



PULMOTECT

Pulmotect is developing PUL-042, a clinical stage, novel, pathogen-agnostic, inhaled compound (TLR 2/6 and 9 agonists) for the prevention and early treatment of viral and bacterial respiratory infections in patients with chronic debilitating conditions.

MARKET SEGMENTS

Even with current vaccines, anti-virals and antibiotics, significant unmet needs remain to better prevent and treat respiratory infections. Pulmotect technology has demonstrated activity and completed Phase I clinical trials to address these unmet needs.



COPD

- Major unmet need
- One of the 5 priorities mentioned by the WHO in Respiratory medicine
- No new treatments for exacerbations
- 24M people in U.S.
- Responsible for 5% of deaths worldwide
- 3rd cause of deaths in U.S.
- \$50B direct/indirect costs



INFLUENZA

- 710,000 hospitalizations in 2014-2015
- 310,000 in 2015-2016 seasons
- 2017 = 50/100,000 pop/ week
- PUL-042 is effective against pandemic flu strains - a public health threat
- PUL-042 exhibits superior efficacy vs oseltamivir



PNEUMONIA

- Cancer patients
 - High unmet needs
 - Ongoing focus area
- Cystic Fibrosis Patients
 - Frequent respiratory infections by pseudomonas
 - Projected growth to exceed \$7B by 2025
 - Potential orphan drug
- VAP/HAP

SOLUTION: PUL-042

PUL-042 is an inhaled anti-infective that has demonstrated activity against a number of respiratory infections: anthrax, SARS, Influenza, pneumococcus, pseudomonas, sendai virus and others.

- Effective in prophylaxis and treatment models – either as monotherapy or in combination with standard of care
- No indication to cause treatment-resistant strains due to its unique host-directed mechanism of action
- Multiple potential indications: reduction of exacerbations in CF and COPD, reduction of pneumonia in cancer patients, and severe hospitalized influenza (government opportunity)
- Maximum tolerated dose identified characterizing the safety profile in man in two Phase I trials
- Non-complicated manufacture and administration

POTENTIAL BENEFITS

Patients

- Reduce morbidity / mortality
- Lower costs
- No resistance expected

Physicians

- Better patient outcomes
- Ease of administration

Health Care Systems

- Decrease length of hospital stay
- Reduce disease burden



PUL-042 has been well-tolerated in two Phase I studies - 49 subjects dosed

STUDY 001 - SAD

3+3 Design
Doubling doses from 4.2/3.9 to 68/46.4µg

Dose related decrease in FEV₁

Dose related increase in ANC and CRP

Maximum tolerated dose identified
59.5/40.6µg defined by reductions in FEV₁

No serious adverse events;
Most common adverse events included
cough, secretions, minor irritations

STUDY 003 - MAD

Multiple dose cross-over design
Used 29.8/20.3µg/day twice a week
(projected therapeutic regimen)

Projected minimum effective dose TBD
likely < 29.8/20.3 µg/day

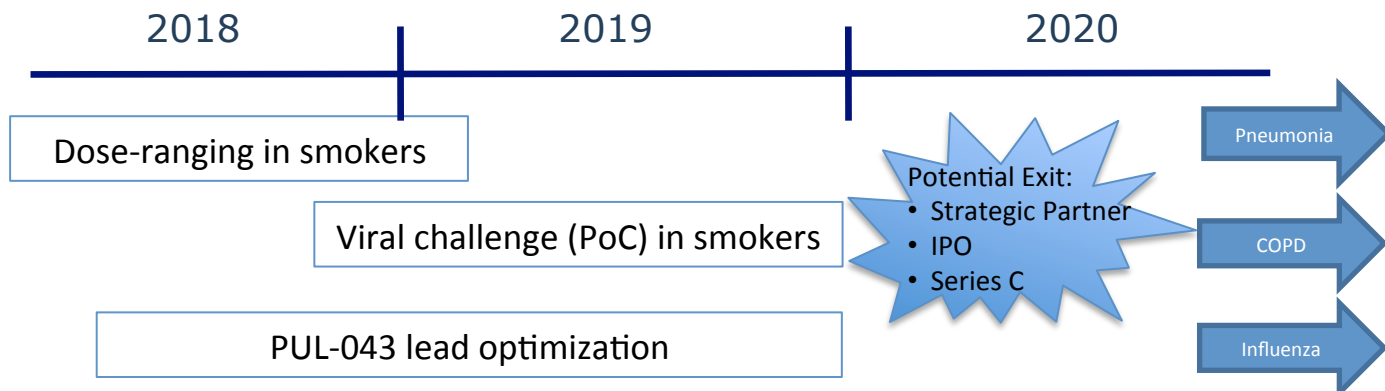
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FUNDING HISTORY

With animal efficacy and human safety milestones completed, the next objective is to gain Proof-of-Concept in man through a viral challenge study. With that foundation, optionality to go public or partner with a strategic partner will be considered to address the multiple respiratory markets for this broad-spectrum, pathogen-agnostic, host-directed breakthrough technology.

\$18M Grants
\$2M Angels
\$2.1M Series A

MILESTONE TIMELINE



SERIES B: \$12M

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