

# JAMES LAWRENCE PEARLE, MD

## CURRICULUM VITAE

### EDUCATION

MD	New York Medical College New York, New York	1973
BA	Biology University of Chicago Chicago, Illinois	1969

### POST GRADUATE STUDIES

Fellowship	Pulmonary University of Illinois Medical Center Chicago, Illinois	1977-1979
Residency	George Washington University Washington, D.C	1975-1977
Internship	Kaiser Hospital Oakland, California	1973-1974

### PROFESSIONAL EXPERIENCE

Medical Director Kindred Hospital Brea, California	2004-2017
President and Medical Director California Research Medical Group, Inc. Fullerton, California	2001-Present
Medical Director Vitalcare Neuro-sub-acute Unit Brea, California	2000-2005
Director of Respiratory Therapy Brea Community Hospital Brea, California	2000-2205

President Southern California Hospitalist Network, Inc. Anaheim, California	1999-Present
President Western Pulmonary Medical Group, Inc. Fullerton, California	1982-Present
Chief of Staff Specialty Hospital La Mirada, California	1996-2001
Medical Consultant Grossman Burn Unit Martin Luther Hospital Anaheim, California	1996-2000
Director of Hyperbaric Medicine Martin Luther Hospital Anaheim, California	1996-2000
Director of Respiratory Therapy St. Jude Medical Center Fullerton, California	1995-2000
Director of Respiratory Therapy Whittier Hospital Medical Center Whittier, California	1996-1999
Director of Respiratory Therapy Martin Luther Hospital Anaheim, California	1981-1999
Director of Pulmonary Rehabilitation Martin Luther Hospital Anaheim, California	1988-1998
Director of Respiratory Therapy Rio Hondo Medical Center Pico Rivera, California	1990-1996
Director of Respiratory Therapy Coast Plaza Doctors Hospital Norwalk, California	1990-1995

Director of Respiratory Therapy La Mirada Medical Center La Mirada, California	1989-1992
Medical Director Hacienda La Puente Respiratory Technician School La Puente, California	1986-1990
Director of Respiratory Therapy St. Jude-Yorba Linda Medical Center Yorba Linda, California	1988-1989
Assistant Professor of Medicine Division of Pulmonary Disease UCI School of Medicine Orange, California	1982 - 1987
Assistant Professor of Medicine Division of Pulmonary Disease UCLA School of Medicine Los Angeles, California	1979-1981
Director of Bronchoscopy UCLA School of Medicine Los Angeles, California	1980 - 1981

## PROFESSIONAL REGISTRATIONS

Medical Licensures:	California	
	District of Columbia	Expired
	Illinois	Expired
Board Certifications:	Pulmonary Disease	1980
	Internal Medicine	1977

## PUBLICATIONS

### Articles:

Pearle J, Correlation of Helium and Plethysmographic Lung Volumes in Airway Obstruction. Am Rev Diagnostics 2:47-48, 1983.

Pearle J, Smoking and Duration of Asbestos Exposure in the Production of Functional and Roentgenographic Abnormalities in Shipyard Workers. JOM: 24:33-40, 1982.

Pearle J, Simmons DH, Ventilatory and Neuromuscular Responses to Inspiratory Positive pressure During CO<sub>2</sub> Breathing. Respiration 43:277-284, 1982.

Pearle J. Exercise Performance and Functional Impairment in Asbestos-Exposed Workers. Chest 80:701-705, 1982.

Anzueto A, Niederman MS, Pearle J, Restrepo MI, Heyder A, Choudhri SH. Community-Acquired Pneumonia Recovery in the Elderly (CAPRIE): efficacy and safety of moxifloxacin therapy versus that of levofloxacin therapy. Clin Infect Dis. 42(1):73-81, 2006 . Epub 2005. Erratum in: Clin Infect Dis. 42(9):1350, 2006.

Cote C, Pearle JL, Sharafkhaneh A, Spangenthal S. Faster onset of action of formoterol versus salmeterol in patients with chronic obstructive pulmonary disease: a multicenter, randomized study. Pulm Pharmacol Ther. 22(1):44-9; 2009.

Fabbri LM, Kerwin EM, Spangenthal S, Ferguson GT, Rodriguez-Reisin R, Pearle J, Sethi S, Orevillo C, Darken P, St Rose E, Fischer T, Golden M, Dwivedi S, Reisner C. Dose-response to inhaled glycopyrrolate delivered with a novel Co-Suspension™ Delivery Technology metered dose inhaler (MDI).in patients with moderate-to-severe COPD. Respir Res. 17(1): 109, 2016.

Ferguson GT, Reisner C, Pearle J, DePetrillo P, Maes A, Martin UJ. Cardiovascular safety profile of a fixed-dose combination of glycopyrrolate and formoterol fumarate delivered via metered dose inhaler using co-suspension delivery technology. Pulm Pharmacol Ther. 49:67-74, 2018.

Lopata M, Pearle J. Diaphragmatic EMS and Occlusion Pressure Response to Elastic Loading During CO<sub>2</sub> Rebreathing in Humans Apply Physio 49: 669-675, 1980.

Lopata M, Freilich FA, Onal E, Pearle J, Lourenco RV. Ventilatory Control and the Obesity Hyperventilation Syndrome. ARRD 119:165, 1979.

Reisner C, Pearle J, Kerwin EM, Rose ES, Darken P. Efficacy and safety of four doses of glycopyrrolate/formoterol fumarate delivered via a metered dose inhaler compared with the monocomponents in patients with moderate-to-severe COPD. Int J Chron Obstruct Pulmon Dis. 13:1965-1977. 2018.

Tashkin DP, Pearle J, Lezzoni D, Varghese ST. Formoterol and tiotropium compared with tiotropium alone for treatment of COPD. COPD. 6(1):17-25. 2009.

## **Abstracts:**

Pearle J. Dose-Ranging Effects of Glycopyrronium Bromide (GB) Delivered Via a Pressurized Metered Dose-Inhaler (pMDI) on Lung Function in Subjects with Chronic Obstructive Pulmonary Disease (COPD): The GLIMMER Study. ATS International Conference 2019.

Pearle, J. Environmental and Occupational Lung Disease. In Pulmonary Disease, Selecky P Ed. John Wiley and Sons, 303-336, 1982.

Pearle J, Simmons DH, Sayre JW, Tashkin DP, Relationship Between Plethysmographic and Helium Dilution Lung Volumes in Obstructive Lung Disease. ARRD 121:389, 1980.

Pearle J, Simmons DH, Ventilatory and Neuromuscular Responses to Inspiratory Positive Pressure during C02 Breathing. ARRD 121:175, 1980.

Pearle J, Lopata M. Respiratory Neuromuscular Responses to C02 Rebreathing With Elastic Loading in Humans. ARRD 119:347. 1979.

Lopata M, Freilich RA, Onal F, Pearle J, Lourenco RV. Ventilatory Control in the Obesity Hypoventilation Syndrome. Thorax 34:420, 1979.

## **Chapter:**

Pearle J. Environmental and Occupational Lung Disease. In Pulmonary Disease, Selecky P Ed. John Wiley and Sons, 303-336, 1982.

## **Letters:**

Pearle J. Fiber optic Bronchoscopy in Pulmonary Abscess. Chest, 77:708. 1980

Pearle J. Fiber optic Bronchoscopy: An Analysis of Proficiency. Chest. 78:497, 1980.

Pearle J. Bronchoscopy in Pulmonary Abscess. Chest. 75:409, 1979.

## **INTERESTS**

Regulation of ventilation  
Sleep disorders  
Obesity hypoventilation syndrome  
Occupational lung disease, asbestos-related disorders

Bronchoscopy  
Pulmonary Rehabilitation  
Reviewer for Chest  
Certified in Hyperbaric Medicine, 1996  
Clinical Trials  
Burn Medicine  
Wound Care

## **SPEAKING ENGAGEMENTS**

Toxic Torts Advocacy I, II, III, IV:	San Francisco, 1983-86
Asbestos Disease-Defense Research Institute:	Boston, 1986
Asbestos-related Lung Disorders-Medilegal Institute:	Las Vegas 1984 Palm Springs 1985

## **Grand Rounds and Medical Education Programs:**

UCLA  
UC Irvine  
Martin Luther Hospital  
Humana Hospital, West Anaheim  
Placentia Linda Community Hospital  
St. Jude Medical Center  
Daniel Freeman Hospital  
St Joseph's Hospital  
Brea Community Hospital

## **Speaker For:**

Rorer Pharmaceuticals  
Glaxo Pharmaceuticals  
Pfizer Pharmaceuticals  
Merck Pharmaceuticals  
Schering-Key Pharmaceuticals  
Bayer Pharmaceuticals  
Smith Kline Pharmaceuticals  
Consultant Cheisi Pharmaceuticals

**CITI GCP:** Training Completed.

## **CLINICAL TRIAL EXPERIENCE**

2019-- A Randomized, Blinded, Parallel Group, Placebo-Controlled, Multiple Dose, Multicenter Study To Compare The Therapeutic Equivalence Of XXXX, XXXX To XXXX, In Adult Subjects With Asthma.

2018-- A Prospective, Phase 2, Randomized, Multi-Center, Double-Blind Study Of The Efficacy, Tolerability, And Safety Of Oral XXXX Versus Oral XXXX For Treatment Of Uncomplicated Urinary Tract Infections In Adult Women.

2018-- A Phase 2b Randomized, Double-Blind, Placebo-Controlled, Parallel-Arm, Multi-Centre Study To Assess The Efficacy And Safety Of Multiple Dose Levels Of XXXX Given Once Daily For Twelve Weeks, Compared To Placebo, In Asthmatics Symptomatic On Low Dose XXXX.

2017-- A Phase 3b, Randomized, Double-Blind, Double-Dummy, Parallel-Group, Study To Compare Once Daily Nebulized XXXX With XXXX Once Daily Delivered Via The XXXX On Lung Function In Subjects With Chronic Obstructive Pulmonary Disease And A Low Peak Inspiratory Flow Rate.

2017-- A Dose Ranging, Parallel Group, Active (XXXX) And Placebo-Controlled Study To Assess Relative Bioavailability, Pharmacodynamics And Safety Of Three Doses Of XXXX Inhalation Solution In Subjects With Mild To Moderate Chronic Obstructive Pulmonary Disease.

2017-- A Phase 3, Randomized, Double-Blind, Double-Dummy, Multicenter, Prospective Study To Assess The Efficacy And Safety Of IV XXXX Compared With XXXX In Complicated Urinary Tract Infections.

2017-- A Randomized, Blinded, Parallel-Group, Placebo-Controlled, Multiple Dose, Multicenter, Multinational Study To Compare The Therapeutic Equivalence of A XXXX Inhalation Aerosol (Manufactured By XXXX For XXXX) to XXXX (Manufactured By XXXX) In Adolescent And Adult Patients With Asthma.

2017-- An 8 Week, Randomized, Double-Blind, Placebo And Active-Controlled, Parallel Group, Dose Ranging Study To Evaluate The Efficacy And Safety Of 3 Doses Of XXXX Pmdi (XXXX) In Asthmatic Subjects.

2017-- A 6-Week, Randomized, Double-Blind, Placebo And Active-Controlled, Parallel Group, Dose Ranging Study To Evaluate The Efficacy And Safety Of 4 Doses Of XXXX Pmdi (XXXX) In Subjects With Chronic Obstructive Pulmonary Disease (COPD).

2017-- A Randomized, Double-Blind, Double-Dummy, Active-Controlled, Multi-Center, Parallel Group Study To Show The Superiority In Lung Function Of 12 Weeks Once Daily Treatment With Orally Inhaled XXXX Fixed Dose Combination Delivered By The XXXX Inhaler Vs. 12 Weeks Twice Daily Treatment With Orally Inhaled XXXX Fixed Dose Combination Delivered By The XXXX In Patients With Chronic Obstructive Pulmonary Disease (COPD).

2017-- A Randomized, Subject-And-Investigator-Blinded, Placebo-Controlled, Multi-Center, Multiple Dose Study To Assess The Efficacy And Safety Of XXXX In Patients With Inadequately Controlled Moderate To Severe Asthma.

2017-A Randomized, Double-Blind, Parallel Group, Multi-Center 24- Week Study Comparing The Efficacy And Safety Of Three Doses Of XXXX To Placebo And Open-Label XXXX In Subjects With Persistent Asthma

2016 - A Randomized, Double-Blind, Parallel Group, Multi-Center Study To Assess The Efficacy And Safety Of XXXXX Compared To XXXXX On COPD Exacerbations Over A 52-Week Treatment Period In Subjects With Moderate To Very Severe COPD.

2016 - A 24 Week Treatment, Multicenter, Randomized, Double-Blind, Parallel Group, Clinical Trial Evaluating The Efficacy And Safety of XXXXX 400µg/Formoterol Fumarate 12 µg Fixed-Dose Combination BID Compared With Each Monotherapy (XXXXX 400 µg BID And Formoterol Fumarate 12 µg BID) And Tiotropium 18 µg QD When Administered To Patients With Stable Chronic Obstructive Pulmonary Disease.

2015 – A Randomized, Double-Blind, Placebo Controlled Study To Assess The Safety, Tolerability, Pharmacokinetics And Pharmacodynamic Effects of Multiple Doses Of XXXXX In Patients With COPD.

2015 - A Randomized, Parallel-Group, Placebo-Controlled, Clinical Endpoint Bioequivalence Study Of Generic XXXXX 100µg And XXXXX 50 µg Inhalation Powder Compared With Advair Diskus® 100/50 In Subjects With Asthma.

2015 – A Phase 3, 12-Week, Randomized, Double-Blind Placebo-Controlled Parallel Group Study of Nebulized XXXXX in Subjects with COPD.

2015 – A Randomized, Double-Blind, Parallel-Group, 24-Week, Chronic-Dosing, Multi-Center Study To Assess The Efficacy And Safety Of XXXXX, XXXXX, And XXXXX Compared With Symbicort® Turbohaler® As An Active Control In Subjects With Moderate To Very Severe Chronic Obstructive Pulmonary Disease.

2015 – A Randomized, Double-Blind, Parallel-Group, 52-Week, Chronic-Dosing, Multi-Center Study To Assess The Safety And Tolerability Of XXXXX, XXXXX And XXXXX In Subjects With Moderate To Very Severe COPD.



2014 - A 28-Week, Multi-Center, Randomized, Double-Blind, Parallel-Group, Active-Controlled Safety Extension Study To Evaluate The Safety And Efficacy Of XXXX, XXXX, And XXXX In Subjects With Moderate To Very Severe COPD, With Spiriva Handihaler As An Active Control.

2014 - A Randomized, Double-Blind, Placebo-Controlled, Dose-Ranging Study To Evaluate XXXXX In Patients With Moderate To Severe, Uncontrolled Asthma.

2014 - A Phase IIB, 28-Day, Randomized, Double-Blind Placebo-Controlled Parallel Group Study Of Nebulized XXXXX In Subjects With Chronic Obstructive Pulmonary Disease.

2014 - A Randomized, Double-Blind, Double Dummy, Parallel Group Study To Determine The Local Equivalence Of Multiple Doses Of XXXXX To Advair Diskus Administered Via Oral Inhalation In Adult Asthma Patients.

2014 - A Phase IIIB, 6 Month, Double Blind, Double Dummy, Randomized, Parallel Group, Multicenter Exacerbation Study Of Symbicort XXXXX Ug X 2 Actuations Twice Daily Compared To Formoterol Turbuhaler 4.5 Ug X 2 Inhalations Twice Daily In COPD Patients.

2014 - A Randomized, Double-Blind, Double Dummy, Chronic Dosing (56 Week) Placebo-Controlled, Parallel Group, Multicentre, Phase III Study To Evaluate The Efficacy And Safety Of 3 Doses Of Benralizumab XXXXX) In Patients With Moderate To Very Severe Chronic Obstructive Pulmonary Disease (COPD) With A History Of COPD Exacerbations.

2014 - A 12-Week, Double-Blind, Placebo-Controlled, Efficacy And Safety Study Of Fluticasone Propionate Multidose Dry Powder Inhaler Compared With Fluticasone/Salmeterol Multidose Dry Powder Inhaler In Adolescent And Adult Patients With Persistent Asthma Symptomatic Despite Inhaled Corticosteroid Therapy.

2014 - A 26-Week Open-Label Study To Assess The Long-Term Safety Of Fluticasone Propionate Multidose Dry Powder Inhaler And Fluticasone Propionate/Salmeterol Multidose Dry Powder Inhaler In Patients 12 Years Of Age And Older With Persistent Asthma.

2014 - Medically Ill Patient Assessment of Rivaroxaban versus Placebo IN Reducing Post-Discharge Venous Thrombo-Embolism Risk.

2014 - A 12-Week Phase II Study to Evaluate the Efficacy and Safety of XXXX Following Exacerbations in Patients with Chronic Obstructive Pulmonary Disease (COPD) By Targeting the XXXXX Pathway.

2014 - A Randomized, Double-Blind, Placebo-Controlled, Parallel Group Study To Assess The Efficacy, Safety, And Tolerability Of XXXX Administered Twice Daily By Inhalation For 12 Weeks In Subjects With Persistent Moderate To Severe Asthma Who Remain Uncontrolled Despite Treatment With Inhaled Corticosteroids (Ics) And Long-Acting Beta2 Agonists (Laba).

2014 - A Randomized, Open Label, Active-Controlled, Parallel-Group, Multicenter, Long Term Safety Trial of Treatment with Nebulized XXXXX in Patients with COPD: GOLDEN-5 (Glycopyrrolate with Obstructive Lung Disease via Electronic Nebulizer).

2013- A 12-Week Treatment, Multi-Center, Randomized, Double-Blind, Double Dummy, Parallel Group Study To Assess The Efficacy, Safety And Tolerability Of XXXX Compared To Fluticasone/Salmeterol In COPD Patients With Moderate To Severe Airflow Limitation.

2013- A 12-Week Multi-Center, Randomized, Double-Blind, Placebo Controlled Study To Assess The Efficacy And Safety Of XXXX In Stable COPD Patients.

2013- A 12-Week Treatment, Multi-Center, Randomized, Double-Blind, Parallel-Group, Placebo And Active Controlled Study To Assess The Efficacy, Safety, And Tolerability Of XXXX (Indacaterol Maleate/Glycopyrronium Bromide) In COPD Patients With Moderate To Severe Airflow Limitation.

2013- A Randomized, Double-Blind (Test Products And Placebo), Chronic Dosing (24 Weeks), Placebo-Controlled, Parallel Group, Multi-Center Study To Assess The Efficacy And Safety Of XXXX, XXXX, And XXXX In Subjects With Moderate To Very Severe COPD, Compared With Placebo.

2012- A Phase IV, Randomized, Double-Blind, Placebo-Controlled, Multicenter, Exploratory, Single-Dose Crossover Study With XXXXX 75µg Compared To Placebo, Assessing Time To Patient's Perception Of Onset Of Effect In Patients With Moderate To Severe Chronic Obstructive Pulmonary Disease (COPD).

2012- A 52-Week, Double-Blind, Randomized, Placebo-Controlled, Parallel-Group Study To Evaluate The Effect Of XXXXX 500µg On Exacerbation Rate In Subjects With Chronic Obstructive Pulmonary Disease (COPD) Treated With A Fixed-Dose Combination Of Long-Acting Beta Agonist And Inhaled Corticosteroid (LABA/ICS).

2012- A Randomized, Double-Blind (Test Products And Placebo), Chronic Dosing (14 Days), Four-Period, Eight-Treatment, Placebo-Controlled, Incomplete Block, Cross-Over, Multi-Center Study To Assess Efficacy And Safety Of Six Doses Of XXXXX In Patients With Moderate To Severe COPD, Compared With Spiriva® Handihaler® (Tiotropium 18 µg, Open-Label) As An Active Control.

2012- A Phase III Randomized, Double-Blind, Placebo-Controlled Study To Assess The Efficacy And Safety Of XXXXX In Patients With Uncontrolled Asthma Who Are On Inhaled Corticosteroids And A Second Controller Medication.

2012- A Randomized, Double-Blind, Placebo-Controlled Study To Evaluate The Safety Of Long-Term Use Of XXXXX (Formoterol Fumarate) Inhalation Solution In Subjects With Chronic Obstructive Pulmonary Disease (COPD).

2012- A 12-Week Randomized, Multiple-Dose, Double-Blind, Placebo-Controlled, Parallel-Group Study to Evaluate Nebulized Fluticasone Propionate (FP) Dose Response in Adult Subjects with Partly Controlled and Uncontrolled Asthma.

2012- A Phase 2, Multi-Center, Randomized, Double-Blind, Placebo-Controlled, Parallel Group Study Of Two Doses Of Inhaled XXXXX In Patients With Mild To Moderate Allergic Asthma.

2012- A 16-Week, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of Reslizumab (3.0 Mg/Kg) Treatment in Patients with Moderate to Severe Asthma.

2012- A Double-Blind, Randomized, Placebo-Controlled, Multicenter, Parallel-Group, Adaptive-Design, Dose-Ranging Study of XXXXX in Adult Subjects with Persistent Asthma.

2012- A Phase 2, Double-Blind, Placebo-Controlled, Randomized Study to Evaluate the Safety, Tolerability, and Efficacy of XXXX in Subjects with Asthma Inadequately Controlled By Corticosteroids.

2012- A Randomized, Double Blind, Parallel Group Study To Assess The Efficacy and Safety Of 12 Weeks Of Once Daily, Orally Inhaled, Co-Administration Of Olodaterol 5µg (Delivered By Respimat® Inhaler) And Tiotropium 18µg (Delivered By The Handihaler®) Compared To Once Daily, Orally Inhaled, Co-Administration of Placebo (Delivered By The Respimat® Inhaler) And Tiotropium 18µg (Delivered By The Handihaler®) In Patients With Chronic Obstructive Pulmonary Disease.

2012- A Randomized, Double-Blind, Placebo-Controlled, Dose-Ranging Study Of The Efficacy And Safety Of EP-101 In Subjects With Moderate To Severe Chronic Obstructive Pulmonary Disease: Golden-2 (Glycopyrrolate For Obstructive Lung Disease Via Electronic Nebulizer).

2012- A 12-Week Multi-Center, Randomized, Double-Blind, Placebo Controlled Study To Assess The Efficacy And Safety Of XXXX In Stable COPD Patients.

2012- A 12-Week Treatment, Multi-Center, Randomized, Double-Blind, Parallel-Group, Placebo And Active Controlled Study To Assess The Efficacy And Safety And Tolerability Of XXXX (Indacaterol Maleate/Glycopyrronium Bromide) In COPD Patients With Moderate To Severe Airflow Limitation.

2011- A Double-Blind, Placebo-Controlled, Randomised, Parallel-Group, Phase-II, Multi-Centre Study To Assess The Efficacy, Safety And Tolerability Of 4 Twice Daily Doses and 2 Once Daily Doses Of XXXX Given As Tablets During 12 Weeks In Asthmatic Patients Treated With Inhaled XXXXX and long-Acting-B2-Agonists.

2011- A Randomized, Double-Blind, Parallel Group, 14-Day, Multi-Center Study To Evaluate The Safety Of XXXX, XXXX, XXXX And XXXX XXXX (12 µg, Open Label) As Evaluated By Holter Monitoring, In Patients With Moderate To Severe Chronic Obstructive Pulmonary Disease (COPD).

2011- A Randomized, Double-Blind, Chronic Dosing (7 Days), Two-Period, Six-Treatment, Incomplete Block, Cross-Over, Multi-Center Study To Assess Efficacy And Safety Of Four Doses Of XXX XXX In Patients With Moderate To Severe COPD, Compared With Its Individual Components (XXF XXX And XX XXX) As Active Controls.

2011- A Phase III International, Randomized, Double-Blind, Double-Dummy Study To Evaluate The Efficacy And Safety Of 300mg Or 600mg Of Intravenous XXXX Twice Daily Compared To 75mg Of Oral XXXX Twice Daily In The Treatment Of Hospitalized Adults And Adolescents With Influenza.

2010- A Long-Term, Randomized, Double-Blind, Extension Study Of The Safety, Tolerability And Efficacy Of XXXX XXXX At Two Dosage Levels When Administered To Patients With Moderate To Severe Chronic Obstructive Pulmonary Disease.

2010- A Randomized, Double-Blind, Double-Dummy, Placebo-Controlled, Parallel- Group Study To Assess The Efficacy And Safety Of Different Doses Of XXXX In Patients With Moderate To Severe Chronic Obstructive Pulmonary Disease, Using XXXX As An Active Control.

2010- A 12-Week Treatment, Multi-Center, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Study to Assess the Efficacy and Safety of Once Daily XXXX in Patients with Chronic Obstructive Pulmonary Disease.

2010- A Randomized, Double-Blind, Placebo-Controlled, 2-Period, Cross-Over Study To Assess The Efficacy And Safety Of Differing Doses Of XXXX Administered Either Once Daily Or Twice Daily, In Patients With Moderate To Severe Chronic Obstructive Pulmonary Disease (COPD).

2010- A Randomized, Active-Controlled, Double-Blind, Double-Dummy, Parallel Group Design, Multi-Center Trial To Compare The Efficacy And Safety Of 2.5 Ug And 5 Ug XXXXX Inhalation Solution Delivered By The XXXXX Inhaler With XXXX Inhalation Capsules 18 Ug Delivered By The XXXX.

2010- A 12-Week Randomized, Multiple-Dose, Double-Blind, Placebo-Controlled, Parallel-Group Trial to Assess the Pharmacodynamic Response of XXXXX XXXX in Fixed-Dose Combination With XXXX XXXX In Subjects With COPD.

2010- A Randomized, Double-Blind, Placebo-Controlled Study Evaluating The Efficacy, Safety, And Tolerability Of 2 Doses Of XXXX XXXX Compared With Placebo For 12 Weeks In Patients With Moderate To Severe, Stable Chronic Obstructive Pulmonary Disease Followed By A 40-Week Evaluation Of The Higher XXXX XXXX Dose.

2010- An 8 Week Randomized, Double-Blind, Parallel Group, Multi-Center, Active Controlled Study To Evaluate The Antihypertensive Efficacy And Safety Of XXXX Administered In Combination With XXXX Versus XXXX Alone In Hypertensive Patients With Type 2 Diabetes Mellitus.

2010- A 52-Week Treatment, Multi-Center, Randomized, Double-Blind, Parallel Group, Active Controlled Study To Evaluate The Effect Of XXXX (110/50 Ug O.D.) Vs. XXXX (50 Ug O.D.) And Open-Label XXXX (18 Ug O.D.), On COPD Exacerbations in Patients with Severe To Very Severe Chronic Obstructive Pulmonary Disease (COPD).

2010- A 26-Week Treatment Multi-Center, Randomized, Double-Blind, Parallel Group, Placebo And Active Controlled (Open Label) Study To Assess The Efficacy, Safety And Tolerability Of XXXX (110/50 Ug Q.D.) In Patients with Moderate to Severe Chronic Obstructive Pulmonary Disease (COPD).

2009- A Large Simple Safety Study of XXXX XXXX Inhalation Solution in Subjects with Chronic Obstructive Pulmonary Disease.

2009- A 52-Week Treatment, Randomized, Double-Blind, Placebo-Controlled, With Open Label XXXXX, Parallel-Group Study to Assess the Efficacy, Safety and Tolerability of XXXX Patients with Chronic Obstructive Pulmonary Disease.

2009- A Randomized, Multi-Center, Parallel Group, Double Blind, Study To Assess The Safety Of XXXX ® (500/400ug) And XXXXX XXXX XXXX® (400ug) In Adolescent And Adult Patients With Persistent Asthma.

2009- A Long-Term, Randomized, Double-Blind Study of The Safety, Tolerability And Efficacy Of XXXX XXXX At Two Dosage Levels When Administered To Patients With Moderate To Severe, Stable Chronic Obstructive Pulmonary Disease.

2009- A 12-Week, Randomized, Double-Blind, Placebo-Controlled, Parallel Group, Multinational, Phase Iib Dose Range Finding Study To Evaluate The Efficacy And Safety Of XXXXXX Administered Orally At 3 Dose Levels To Patients With Chronic Obstructive Pulmonary Disease (COPD) On Treatment With XXXX.

2009- A Phase I Randomized, Double-Blind, Placebo-Controlled Dose Escalation Study to Evaluate the Safety and Efficacy of XXXX When Administered Intravenously To Subjects With Stable Moderate To Severe Chronic Obstructive Pulmonary Disease (COPD).

2008- Study XXXX, A Dose-Finding Study of XXXX versus Placebo in Patients with COPD.

2008- A Randomized, Double-Blind, Active-Controlled, Parallel-Group, Multicenter, 4- Week Pilot Study To Assess Symptoms In Stable, Moderate To Severe COPD Patients Taking XXXX 200mcg Daily In Combination With XXXX 12mcg Once Or Twice Daily Versus XXXX 12mcg Twice Daily.

2008- A 12 Week Treatment, Multicenter, Randomized, Double-Blind, Placebo Controlled, Parallel Group Study To Assess The Efficacy Of XXXX (150mcg O.D.) In Patients with COPD Disease.

2008- A 26 Week Extension To A 26 Week Treatment, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Adaptive Seamless, Parallel-Group Study Assess, Tolerability And Efficacy Of Two Doses Of XXXX (150mcg And 300mcg O.D.) In Patients with COPD Disease.

2008- An Open-Label, Multi-Center, Patients Handling Study XXXX with an Integrated Dose Counter in Adolescent and Adult Subjects with Asthma or COPD.

2008- Dose-Ranging Study of the Efficacy and Safety of Oglemilast in Patients with COPD Disease.

2008- A Study of XXXX in Adults with Chronic Asthma.

2008- Qualitative Assessment Of Patients Reported Concepts Among Patients Who Have COPD.

2008- A Multinational, Multicenter, Randomized, Double-Blind Study Comparing the Efficacy and Safety of XXXX with XXXX for the Primary Prevention of Venous Thromboembolism in Acutely III Medical Patients with Restricted Mobility.

2008-Dose Ranging Study For XXXX Delivered Once Daily In Subjects With COPD.

2008-A Study of XXXX in Adults with Chronic Asthma.

2008-Qualitive Assessment of Patients Reported Concept among Patients Who Have COPD.

2008-Amultinational, Multicenter, Randomized Double-Blind Study Comparing the Efficacy and Safety of XXXX with XXXX for the Primary Prevention of Venous Thromboembolism in Acutely III Medical Patients with Restricted Mobility.

2008- Dose Ranging Study for XXXX Delivered Once Daily In Subjects with COPD.

2007- A 52-Week Randomized, Double-Blind, Parallel Group, Placebo Controlled, Multicentre Clinical Trail, To Access The Efficacy And Safety Of 200mg Of The Anticholinergic XXXX Compared To Placebo Both Administered Once- Daily By Inhalation, In The Maintenance Treatment Of Patients With Moderate To Severe, Stable Chronic Obstructive Pulmonary Disease.

2007- A 52- Week Randomized, Double-Blind Parallel- Group Study of XXXX 250/50mcg BID XXXX 250mcg BID in Treatment of Subjects with Asthma

2007- A 12-Week, Randomized, Double-Blind, Active-Controlled, Multi-Centre, Phases IIIB Study Comparing The Efficacy And Evaluating The Safety Of XXXX XXXX 160/4.5 Mcg X 2 Actuations Twice Daily, In Adults And Adolescent ( $\geq$  12years) Hispanic Subject With Asthma.

2007- A Phase IIIB, 12- Month, Double-Blind, Double-Dummy, Randomized, Parallel-Group, Multicentre Exacerbation Study Of XXXX 160/4.5 Mcg X 2 Actuations Twice- Daily And 80/4.5 Mcg X 2 Actuations Twice-Daily Compared To XXXX TBH 4.5 Mcg X 2 Inhalations Twice-Daily In COPD Subjects.

2007- A 26 Week Treatment, Multicenter, Randomized, Double-Blind, Double Dummy, Placebo- Controlled, Adaptive, Seamless, Parallel-Group Study To Assess The Efficacy, Safety And Tolerability Of Two Doses Of XXXX (Selected From 75, 150,300, And Mg O.D. ) In Patients With Chronic Obstructive Pulmonary Disease Using Blinded XXXX (12 Mg B.I.D) And Open-Labeled XXXX (18 Mg O.D.) As Active Control.

2007- A 26 Week Placebo-Controlled Efficacy And Safety Of XXXX Combination XXXX With XXXX And XXXX In Subjects With Persistent Asthma Previously Treated With Low-Dose Inhaled Glucocorticosteroids.

2007- A-26-Week Placebo-Controlled-Efficacy and Safety Study of XXXX Combination XXXX with XXXX and XXXX on Subjects with Previously Treated Medium-Dose Inhaled Glucocorticosteroids.

2007- A Randomized , 26-Week, Placebo-Controlled Efficacy And Safety Study With A 26 Week Long-Term Safety Extension Of High-And Medium-Dose Inhaled XXX Fixed-Dose Combination Formulation Compared With XXXX And High-Dose Inhaled XXXX In Subjects With Moderate To Severe COPD.

2006- A Phase IIIB Multicenter, Randomized, Double-Blind, Placebo- Controlled Study Of XXXX In Subjects With Moderate To Severe Persistent Asthma Who Are Inadequately Controlled With High-Dose Inhaled Corticosteroids And Long-Acting Beta- Agonists.

2006- A Methodological Study To Validate A Patient Reported Outcome Measure For Dyspnea In Patients With COPD.

2006- Effect of XXXX on Exacerbation Rate in Patients with COPD. A 52-Week, Double-Blind Study With 500mcg XXX Once Daily Versus Placebo.

2006- A 52- Week Randomized, Double-Blind, Parallel Group, Placebo-Controlled, Multicenter Clinical Trial, To Assess The Efficacy And Safety Of 200mcg Of The Anticolonergics XXXX Compared To Placebo, Both Administered Once-Daily By Inhalation, In The Maintenance Of Patients With Moderate To Severe, Stable Chronic Obstructive Pulmonary Disease.

2006- A Randomized, Parallel-Group, Double-Blind, Comparative Trial Assessing Lung Function And Other Measures Of Asthma Control In Adults And Adolescents, At Least 12 Years Of Age, With Persistent Asthma, Who Have Either B16-Gly/Gly Or A B-16 Arg/Gly Genotype And Treated With XXXX 100/50 Mcg Or XXXX 50 Mcg BID.

2005- A Randomized, 24-Week, Double-Blind, Placebo-Controlled, Parallel-Group Study To Evaluate The Efficacy, Safety And Tolerability Of XXXX (15mg BID) In Patients With Chronic Obstructive Pulmonary Disease (COPD).

2005- A 6-Month Double-Blind, Double-Dummy, Randomized, Parallel Group, Multicenter Efficacy & Safety Study Of XXXX Pmdi 2x 160/4.5mg & 80/4.5mg Bid Compared To XXXX & Placebo In COPD Patients.

2005- A Double-Blind, Parallel-Group, Multicenter Clinical Study To Compare The Efficacy And Tolerability Of XXXX Alone Versus The Co-Administration Of XXXX XXXX And XXXX XXXX In Subjects With COPD.

2005- A Randomized, Double-Blind, Parallel-Group, Multicenter Study To Compare Clinical Health Outcomes Of XXXX Versus XXXX In Outpatients With Community-Acquired Lower Respiratory Tract Infections.

2005- A Double-Blind, Double-Dummy, Randomized, Active-Controlled, Parallel Group Long Term Safety Study Of XX And XX XXXX Inhalation Solution BID In The Treatment Of Subjects With Chronic Obstructive Pulmonary Disease.

2005- A Double-Blind, Randomized, Parallel-Group, Multicenter Clinical Study To Compare The Efficacy And Tolerability Of XXXX Versus XXXX In Subjects With COPD.

2004-Effect of XXXX Exacerbation Rate in Patients with Chronic Obstructive Pulmonary Disease. A 52-Week Double-Blind Multi-Center Study with 500mcg XXXX Once Daily Versus Placebo.

2004-A Randomized, Double-Blind, Parallel-Group Clinical Trial Evaluating The Effect Of XXXX Versus XXXX On Bone Mineral Density In Subjects With Chronic Obstructive Pulmonary Disease- (COPD).



2004-“Follow-Up Serial Infusions of XXXX for the Management of Patients with Heart Failure.”

2004- A Double-Blind, Randomized Study to Compare the Efficacy and Safety of XXXX Once Daily versus XXXX Twice Daily in the Treatment of Complicated Urinary Tract Infection Or Acute Pyelonephritis.

2004- A Double-Blind, Randomized Study To Investigate The Effect Of XXXX Once Daily Versus Placebo On Parameters Indicative Of Hyperinflation In Patients With Chronic Obstructive Pulmonary Disease.

2004- A Double-Blind, Randomized Study To Compare The Safety And Efficacy Of XXXX XXXX With That Of XXXX In Complicated Intra-Abdominal Infections.

2004- A Randomized, Double-Blind, Placebo Controlled, Dose Ranging, Study Of The Safety And Efficacy Of Three Days Continuous Intravenous Infusion Of XXXX In The Treatment Of Suspected Or Confirmed Gram-Negative Severe Sepsis In Adults.

2004- A Randomized, Open-Label, Phase 3 Study To Compare The Safety And Efficacy Of XXXX XXXX With That Of XXXX XXXX In Hospital-Acquired Pneumonia.

2004- A Randomized, Double-Blind, Parallel Group, 52-Week Study To Compare The Effect Of The XXXX DISKUS Combination Product 250/50mcg BID With XXXX DISKUS 50mcg BID On The Annual Rate Of Moderate/Severe Exacerbations In Subjects With Chronic Obstructive Pulmonary Disease (COPD).

2003-A Randomized, Multi-Center, Placebo- And Active-Controlled, Single-Dose, 4-Period, Crossover Study To Evaluate The Bronchodilating Effect Of XXXX Pmdi Versus XXXX XXXX And XXXX XXX.

2003-A Double-Blind, Double-Dummy, Randomized, Placebo-And Active-Controlled, Multi-Center, Parallel-Group Study Of XX-XXXX In The Treatment Of Subjects With Chronic Obstructive Pulmonary Disease.

2003-A Randomized, Multi-Center, Placebo- And Active-Controlled, Single-Dose, 4-Period, Crossover Study To Evaluate The Bronchodilating Effect Of XXXX Pmdi Versus XXXX XXXX And XXXX XXX.

2003-A Twelve-Week, Randomized, Double-Blind, Double-Dummy, Placebo- And Active-Controlled Study Of XXXX Pmdi Administered Once Daily In Adults And Adolescents With Asthma.

2003-A Multi-Center, Open-Label, Randomized Study To Compare The Safety And Efficacy Of Once Daily XXXX Along With Once Daily XXXX Versus XXXX In The Treatment Of Complicated Appendicitis.

2002-Aphase I Ib Comparative Study of the Safety and Efficacy of Three Oral Doses of XXXX for the Treatment of Subjects with Community Acquired Pneumonia.

2002-A Multi-Dose Comparison of XXXX Inhalation Capsules and XXXX Inhalation Aerosol in a 12 Week Randomized, Double-Blind, Double-Dummy Parallel Group Study In Patients With COPD.

2002-A Randomized, Multicenter Open-Label, Parallel Group Study Comparing The Efficacy And Safety Of XXXX 12ug BID To XXXX 50ug BID In Patients With COPD.

2002-Open-Lable Extension Study Ii Of XXXX In Moderate To Severe, Persistent Asthma Subjects Who Completed Study XXXX.

2002-A Multi-Center, Randomized, Double-Blind, Double-Dummy, Placebo Controlled, Parallel Group, Four Week Study Assessing The Efficacy Of XXXX 200mcg QD Vs. XXXX 10mg QD In Adolescent And Adult Subjects With Asthma And Seasonal Allergic

2002-A Study of XXXX for Treatment of Elderly Patients with Community Acquired Pneumonia Phase Lv.

2002-Efficacy and Safety of XXXX in Adult Patients with Early Stage Severe Sepsis.

2001-An Observational Study of the Epidemiology and Natural History of Asthma: Outcomes and Treatment Regimens.

2001-Multicenter, Double-Blind, Randomized Study To Compare The Safety And Efficacy Of XXXX 750mg Once Daily For 5 Days Vs. XXXX 500mg Once Daily For 10 Days In The Treatment Of Mild To Severe Community-Acquired Pneumonia In Adults-Phase 3B.

2001-Multicenter, Open-Label, Non-Comparative Study To Evaluate The Safety And Efficacy Of XXXX 750mg Once Daily For 5 Days In The Treatment Of Mild To Severe Community-Acquired Pneumonia In Adults.

2001-A Randomized, Multicenter, Blinded Study Of The Efficacy And Safety Of High-Dose (750mg), Short-Course (3-5 Days) XXXX Therapy In Uncomplicated And Complicated Acute Bacterial Exacerbation Of Chronic Bronchitis-Phase 3B.

2001-A Multicenter, Randomized, Double-Blind, Parallel Group, Placebo-Controlled Study To Investigate The Long-Term Effects Of XXXX 50/500mcg BD, XXXX 50mcg BD And XXXX 500mcg BD, All Delivered Via The Diskus/Accuhaler, On The Survival Of Subjects With COPD Over 3 Years Of Treatment.

2001-A Randomized, 12-Week, Double-Blind, Placebo-Controlled, Parallel-Group Study To Evaluate The Safety And Tolerability Of XXXX 15mg Twice Daily In Patients With COPD.

2001-A Phase Ila Comparative Study Of The Safety And Efficacy Of XXXX 100mg QD, 200mg QD, 400mg QD And XXXX 500mg QD For The Treatment Of Subjects With Acute Bacterial Exacerbation Of Chronic Bronchitis.

2001-Prospective, Uncontrolled, Open-Label, Multicenter Clinical Trial Evaluating The Efficacy And Safety Of XXXX 300 Mg PO BID For 10 Days In The Treatment Of Patients With Community Acquired Pneumonia.

2001-A Multicenter, Randomized, Controlled, Open-Label Study To Evaluate The Safety Of XXXX In Moderate To Severe, Persistent Asthma Subjects Already Treated With Other Therapies.

2001-Clinical Protocol For A Multicenter, Double-Blind, Placebo-Controlled, Randomized, Parallel Group Study In The US To Compare The Efficacy And Tolerability Of XXXX Vs. XXXX In Treatment Of Acute Ankle Sprains.

1999-Double-Blind Randomized, Placebo-Controlled Surveillance Study Of Asthma Event Outcomes In Subjects Receiving Either Usual Pharmacotherapy Of Asthma Or Usual Pharmacotherapy Plus XXXX 42 MCG (2puffs) Twice Daily.

Schering Plough Research Investigator Training Program.