

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): April 24, 2017

Mast Therapeutics, Inc.
(Exact name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-32157
(Commission
File Number)

84-1318182
(IRS Employer
Identification No.)

**3611 Valley Centre Drive, Suite 500,
San Diego, CA**
(Address of Principal Executive Offices)

92130
(Zip Code)

Registrant's Telephone Number, Including Area Code: (858) 552-0866

Not Applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 7.01 Regulation FD Disclosure.

As previously announced, on January 6, 2017, Mast Therapeutics, Inc. (“Mast” or the “Company”), Victoria Merger Corp., a Delaware corporation and a wholly-owned subsidiary of Mast (“Merger Sub”), and Savara Inc., a privately-held Delaware corporation focused on the development and commercialization of novel therapies for the treatment serious or life-threatening rare respiratory diseases (“Savara”), entered into an Agreement and Plan of Merger and Reorganization (the “Merger Agreement”), pursuant to which, among other things, subject to approval of the stockholders of Mast and Savara and the satisfaction or waiver of the other conditions set forth in the Merger Agreement, Merger Sub will merge with and into Savara, with Savara becoming a wholly-owned subsidiary of the Company (the “Merger”).

The information furnished in Exhibit 99.1 to this report, which relates to Savara and its development programs, may be presented from time to time by Savara at various meetings with securities market participants. Mast has not independently verified the material in this presentation. The presentation shall not be deemed “filed” for any purpose, including for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or otherwise subject to the liabilities of that Section.

The information in this Item 7.01, including Exhibit 99.1, shall not be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, regardless of any general incorporation language in the filing.

By furnishing the information in this Item 7.01 of this Current Report on Form 8-K, including Exhibit 99.1, the Company makes no admission as to the materiality of such information. The information contained herein is intended to be considered in the context of the Company’s filings with the Securities and Exchange Commission (“SEC”) and other public announcements that the Company makes, by press release or otherwise, from time to time. The Company undertakes no duty or obligation to publicly update or revise the information contained in this report, although it may do so from time to time as its management believes is appropriate. Any such updating may be made through the filing of other reports or documents with the SEC, through press releases or through other public disclosure.

Additional Information about the Merger and Where to Find It

In connection with the Merger, the Company has filed relevant materials with the SEC, including a registration statement on Form S-4 that contains a prospectus, proxy statement and information statement. Investors and security holders of the Company and Savara are urged to read these materials because they contain important information about the Company, Savara and the Merger. The proxy statement/prospectus/information statement and any other documents filed by the Company with the SEC may be obtained free of charge at the SEC web site at www.sec.gov. In addition, investors and security holders may obtain free copies of the documents filed with the SEC by the Company by directing a written request to: Mast Therapeutics, Inc., 3611 Valley Centre Drive, Suite 500, San Diego, CA 92130, Attention: Investor Relations. Investors and security holders are urged to read the proxy statement/prospectus/information statement and the other relevant materials before making any voting or investment decision with respect to the Merger.

This communication shall not constitute an offer to sell or the solicitation of an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No offering of securities shall be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act of 1933, as amended.

Participants in the Solicitation

The Company and its directors and executive officers and Savara and its directors and executive officers may be deemed to be participants in the solicitation of proxies from the stockholders of the Company in connection with the proposed transaction. Information regarding the special interests of these directors and executive officers in the merger is included in the proxy statement/prospectus/information statement referred to above. Additional information regarding the directors and executive officers of the Company is also included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2016 which is available free of charge at the SEC web site (www.sec.gov) and from the Company, Attn: Investor Relations, at the address described above.

Item 9.01 Financial Statements and Exhibits.

Reference is made to the Exhibit Index included with this Current Report on Form 8-K.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Mast Therapeutics, Inc.

Date: April 24, 2017

By: /s/ Brandi L. Roberts
Brandi L. Roberts
Chief Financial Officer and Senior Vice President

Exhibit Index

**Exhibit
Number**

Description

99.1 Savara Inc. corporate presentation, April 2017

CORPORATE PRESENTATION

APRIL 2017



SAFE HARBOR STATEMENTS

Forward Looking Statements. Savara cautions you that statements in this presentation that are not a description of historical fact are forward-looking statements which may be identified by the use of words such as “expect,” “intend,” “plan,” “anticipate,” “believe,” and “will,” among others. Such statements include, but are not limited to, statements regarding the sufficiency of the combined organization's resources to fund the advancement of any development program or the completion of any clinical trial; the nature, strategy and focus of the combined organization; the safety, efficacy and projected development timeline and commercial potential of any product candidates; and the market size or potential for any of our products. Savara may not actually achieve the proposed merger with Mast, or any plans or product development goals in a timely manner, if at all, or otherwise carry out the intentions or meet the expectations or projections disclosed in its forward-looking statements, and you should not place undue reliance on these forward-looking statements. Because such statements are subject to risks and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements. These forward-looking statements are based upon Savara's current expectations and involve assumptions that may never materialize or may prove to be incorrect. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of various risks and uncertainties, which include, without limitation, risks and uncertainties associated with the ability to consummate the proposed merger, the ability to project future cash utilization and reserves needed for contingent future liabilities and business operations, the availability of sufficient resources for combined company operations and to conduct or continue planned clinical development programs, the timing and ability of Mast or Savara to raise additional equity capital to fund continued operations; the ability to successfully develop any of Savara's product candidates, and the risks associated with the process of developing, obtaining regulatory approval for and commercializing drug candidates that are safe and effective for use as human therapeutics. You are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date on which they were made. Savara undertakes no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they were made, except as may be required by law.

Additional Information about the Proposed Merger and Where to Find It. In connection with the proposed merger, Mast has filed relevant materials with the SEC, including a registration statement on Form S-4 that contains a prospectus and a joint proxy statement. Investors and security holders of Mast and Savara are urged to read these materials because they contain important information about Mast, Savara and the proposed merger. The joint proxy statement, prospectus, amendments and other relevant materials filed by Mast with the SEC, may be obtained free of charge at the SEC web site at www.sec.gov. In addition, investors and security holders may obtain free copies of the documents filed with the SEC by Mast by directing a written request to: Mast Therapeutics, Inc. 3611 Valley Centre Drive, Suite 500, San Diego, California 92130, Attn: Investor Relations. Investors and security holders are urged to read the joint proxy statement, amendments, prospectus and the other relevant materials before making any voting or investment decision with respect to the proposed merger. Mast and its directors and executive officers and Savara and its directors and executive officers may be deemed to be participants in the solicitation of proxies from the stockholders of Mast and Savara in connection with the proposed transaction. Information regarding the special interests of these directors and executive officers in the proposed merger are included in the joint proxy statement/prospectus referred to above.

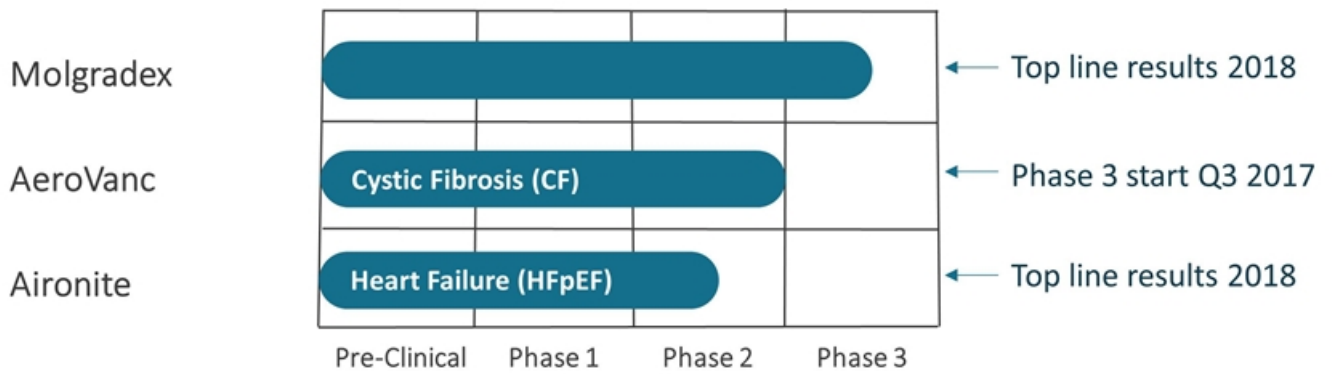


SAVARA OVERVIEW

- Clinical Stage Specialty Pharmaceutical Company...
...Focused on Rare Respiratory Diseases



- Unique products with no approved alternatives
- Clinically proven treatment concepts
- Over \$1B peak sales potential*



MAST MERGER

- Merger announced in Jan 2017
- Pending Mast shareholder consent

Reverse Split	Share Price*	Shares Outstanding*	Market Cap*
50-70	\$6.5 to \$9.1	16M to 23M	\$140M

- Name change to Savara, Inc.
- Listing on NASDAQ: SVRA
- Combined Cash of \$23m as of Q4 2016

* Assuming a MSTX share price of \$.13 and an exchange ratio of 41 subject to certain adjustments as discussed in the registration statement on Form S-4

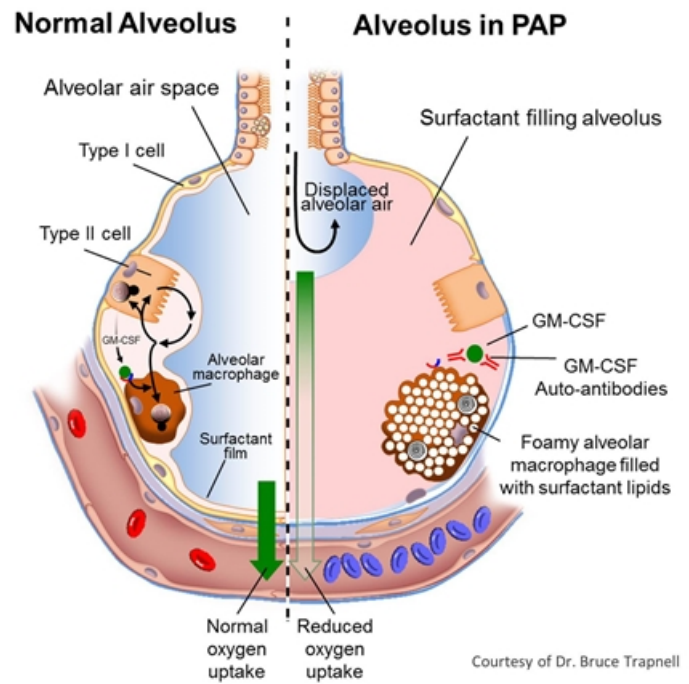


MOLGRADEX

Inhaled GM-CSF for Autoimmune Pulmonary Alveolar Proteinosis (aPAP)

PAP: EXCESS OF SURFACTANT IN THE LUNGS

Anti-GM-CSF antibodies cause accumulation of surfactant in the alveoli

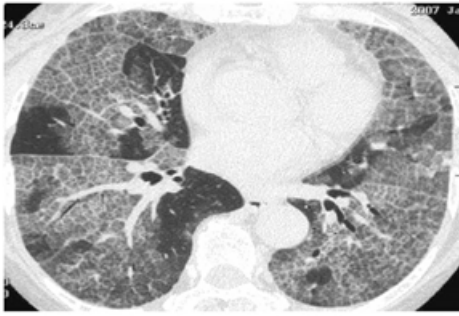


- Mechanism of disease well understood

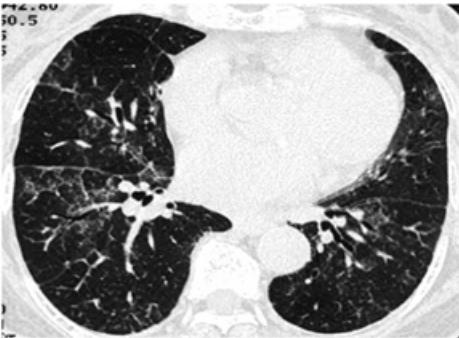


INHALED GM-CSF PROMISING IN ACADEMIC STUDIES

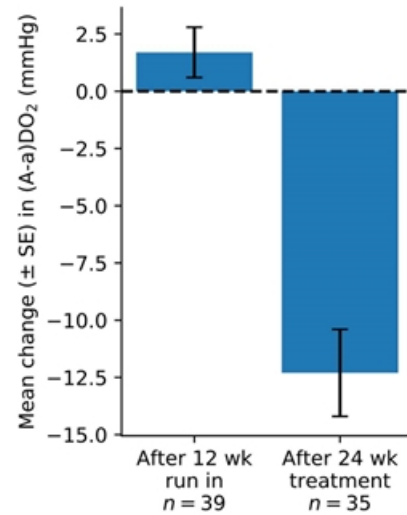
aPAP patient before inhaled GM-CSF



After 6 months of inhaled GM-CSF



Improvement in alveolar to arterial oxygen gradient ((A-a)DO₂)



Tazawa et al. *AJRCCM*. 181:1345; 2010.

- Published experience from treatment of more than 80 aPAP patients suggests potential for profound impact on oxygenation and clinical symptoms

MOLGRADEX: FIRST INHALED GM-CSF

**Inhalation solution of
rhGM-CSF**

**Direct lung delivery to overcome
functional GM-CSF deficiency**

**Proprietary cell bank for
GM-CSF manufacturing**

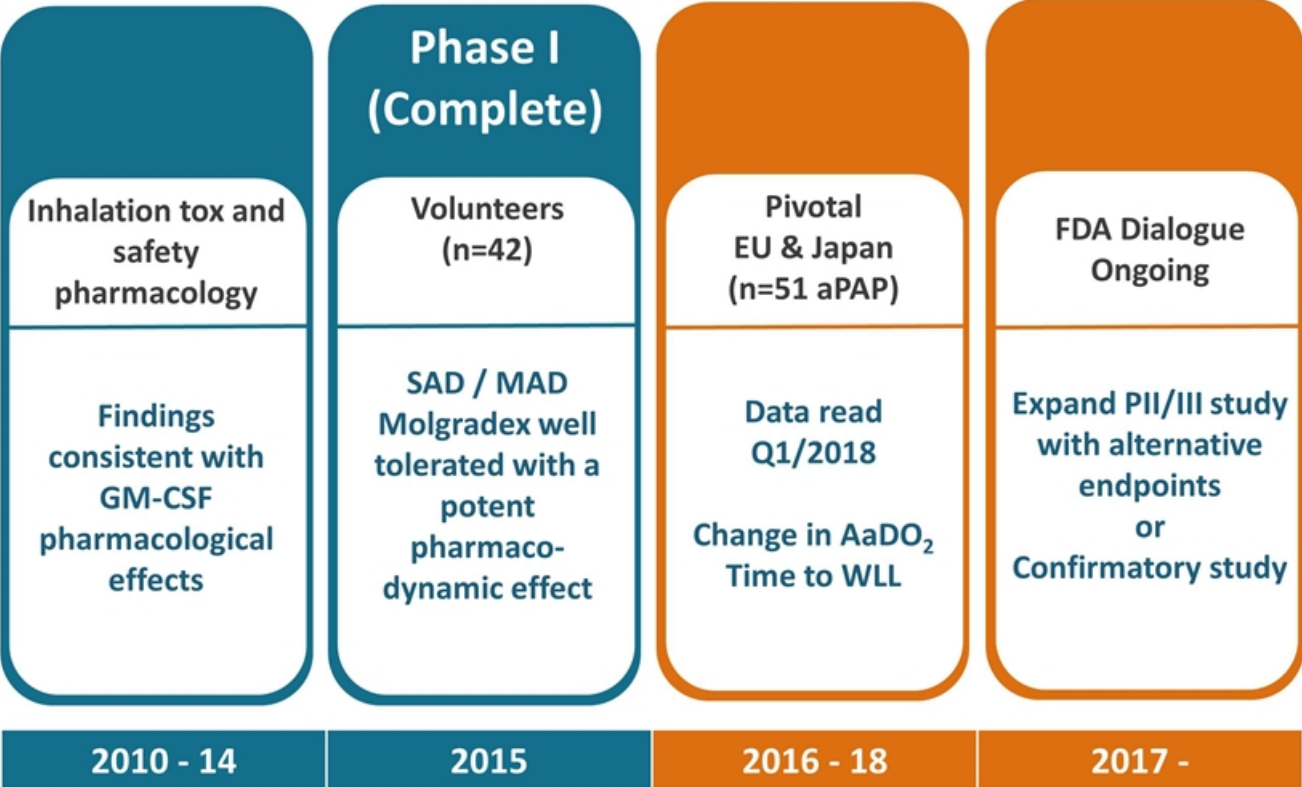
**Orphan status
(7-10 years exclusivity)**

**PARI eFlow[®]
Nebulizer**

**Considerable indication
extension opportunity**

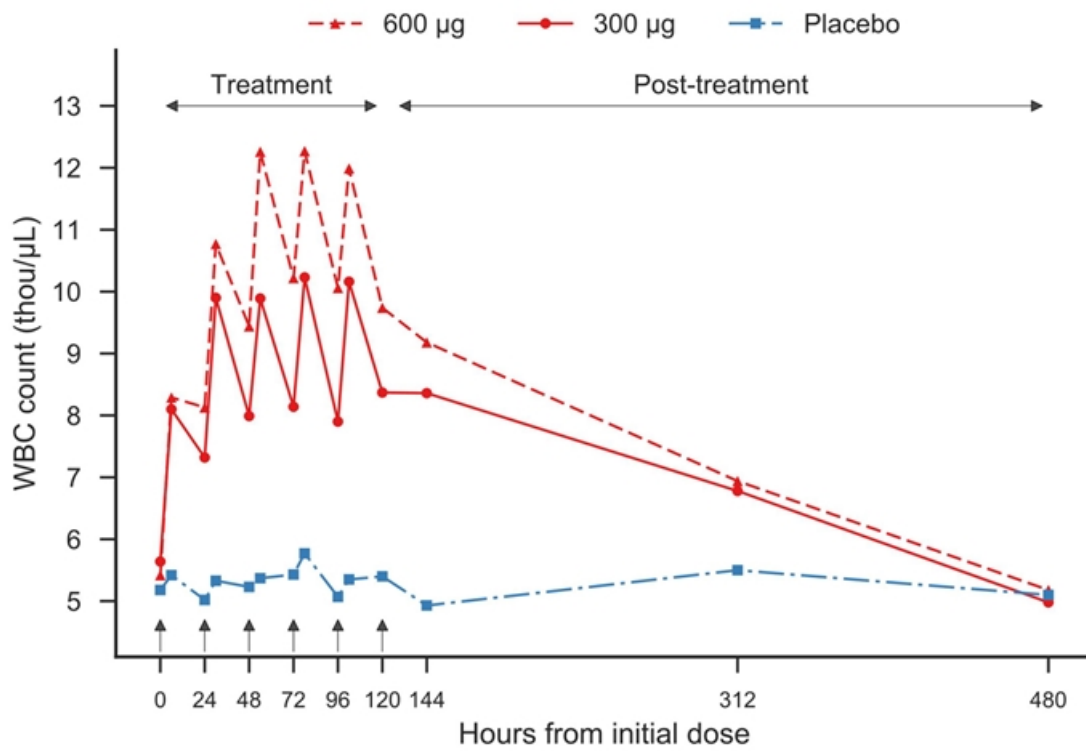


MOLGRADEX: PIVOTAL STUDY FOR EUROPE ENROLLING



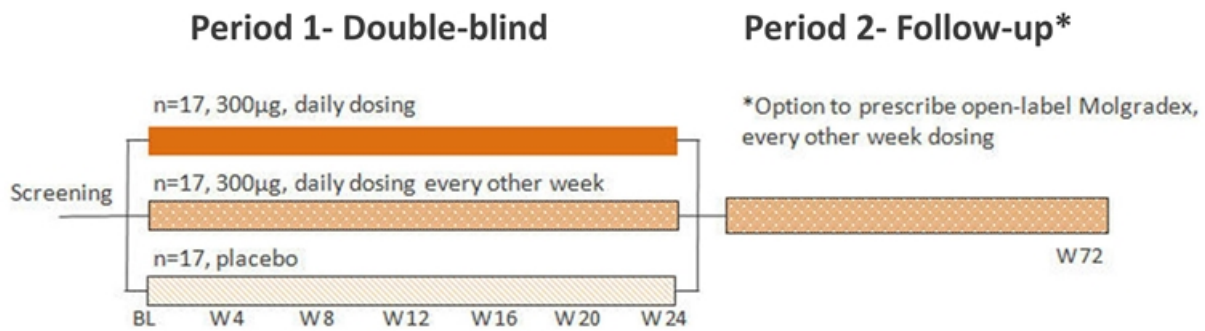
*Proposal subject to regulatory approval of final protocol

PHASE I – CONSISTENT WBC RESPONSE TO EACH DOSE



- Safety in healthy volunteers comparable to placebo
- Potent dose-dependent pharmacodynamic effect

DESIGN OF ONGOING MOLGRADEX PHASE II/III STUDY



Primary Endpoint

- Change from baseline in (A-a)DO₂

Secondary Endpoints

- Requirement for/time to WLL
- Vital Capacity
- 6 min walk distance
- Quality of life



AEROVANC

**Inhaled Vancomycin for MRSA in Cystic
Fibrosis**

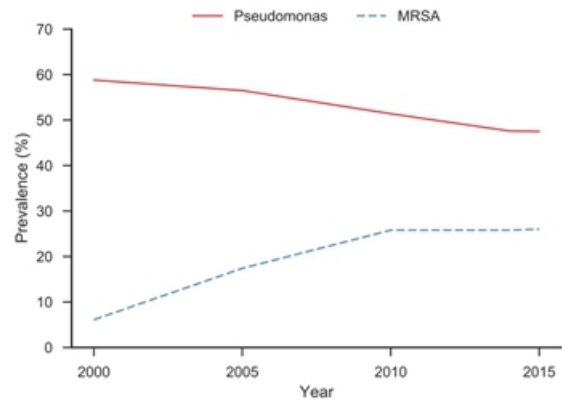
HIGH UNMET NEED FOR INHALED MRSA TREATMENT

CF Prevalence (US)
30,000 patients,
26% MRSA infected

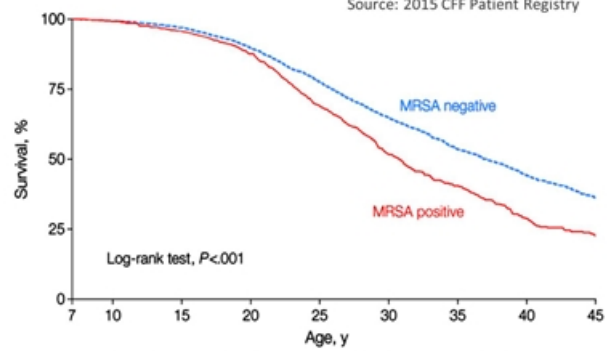
Persistent lung
infections managed
with chronic inhaled
antibiotics

MRSA infection
associated with worse
clinical outcomes

No approved inhaled
MRSA antibiotic,
emerging use of nebulized
IV form of vancomycin



Source: 2015 CFF Patient Registry



Dasenbrook, et al. reprinted with permission, Copyright © (2010) JAMA

AEROVANC: FIRST INHALED MRSA ANTIBIOTIC

**Inhaled Dry Powder
Vancomycin**

**Orphan 7 yrs + QIDP 5 yrs
(total 12 years exclusivity)**

**Drug Directly to Site
of Infection**

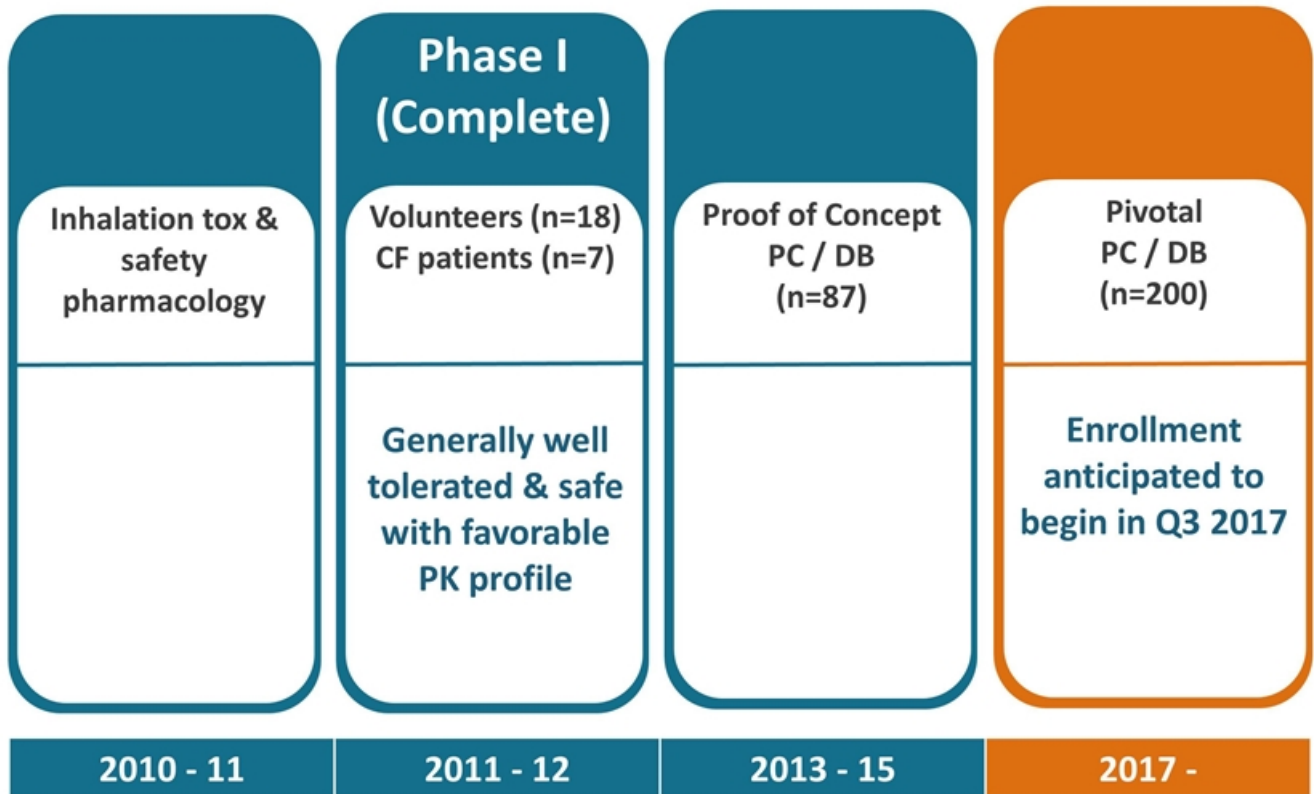
Grants from CFF & NIH

**Reduced Systemic
Toxicity**

**Manufacturing at
Commercial Scale**

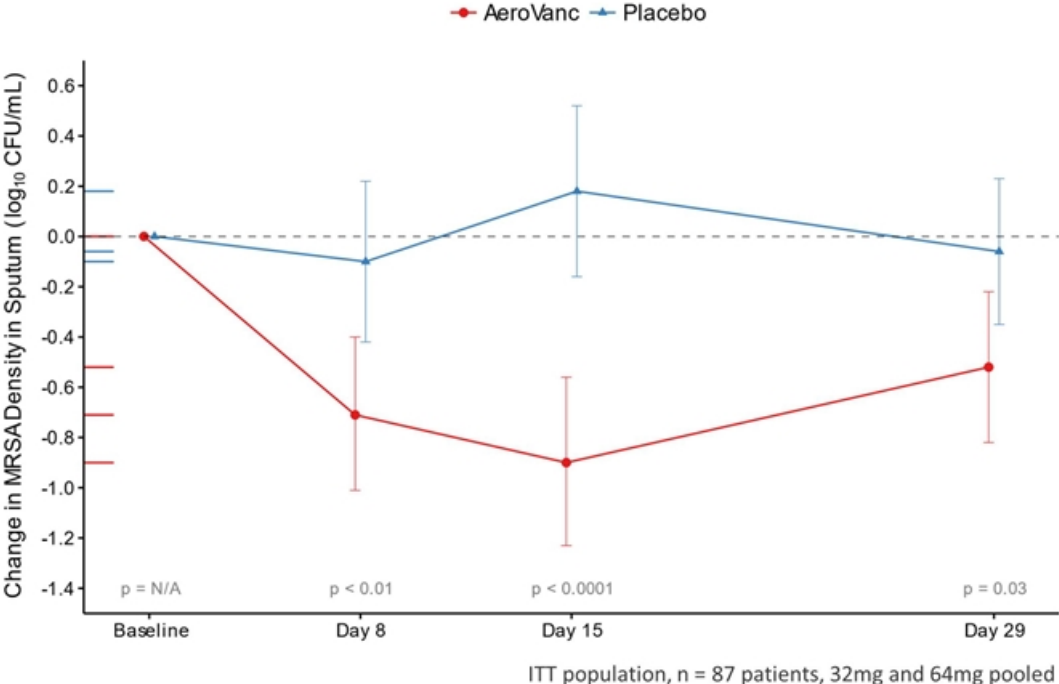


AEROVANC PHASE III READY



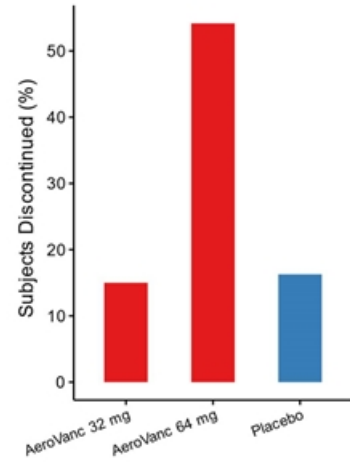
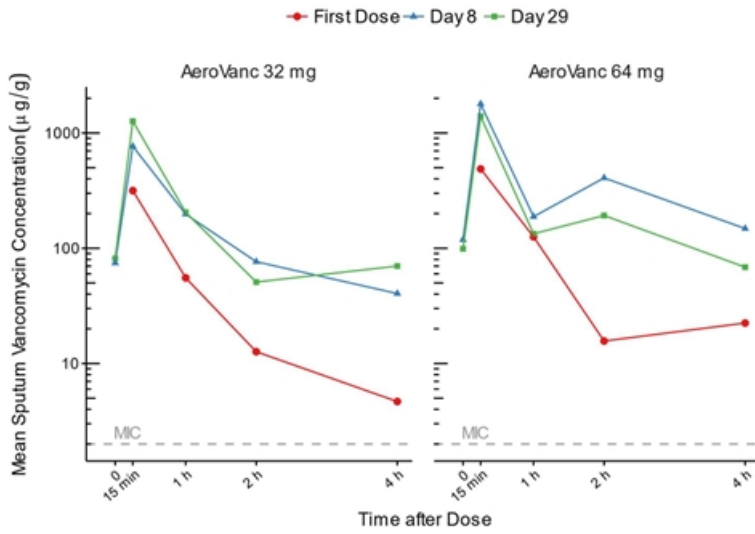
*Proposal subject to regulatory approval of final protocol

PHASE II: MRSA IN SPUTUM - PRIMARY ENDPOINT MET



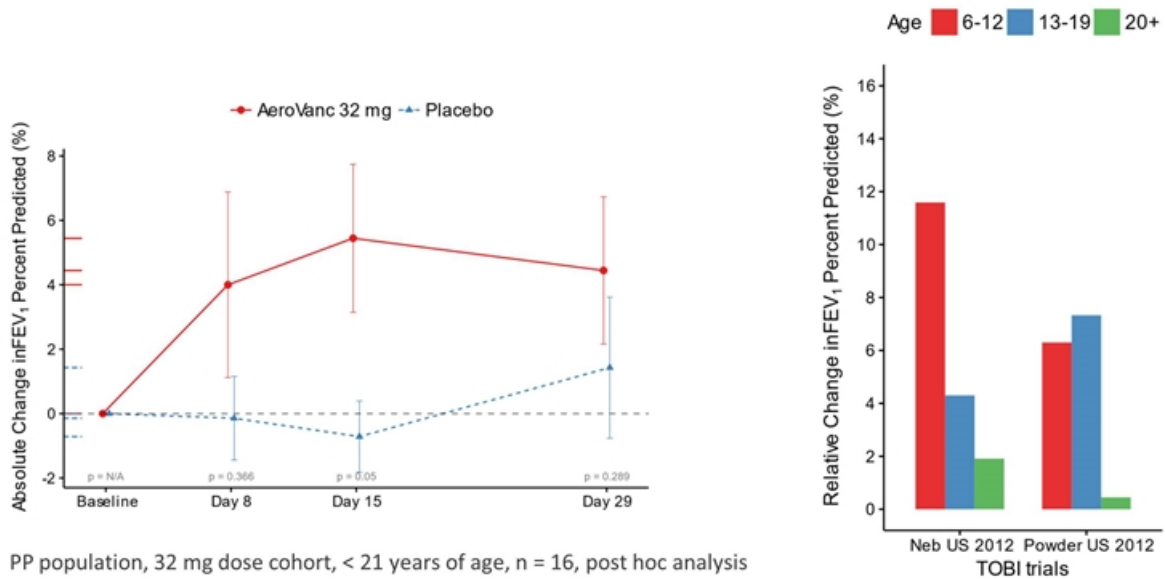
- Proof of concept established
- Microbiology not acceptable to FDA as Phase III primary endpoint

32 MG DOSE SELECTED FOR PHASE III STUDY



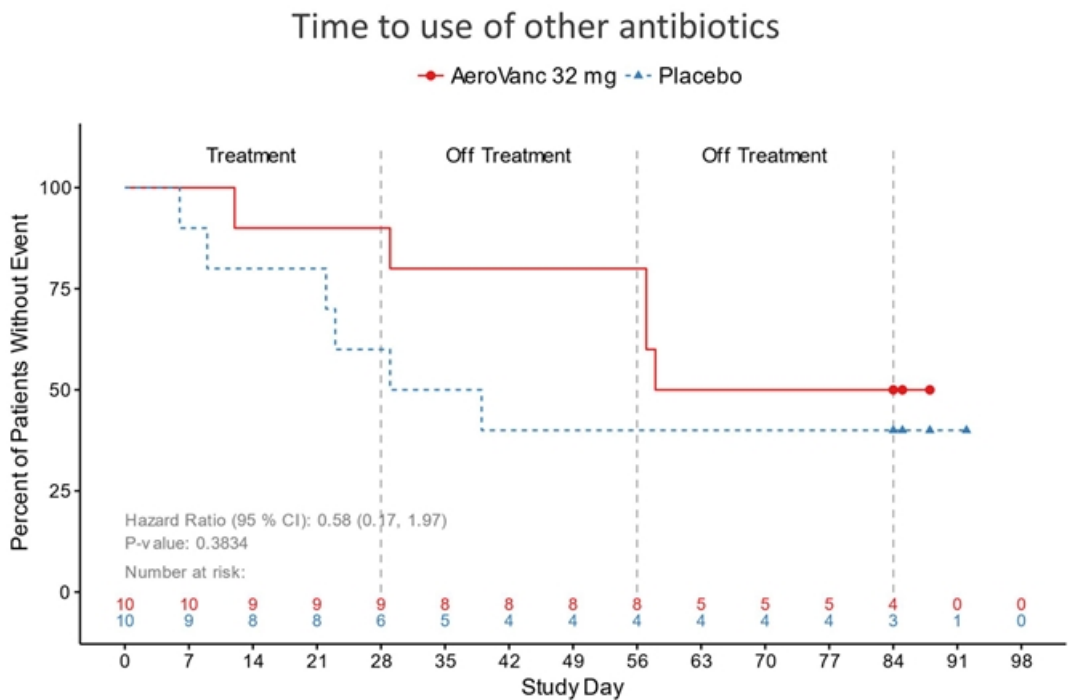
- Vancomycin trough concentrations in high excess over MIC at both doses
- ~ 50 % premature study drug discontinuations at 64 mg dose

FEV₁ IMPROVEMENT CONSISTENT WITH TOBI DATA



- Best FEV₁ improvement in young patients
- Similar FEV₁ response profile in prior TOBI studies
- Absolute change in FEV₁ selected as Phase III primary endpoint
- Phase III to be adequately powered and focused on children 6-21 years

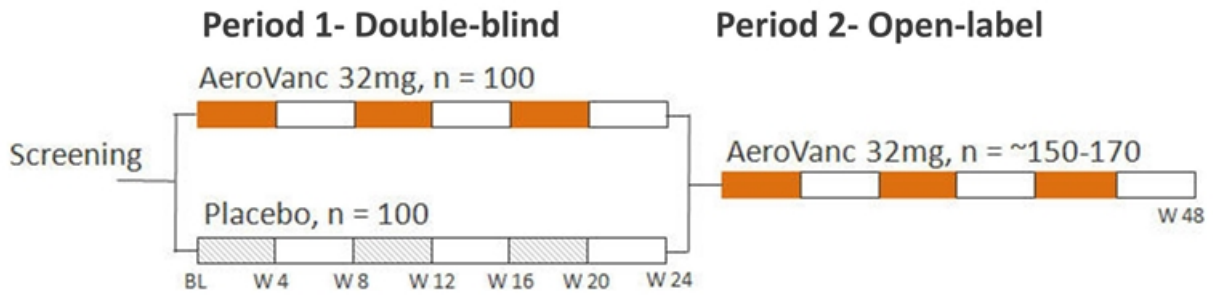
IMPROVEMENT IN TIME TO OTHER ANTIBIOTICS



ITT, 32 mg dose cohort, < 21 years of age, n = 20 , post hoc analysis

- Prolongation of time to use of other antibiotics
- In chronic use, a new treatment cycle would start at day 56, and events (use of other antibiotics) would not be expected at that time

PHASE III DESIGN AGREED WITH FDA



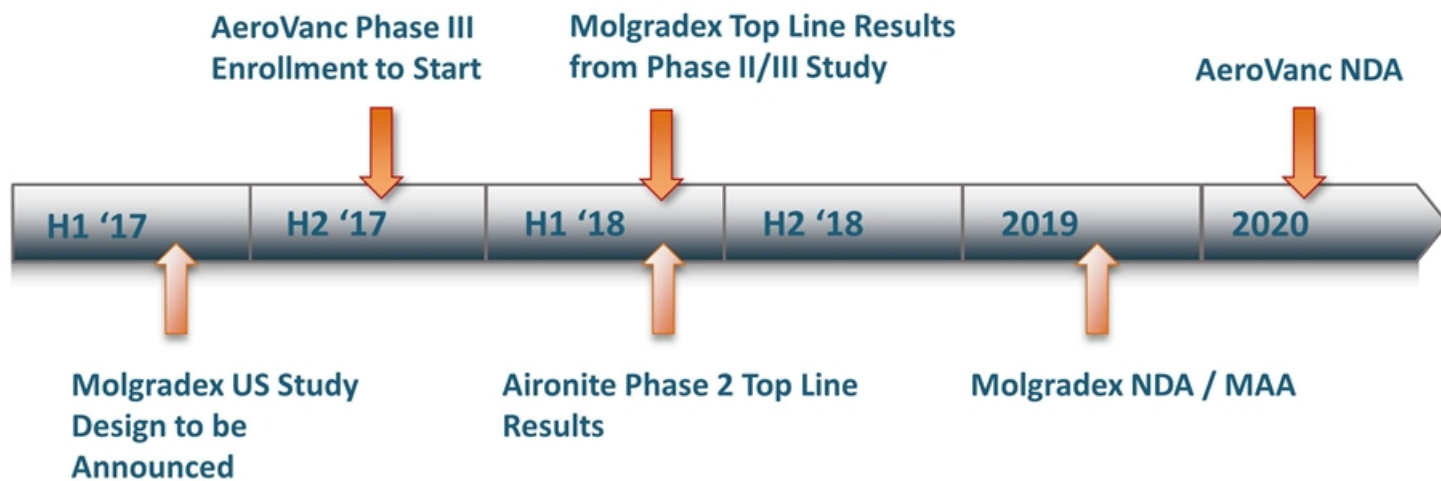
Primary Endpoint

- FEV₁ improvement at Week 4 and Week 20 (absolute change analyzed sequentially)
- Primary analysis based on patients 6-21 years of age

Secondary Endpoints

- Time to use of another antibiotic for pulmonary infection
- FEV₁ improvement (relative change, number of response cycles)
- Respiratory Symptoms Diary

ANTICIPATED CORPORATE MILESTONES



THANK YOU!



INVESTMENT HIGHLIGHTS

Pipeline

- Multiple late-stage assets addressing orphan diseases
- Previously approved active drug substances and drug delivery technologies
- High local drug concentrations reducing systemic toxicity
- Strong market protection

Strategy

- Pursue AeroVanc and Molgradex indication expansion
- Grow pipeline of best-in-class products through strategic partnerships and acquisitions
- Operate by outsourcing capital intensive operations
- Commercialize through own salesforce in US

MANAGEMENT & BOD

Executive Team

Rob Neville, CEO

Serial entrepreneur / Evity exit \$100M / Series A lead investor

Dr. Taneli Jouhikainen, President & COO

Serial drug developer / 10+ license deals / public company and IPO experience / 20 yrs. in pharma mgmt.

David Lowrance, CFO

15 years biotech / pharma, public company and IPO experience

Dr. Cecilia Ganslandt, VP, Medical Affairs

Serial drug developer / 20 yrs. in pharma mgmt.

Dr. John Lord, VP, Pharmaceutical Development

Ex-Nektar / Exubera program mgr. / 20 yrs. in pharm dev

Board of Directors

Nevan Elam

CEO Antriabio, Former head of Nektar Inhalation

Rick Hawkins

CEO Lumos, Founder and former CEO Pharmaco

Joe McCracken

Former global head of BD Roche

Yuri Pikover

37 Technology Ventures

Matthew Pauls*

CEO StrongBridge Biopharma

David Ramsay*

Former CFO Halozyme

Rob Neville

Savara