



# ADHERIUM

Company Presentation  
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Group CEO



# Forward Looking Statement

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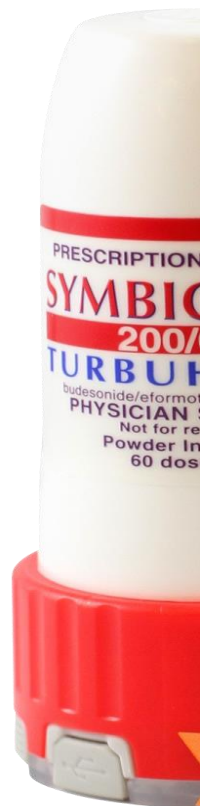
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## INVESTMENT HIGHLIGHTS

### Adherium provides valuable exposure to the rapidly growing digital health sector

- Commercialisation stage digital health company with **the most clinically proven solution** in the respiratory space
- Valuable intellectual property portfolio, with a 15 year investment in one of the **world's largest datasets of respiratory medication usage data**
- Exciting opportunity to leverage proprietary Big Data providing benefits across the value chain, from consumers and their families to their healthcare physician, payors and pharmaceutical companies, **positioning Adherium for scalable growth**
- Focus on growing market share via **existing AstraZeneca agreement and accessing new channels to market - provider and payor markets**
- Large unmet market opportunity of **approximately US\$50 billion** across respiratory smart inhalers, other chronic diseases and global healthcare Big Data
- Significant Founder and Board ownership aligns incentives with **global institutional ownership**
- Successful ASX IPO 2015 – strong balance sheet with **cash of A\$29.5 million to fund exciting growth opportunities**
- De-risked investment proposition – revenue-stage with **proprietary technology developed and cleared for market**



## A RECOGNISED PROBLEM

Adherium understands non-adherence to preventative medication is the major cause of poorly-controlled asthma & COPD

### The challenge of non-adherence

Non-adherence is defined as patients that might not take their medication as prescribed (e.g. at the right time, in the right way, or the right amount)

**\$475B**

Avoidable healthcare costs globally

**\$34B**

Avoidable healthcare costs for respiratory diseases in the US

### The challenge of uncontrolled patients

Poorly-controlled patients use their reliever medication more than twice a week and/or suffer symptoms on a weekly basis that include: night waking, activity limitation, airway obstruction or exacerbations

**35%**

Of patients with asthma or COPD are poorly controlled in the G7, representing ~20m people

**1.1m+**

Hospital stays related to asthma & COPD in the US every year

# ADHERIUM'S SMARTINHALER™ SOLUTION

## Proprietary technology and databases support a differentiated product range with proven results

### Adherium's Smartinhaler™ platform

#### Proprietary electronic measurement device for respiratory market

- Substantial technology advantage
- Easy-to-use hardware device that fits over current prescription inhaler
- Records date and time of inhaler use, and reminds patients when they have missed a dose of medication

#### Platform architecture drives data-sharing efficiencies and better outcomes

- Data is transmitted from devices into cloud-based servers
- Physicians can remotely monitor and manage patient's adherence, improving patient outcomes
- Patients can monitor their own adherence using smartphone app

#### Data-driven advantage

- Smartinhaler™ solution provides a means of collecting respiratory medication data
- Pharma companies can use Smartinhaler™ data to boost product differentiation and brand loyalty in the face of generic competition
- Smartinhaler™ data helps payors/providers reduce healthcare costs and accelerate healthcare strategy while also improving patient outcomes

### Smartinhaler™ digital health solution



Tracks inhaler use

Patients receive medication reminders



Patients, parents, caregivers can monitor adherence

Patients know when and how to take their medication



Collects medication use data

Physicians can manage patients' adherence remotely

# PROPRIETARY TECHNOLOGY

## Market proven proprietary technology positioning Adherium for scalable growth

### Clinically proven, market ready

Adherium's Smartinhaler™ platform is the only product available for the digitisation of respiratory medication that can point to **robust, independent clinical outcomes data** that demonstrates a significant improvement in patient health outcomes

**63 clinical projects in  
30 Countries**

### Market approvals:

US (FDA)

EU (CE)

Canada

China

Australasian

### Intellectual property

Adherium has a valuable IP portfolio, comprising international patents and registered designs

- **Cost effective, targeted IP strategy**, driven by product demand
- Patents currently granted or filed in **5 key jurisdictions** (NZ, Australia, US, EU and China)
- Designs **registered globally** in NZ, Australia, USA, EU and China

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#### Patents

**10 granted (incl. 2 in USA)**  
**22 pending (incl. 3 provisional)**

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#### Registered designs

**>70 registered**  
**16 pending**

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**15 years of device design & manufacturing experience.**

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<sup>1</sup> Forster et al (2014, Sydney)

<sup>2</sup> Chan et al (2015, Auckland)

<sup>3</sup> Forster et al (2014, Sydney) – Exacerbations refer to an asthma flare-up, when asthma symptoms start or get worse than usual (requiring treatment)

<sup>4</sup> Chan et al (2015, Auckland) – Morbidity score based on measures such as admissions to hospital and use of emergency room

## CLINICALLY PROVEN EFFICACY

Adherium's Smartinhaler™ is the most clinically proven solution to improve patient outcomes

Four independent clinical trials prove that the use of the Adherium Smartinhaler™ leads to...



**3.4 times**

More patients achieving 80% adherence to preventative medication<sup>1</sup>



**67%**

Reduction of morbidity rate<sup>2</sup>



**Five-fold**

Reduction in asthma-related hospitalization<sup>3</sup>



**61%**

Reduction in oral steroid use<sup>3</sup>



**45%**

Reduction in reliever medication use<sup>3</sup>



## VALUE PROPOSITIONS

Adherium improves the lives of people with asthma & COPD through real-time delivery of invaluable insights



### Patients

- ✓ Receive reminders and feedback on the treatment
- ✓ Reduce the risk of exacerbation
- ✓ Reduce side effects and hospitalizations



### Parents & Caregivers

- ✓ Track children/elderly relatives behaviour around medication use
- ✓ Reduce the risk of life-threatening events
  - ✓ Connect with online community



### Physicians

- ✓ Gain visibility on patient's usage of medications
- ✓ Increase engagement, diagnosis quality and titration effectiveness
- ✓ Improve outcomes and patient retention
  - ✓ Engage patients remotely



### Payers

- ✓ Identify cost-effective medications using insights on treatment efficiency
- ✓ Incur lower treatment costs
- ✓ Better manage patients' conditions



### Pharma

- ✓ Gain insights in the efficiency of their drugs
- ✓ Identify potential areas of improvement in treatment efficiency



### Researchers

- ✓ Gain better understanding of the drivers of chronic respiratory disease occurrence
- ✓ Uncover the cause of asthma and develop potential cures



# ASTRAZENECA PARTNERSHIP

## Validating technology through initial commercial partnership with AstraZeneca

### Partnership with AstraZeneca

In July 2015, Adherium entered into a long term partnership with international pharmaceutical leader AstraZeneca

AstraZeneca is a **global biopharmaceutical company listed in the US** with a **market capitalisation of US\$78.7 billion<sup>1</sup>**

AstraZeneca produces Symbicort, the third highest selling respiratory drug globally, with **global revenues from Symbicort and Pulmicort of US\$4.4 billion<sup>1</sup>**

The partnership is a world-first commercial arrangement combining digital health technology with blockbuster inhaler medications

### AstraZeneca product development and supply agreement

- AstraZeneca currently purchases Adherium's products through a Master Supply and Development Agreement
- 10 year term (with rolling 12 month extensions)
- Each party retains its respective intellectual property
- Non-exclusive, giving Adherium the discretion to supply its products to other multinational pharmaceutical companies
- Adherium has the right to analyse data derived from the use of AstraZeneca's product in combination with Adherium technology and provide reports/recommendations based on this analysis

**~50%**

Proportion of revenue contributed by commercial supply agreement with AstraZeneca (with remainder from clinical trials)

**463%**

Increase in the number of patients using the Smartinhaler™ from April 2015 to June 2016, largely as a result of AstraZeneca agreement

## CORPORATE

### Adherium's focus on revenue and market share growth in FY17 is enabled by a strong cash balance

#### Financial information

Share price (31-Dec-16)	A\$0.24
Number of shares <sup>1</sup>	172.1m
<b>Market capitalisation</b>	<b>A\$41.3m</b>
Cash (31-Dec-16)	A\$29.5m
Debt (31-Dec-16)	Nil

#### Top shareholders<sup>2</sup>

<b>One Funds Management</b> <i>Australian fund manager</i>	13.9%
<b>Fidelity International</b> <i>Global investment manager</i>	9.3%
<b>I.G. Investment Management Ltd</b> <i>Canadian investment manager</i>	7.0%
<b>K One W One</b> <i>New Zealand venture capital firm</i>	6.4%
<b>Garth Sutherland</b> <i>Founder &amp; CEO</i>	6.0%
<b>Regal Funds Management</b> <i>Australian fund manager</i>	5.9%

<sup>1</sup> As at 31 December 2016; includes 35.3m escrowed shares

<sup>2</sup> Based on market disclosures. AstraZeneca holds 4.7% via an early investment of US\$3.0 million at IPO

## BOARD OF DIRECTORS

### Entrepreneurial founder supported by an experienced Board and management team

#### Founder of Adherium



**Garth Sutherland**

*Founder and Group CEO*

- Garth founded Adherium (then Nexus6) in response to his personal asthma management problem
- Prior to founding Adherium, Garth spent 20 years in technology development and commercialization (formerly at Microsoft)
- Secured the first and only global agreement with a multinational pharmaceutical company
- Garth continues to oversee Adherium's growth and strategic direction as it becomes a global provider of digital health solutions for chronic disease management

#### Independent Non-Executive Chairman

##### **Thomas Lynch**

Mr Lynch has extensive capital markets experience and the internationalisation in the healthcare sector. He was the chair of Icon plc for 22 years, one of the world's largest clinical research companies, and has been involved in listing numerous companies

*Appointed 1 September 2016*

#### Non-Executive Directors

##### **Jeremy Curnock Cook**

Mr Cook was formerly head of the life science private equity team at Rothschild AM in the UK.

*Appointed on 17 April 2015*

##### **Prof. John Mills AO**

Professor Mills is an internationally-regarded physician, scientist and biotechnology businessman.

*Appointed on 20 July 2015*

##### **Bruce McHarrie**

Mr McHarrie has over 20 years' experience in health and life sciences.

*Appointed on 20 July 2015*

##### **Dr William Hunter**

Dr Hunter is a co-founder of Angiotech Pharmaceuticals and led it through its TSX and NASDAQ listings. He is currently CEO and President of Cardiome Pharma Corp and has an impressive history of commercialising medical device technologies.

*Appointed on 17 December 2015*

##### **Bryan Mogridge**

Mr Mogridge has been a successful public company director for over 30 years. He currently sits on the Board of Bupa ANZ.

*Appointed on 20 July 2015*

## GROWTH OPPORTUNITIES

Adherium is at the forefront of a large unmet market opportunity across multiple verticals

### Chronic respiratory disease

#### First target market

- Adherium's first target market is the chronic respiratory disease treatment and management sector
- Market for digital dose inhalers estimated to be **US\$3.6bn** in 2024<sup>1</sup>
- Global sales revenue of US\$22bn (asthma) and US\$14.4bn (chronic obstructive pulmonary disease)<sup>2</sup>
- Adherium is perfectly positioned to meet the needs of this large and growing market with its Smartinhaler™ platform

Respiratory  
(smart inhalers)  
**US\$3.6bn**

Other chronic  
diseases  
**US\$15.0bn**

Big Data  
**US\$30.0bn**

### Future market opportunities

Adherium is also able to leverage its leadership in respiratory disease, and its valuable and growing database to scale into other growing sectors:

#### Other chronic diseases

US\$15bn<sup>3</sup> commercial opportunity globally from the application of digital health technologies to other chronic diseases






#### Big Data

The impact of data on the global healthcare system is forecast to be a commercial opportunity of US\$30bn<sup>4</sup>

# COMMERCIALISATION STRATEGY

Adherium creates multiple additional revenue streams through our data monetization program

## Data Revenue Streams

	 Patients, Parents & Caregivers	 Payers & Providers	 Physicians	 Pharmaceutical Companies	 Researchers
Value Proposition	<ul style="list-style-type: none"><li>Personalized care</li><li>Medication adherence</li><li>Predictive analytics</li><li>Interventions</li></ul>	<ul style="list-style-type: none"><li>Quantification of healthcare savings</li><li>Value-based reimbursement</li><li>Waste reduction</li></ul>	<ul style="list-style-type: none"><li>Telehealth services</li><li>Remote monitoring</li><li>Clinical insights from new biosensors</li></ul>	<ul style="list-style-type: none"><li>Commercial intelligence</li><li>Medication efficacy</li><li>Patient retention</li></ul>	<ul style="list-style-type: none"><li>Medication efficacy and therapeutics discovery</li><li>Data monitoring for clinical / outcome studies</li><li>Gold-standard data</li></ul>
Benefits					
Improve outcomes	✓	✓	✓	✓	✓
Reduce cost		✓	✓	✓	✓
Generate revenue & improve share			✓	✓	

## POSITIONING ADHERIUM FOR SUCCESS

Adherium's long term strategy is to become a global leader in digital health solutions



## In Summary

### An Unparalleled Opportunity



- Electronic monitoring and interventions will become the chronic disease management standard
- We have tens of thousands of devices deployed globally, and an international client base
- The technologies behind Adherium® Smartinhaler™ can be rapidly developed for other chronic diseases
- The Company has required regulatory approvals in all major markets
- The Company is well capitalized, and has a strong cash position to support its global growth strategy
- The Company is accelerating rapidly, and leveraging its leadership in respiratory disease to move into new chronic diseases and the monetization of its data assets
- Revenues will be derived from a number of channels:
  - ✓ Multinational pharmaceutical & medical technology companies
  - ✓ Distribution to hospitals, doctors and pharmacies
  - ✓ Clinical trials
  - ✓ Disease management groups
  - ✓ Health care providers and insurance
- Adherium® is expanding rapidly with hubs in EU and USA, increased marketing and data analysis, design, regulatory capabilities
- More than a decade of experience gives us the best possible chance of success