

PI: **Gustavo Ferrer, MD, FCCP,**
 CEO, *Dr. Ferrer Biopharma*
 Co-PI: **Marcos A. Sanchez-Gonzalez, MD, PhD**
 CSO, *Dr. Ferrer Biopharma*

DEVELOPING INTRANASAL/INHALATION THERAPIES FOR THE TREATMENT OF INFLAMMATORY AND INFECTIOUS DISORDERS OF THE PULMONARY SYSTEM

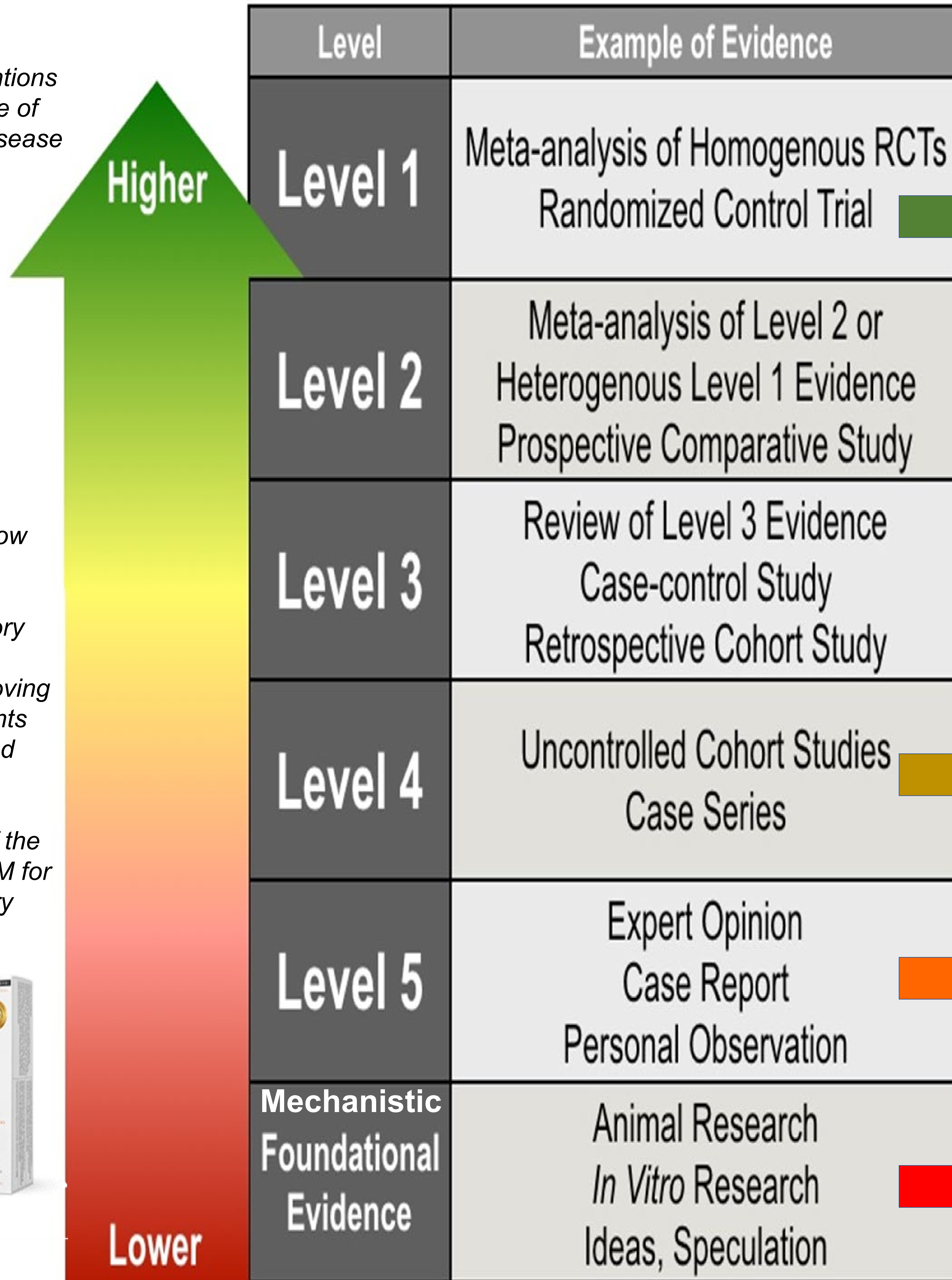
Overarching Goal

To develop effective interventions to improve the quality of life of those suffering from Lung Disease



Objectives of Research Agenda

- To unveil the underlying mechanisms explaining how Xylitol and CPM improve pulmonary symptoms (Microbiome – Inflammatory Markers)
- To test therapies for improving pulmonary health in patients with Allergic, infectious and Inflammatory Pulmonary Conditions.
- To increase awareness of the benefits of Xylitol and CPM for the treatment of pulmonary disorders.



- A Randomized Control Pilot Trial to Test the Efficacy of Intranasal Chlorpheniramine Maleate with Xylitol for the Treatment of Allergic Rhinitis. Status: Published: Cureus. 2021 Mar 31;13(3):e14206.**
- Efficacy of Chlorpheniramine Maleate Nasal Spray for the Treatment of COVID-19: A Short Report. Status: Preliminary Report Completed**
- Preventing Recurrent Otitis Media by Addressing Nasal Hygiene with a Nasal Spray of Xylitol and Grapefruit seed extract (Xlear®): A Multi-Center Randomized Clinical Trial. Status: Manuscript pending IRB exempt approval**
*Various Clinical Trials – Dominican Republic, Venezuela, Panama



- Development and Patient Experience Evaluation of a Gentle Atomizer for Nasal Drug Delivery. Status: Submitted: Drug Delivery and Translational Research**
- Potential Role of Xylitol Plus Grapefruit Seed Extract Nasal Spray Solution in COVID-19: Case Series. Status: Published: Cureus 2020 Nov 3;12(11):e11315.**
- Chlorpheniramine Maleate Nasal Spray In COVID-19 Patients: Case Series Status: Published; J Clin Exp Pharmacol 10(2): 3.**
- Intranasal therapy and COVID-19: A comprehensive literature review. Status: Published; J Allergy Infect Dis, 2021, 2, 9 – 16**
- Effective Nasal Disinfection as an Overlooked Strategy in our Fight Against COVID-19 Status: Published Ear Nose Throat J. 2021 Mar 26;1455613211002929**
- In Vitro Analysis of the Anti-viral Potential of Nasal Spray Constituents Xylitol and Grapefruit Extract plus against SARS-CoV-2 Status: Ready for submission**
- In Vitro Virucidal Effect of Intranasally Delivered Chlorpheniramine Maleate Compound Against Severe Acute Respiratory Syndrome Coronavirus 2 Status: Published; Cureus 2020 Sep 17;12(9):e10501**
- A Pathophysiological Perspective on COVID-19's Lethal Complication: From Viremia to Hypersensitivity Pneumonitis-like Immune Dysregulation Status: Published; Infect Chemother 2020 Sep;52(3):335-344**