## adherium Shareholder Update

May 2017

## Chairman's Message

Adherium has been very busy as we continue to roll out our Smartinhaler™ devices, which are being welcomed by asthmatics and clinicians alike.



Our Group CEO Garth Sutherland and his team have continued to invest time, effort and resources in broadening the Smartinhaler<sup>™</sup> platform to cover more devices with enhanced features and ensuring that the clinical successes of patients adhering more closely to their medication schedules become widely recognised.

Our business at Adherium is to use technology to transform the lives of those with chronic disease and it was great to see that message broadcast recently as the national health story on Australia's Channel 7 News. I encourage you to click on this link to see the story. https://au.news.yahoo.com/video/watch/34614935/new-age-pufferchanges-asthma-treatment/#page1\_

Getting clinicians to recognise the usefulness of our devices in preventing unnecessary hospitalisation and suffering is one part of the battle but we must always ensure that our products are also intuitive and easy to use so that patients get the help they need to control their symptoms.

That has been the experience as more people get to use our Smartinhaler<sup>™</sup> devices, both through clinical projects and programs around the world and increasingly through consumer rollouts by our cornerstone investor and key commercial client, AstraZeneca.

I trust you enjoy reading about some of the many things happening at Adherium as we continue to build on our market leadership position in digital interventions that can dramatically improve the lives of people with chronic respiratory disease.

Thomas Lynch Chairman







## Global rollout set to accelerate

Adherium's commercial partner, AstraZeneca, has expressed confidence in our ability to make Smartinhalers<sup>™</sup> that cover a wide range of inhalers and medications and is planning to accelerate the global rollout of the Smartinhaler<sup>™</sup> platform.

In an article in The Pharmaceutical Journal (7 APR 2017), Jon-Paul Sherlock, director of AstraZeneca's Intelligent Pharmaceutical Respiratory division, said: "Selecting which company to work with was based on a number of factors, including clinical evidence, strategic fit and the quality and range of the devices.

"We chose Adherium because we were in a position to evolve with them starting from them having a device that was ready for us."

Mr Sherlock said AstraZeneca was testing Adherium's devices in countries including the Netherlands and plans to roll out to other markets.

He expects product development to be rapid, with more advanced inhalers available by 2020.

"It's a very exciting area and has the potential to be truly disruptive, which is why AstraZeneca is exploring it," said Mr Sherlock. "There's a misnomer that drug companies just make medicines and push them out, but the idea here is that we can improve clinical outcomes and clinical benefits."

"It's a very exciting area and has the potential to be truly disruptive

"We anticipate that the expectations of patients, healthcare professionals and ultimately payers will change as smart inhalers become more established. This new technology introduces the potential to support patients, ensuring they get the best from the medicine they have been prescribed."

Mr Sherlock said helping patients get the most from their asthma medicine was something that drug companies had long struggled with. The full article is available at

http://www.pharmaceutical-journal.com/news-andanalysis/features/smart-inhalers-will-they-help-toimprove-asthma-care/20202556.article

During 2016, AstraZeneca ran several Smartinhaler<sup>™</sup> commercial pilot programmes in countries around the world with great results. These pilots demonstrated the benefits of Smartinhaler<sup>™</sup> for patients in the real world, and showed incredibly high user adoption, compliance and persistency with the platform. Following these successes, AstraZeneca will begin the global roll-out of the Smartinhaler<sup>™</sup> platform in 2017. Launches began in Q1 and will continue throughout the year in major markets across Europe, Australasia and North America.



## Adherium Smartinhaler™ Live – the cloud that keeps growing

"If you build it, they will come" was the ghostly theme of the popular film Field of Dreams but it could just as well have been the description for Adherium's Smartinhaler Live™ cloud-based data platform.

Since the beginning of 2014, growth has been significant with Smartinhaler Live™ now holding more than 25 million device logs received through more than five million data uploads, and compound annual growth is now running at 243 per cent.

This growth has been driven by the continued uptake of the Smartinhaler<sup>™</sup> technology and is just the start as our commercial partner AstraZeneca continues to accelerate its roll out of Smartinhalers<sup>™</sup> in global markets.

Smartinhaler Live™ is a vital link because it allows doctors and patients for the first time to monitor actual usage of medication for treating asthma, COPD and other respiratory diseases. It also provides Adherium with one of the largest repositories of inhaled medication use data in the world which facilitates the development of predictive algorithms that can provide an early warning system to patients and caregivers. By using machine learning and artificial intelligence we can help understand what may be causing symptoms and prevent attacks before they occur.

The value of this data set was reflected in the Financial Times\* last week in its article about Digital Disruptors. The article highlights 'The imperative to develop a capability in this field is becoming stronger as health systems demand hard evidence that a drug is effective and will ease strain on the budget – for example by reducing hospital stays'. Stefan Biesdorf, a principal at McKinsey, adds: "In digital health the winners are going to be the companies that sit on the largest amount of patient level, granular data . . . a lot of players are taking and building a position in the market."

The Smartinhaler<sup>™</sup> platform also continues to generate the best global, clinically validated outcomes data.



In a recent article in the prestigious journal Thorax\*\*, the independent STAAR study results showed unequivocal evidence that using Adherium's Smartinhaler<sup>™</sup> platform in children with asthma dramatically increases medication adherence and clinical outcomes, resulting in a five-fold reduction in asthma-related hospitalisations in patients.

This is the sort of research that is crucial in getting recognition from doctors, insurers and hospitals about the potential for significantly better clinical outcomes and to reduce unnecessary and costly hospital admissions.

Adherium already has the requisite approvals in place for markets around the world and the inventory of devices covering multiple medications to be able to start reaching out to consumers, caregivers, insurers and hospitals directly and is establishing a sales and marketing capacity to match this potential.

\*https://www.ft.com/content/d7a60642-0361-11e7-ace0-1ce02ef0def9

\*\*<u>http://thorax.bmj.com/content/72/4/347</u>



#### Adherium a finalist in NZ Hi-Tech Awards

We are pleased to be a finalist in the 2017 NZ Hi-Tech Awards and join an elite group of companies and individuals who are on a journey to even greater success and recognition.

Adherium has been selected in the 'Most Innovative Hi-Tech Hardware Product' category for itsSmartinhaler™ technology. This achievement is based on having developed a hardware product that is genuinely innovative, is positioned for future success, and is clearly differentiated from that of the competition.

The panel judging for the finalists happened on 12 April and the winners will be announced at a Gala Dinner at the ANZ Viaduct Events Centre in Auckland on 12 May.



#### Garth speaking at RDD Europe

Garth Sutherland, Adherium Group CEO & Founder, was a speaker and author at last week's Respiratory Drug Delivery Europe 2017 meeting held at Palais des Congres d'Antibes, Nice (Antibes), France.

Garth presented to a packed auditorium of approximately 300 delegates during Session 3: Can Connected Devices Improve Respiratory Outcomes? The presentation is based on a paper authored by Garth and colleagues at Adherium which will be published by RDD. RDD publications cover the most innovative areas of pulmonary drug delivery research from drug delivery experts on every aspect of inhaled drug delivery.

## Other news from Europe

In January 2017, Adherium appointed Scott Fleming as Senior Vice President of Business Development for Europe. Since taking up his position, Scott has very busy supporting Adherium's European growth plans.

Scott recently represented Adherium at the Asthma UK Roundtable for the launch of the Smart Asthma report\*: Real world implementation of connected devices in the UK to reduce asthma attacks, in London, UK. The main message from Asthma UK was that the UK needs to do better with improving asthma treatment (outcomes have declined) and reduce costs.

\*https://www.asthma.org.uk/globalassets/get-involved/external-affairscampaigns/publications/smart-asthma/auk\_smartasthma\_feb2017.pdf

Interest in Smartinhaler<sup>™</sup> adoption across the NHS has increased significantly since NICE published it's Medtech Innovation Briefing (MIB) in January, recognising the role that Adherium's Smartinhaler<sup>™</sup> technology platform can play in improving adherence to asthma medication. The MIB reviewed data from independent clinical trials that demonstrate Smartinhaler<sup>™</sup> devices were more effective than the current standard of care in improving adherence to asthma medication. The NICE Medtech Innovation Briefing can be found here: https://www.nice.org.uk/advice/mib90

Scott was in the UK again in April when Adherium exhibited at the 3rd King's St John's Paediatric Respiratory conference in London. The King's Paediatric Respiratory Conference has acquired an outstanding reputation among professionals as a forum for sharing new information and discussing controversial issues about respiratory problems in children. Attendees include leading specialists and researchers from around the globe, united by the common purpose of improving respiratory care for young patients, a goal that is very dear to the hearts of everyone at Adherium. And finally, here are a few pictures of the new Adherium European office just opened in Amsterdam.













# Helping patients to connect with their medication

James Hattersley, Senior Vice President of Business Development, North America, at Adherium, said it is vital for the makers of medical devices to consider the needs of patients and not just those of doctors and clinicians.

As one of the panel speakers at the recent Digital and Personal Connected Health forum at HIMSS 17 in Orlando, Florida, Mr Hattersley said the days of not considering the attractiveness and ease of use of a device for the patient were ending.

"It can't be always focused on just physician side or clinical side, although that is the basis for some of the technology for things like respiratory, neurology, obesity and hypertension," Mr Hattersley told the conference.

"But if you can look at another value or outcome for the patient that is, for lack of a better term, closed-loop, a connection that they have with the use of their medication, the use of their devices, I think that is extremely important because then they feel more of a connection instead of feeling like they are leaving something to chance.

"We all know what can happen when you leave something to chance. "



Mr Hattersley said Adherium took product design especially to heart, because if an inhaler is clunky, a patient will not use it properly and it will affect actuation and inhalation of their medication.

"It needs to be used properly, and it if is too complicated or not something they are willing to use and get a benefit out of, what's the longevity of that tool going to look like?" said Mr Hattersley.

"That's very important because we don't want people, especially those who have moderate to severe asthma, to stop using the tool."



## Erin Wansborough joins Business Development team

Erin Wansbrough has been appointed as Adherium's Vice President of Business Development for its key markets outside of North America and Europe.



Erin will be operating out of the Company's existing Asia Pacific base in Auckland, New Zealand.

Ms Wansbrough joins Adherium after a successful career over the last 16 years that spans multiple industries including pharmaceuticals, healthcare, biotechnology, and ICT across both private and public sectors.

Erin began her career with Life Technologies in New Zealand in Product and Sales Management. She then went on to work for AstraZeneca and GSK in a Sales Management capacity before joining Genesis



Research & Development Corporation as Business Development Manager.

Adherium Group CEO, Garth Sutherland, said he was delighted to welcome Ms Wansbrough.

"This is a key milestone for us as we continue to build our commercial capabilities to attract and service new customers. Erin has a proven track record of executing commercial partnerships and business development management."

Ms Wansbrough said it had been exciting to watch the progress of Adherium over the past few years,

"It will be a privilege to join the team to help build Adherium's future, fulfilling the promise of empowering people with chronic conditions to live the life they want."

## Adherium meets key Smartinhaler™ supporters at TSANZSRS 2017



The Annual Scientific Meetings of The Australia and New Zealand Society of Respiratory Science and The Thoracic Society of Australia and New Zealand recently took place at the National Convention Centre, Canberra.

Adherium's new Vice President of Business Development for its key markets outside of North America and Europe, Erin Wansbrough, was on hand to meet the delegates in the exhibition hall who were keen to learn more about Smartinhaler<sup>™</sup>.

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