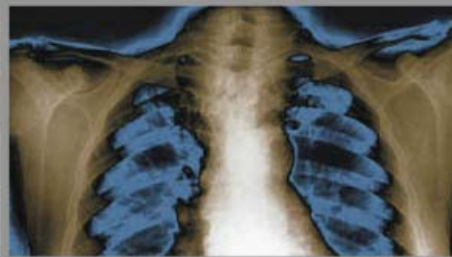
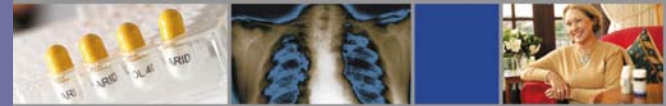


pharmaxis



ABN 75 082 811 630
Human therapeutic products
for
chronic respiratory and autoimmune diseases

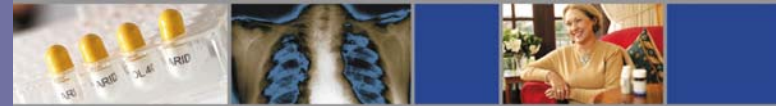
August 2004



Investor Presentation Disclaimer

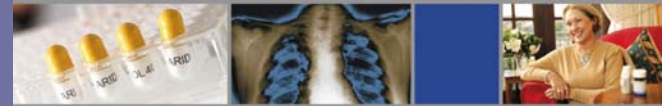
This presentation contains forward-looking statements within the meaning of the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995. These statements are based on management’s current expectations and beliefs and are subject to a number of factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. The forward-looking statements contained in this presentation include statements about future financial and operating results, and risks and uncertainties that could affect Pharmaxis’ product and products under development. These statements are not guarantees of future performance, involve certain risks, uncertainties and assumptions that are difficult to predict, and are based upon assumptions as to future events that may not prove accurate. Therefore, actual outcomes and results may differ materially from what is expressed herein. In any forward-looking statement in which Pharmaxis expresses an expectation or belief as to future results, such expectation or belief is expressed in good faith and believed to have a reasonable basis, but there can be no assurance that the statement or expectation or belief will result or be achieved or accomplished.

The following factors, among others, could cause actual results to differ materially from those described in the forward-looking statements: risks associated with preclinical, clinical and sales and marketing developments in the biopharmaceutical industry in general and in particular including, without limitation, the potential failure to meet Aridol revenue goals, the potential failure of Bronchitol to prove safe and effective for treatment of COPD and/or Cystic Fibrosis, determinations by regulatory, patent and administrative governmental authorities, competitive factors, technological developments, costs of developing, producing and selling Aridol, Bronchitol and Pharmaxis’ other products under development; and other economic, business, competitive, and/or regulatory factors affecting Pharmaxis’ business generally, including those set forth in Pharmaxis’ filings with the ASIC, including its Annual Report for its most recent fiscal year and its most recent Quarterly Report, especially in the “Factors Affecting Our Operating Results” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections, and its Current Reports. Pharmaxis is under no obligation to (and expressly disclaims any such obligation to) update or alter its forward-looking statements whether as a result of new information, future events, or otherwise.

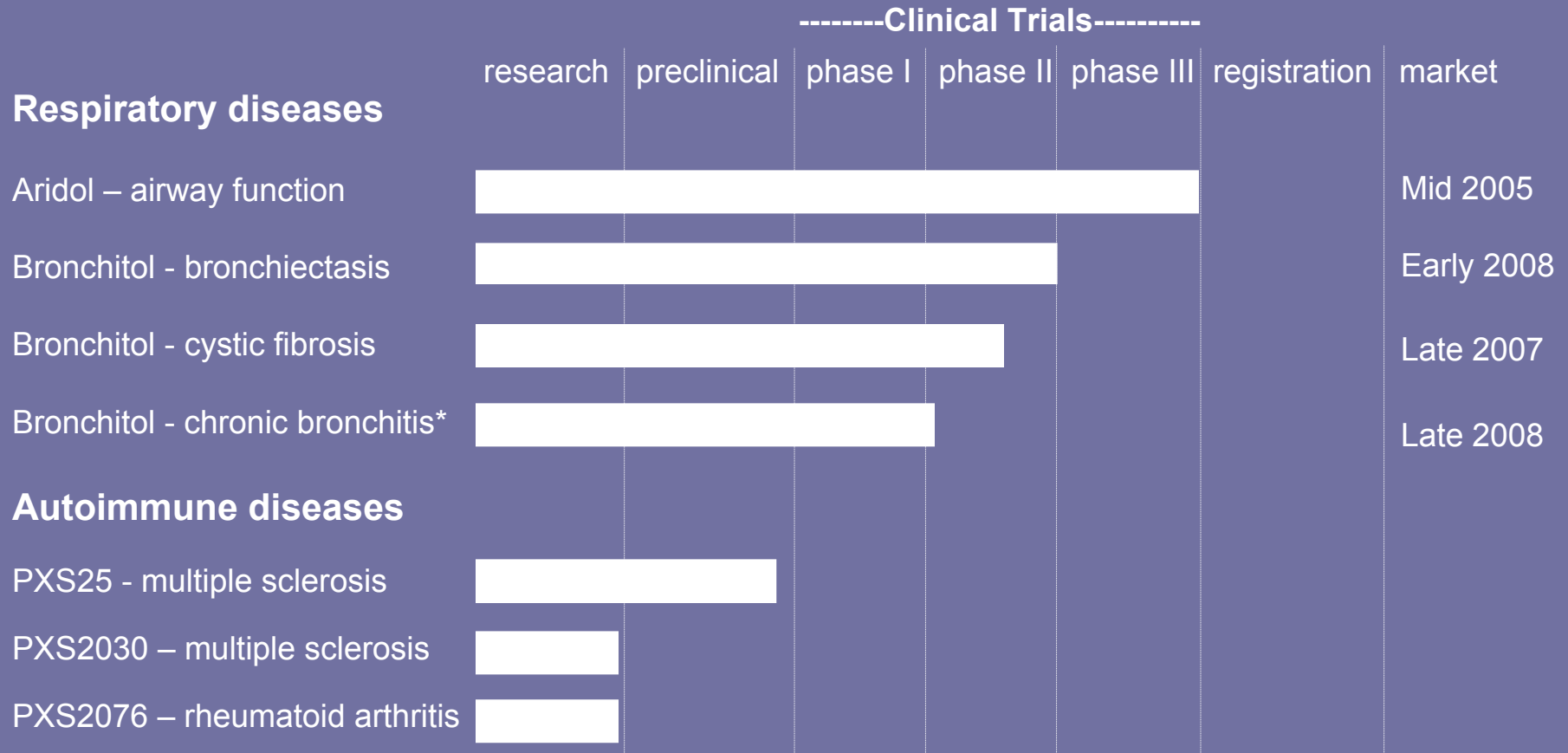


Investment Highlights

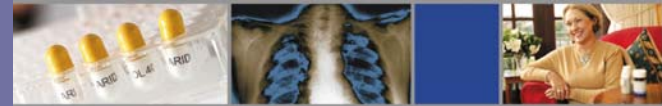
- Emerging specialty biotech company with two products in late stage development
 - ◆ Aridol - Phase III for asthma diagnosis complete, data 9/04
 - ◆ Bronchitol - expected to report phase II efficacy data in COPD & CF by end 2004
- Targeting large, underserved markets
 - ◆ Aridol filling a need for diagnosis and management of asthma
 - ◆ Bronchitol offers treatment for CF & COPD lung diseases
- All product marketing rights have been retained
- Strong intellectual property – granted in US/Pending in Europe
- Multiple near-term value driving milestones
- Experienced management



Product Pipeline



* CB trial pending outcome of bronchiectasis trial



Strategy

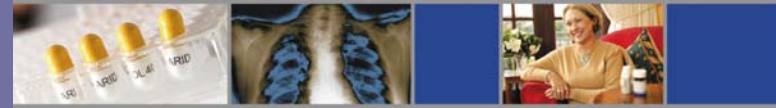
- Build a fully integrated specialty pharmaceutical company spanning research, development and commercialization
- Focus on attractive product development and commercialization opportunities
- Undertake product development and commercialization
- Focus on respiratory and autoimmune markets
- Expand R&D pipeline through research and licensing



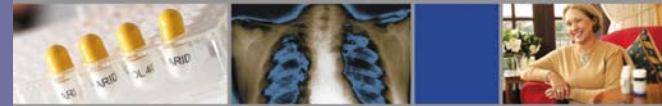
Respiratory market opportunity

Product	Target Application	Current Market (US\$)	Patients diagnosed	Potential Market	Projected penetration
Aridol	Diagnostic/Theranostic	\$100 M	52 M	31 M	High
Bronchitol	COPD (bronchiectasis and chronic bronchitis)	\$399 M	30 M	15 M	Low
Bronchitol	Cystic Fibrosis	\$294 M	75,000	75,000	Moderate

¹ Dollar figure based on current 400,000 bronchial challenge tests at \$250 charge / test

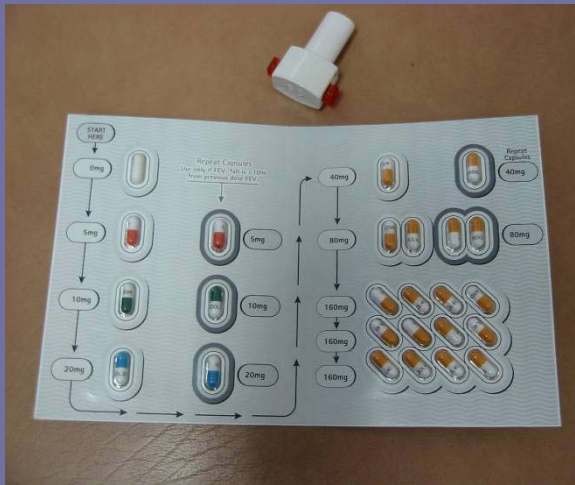


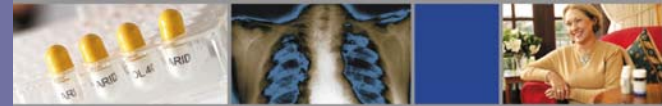
Aridol



Aridol

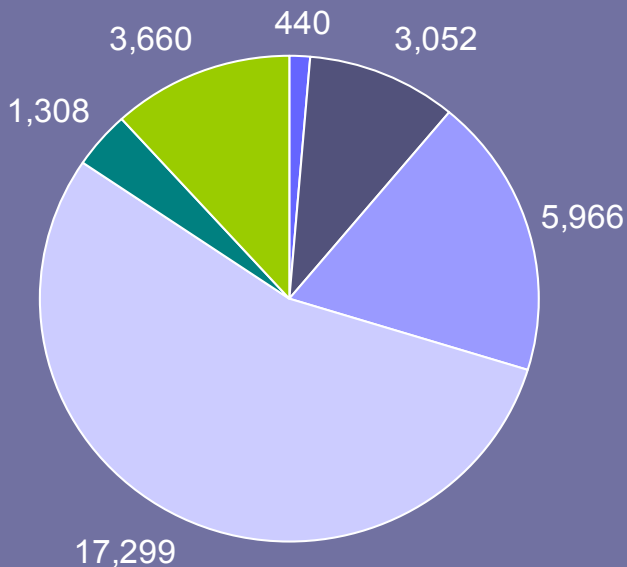
- New product for the diagnosis and management of Asthma and COPD
- Indirect airway provocation for accurately measuring level of ongoing inflammation
 - ◆ Current standard for diagnosis in Australia
 - ◆ Proposed replacement for direct provocation with methacholine in the US
- Quick and easy to use – ideal for PCP outpatient clinic setting
- Phase III completed in July 2004, results in September
- Supported by international opinion leaders in respiratory medicine





Market Opportunity

Addressable Market (000 pts)



- Lung testing
- Asthma diagnosis
- Asthma management, Specialists
- Asthma management, GP
- COPD diagnosis
- COPD management

- Significant addressable market, 31 M patients
- Estimated 400,000 bronchial provocation tests used in 2003 in major pharmaceutical markets
- Methacholine provocation test is currently reimbursed in the U.S. (\$150 - \$300 per test)

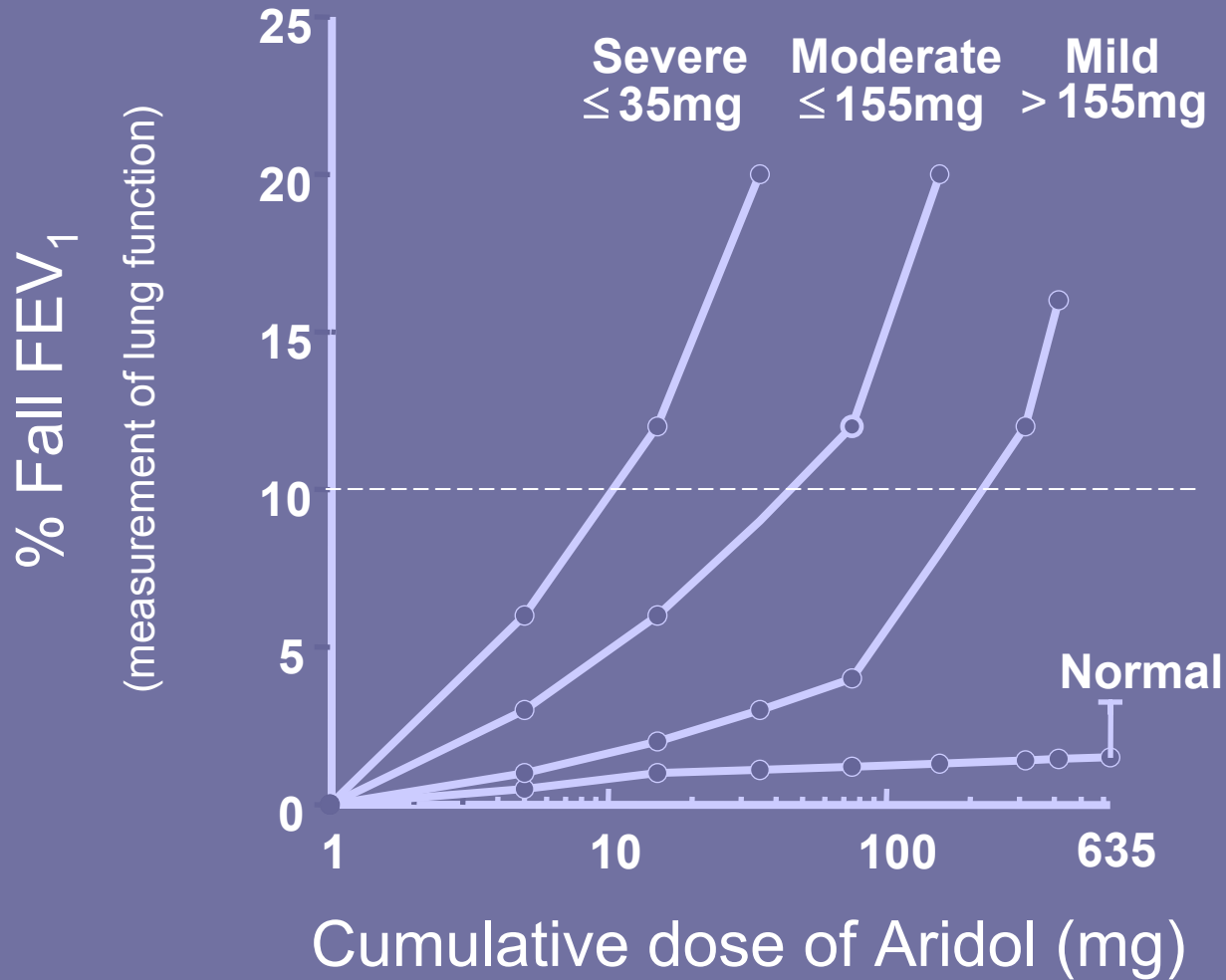


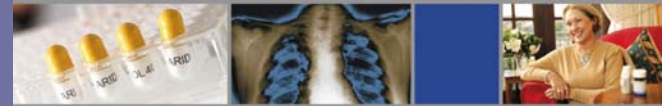
Phase II Clinical Trial Design: Asthma

Progressive Protocol:	0, 5, 10, 20, 40, 80, 160, 160, 160 mg
Diagnostic Measurement:	FEV ₁ 1 minute post dose
Positive Diagnosis:	Fall in FEV ₁ >14.9%
Time taken:	10 minutes (Mean positive test with PD ₁₅)
Numbers:	> 750 pts
Clinical Sites:	Worldwide
	20 minutes (negative test with PD ₁₅)
Recovery:	Spontaneous recovery to baseline
	FEV ₁ in 30 minutes (or Bronchodilator)



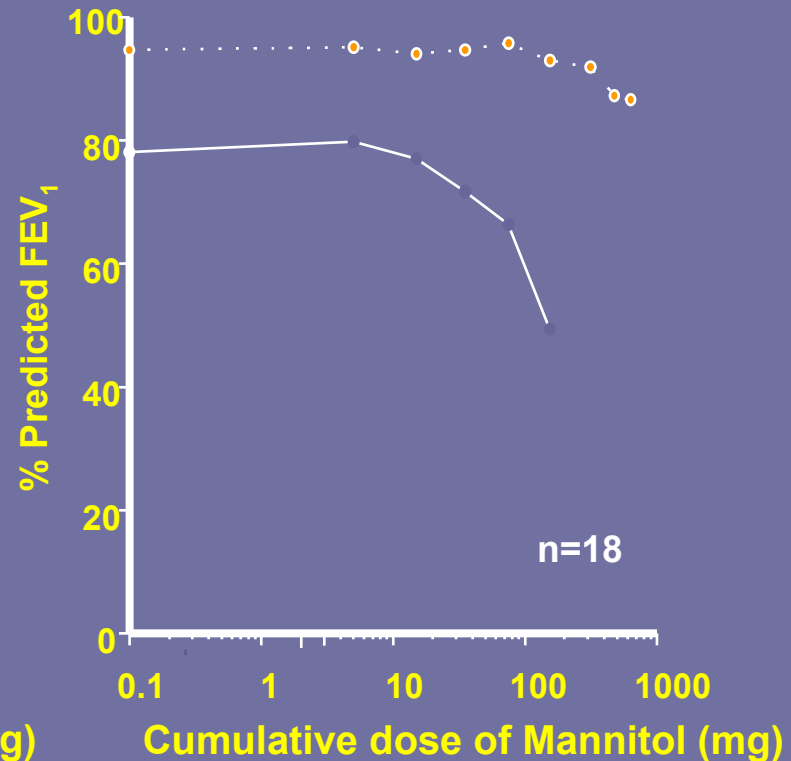
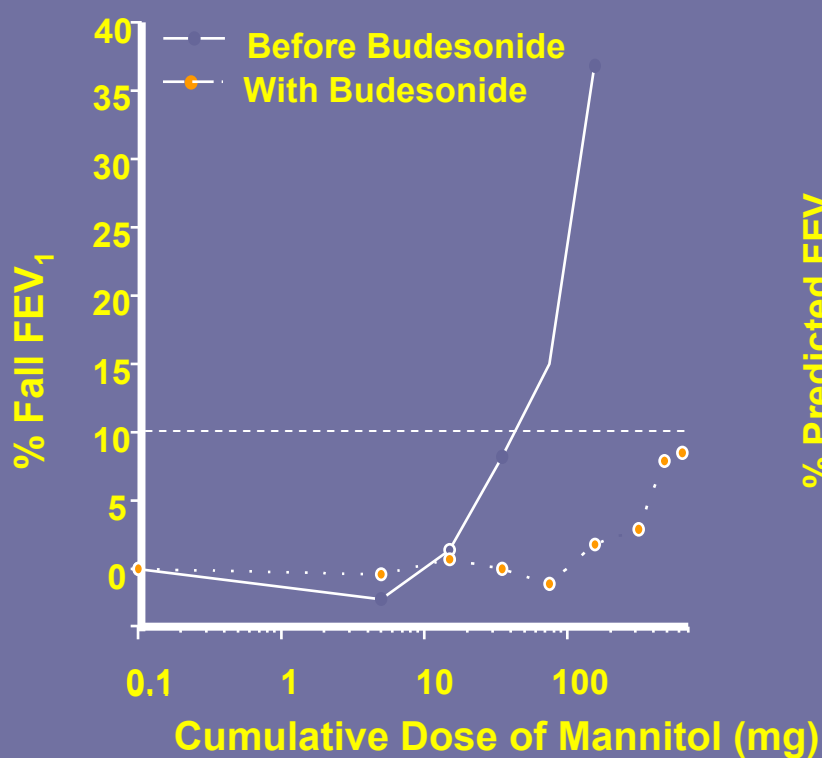
Aridol™





Phase II Trial Results

Measuring the effectiveness of inhaled steroid therapy



Effect on response to Aridol challenge of 8 weeks Rx with Budesonide



Phase III Clinical Trial Design

Progressive Protocol:	0, 5, 10, 20, 40, 80, 160, 160, 160 mg
Diagnostic Measurements:	FEV ₁ 1 minute post dose
Positive Response:	Fall in FEV ₁ >14.9% or >9.9%
Number:	600 pts
Clinical Sites:	12
Time taken:	10 minutes (Mean positive test with PD ₁₀) 20 minutes (negative test with PD ₁₀)
Recovery:	Spontaneous recovery to baseline FEV ₁ in 30 minutes (or Bronchodilator)
Results Expected:	September 2004



Next steps in clinical development

● Aridol as an asthma diagnostic

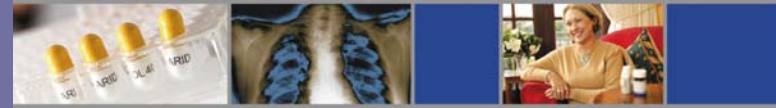
- ◆ Results Nov 04
 - ▶ IST in 50 patients vs methacholine for clinical diagnosis in asthma
- ◆ Sept 04 Phase III clinical trial results
 - ▶ Aridol vs hypertonic saline and physician diagnosis in 600 patients

● Aridol as an asthma management tool

- ◆ Results Nov 05
 - ▶ IST in 300 patients with 12 month follow up using Aridol to guide steroid dosage
 - ▶ Endpoint is number of exacerbations with Aridol vs standard British Thoracic guidelines

● Aridol as a COPD management tool

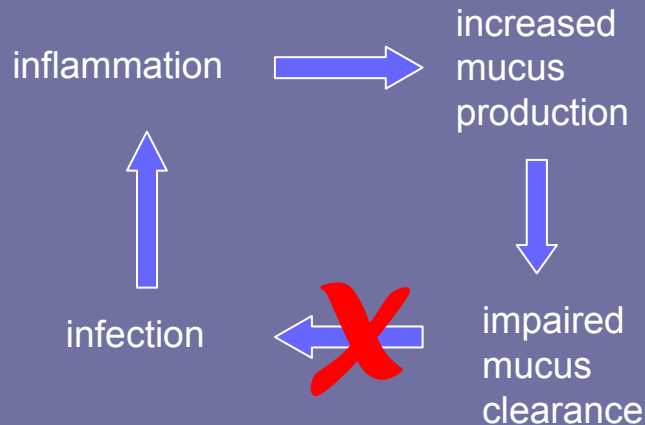
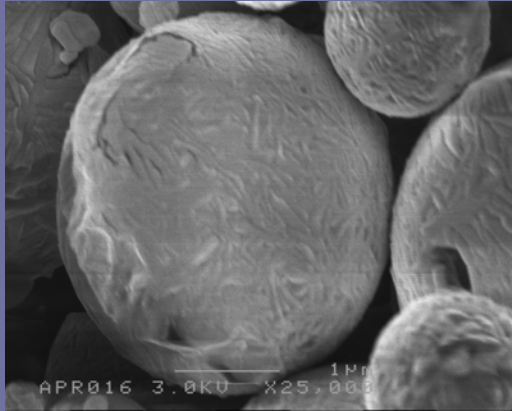
- ◆ Results Jun 05
 - ▶ Investigator sponsored 100 patient study to determine sensitivity / specificity of Aridol test in identifying COPD patients who will respond to steroids (smokers)
 - ▶ Investigator sponsored 40 patient study to determine sensitivity of Aridol in identifying steroid responsive COPD patients (ex-smokers)



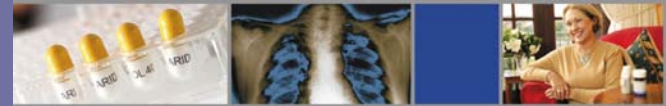
Bronchitol



Product Detail

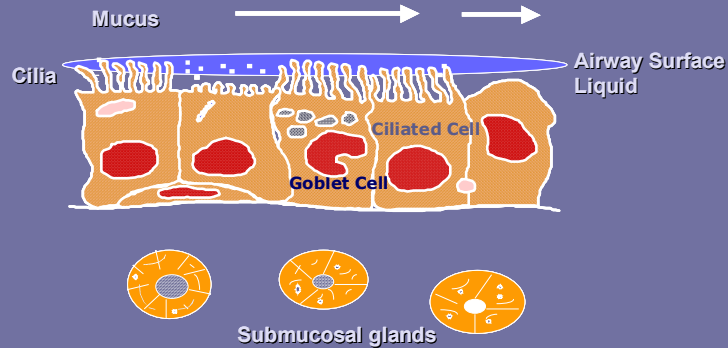


- Inhaled mannitol for CF & COPD
 - ◆ Phase IIb for COPD
 - ◆ Phase IIa for CF
 - ◆ Patents granted in the U.S. and Australia,
 - ◆ pending in Europe and Japan
- Uniform, respirable osmotically active sugar
 - ◆ Delivers compound into deep, smaller airways
 - ◆ Simple dry-powder delivery without need for nebulizer
- Therapeutic benefits
 - ◆ Reduce exacerbations
 - ◆ Reduce hospitalizations
 - ◆ Extend life expectancy

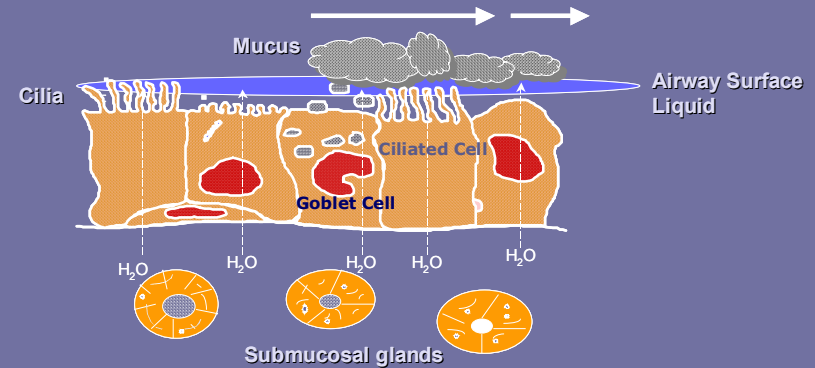


Detailed Mechanism of Action

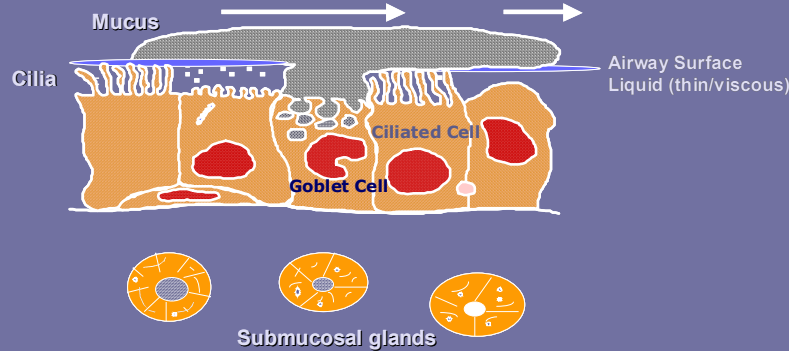
Lung defense (normal)



Lung defense (after Bronchitol)

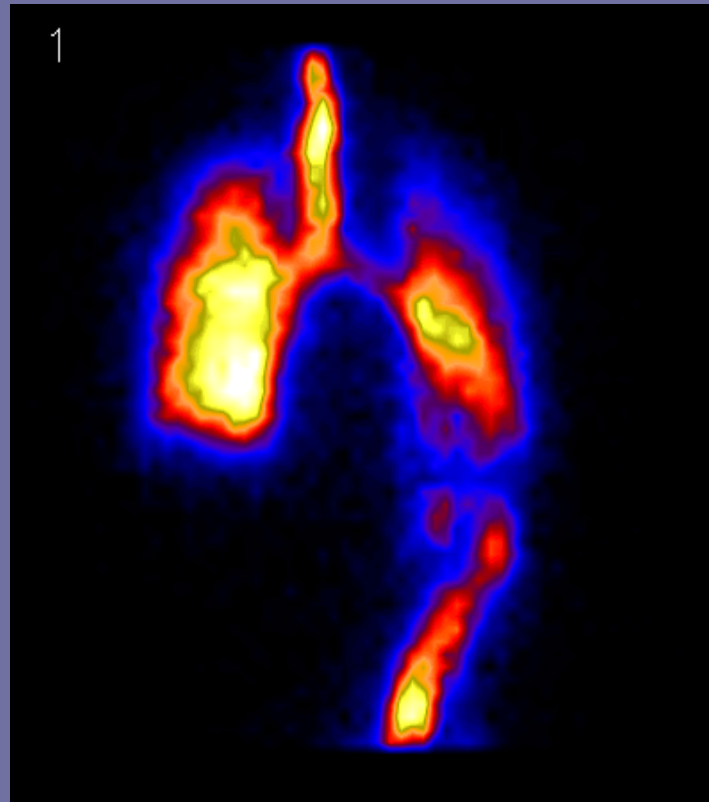
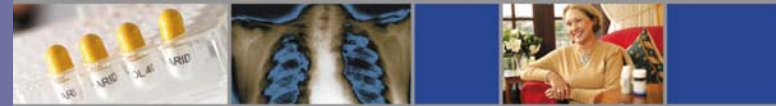


Lung defense (compromised)



- Restores Airway Surface Liquid
 - ◆ Non-absorbable sugar creates osmotic gradient
 - ◆ No risk of post-receptor effects limiting chronic utility
- Changes rheologic properties
 - ◆ Correction of mucus rheology increases action of ciliary elevator
- Increases ciliary beat frequency
 - ◆ Decreased infection and chronic inflammation
 - ◆ Increased pulmonary function

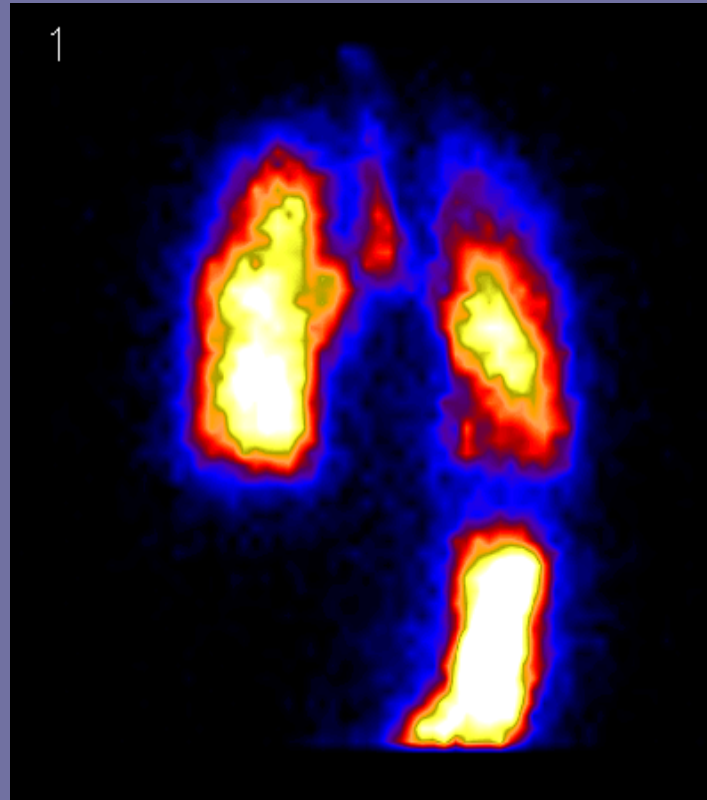
Chronic bronchitis without Mannitol





Chronic bronchitis

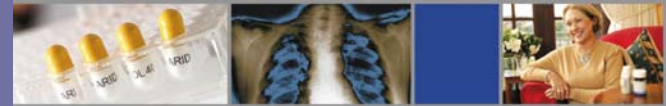
with Mannitol (400mg)





Bronchitol

Status in COPD



Chronic Obstructive Pulmonary Disease

● Epidemiology

- COPD represents emphysema, chronic bronchitis and bronchiectasis
- 4th leading cause of death in US – estimated 12 M affected, 1.4 M diagnosed
- Direct cost to US healthcare estimated at \$18 billion per year

● Disease progression

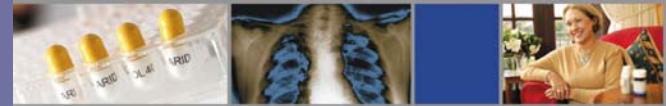
- Airway hyper-reactivity / obstruction (overlaps asthma)
- Chronic infections
- Irreversible lung tissue damage
- Hypoxemia, pulmonary hypertension, right heart failure

● Current Management

- Bronchodilators
- Mucoactive agents
- Oral corticosteroids (1 in 5 respond to steroids)
- Prevention / Treatment of infections
- Supplemental oxygen

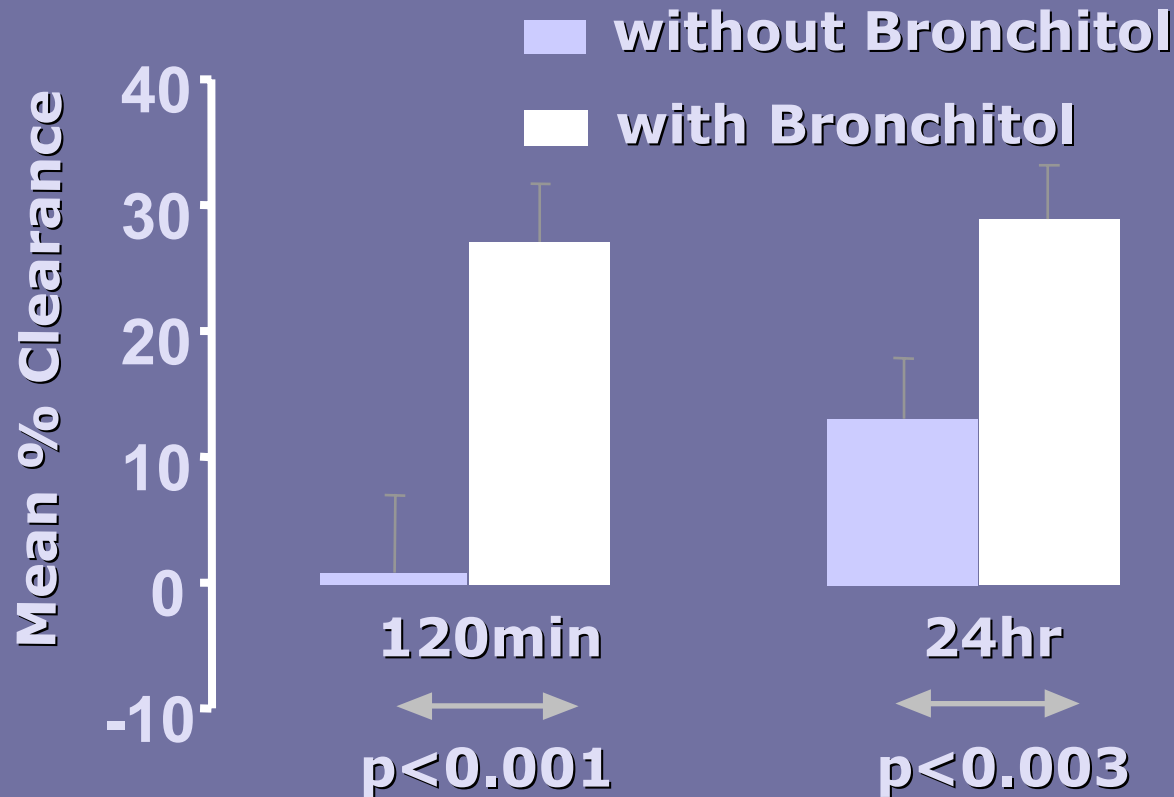


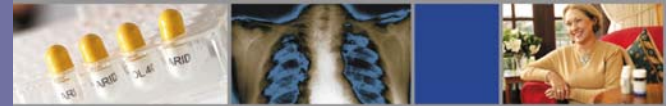
Source: National Heart, Lung, and Blood Institute.
Morbidity and Mortality: 2002



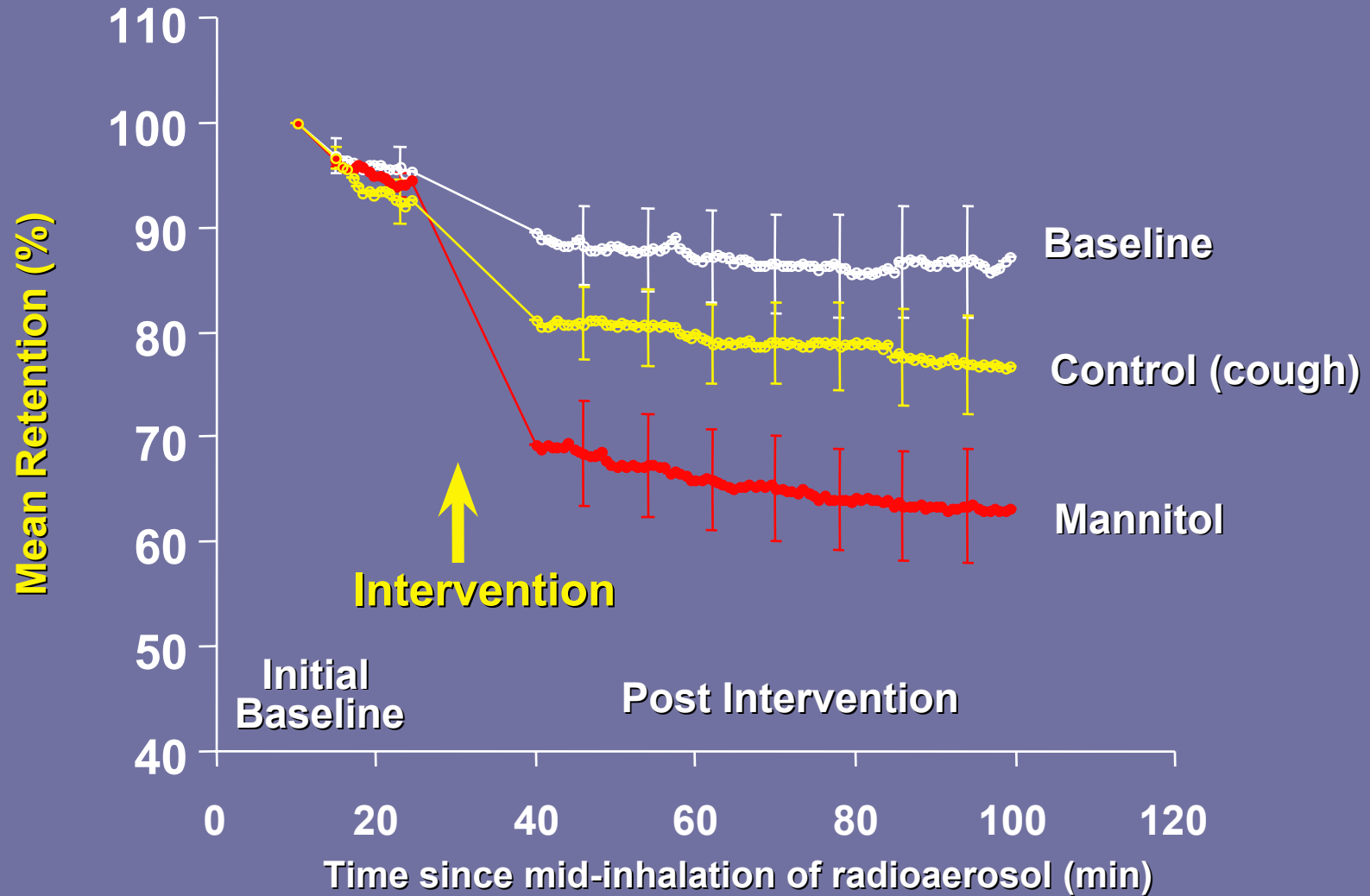
Proof-of-Concept Data - Bronchiectasis

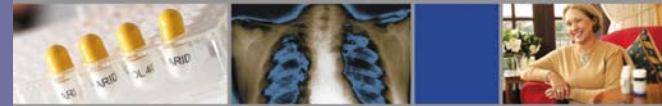
Right Peripheral Region of Lung





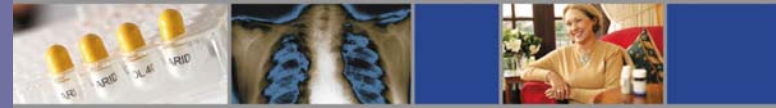
Proof-of-Concept Data - Bronchiectasis





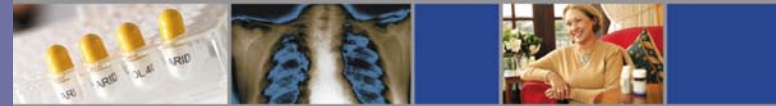
Phase IIb Clinical Trial Design

Study Population:	Patients with known bronchiectasis
Study Protocol:	Blinded, multicenter, cross-over trial
Dosage:	400 mg twice daily for 14 days
Numbers	60 pts
Clinical Sites:	4
Primary Endpoint:	QOL (St. George questionnaire)
Additional Endpoints:	FEV ₁ , sputum microbiology, rheology and 24hr sputum volume
Results Expected:	September 2004



Bronchitol

Status in CF



Cystic Fibrosis

● Epidemiology

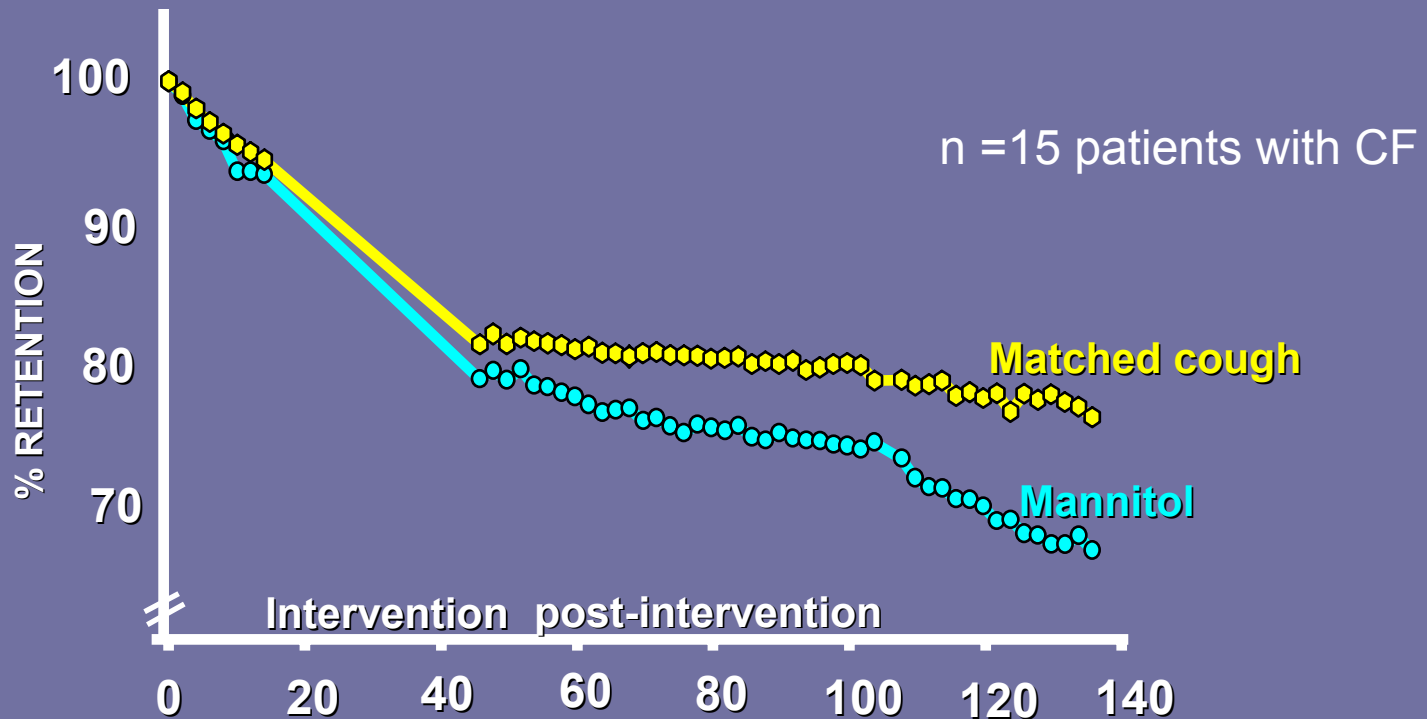
- ◆ Genetic disease - affects or 1000 new infants per year in the U.S.
- ◆ 30,000 children and adults affected in the US
- ◆ Median survival now early-thirties
- ◆ Disease progression
 - ▶ Abnormal pulmonary mucus secretions
 - ▶ Early infections with *S. aureus*, or *H. influenza*
 - ▶ Chronic infections with *Pseudomonas aeruginosa* and *Burkholderia*
 - ▶ Lung tissue damage (bronchiectasis), hypoxia, death

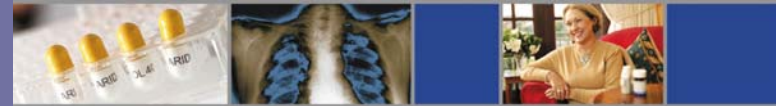
● Current Management

- ◆ Pulmozyme - a mucolytic agent
- ◆ TOBI - inhaled Tobramycin
- ◆ Other antibiotics - oral
- ◆ Bronchodilators
- ◆ Inhaled and oral corticosteroids



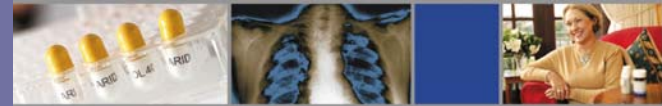
Proof-of-Concept Data - CF





Phase IIa Clinical Trial Design

Study Population:	Evaluating children and adults with cystic fibrosis in the hospital setting
Study Protocol:	Randomized, double blinded, multicenter, placebo controlled, crossover study
number:	60 pts
Clinical Sites:	4
Dosage:	420 mg twice per day for 14 days
Primary Endpoints:	FEV ₁
Additional Endpoints:	QOL (St. George questionnaire), lung function and safety
Results Expected:	November 2004



Next steps in clinical development

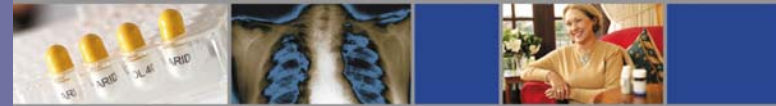
- Phase IIb Trial

Study Population:	Evaluating children and adults with cystic fibrosis in the hospital setting
Study Protocol:	Head-to-head, parallel trial versus Pulmozyme in 30 patients
Dosage:	400 mg twice per day for 3 months
Primary Endpoints:	QOL (St. George questionnaire), and FEV ₁
Additional Endpoints:	Safety, sputum microbiology, and rheology
Results Expected:	November 2005



Preclinical Pipeline

Product Detail



Autoimmune Disease

● PXS25

- ◆ Orally available compound effective in MS and RA models
- ◆ IGF-2 receptor antagonist
- ◆ Inhibits diapedesis, immune cell trafficking
- ◆ Human studies Q2 2005
- ◆ Pro-drug under development with excellent PK profile

● PXS2030

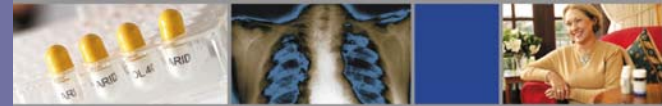
- ◆ Orally available compound targeting symptoms of MS
- ◆ Peripheral cannabinoid receptor agonist
- ◆ Inhibitor of T cell migration & B cell proliferation

● PXS2076

- ◆ Effective in RA models
- ◆ Believed to act through intracellular kinase pathways
- ◆ Inhibits TNF release from immune cells
- ◆ BA of >80%

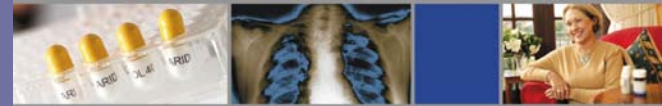


Summary



Upcoming Milestones

- Aug 04 Aridol investigator sponsored trials commence
 - Management of asthma with steroids – UK general practice ✓
 - Management of COPD with steroids – Sydney ✓
- Sep 04 Bronchitol in COPD, Phase IIb trial results
- Sept 04 Aridol Phase III clinical trial results - asthma
- Oct 04 Aridol in COPD with steroids – Switzerland
- Oct 04 Submit IND - Aridol study in USA
- Oct 04 Aridol v methacholine in asymptomatic pts – Denmark
- Nov 04 Bronchitol in CF - Phase IIa trial results
- Nov 04 Aridol registration in Aus/EU
- Early 05 Commence US Aridol study
- Mid 05 Aridol launch Aus/EU
- Mid 05 Phase I study with PXS25 pro-drug
- Nov 05 Bronchitol in CF vs pulmozyme, Phase IIb trial results
- Late 06 Bronchitol in COPD, Phase III results
- Early 07 Bronchitol in CF, Phase III results



Finances

	Year to 30 June 03 US\$'000	Year to 30 June 04 US\$'000
Income Statement		
Revenues		
Grants	571	789
Interest	166	768
Other	25	34
	<u>762</u>	<u>1,591</u>
Expenditures		
Research and Development	(1,047)	(4,317)
Administration	(574)	(1,557)
Net loss before and after tax	<u>(858)</u>	<u>(4,284)</u>
Depreciation & amortisation	150	350
EBITDA	(875)	(4,702)
<u>Balance Sheet</u>		
Cash & equivalents	4,931	17,416
Total assets	7,009	19,518
Long term debt	-	-



Management

Alan Robertson BSc, PhD

Chief Executive

Wellcome/Faulding/amrad

Brett Charlton MBBS, PhD

Medical Director

Baxter/Stanford/ANU

William Cowden BSc, PhD

Chief Scientist

Progen/Peptech/ANU

David McGarvey BA, CA

Finance

PWC/Memtec/US Filter

John Crapper BAS, MBA

Operations

Syntex/Memtec/US Filter

Gary Phillips BPharm, MBA

Commercial

Novartis

28 employees, 24 in R&D, 4 in G&A