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Todd Patrick, Chief Executive Officer

Brian Varnum, President and Chief Development Officer

Steve Martin, Chief Financial Officer

April 28, 2020

NYSE American: ARMP

Forward Looking Statements

This presentation contains "forward-looking" statements that involve risks, uncertainties and assumptions. If the risks or uncertainties materialize or the assumptions prove incorrect, our results may differ materially from those expressed or implied by such forward-looking statements. All statements other than statements of historical fact could be deemed forward-looking, including, but not limited to: the potential future of antibiotic resistance; the ability for bacteriophage therapies to disrupt and destroy biofilms and restore sensitivity to antibiotics; the planned development strategy, presenting data to regulatory agencies and defining planned clinical studies; the expected timing of additional clinical trials, including Phase 1b/Phase 2 or registrational clinical trials; the drug product candidates to be supplied by Armata for clinical trials; bacteriophage technology being uniquely positioned to address the global threat of antibiotic resistance; the protection of intellectual property, including pending and issued patents; the activities to be performed by specific parties in connection with clinical trials; the potential use of bacteriophages to treat bacterial infections; research and development plans; the development of bacteriophage-based therapies; the ability to select combinations of phages to formulate product candidates; the ability to manufacture product candidates; the pursuit of additional indications; the safety and efficacy of product candidates; collaborations with third parties and the potential markets and market opportunities for product candidates; potential market growth; our partnership with Merck, known as MSD outside of the United States and Canada; our ability to achieve our vision, including improvements through engineering and success of clinical trials; our ability to obtain financing on terms and in amounts that are acceptable to us; our ability to meet anticipated milestones for 2020 and 2021; and any statements of assumptions underlying any of the items mentioned. These statements are based on estimates and information available to us at the time of this presentation and are not guarantees of future performance. Actual results could differ materially from our current expectations. You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. Moreover, we undertake no obligation to update publicly any forward-looking statements for any reason to conform these statements to actual results or to changes in our expectations except as required by law.

We refer you to the documents that we file from time to time with the Securities and Exchange Commission, including our registration statement, Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. These documents, including the sections therein entitled "Risk Factors," identify important factors that could cause the actual results to differ materially from those contained in forward-looking statements.

Investment Highlights

A Leader in Phage Therapeutics

Two phage product candidates advanced through Pre-IND meeting with FDA

- Expected IND filing for *P. aeruginosa* phage product candidate **(AP-PA02)** in 1H 2020
  - Cystic fibrosis study supported by a $5 million Therapeutics Development Award through the CF Foundation
- *S. aureus* phage product candidate **(AP-SA02)** IND expected in 2H 2020
  - Bacteremia indication subject to third party funding of at least $10 million

Merck partnership to develop proprietary synthetic phage

- Undisclosed infectious disease target and indication

Phage-specific GMP drug manufacturing facilities

- In-house manufacturing and formulation capabilities

Strong board and executive leadership team

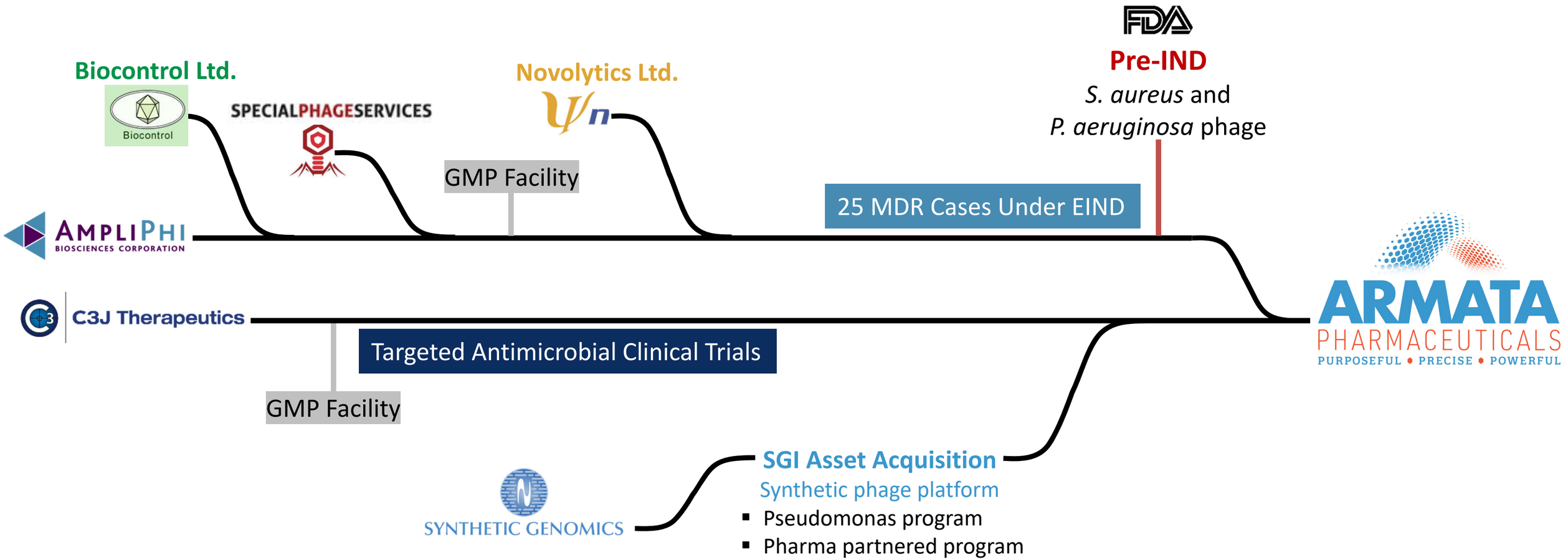
- Seasoned drug development team
- Successful track record in capital raises, M&A, and exits

$25 million private placement completed in March 2020

ARMATA PHARMACEUTICALS

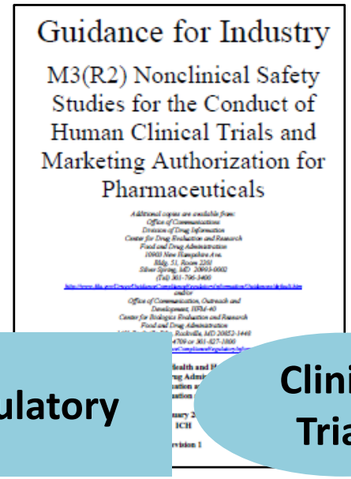
Armata Stands on Long History of Phage Development

M&A Yields Leading Phage Company



Armata's Capabilities and Operational Overview

Built for Product Development, Bench to Clinic


Guidance for Industry

M3(R2) Nonclinical Safety Studies for the Conduct of Human Clinical Trials and Marketing Authorization for Pharmaceuticals

Phage Discovery

Microbiology

Peptide Chemistry

Leads

Synthetic Biology

Clinical Candidates

Manufacturing & Quality

Clin. Trial Material

Regulatory

Clinical Trials

Discovery

- Two targeted antimicrobial platforms
- **Robust natural phage discovery library**
- **Synthetic biology improves phage activity**
- ESKAPE pathogen library; >25,000 isolates

Preclinical Development

- Preclinical biology
- **Deep formulation expertise**
- Host cell engineering

CMC

- **Licensed GMP facility**
- Fermentation, purification
- Testing and release of CTM
- QC, QA

Clinical Development

- Experienced team
- **Multiple INDs, CMC amendments, CSRs, Annual Reports**
- Electronic filing

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Pipeline

Pathogen / Indication	Discovery	Preclinical	IND-Enabling	CMC	Phase 1b/2
Pseudomonas aeruginosa Cystic Fibrosis Lung Infections	AP-PA02				CYSTIC FIBROSIS FOUNDATION
Staphylococcus aureus Bacteremia*	AP-SA02				
Undisclosed	Partnered	MERCK			

* pending nondilutive financing

Phage libraries to address market expansion and new indications

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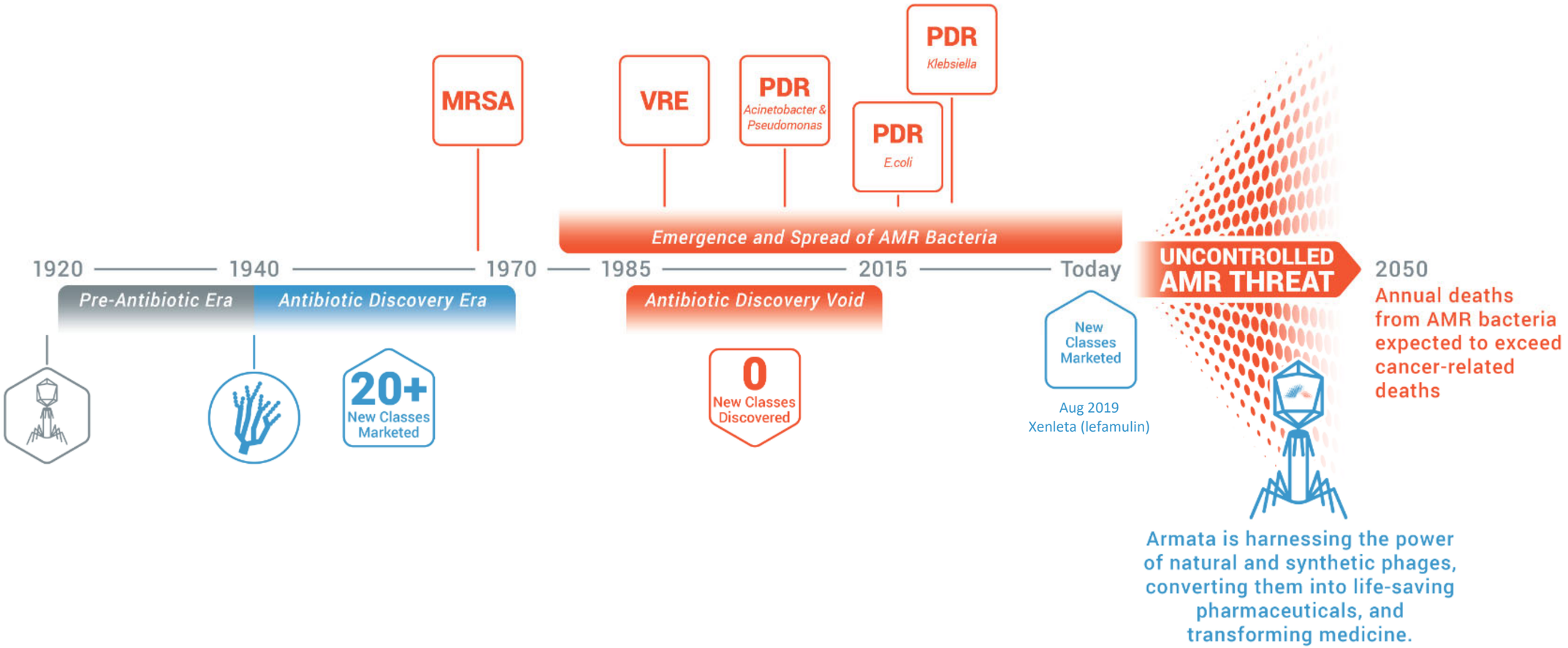
Unmet Need in Antibiotic Resistant Infections

Phages May Provide a Powerful Solution to an Urgent Public Health Threat



MRSA: methicillin-resistant *Staphylococcus aureus*; VRE: vancomycin-resistant enterococci; PDR: pandrug-resistant; AMR: antimicrobial resistance.

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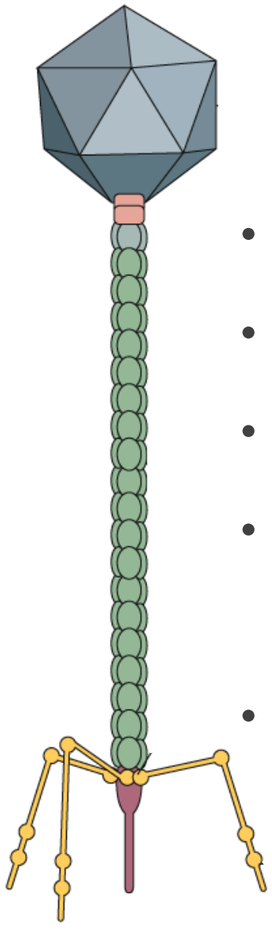
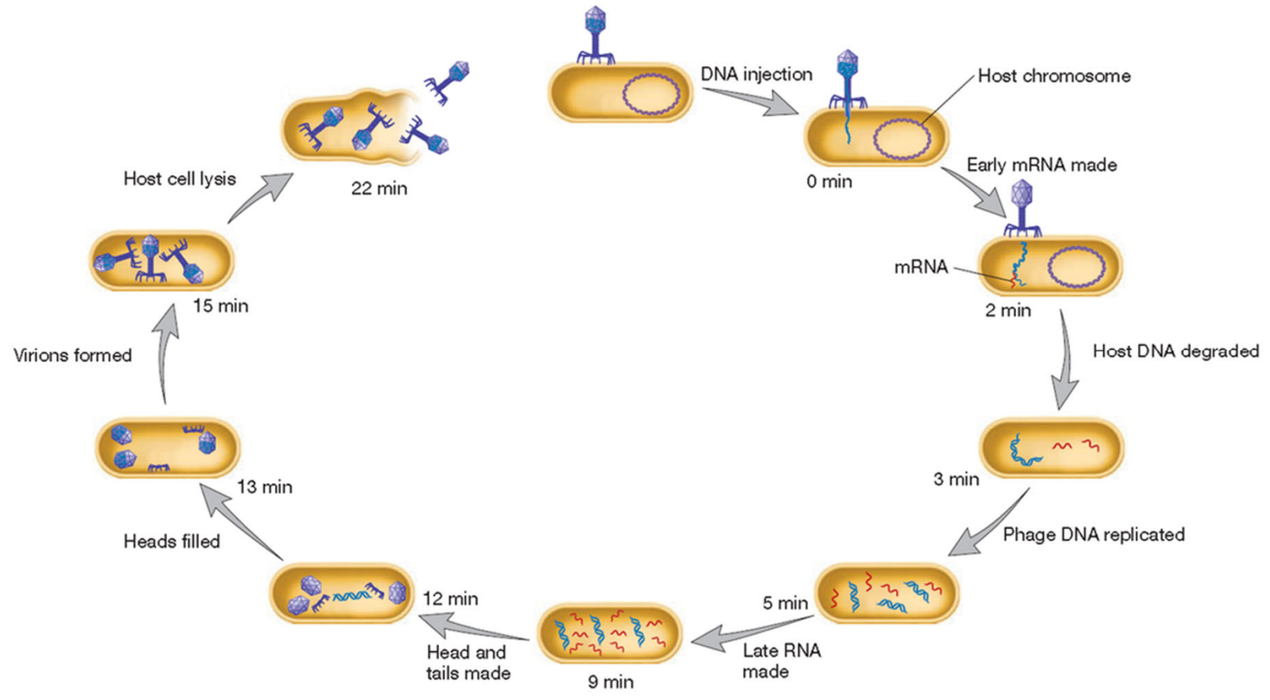
Bacteriophages

Infection Yields Progeny and Results in Bacterial Lysis



- The most ubiquitous organisms on Earth
- Natural predators of bacteria
- Highly targeted
- Prior history as therapeutic agent
  - Antibiotics displaced phage use
- Drug-resistant threat revitalized phage use



Source: Prescott Harley Klein's Microbiology, 7th Ed.

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Differentiating Attributes of Phage vs. Classic Antibiotics

Highly specific bactericidal agents will not disrupt microbiome

- Lowers risk of infection by *Clostridium difficile* and vancomycin-resistant enterococci

No toxicities associated with chemical structures

- Toxicities associated with antibiotics: kidney, bone marrow, hearing loss…

Not an incremental change to an existing chemical structure

- Distinct mechanism of bactericidal action
- Activity independent of antibiotic resistance
- Provides much needed therapy for multidrug-resistant infections

Replication competent

- Potential to autoregulate dose

High potential for added functionality through genetic engineering

- Biofilm degradation, bystander killing, tissue localization

Deadly Infections Successfully Treated With Phage

theguardian

Teenager recovers from near death in world-first GM virus treatment

Bacteria-killing viruses known as phages offer hope of solution to antibiotic resistance

Cystic Fibrosis
NTM

This Scientist Used Live Viruses To Save A Woman's Life From A Superbug Infection

BuzzFeed News

Cystic Fibrosis
Pseudomonas

AMERICAN SOCIETY FOR MICROBIOLOGY | Antimicrobial Agents and Chemotherapy®

Development and Use of Personalized Bacteriophage-Based Therapeutic Cocktails To Treat a Patient with a Disseminated Resistant *Acinetobacter baumannii* Infection

AP Associated Press

I Inhaled Viruses As A Last-Ditch Effort To Fight A Drug-Resistant Bacterial Infection

Cystic Fibrosis
Pseudomonas

STAT

A virus, fished out of a lake, may have saved a man's life — and advanced science

Aortic Graft
Pseudomonas

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Lead Indication

Pseudomonas aeruginosa

Cystic Fibrosis Lung Infections

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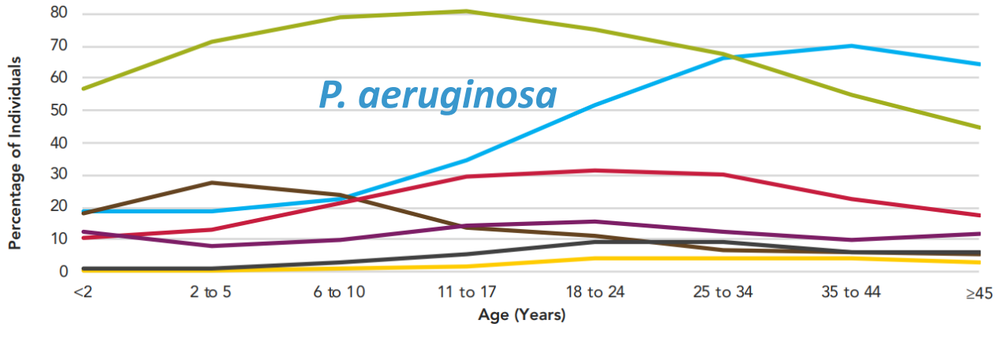
Pseudomonas aeruginosa: Respiratory Opportunity

Primary Clinical Inquiry: Cystic Fibrosis

- Chronic *P. aeruginosa* infections occur in 55% of CF patients by age 25
  - Strongly associated with deteriorating lung function, frequent pulmonary exacerbations, increased mortality
- Increased risk of death at 8 years in children with *P. aeruginosa* infection
- Total antibiotic sales in CF market projected to be >$400M in 2020
- Potential uses as frontline therapy or adjuvant therapy

High Prevalence of *P. aeruginosa* in CF Lung Infections

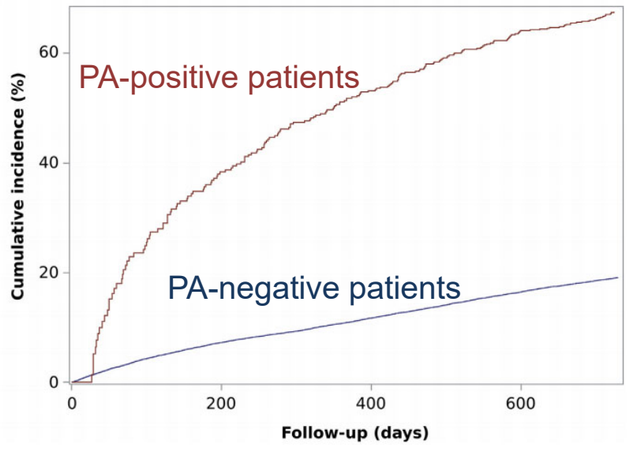


Sources: Cystic Fibrosis Foundation Patient Registry 2018 Annual Data Report; GlobalData

Indication Expansion: Pneumonia

- *P. aeruginosa* infection drives ~300K hospitalizations/year
- *P. aeruginosa* infection associated with high morbidity / mortality
- High cost burden (excess cost of >$40,000/patient)
- Companion rapid diagnostic to drive early use in treatment paradigm

All-Cause Death After 2 years in COPD Patients



Source: Eklöf, Clin Microbiol Infect 2019 Jun 22

CF: cystic fibrosis; COPD: chronic obstructive pulmonary disease

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Integrated Approach Yields Robust Pseud Phage Candidate

Relevant Clinical Isolate Screening

surveillance

Initial phage pool

Prioritize on desired attributes:

- Broad host range
- Distinct receptors
- Diverse families

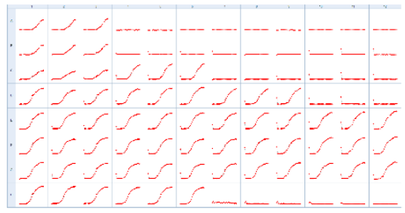
Genomic analysis

- ID phage family
- Confirm lytic

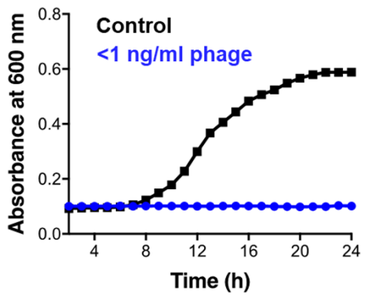
Identify receptors

Candidate Screening

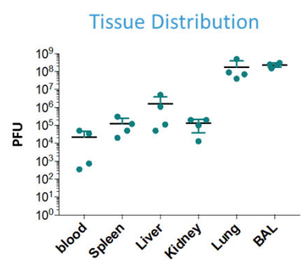
In Vitro Killing Kinetics



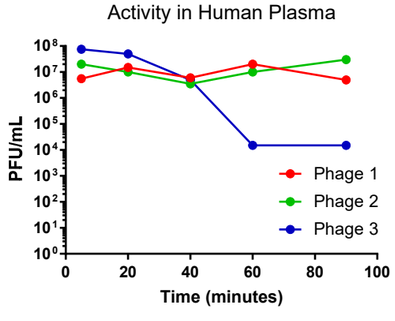
Cooperativity/ Compatibility



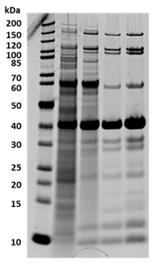
In Vivo Screening



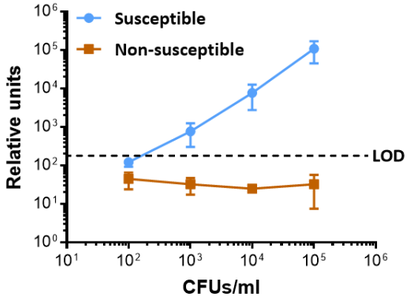
Biocompatibility



Manufacturing Feasibility



Phage-Based Diagnostic



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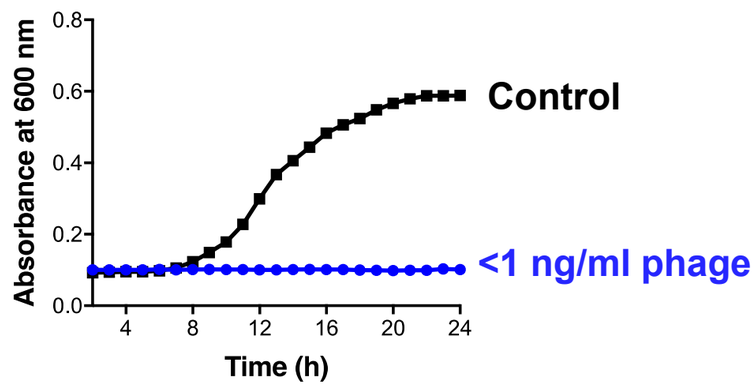
AP-PA02: Phage Product Tailored for *Pa* Respiratory Infections

Multiple-phage product candidate

- Distinct phage families
- Targets multiple different receptor classes
- Cooperative/compatible
- Broadly active against clinical isolates
- Highly potent

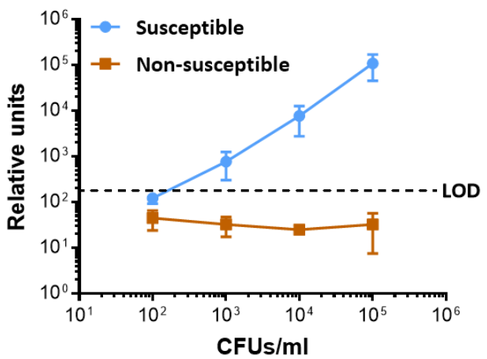
Killing Kinetics Assay in MIC Format



Engineering phage-based diagnostic

- Rapid test to drive early use in treatment paradigm
- Highly sensitive, can identify colonized patients

Diagnostic phage express reporter gene



Pa: *Pseudomonas aeruginosa*

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AP-PA02: Product Development Status

Utilizing Armata's Proprietary Phage-Specific GMP Capabilities

Capabilities and Capacity

- cGMP laboratory designed for manufacturing and formulating sterile products
  - ISO-certified cleanrooms and closed system isolator
  - Registered with FDA; licensed by California Department of Public Health
- Staffing
  - Independent Quality Unit
  - cGMP-trained manufacturing and facilities personnel
- Production capacity to support manufacturing needs through Phase 3 trials

Advancing toward phase 1/2 study in CF patients

- Manufacturing processes established
  - Efficient production at small scale
- Clinical dosing form produced
  - Nebulized liquid formulation
- Near-term US IND filing
- Top cystic fibrosis KOLs engaged as study PIs

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AP-PA02: Clinical Outline

Near-term study

Patient population: Medically stable chronically-infected CF patients

Route of administration: Nebulized

Goals: Safety and tolerability, pharmacokinetics, dose exploration

Follow-on studies

Efficacy endpoints in CF populations

Chronically-infected patients

Primary/early intermittent infections

Exacerbations

Future Opportunities

Pneumonia

Prevention (early intervention of colonized intubated patients)

Treatment of HAP/VAP

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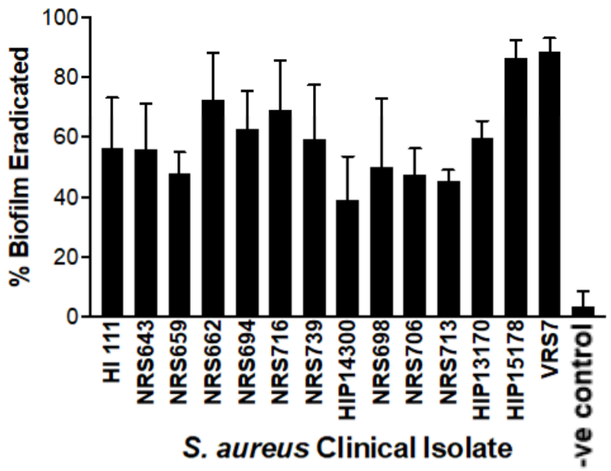
Staphylococcus aureus Program

AP-SA02: Phage Product Targeting *S. aureus*

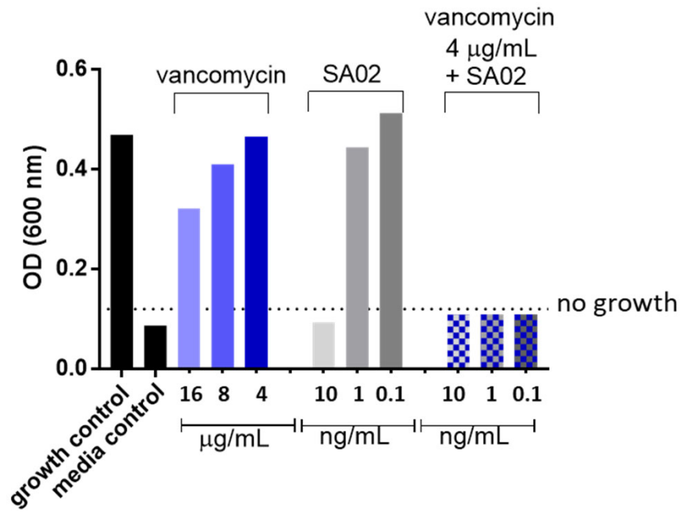
Robust Therapeutic Attributes

- Host range coverage of >90% across clinical isolates tested
- Robust potency against drug-resistant isolates, including MRSA, VISA, VRSA
- Penetrates pre-existing biofilms
- Maintains activity in presence of current standard anti-staphylococcal therapy

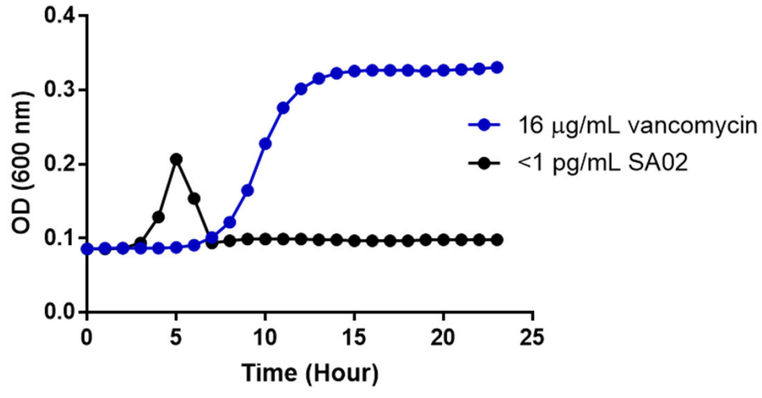
Biofilm eradication by AP-SA02



Synergistic activity of AP-SA02 and vancomycin against VRSA



AP-SA02 active at very low dose



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AP-SA02: Opportunities

- First indication: *S. auerus* bacteremia
  - Subject of nondilutive funding opportunity
  - Phase 1b/2 dose escalation study
    - Administered intravenously as an adjunct to best available antibiotic therapy
    - Demonstrate safety and tolerability of multiple different dose levels
    - Determine optimal dose for subsequent definitive efficacy studies

- Additional indications
  - Respiratory infections
  - Periprosthetic joint infections

Corporate Summary

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Significant Opportunity to Improve Clinical Outcomes

Annual cost of treating all antibiotic-resistant infections in the US: $21-$34 billion[1]

Pseudomonas aeruginosa **ARMP candidate AP-PA02**	• **32,600** new cases in hospitalized patients[2] • **2,700** deaths[2] • **$767 million** of attributable healthcare costs[2] • Particularly problematic for cystic fibrosis patients
Methicillin Resistant Staphylococcus aureus (MRSA) Bacteremia **ARMP candidate AP-SA02**	• **323,700** new cases in hospitalized patients[2] • **10,600** deaths[2] • **$1.7 billion** of attributable healthcare costs[2] • Mortality rates comparable to breast or prostate cancer

Antibiotic resistant infections result in an additional 8 million hospital days annually in the US[1]

[1] Infectious Disease Society of America

[2] Annually, U.S., 2017. Source: US Centers for Disease Control and Prevention, *Antibiotic Resistance Threats in the United States, 2019*

Strong Global IP Position Through Pending and Issued Patents

15 Patent Families, Long-Life Patents, Patents Granted in all Major Jurisdictions

Armata's patents and applications cover:

Therapeutic phage cocktails (Staphylococcus and Pseudomonas) and uses thereof

Synthetic phage and methods of manufacture thereof

Beneficial effects of phage treatment

Phage combinations for treating biofilm infections

Sequential use of phages in combination with antibiotics

Methods to reduce antibiotic resistance

Methods to design therapeutic combination panels of phage

Disinfection methods using bacteriophages

Phage mutants having increased bacterial host spectra

Jurisdiction	Issued	Pending
U.S.	10	12
R.O.W.	60	21

Expiration dates through 2039

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Anticipated Topline Milestones

2020/2021

Pseudomonas phage program

- ✓ Obtained nondilutive funding to partially support clinical studies
  - Awarded $5 million Therapeutics Development Award through Cystic Fibrosis Foundation
- File US IND
- Initiate Phase 1b/2 CF study and obtain topline data
- Advance into new indication

Staphylococcus phage product, AP-SA02

- Obtain nondilutive funding to support IND enabling activities and Phase 1b/2 study in bacteremia
- File US IND
- Initiate Phase 1b/2 study

Leadership and Board of Directors

Diverse Public Company Drug Development Expertise

Management

Todd R. Patrick *CEO*	**Steve Martin** *CFO*
Brian Varnum *President and CDO*	**Duane Morris** *VP, Operations*
Heather Jones *VP, Clinical Development*	

Board of Directors

Richard Bastiani *Chair*	**Joseph M. Patti**
Odysseas Kostas	**Sarah Schlesinger**
Jeremy Curnock Cook	**Todd Patrick**
H. Stewart Parker	**Todd Peterson**

Funding and Capitalization

As of March 31, 2020

Cash Position

- Completed a $25 million private placement of common stock and warrants with Innoviva, Inc. (NASDAQ: INVA) in March 2020
  - Innoviva is a holding company receiving royalties from GSK; $1.3B market capitalization
- Armata has cash through mid-2021

Capitalization

- 18.6 million common shares outstanding; no debt
- Trades on NYSE American exchange: ARMP
- Market capitalization of approximately $60 million

Highlight Summary

A Leader in Phage Therapeutics

- Two bacteriophage candidates in clinical development
- Phage-specific GMP drug manufacturing facilities
- Natural phage discovery and synthetic biology yield robust pipeline
- Strong Board and Executive leadership team
- Strong partnerships to support phage development: Merck, Cystic Fibrosis Foundation
- Well capitalized following a $25 million cash investment in Q1 2020 from Innoviva, Inc.

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