: 75% (27/36)

AR-301 Efficacy was Increased in MRSA patients

- AR-301 efficacy trend was increased in MRSA (antibiotic resistant) patients

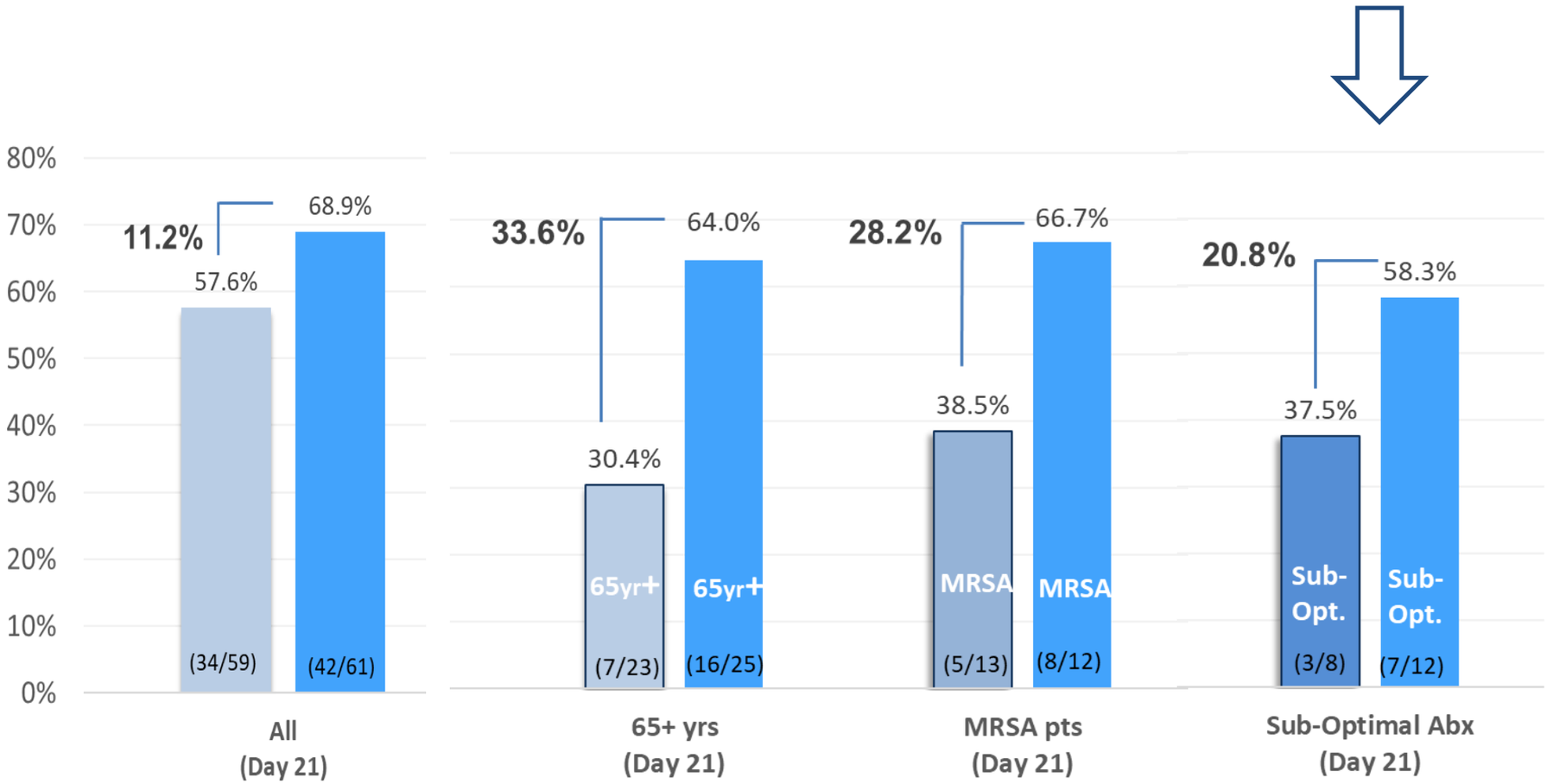


Higher clinical cure from SOC Antibiotics in less vulnerable subjects:

- <65 years old: 75% (27/36)
- MSSA Pneumonia: 63.0% (29/46)

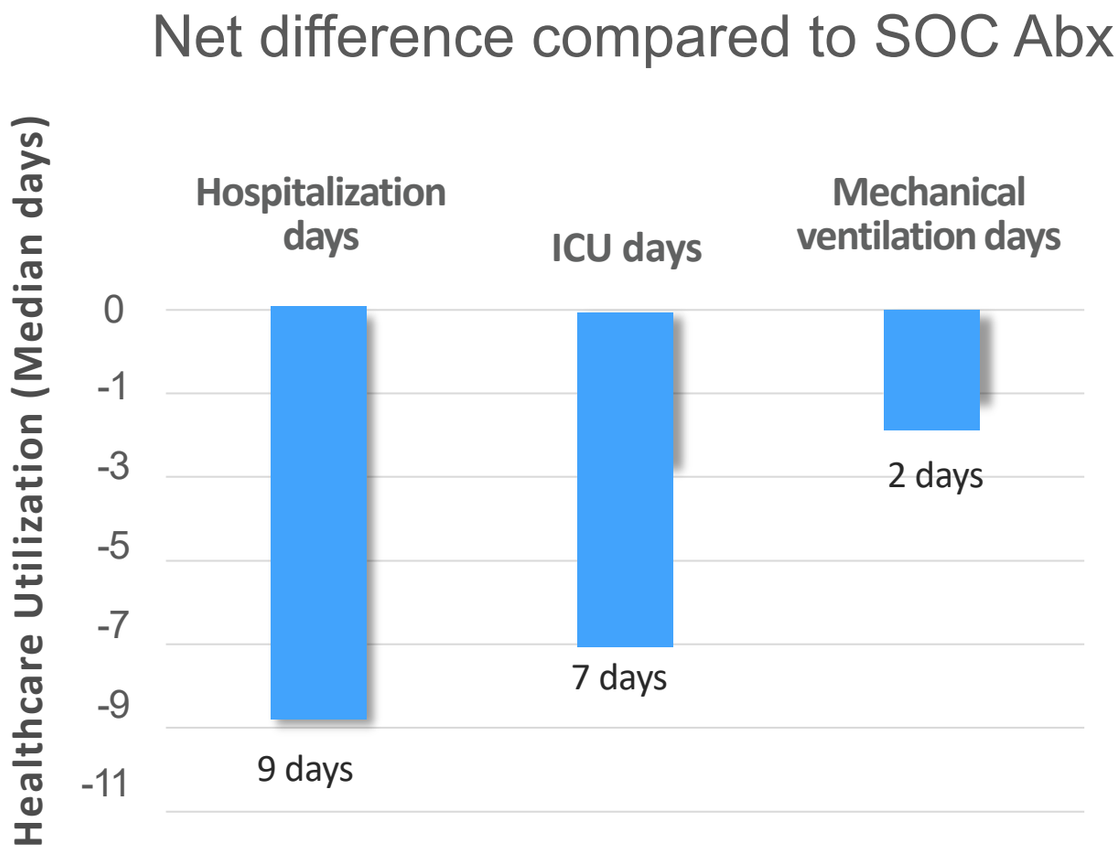
*SOC = standard of care antibiotic; 'MRSA': Methicillin resistant Staphylococcus aureus; 'MSSA': Methicillin sensitive S.a.; all data are mFAS

AR-301 Efficacy Trend Was Increased in Patients Treated with Sub-Optimal Antibiotics



*Trends, no group with p-value <0.05

AR-301 Reduced Duration of Hospital & ICU Stay, and MV



'SOC Abx': Standard of care antibiotics; 'MV': Mechanical ventilation; 'ICU': Intensive care unit

AR-301-002 Study Conclusions

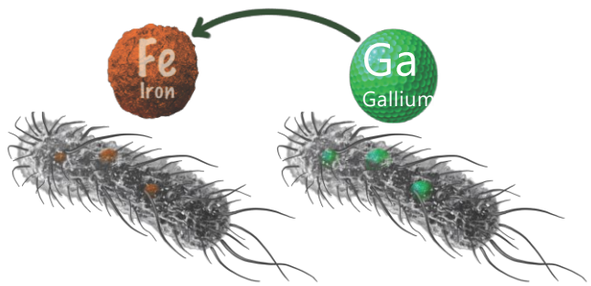
- Clinical cure at Day 21 was 68.9% (42/61 patients) for AR-301 + SOC versus 57.6% (34/59) for SOC alone, (efficacy difference or absolute efficacy: 11.3%, [*p*= 0.23]). AR-301 did not reach statistical significance in the primary endpoint.
  - Consistent trends were observed across multiple endpoints, including:
    - Clinical Cure at Day 7 (AR-301: 16.4% vs Placebo: 8.5%) , Day 14 (AR-301: 55.7% vs Placebo: 50.8%), and Day 28 (AR-301: 70.5% vs Placebo: 61%)
    - Trends towards substantially shorter duration of health resource utilization outcomes (e.g. ICU stay, Mechanical Ventilation days, and Hospitalization days)
  - There were stronger efficacy trends in vulnerable study subjects where SOC antibiotics were associated with lower clinical cure:
    - ≥65 years old
    - MRSA
    - Suboptimal antibiotic treatment
- Overall, AR-301 was well tolerated

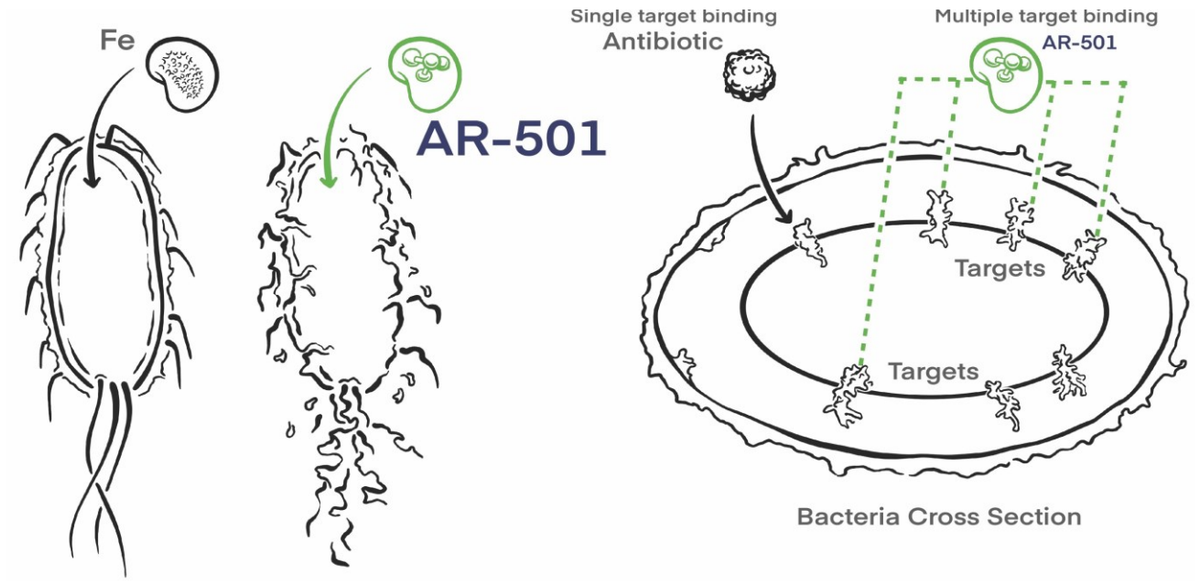
AR-501: Novel Inhaled Non-Antibiotic

Small Molecule Anti-infective

Mechanism of Action

Iron (Fe) is necessary for bacterial metabolic functions. AR-501 (gallium, Ga) replaces Fe





AR-501 impairs multiple bacterial functions,

while standard antibiotics inhibit single targets

AR-501 Phase 1/2: Healthy & Cystic Fibrosis Patients

CF Foundation Funded

Phase 1 Healthy Volunteers

Single Ascending Dose ✓ **Done**

6 mg → 20 mg → 40 mg

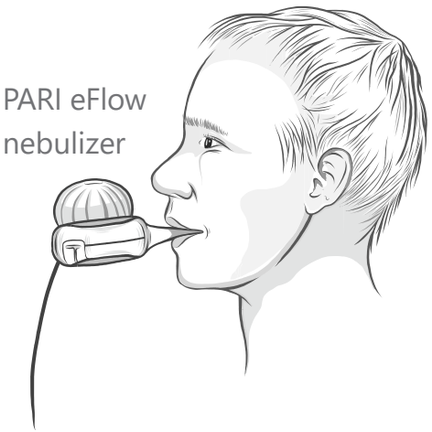
18 patients **AR-501** | 6 patients Placebo

Multiple Ascending Doses ✓ **Done**

t = 0, 1, 2, 3, 4 weeks

6 mg → 20 mg → 40 mg

18 patients **AR-501** | 6 patients Placebo



PARI eFlow nebulizer

Primary Endpoint:
Safety and PK

Secondary Endpoints:
Lung function of CF patients (changes in FEV1)

Sputum bacteriology

Phase 2 Cystic Fibrosis Patients Completed ✓

Multiple Ascending Doses

t = 0, 1, 2 weeks

6 mg → 20 mg → 40 mg

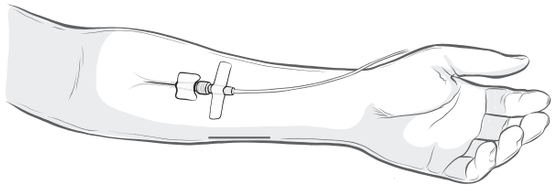
30 patients **AR-501** | 15 patients Placebo

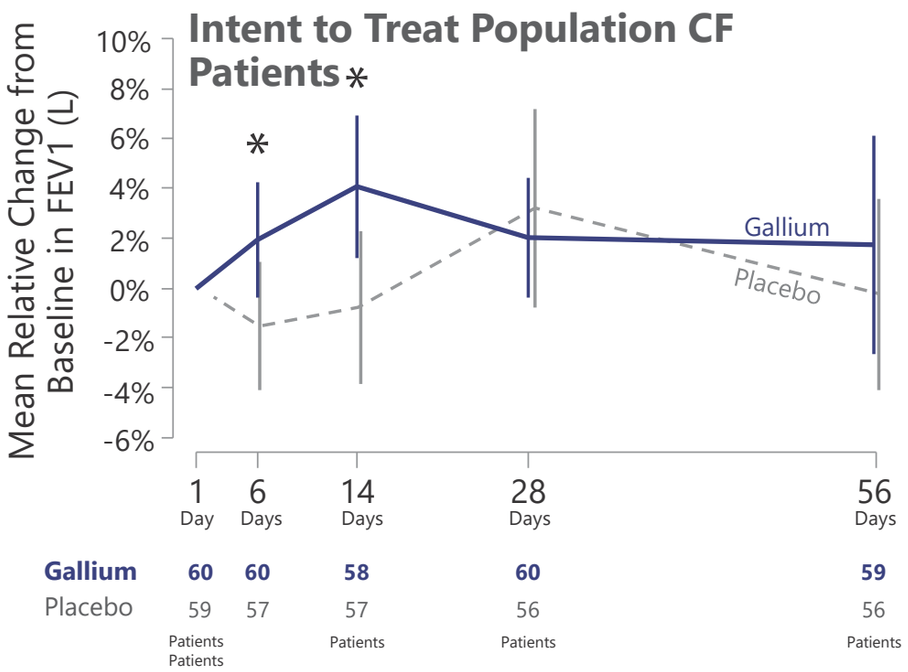
Ph2a data readout:

- **Primary Endpoint of safety is met**
- **Secondary Endpoint of pharmacokinetics (PK) is met**

Ph1 study results: AR-501 was well tolerated

A single IV dose of gallium resulted in statistical significant improvement in lung infection

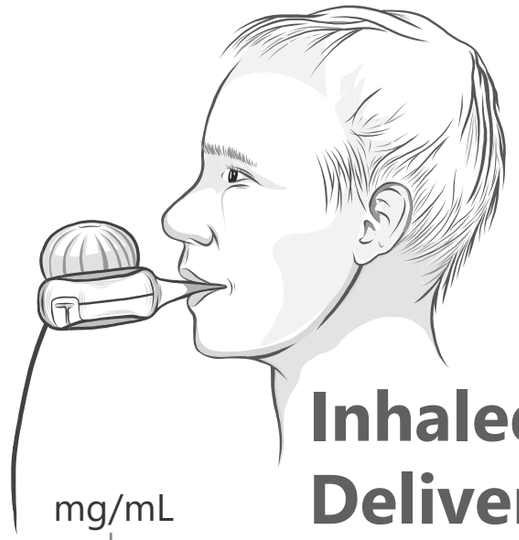




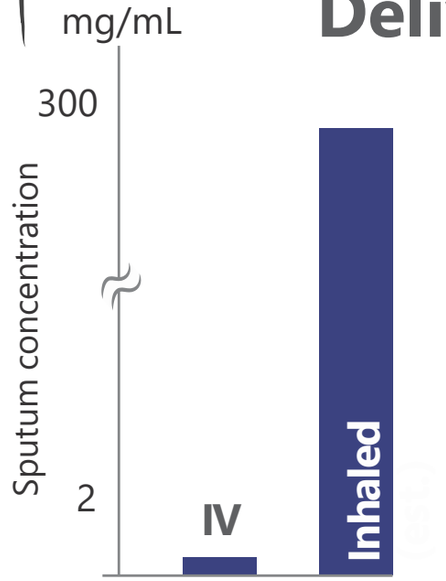
Data from University of Washington: Goss, C. et al. 2018 N. Am. Cystic Fibrosis Conference Abstract #307

Proxy Data:

Safety & Efficacy of IV Gallium Demonstrated



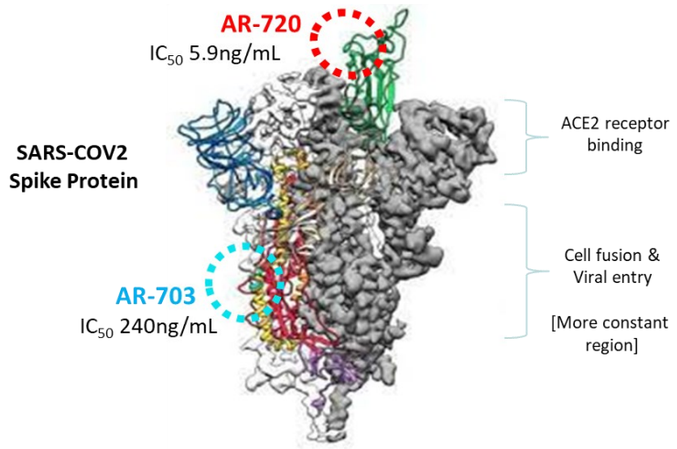
Inhaled Delivery



(*estimate based on animal PK data)

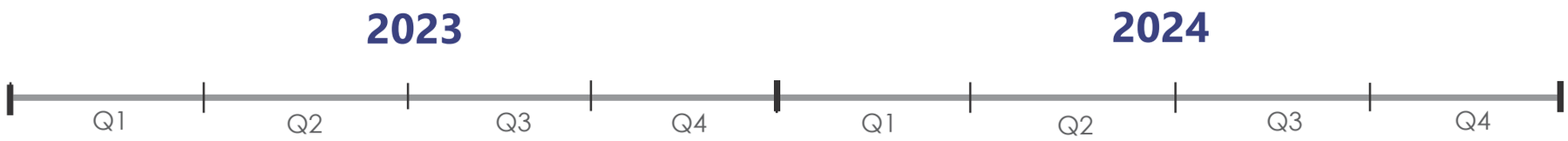
AR-701: COVID-19 mAb Cocktail for I.M. & Inhalation

- Broad, pan-coronavirus cocktail utilizing dual mechanism of action
  - Effective against Omicron, more future-proof against SARS-COV2 variants
  - Effective against SARS, MERS, seasonal human coronaviruses
- Efficacious in ACE2 mice, hamster, and non-human primate SARS-CoV-2 virus challenge models
- Intramuscular and Inhaled formulation options
- Long-acting, mAbs are half-life extended
- Targeting non-hospitalized COVID population with self-administered, at-home treatment



Self-administered inhaled formulation option

Key Milestones



AR-301
Toxin Blocker

Phase 3
Data

FDA & EMA
meetings

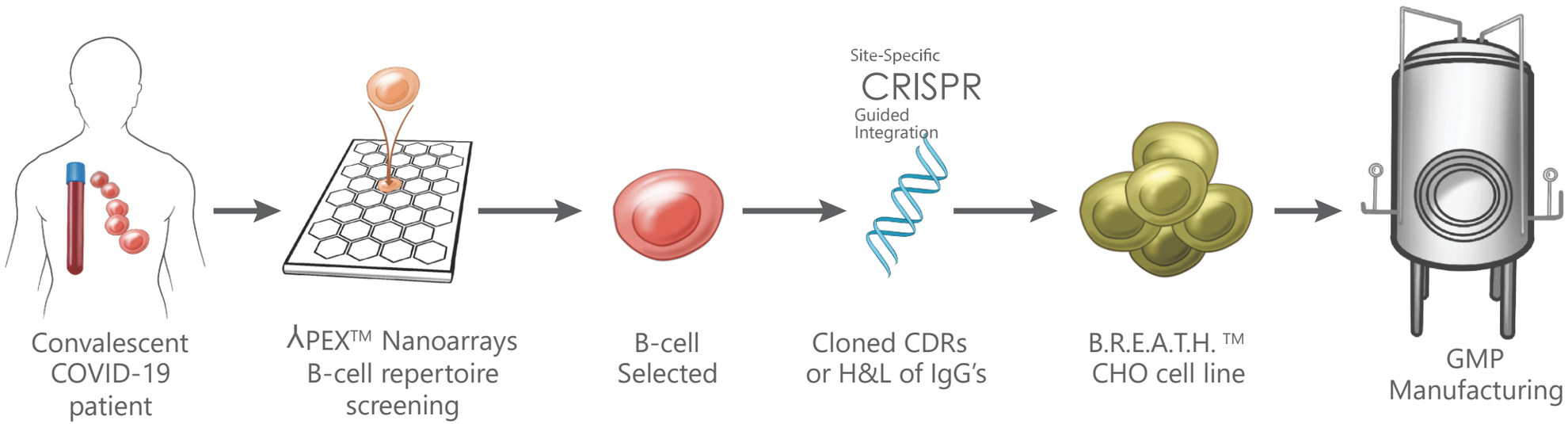
Phase 3b
Initiation

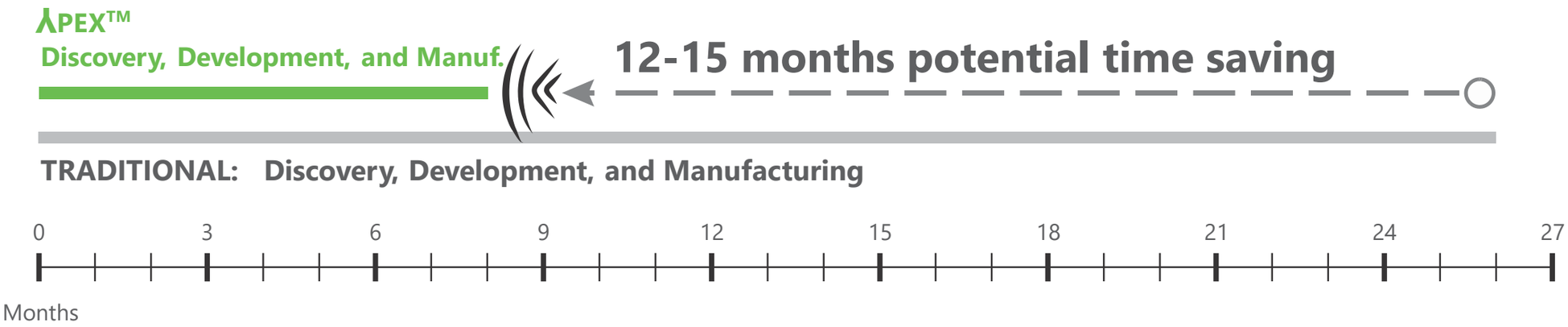
AR-501
Cystic Fibrosis

Phase 2a
Data

Phase 2b/3
Initiation

λPEX™ Monoclonal Antibody Discovery & Production Platform Technology





Financial Information

As of 9/30/2022

- Cash & Cash Equivalents $3.1m & $13m*
- Q3 Burn $ 4.3m
- Shares Authorized 100m
- Shares Outstanding 17,701,592

Analyst Coverage

- HC Wainwright (Vernon Bernadino)
- Maxim Group (Jason MacCarthy)
- Northland Securities (Carl Byrnes)

*4Q‘22

Senior Management

Vu Truong
CEO, Director
(Medimmune, Aviron)

Hasan Jafri
Chief Medical Officer
(AstraZeneca/Medimmune)

Fred Kurland
Chief Financial Officer
(XOMA, PDL, Aviron)

Franco Merckling
SVP, Operations
(Eli Lilly, Eisai, Merck)

Elizabeth Leininger
VP, Regulatory & Quality
(FDA, GSK, Chiron/Novartis)

Steve Chamow
VP, Development
(Genentech, Abgenix)

Board of Directors

Eric Patzer, Ph.D.
Chairman
(Co-Founder, Aridis)

Vu Truong, Ph.D.
(CEO, Aridis)

Susan Windham-Bannister, Ph.D.
(Assoc. Women in STEM, Mass. Life Sci. Ctr)

John Hamilton, M.B.A.
(CFO, Depomed; BioMarin)