

Alaxia

Meveol program supported by



Location and Primary Focus

- Incorporated in 2008, ALAXIA is a private biotech company based in Lyon, France
- Main Focus: Development of medicinal products targeting respiratory diseases, Products exiting our Peroxidase platform.
- 1st Product : Meveol[®] for Cystic Fibrosis

Cystic Fibrosis

Physiopathology:

- Genetic disease of the body's mucus glands
- Rare disease 1.2/10,000 in EU
- Affects the respiratory and digestive systems
- Implication of CFTR* Gene – CFTR Protein

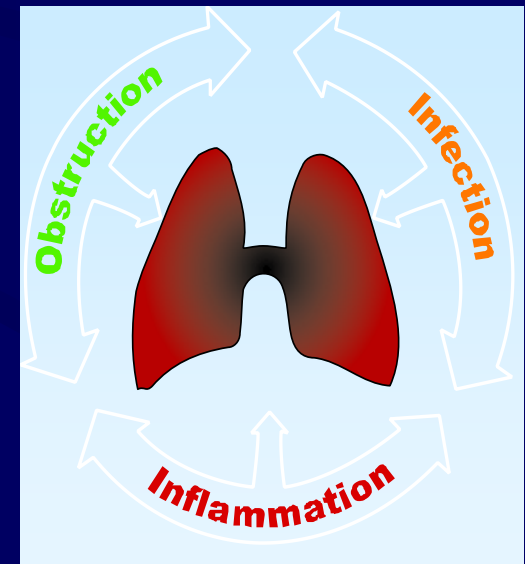
CFTR Gene Mutation



Defective CFTR



Deranged Airway
Environment



*CFTR : Cystic Fibrosis Transmembrane conductance Regulator

What happens in Cystic Fibrosis lungs ?

CFTR is defective

- Chronic Inflammation

Rogan et al., 2004 ⇒ Decreased Lactoferrin Activity In CF

- Lack of antimicrobial molecules

⇒ failure in inhibition of bacterial growth

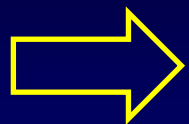
Childers et al., 2007 ⇒ SCN^- doesn't cross CFTR

Moskwa et al., 2007 ⇒ Lack of OSCN^- in CF

Conner et al., 2007 ⇒ Defective LPS in CF

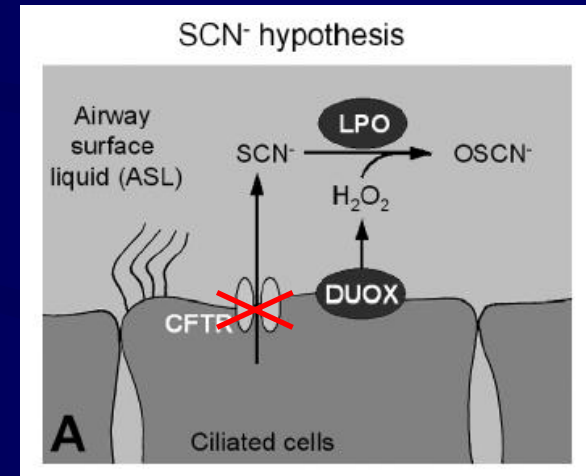
- Thick mucus

⇒ defective mucociliary transport



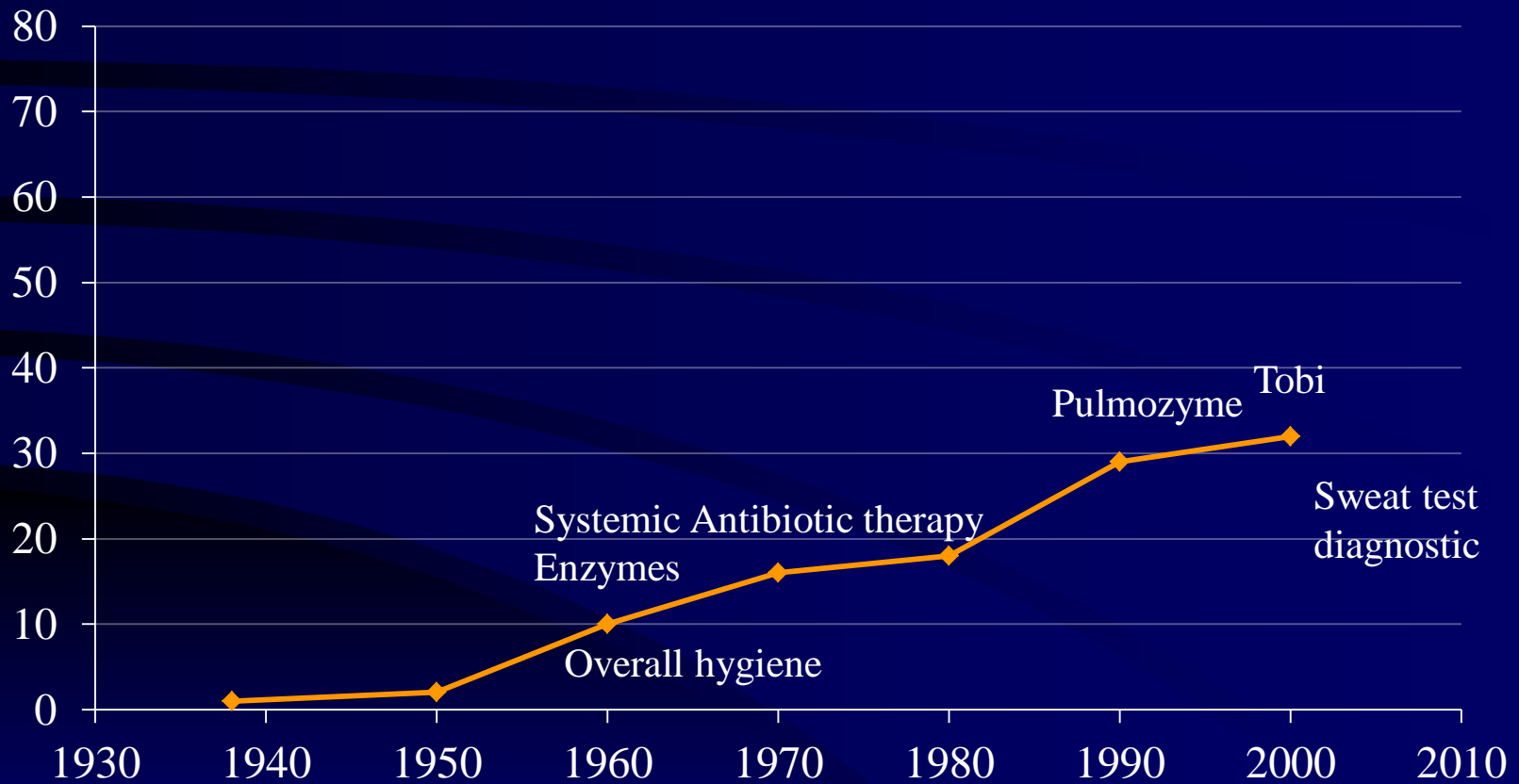
CF lung sensitive to opportunist pathogens responsible of lethal infections

CF CELL



Fischer, 2009

Life Expectancy



MEVEOL

www.alaxia-pharma.eu

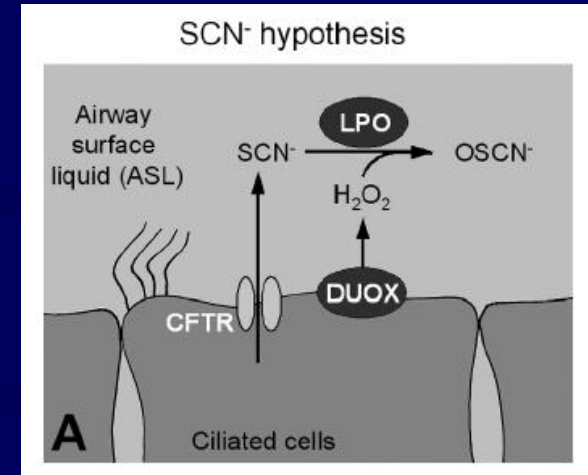
Program supported by



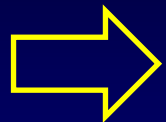
How do normal airways prevent and resolve bacterial infections?

Airways epithelial cells secrete :

- Various antimicrobial molecules
 - inhibition of bacterial growth
- Mucus
 - traps and remove bacteria by mucociliary transport



Fischer, 2009



Healthy lungs resistant to opportunist pathogens

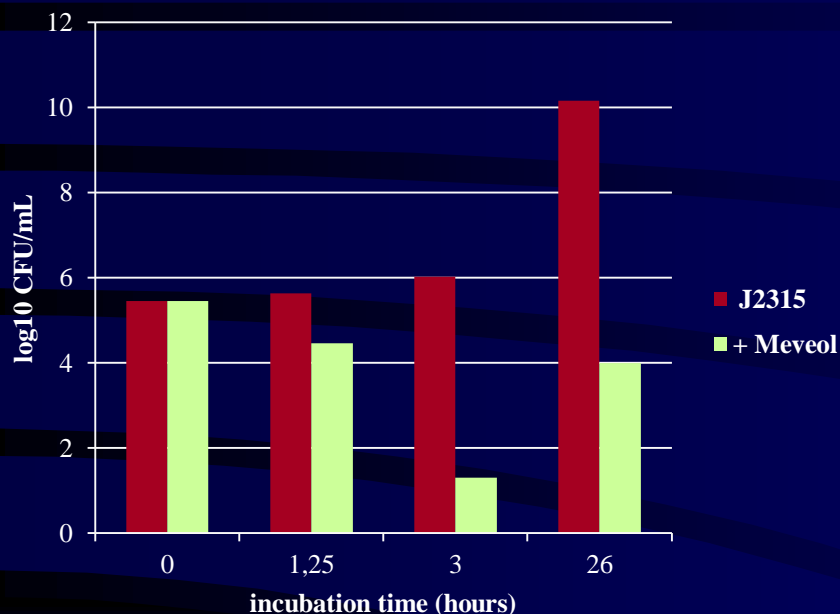
Meveol : Alaxia's First Drug in Development

- Attributes of Meveol (OSCN-/Lactoferrin)
 - A designated orphan drug
 - Multiple Patents
 - 1st product exiting peroxidase platform
 - Antimicrobial, wide spectrum,
 - *Pseudomonas Aeruginosa* , *Burkholderia cepacia*, *MRSA*, *Mycobacterium abscessus*...
 - **Mechanism of action:**
 - 1) Acts directly on micro-organism metabolism (SH & Fe)
 - 2) Disrupts established biofilm
 - No antibiotic resistance generation
 - Stand alone or/& antibiotic combination
 - **Inhalation use**
 - Strong scientific background in respiratory
 - Cystic Fibrosis
 - URTI, LRTI,...

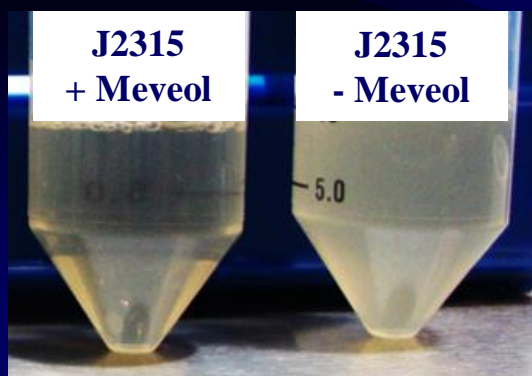
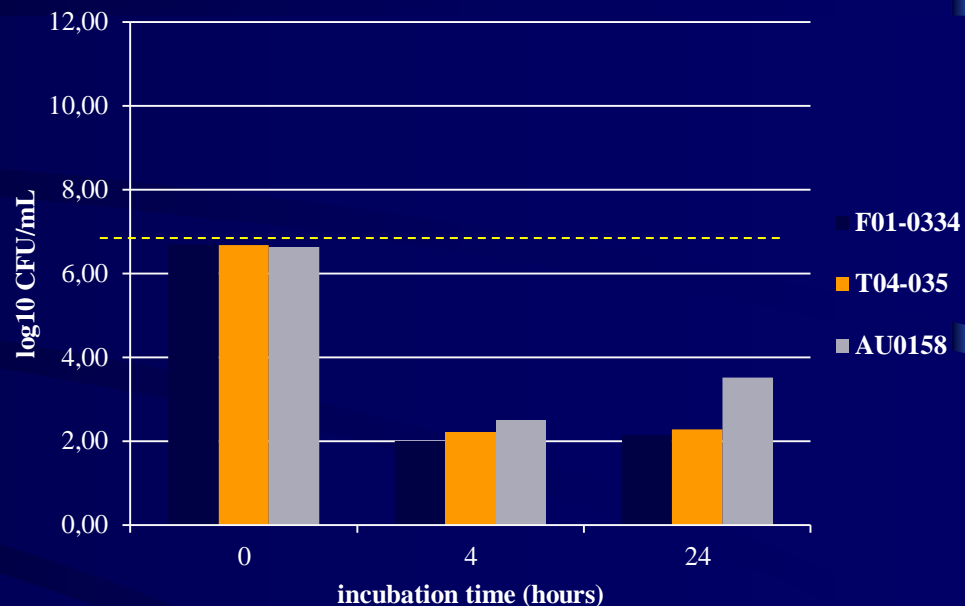
Meveol® vs *Burkholderia*

➤ *In vitro* tests

Meveol vs *B. cenocepacia*



Meveol vs *B. dolosa*



18h after inoculation

➡ Bactericidal effect of Meveol® vs BCC

- Efficacy also demonstrated on other microorganisms (eg *Pseudomonas aeruginosa*, MRSA, *Mycobacterium abscessus*,...), either on planktonic/biofilm

- ...

Alaxia news

- Stragen Group Partnership
 - Genève headquarters
 - Pharmaceutical group developing various specialities
www.stragen.com
 - Lyon based (DG Annie Claude Benichou)
 - Pharmacovigilance & Medical affairs base

www.alaxia-pharma.eu

Meveol

Cystic Fibrosis
Innate lung defense
system compensation

Come to see us – booth 23
35th European Cystic Fibrosis Conference
Dublin, June 6-9th 2012