



Adherium Limited
Collins Square, Tower 4
Level 18, 727 Collins Street
Melbourne VIC 3000 Australia

Level 11, 16 Kingston Street
Auckland 1010 New Zealand

19 December 2019

Companies Announcements Office
ASX Limited

Dear Sir/Madam

Adherium December 2019 Update Presentation

Adherium Limited ACN 605 352 510 (**Adherium or the Company**), (ASX code: **ADR**) provides the attached Company update presentation supporting the Rights Issue offer announced 11 December 2019.

For further information, please view our website (www.adherium.com) or contact the Company at investors@adherium.com.

The release of this announcement was authorised by the Board of Adherium.

Yours faithfully

A handwritten signature in black ink, appearing to read "Rob Turnbull".

Rob Turnbull
Joint Company Secretary



INTRODUCTORY SUMMARY

A Digital Health Company
focused on **Medication Adherence**,
with the **market leading**
Respiratory Solution

December 2019



Disclaimer and Forward Looking Statement

The following material is of a general nature and has only been prepared as a presentation aid. This presentation does NOT contain all of the information that may be required for evaluating Adherium Limited ACN 605 352 510 (Adherium or the Company), its assets, prospects or potential opportunities.

This presentation may contain budget information, forecasts and forward looking statements in respect of which there is NO guarantee of future performance and which of themselves involve significant risks (both known and unknown). Actual results and future outcomes will in all likelihood differ from those outlined herein.

Forward-looking statements are statements that are not historical facts. Words such as “expect(s)”, “feel(s)”, “believe(s)”, “will”, “may”, “anticipate(s)” and similar expressions are intended to identify forward-looking statements. These statements include, but are not limited to, statements regarding market size, future results, regulatory approvals, production targets, sales, staffing levels etc. All of such statements are subject to risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements.

These risks and uncertainties include, but are not limited to: (i) the possible delays in and the outcome of product development, (ii) risks relating to possible partnering or other like arrangements, (iii) the potential for delays in regulatory approvals, (iv) the unknown uptake and market penetration of any potential commercial products and (vi) other risks and uncertainties related to the Company’s prospects, assets / products and business strategy. This is particularly the case with companies such as Adherium which operate in the field of developing and commercializing medical devices and related services. You are cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events.

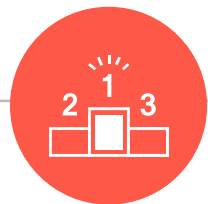
Additionally there are a number of factors, both specific to Adherium and of a general nature, which may affect the future performance of Adherium. There is no guarantee that Adherium will achieve its stated objectives/milestones, that any of its forecasts will be met or that forward looking statements will be realized.

adherium Overview



- Digital health company, founded in 2001 and listed on ASX in 2015
- A leader in providing connected health solutions with a primary focus on enhancing adherence among asthma and COPD patients supported by:
 - Our Hailie® sensor technology portfolio giving 80% US market coverage of inhaled asthma and COPD drugs
 - Hailie® cloud-based digital platform, mobile app and web portal, provides feedback to patients, providers and payers
- Hailie® technology has been shown to improve adherence and reduce the frequency of negative outcomes
 - > 85 peer reviewed publications
 - ~13,000 patients
 - 30+ countries
- Helping enhance the patients' quality of life
- Lowering healthcare treatment costs

Executive Summary



MARKET LEADERSHIP

adherium (ADR.ASX) is a leader in the respiratory adherence market:

- >170k sensors sold,
- >85 clinical publications, and multiple regulatory approvals
- Used in 30+ countries



INFLECTION POINTS

- Establishment of reimbursement for digital solutions
- Sensor portfolio, greater than 80% coverage for asthma and COPD medications
- Secure channel options for North America and UK



18 MONTH COMMERCIAL FOCUS

- Payer / Provider-led strategies, as path to payment and adoption by physicians . (Risk share / CPT codes)
- Commercialisation in US and UK
- Commercially focused product development to extract value from data and to access reimbursement codes



SHAREHOLDER VALUE

- Physician engagement and adoption combined with patient acquisition establishes sustainable revenue growth



NEW LEADERSHIP

- Experienced leadership focused on commercialization and execution

The adherium 1,2,3 > 1) Better outcomes 2) Path to Payment 3) Data analytics

1

We provide connected solutions to allow patients and physicians to better manage their disease state

We measure inhaler use :

- Frequency, dosing and technique;

To improve adherence:

- Supporting improved outcomes;
- Improved quality of life;
- Reduced healthcare costs;



2

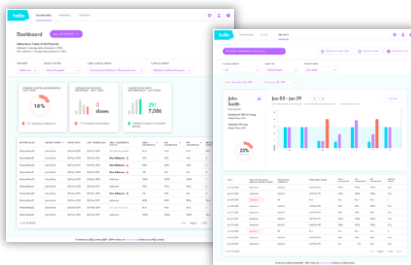
Supply the sensors and a data platform to our partners who can benefit from CPT codes and risk share in value based contracts

Complements existing inhalers:

- Asthma;
- COPD;

Simple to use;

Across all patient groups;



3

Provide reimbursement data analytics and clinical data management services to clinicians

Provide data services to clinicians:

- Analyze the data;
- Generate reports.

Clinicians bill insurers:

- Established billing codes (US);
- Better outcomes, lower costs.

Activity	CPT Code	Amount
Set-up	99453	\$19.43
Data collection	99454	\$64.15/mo
Data interpretation	99457	\$51.54/mo
Patient Value*	~\$1,400	
* Example value based on CPT codes		

adherium is well positioned to address the digital health adherence opportunity

Why Adherence Technology?

US\$56b

US economic burden of asthma

~50%

of asthma and COPD patients fail to take their doses as prescribed

US\$34b

Annual preventable US healthcare cost for uncontrolled asthma & COPD patients

Why now?

Changing market conditions triggering a tipping point in the opportunity:

Healthcare needs to do more with less in a value-based context

Digital health reimbursement is now available (US CPT codes)

Providers are incentivised to adopt digital tech, alongside consumers

Why adherium?

A leader in digital health in respiratory disease with robust foundations...

- **Founding leader** in adherence technology
- **> 170,000 sensors** sold globally,
- **~ 13,000 patients on clinical trials** or disease management programs
- Sensor portfolio covers est. **80% US asthma and COPD medications**
- **Regulatory and compliance** capabilities

...and a new focus to enable successful growth execution informed by our experience and changing market conditions

Evolved Strategic Focus

Payer & Provider-led patient acquisition



Stronger and New Partnerships



New Management Team

Adding commercialisation and execution capabilities to deliver on the new strategy

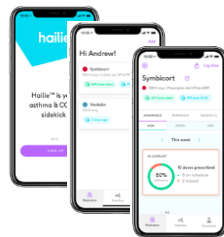
adherium's Hailie® solution is the most-clinically supported solution to improved medication adherence among asthma and COPD patients

Patients



Hailie® Sensor

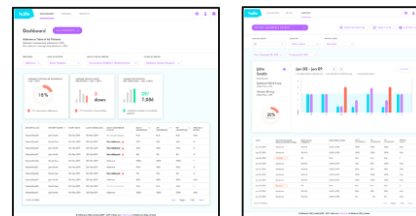
Patients know exactly when they have to take their medication and get reminded if they miss a dose



Hailie® Mobile App



Clinicians, Providers & Payers



Hailie® Clinician Web Portal

Clinicians and providers can monitor their patients remotely and identify those at-risk of exacerbations

Monitoring the use of asthma medication with Hailie® Sensors reduces the frequency of negative outcomes

Percentage
reduction vs.
control group

▼ **59%**
Missed doses

▼ **80%**
Hospital admissions

▼ **61%**
Acute Attacks

▼ **39%**
Oral Steroid Use

▼ **15%**
Less Missed
School Days

In the last four years, we have made significant progress to enhance and distribute our technology, while preparing for growth

Commercial

- ~170,000 sensors sold globally
- Further development of our current relationships via commercial pilots and clinical trials
- New partnerships



SUMMATIX
HEALTH



TRUDEMED
INTERNATIONAL



Recent Achievements

- Clinically supported adherence solution for respiratory disease
- ~13,000 patients using Hailie® sensors via trials or disease management programs in 30+ countries
- Major clinical studies completed (SYGMA, PRACTICAL) and 85 peer-review publications
- Endorsement via UK NICE Publication

Product

- Sensor set with broad US market coverage for asthma and COPD medications (80%)
- Continued geographic expansion approvals
- US FDA sensor clearances for medications by Boehringer Ingelheim, AstraZeneca, GlaxoSmithKline and Teva
- New compliant and interoperable digital platform leveraging behavioural design

- Quality standards successfully met
- FDA audit in 2019 with no significant findings
- ISO 13485 audit successfully completed in June 2019
- Supported South East Asian manufacturing supplier in gaining ISO 13485 accreditation

Clinical

Regulatory

Based on learnings from our experience and evolving market conditions, we have now a new focus to address the opportunity

Changing Market Conditions

Healthcare needs to do more with less in a value-based context

Digital health reimbursement is now available (e.g. US CPT codes)

Providers are incentivised to adopt digital tech, alongside consumers



Our Learning from Experience

- Direct to Consumer strategy failed due to lack of physician endorsement
- Path to payment needs to be clear
- Ensure alignment of strategy with commercial partners
- Establish a Commercial-ready portfolio
- Focus on execution and be prepared to Invest

Our New Focus



Payer- and provider-led strategies where path to payment is clear. (e.g. risk/reward, CPT codes)



Commercialisation in US and UK
Strategic pricing entries in UK, Canada and Australia
Market readiness in China, Japan



Portfolio development driven by;
1) data generation to support payment
2) expansion to COPD

Our New Focus



Payer- and provider-led strategies where path to payment is clear.
(e.g. risk/reward, CPT codes)



Commercialisation in US and UK
Strategic pricing entries in UK, Canada and Australia
Market readiness in China, Japan



Portfolio development driven by;
1) data generation to support payment
2) expansion to COPD

- **Risk Share COPD > Partner with patient management service**
 - Providers penalised for readmission of patients within 30 days of treatment
 - No payment for activities and fines
 - Manage patient populations “at risk”. Levy a fee per patient and share in reduction of penalties \$000Ks or more
- **Extend offering to Asthma**

- **CPT code :- Remote Patient Monitoring**
 - Three Remote Patient Monitoring codes
 - Required a physiological measure captured 16 times in 30 days – Respiratory Flow
 - Next Gen Sensor captures data
- **Audit trail of claim required**

Activity	Code	Amount
Set-up	99453	\$19.43
Data collection	99454	\$64.15/mo
Data interpretation	99457	\$51.54/mo
Patient Value*	~\$1,400	

* Example value based on CPT codes

Our New Focus



Payer- and provider-led strategies where path to payment is clear.
(e.g. risk/reward, CPT codes)



Commercialisation in US and UK
Strategic pricing entries in UK, Canada and Australia
Market readiness in China, Japan



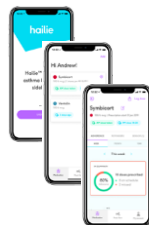
Portfolio development driven by;
1) data generation to support payment
2) expansion to COPD

Patient reports and alerts

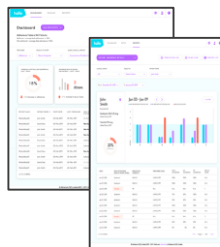
adherium



Sensor Captures use & Physiological Measure



- Reimbursement-compliant data
- On-demand data for clinicians



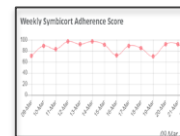
- Clinical Dashboard
- Send alerts
- Direct-connect to cloud

hailie®

Data management and analytics

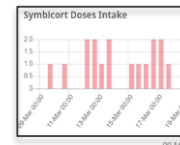
- Regulatory-compliant cloud infra-structure

Online interfaces



Reimbursement-compliant reports
Billing support
Audit trail

Clinician



Tailored Clinical Data reports

Our New Focus



Payer- and provider-led strategies where path to payment is clear. (e.g. risk/reward, CPT codes)



Commercialisation in US and UK
Strategic pricing entries in UK, Canada and Australia
Market readiness in China, Japan



Portfolio development driven by;
1) data generation to support payment
2) expansion to COPD

MARKET READINESS

US and Canada

- Identify distribution partners
- Partner with Respiratory Disease Management providers
- Explore direct options once CPT code accessible

China

- WeChat integration assessment complete
- Marketing approval and Radiofrequency/Bluetooth certification under way

Japan

- Regulatory classification assessment complete
- Pilot study in development

PRICING STRATEGY

Pricing strategy developed to ensure target countries and timing maximizes the opportunity

UK

- Reimbursement assessment and plan in place supported by publications and locally generated data

Canada

- Private payer opportunity under investigation

Australia

- Under review

COMMERCIALISATION

UK

- Direct sales and clinical presence
- Leverage current customers and clinical activities
- 12 specialist respiratory Centers

Our New Focus



Payer- and provider-led strategies where path to payment is clear. (e.g. risk/reward, CPT codes)



Commercialisation in US and UK
Strategic pricing entries in UK, Canada and Australia
Market readiness in China, Japan



Portfolio development driven by;
1) data generation to support payment
2) expansion to COPD

“Devices like Smartinhalers will be the next big thing in asthma and in ten years we will look back at them the same way we do with smartphones now and say, “how did we cope without them?”

*Prof Steve Turner,
Royal Aberdeen Children's Hospital*

“90% of those who I see in the severe asthma setting do not require escalation to biologics, this would be impossible to prove without the use of electronic monitoring”

*Prof Andrew Bush,
Royal Brompton & Harefield NHS Foundation Trust*

“As the bulk of asthma is in primary care, the Smartinhaler is a perfect tool for understanding medication adherence and therefore may help to guide referral into secondary/tertiary care”

*Dr Jennifer Quint,
National Heart and Lung Institute*

Our New Focus



Payer- and provider-led strategies where path to payment is clear. (e.g. risk/reward, CPT codes)



Commercialisation in US and UK
Strategic pricing entries in UK, Canada and Australia
Market readiness in China, Japan



Portfolio development driven by;
1) data generation to support payment
2) expansion to COPD

Rescue/Reliever

Preventer

Current



GSK Ventolin HFA



Teva ProAir HFA



GSK Advair HFA



GSK Flovent HFA



AZ Symbicort



GSK Diskus Advair / Flovent

Proposed Future Development



Merck Proventil



BI RespiMat Spiriva



GSK Ellipta Breo / Trelegy



BI HandiHaler Spiriva

Work to date has focussed on supply for clinical trials and limited commercial evaluations

- Completed development for four new devices which incorporate Hailie® technology: AstraZeneca's Symbicort® pMDI, Symbicort® Turbuhaler®, Bricanyl® Turbuhaler®, and Bevespi®. The Symbicort® Turbuhaler® and Bricanyl® Turbuhaler® Hailie® sensors both include inhalation and orientation detection.
- Completing the design and development to enable over the air (OTA) firmware updates to Hailie® sensors, allowing software to be updated wirelessly.

Go forward plan

- Expand commercial evaluations with the in-country teams
- Engage with key in-country leadership

Building the Bridgehead over the next two years

1

Partnership-enabled commercialization in the US, Canada and ROW

- Leveraging our new partnerships



TRUETT MEDICAL
INTERNATIONAL



- Focus on payer/provider-led patient acquisition by tapping into new reimbursement codes
- Work with Provider respiratory disease management services to test new reimbursement strategies (e.g. risk/reward)

2

Step change in our relationship with AstraZeneca (AZ)

- Move from development relationship to focus on commercialisation
- Cross-market commercial and clinical collaboration in specific geographies
- Execute joint strategies to support reimbursement code
- Ongoing large-scale clinical trials

3

UK reimbursement & NHS commercialization as strategic pillar to ROW growth

- Leveraging our extensive UK KoL network



Royal Brompton
& Harefield
NHS Foundation Trust



St George's
Healthcare
NHS Trust



NHS
Nottingham
University Hospitals
NHS Trust



Great Ormond Street
Hospital for Children
NHS Foundation Trust



NHS
Great Ormond Street
Hospital for Children
NHS Foundation Trust

- NHS application for reimbursement code, leverage in other markets
- Partnership with Patients Know Best ®

4

New partnerships to deliver our next-generation product

- Partnership with  SUMMATIX HEALTH

focusing on developing:

1. next-generation sensors drive further value and access to reimbursement codes
2. new value-add data capabilities focusing on insight generation and distribution

From Bridgehead to Sustainable Business

Strengthen the Foundations

IPO, invest, experiment, partner, consolidate our base



2015 > 2019

Building the bridgehead

Focused Commercialisation
Reset commercial partnerships
Payer Provider strategies following path to payment
Portfolio development to access reimbursement



2020 / 2021

Drive patient numbers & data capture

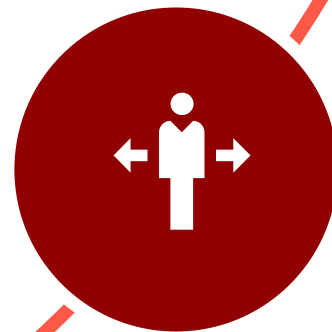
Aim to commercialise sensors with physiological measures to access new digital CPT codes in the US

Anticipate move to data monetization leveraging the Summatix platform

Identify health data partners (e.g. Apple Health etc)



2022 / 2024



Broaden our offering & reach

Build upon leadership in adherence tech for respiratory diseases to tap into new opportunities: new conditions, sensor types

2025+

Proven Leadership Team

Significant commercialisation strategy experience with proven track record in globally



Thomas Lynch
Chairman

- Moved multiple offshore companies to the US
- Chairman of multiple multi-billion healthcare companies
- Deep connections and insights in US & EU healthcare & hospital economics



Peter Stratford
Chief Executive Officer

- Proven track record of bringing products from development through successful market launch
- Head of Innovation at BTG plc acquired by Boston Scientific for \$4.2B
- At BTG (Biocompatibles plc) grew the Interventional Oncology business from start-up to US\$200m



Mike Motion
Chief Commercial Officer

- Experience of success in strategy development and execution across a broad range of therapeutic areas and digital initiatives
- Grew Biocompatibles Oncology business to US\$40m (acquired by BTG plc \$283m).
- Proven track record of commercial execution in US, APAC and ROW



Rob Turnbull
General Manager

- Six years CFO/finance and senior management at Adherium
- Over 25 years corporate experience
- 14 years with listed entities leading finance and corporate governance

Conclusion

Key Drivers...

Ever growing **burden** of **respiratory** and broader chronic diseases

25m

asthma patients
in the US

Urge to **contain costs** while enhancing clinical outcomes

US\$56b

US economic
burden of asthma

**Evolving patients base -
living longer,
with chronic diseases,**
and increasingly using
technology for personal /
health reasons

Providers encouraged
to adopt **digital techs**
**becoming more and more
accessible**

*New reimbursement codes and
adoption programs*

...Our Goal

**Through leadership in digital solutions
that improve adherence we will address needs
across the end-end healthcare system:**

...Our Immediate Execution Strategy

- Payer- and provider-led strategies, as critical path to payment and adoption by physicians (e.g. risk/reward, CPT codes)
- Commercialization in US and UK
- Commercial-focus product development to enhance value from data and to access reimbursement as an enabler to adoption

Capital Raise Summary

Transaction Structure

- A pro rata Offer via a 1 for 1 non-renounceable rights issue of ~180m New Shares to raise up to \$5.4m
- The offer price is A\$0.03 per share
 - 11.8% discount to TERP of \$0.034 on 10 December 2019
 - 21.1% discount to last close of \$0.038 on 10 December
- Offer to existing shareholders with registered addresses in Australia & New Zealand
- Includes Top-Up facility for shareholders and right for Company to place Shortfall
- Minimum Subscription Amount \$2.5m

Use of Funds

Next generation Hailie® sensors incorporating physiological measures and extended portfolio for COPD	\$2.7m
--	--------

Global market access and reimbursement initiatives	\$0.4m
--	--------

Extension of UK and US sales channels	\$1.1m
---------------------------------------	--------

Working capital	\$1.0m
-----------------	--------

Offer expenses	\$0.2m
----------------	--------

Total	\$5.4m
--------------	---------------

This is the current proposed use of funds under the Offer. There is no guarantee the Offer will be fully subscribed or that the Minimum Subscription Amount will be raised

Indicative Timeline

Activity	Indicative Dates
ASX Announcement of Rights Issue Offer	Wednesday, 11 December
'ex' date	Friday, 13 December
Record date for Rights Issue Offer	Monday, 16 December
Dispatch of Offer Booklet and Rights Issue Offer opens	Thursday, 19 December
Rights Issue Offer closes	Friday, 10 January
Allotment of New Shares issued under the Rights Issue Offer	Friday, 17 January

The timetable is indicative only and the Company reserves the right to amend the dates at its discretion and without notice, subject to the ASX Listing Rules and the Corporations Act 2001 (Cth) (Corporations Act).

Risks

Shareholders should consider the investment in the context of their individual risk profile for speculative investments, investment objectives and individual financial circumstances. Each Shareholder should consult their own stockbroker, solicitor, accountant or other professional adviser before deciding whether or not to invest in the New Shares.

An investment in New Shares should be regarded as very speculative and involves many risks. The New Shares carry no guarantee with respect to the payment of dividends, returns of capital or the market value of those Shares.

There is no guarantee of the amount which may be raised by the Company from Shareholders under the Offer. If there was a shortfall in subscriptions for New Shares from Shareholders (after all acceptances under the Top-Up Facility and the Shortfall Offer), the Company may not receive the Minimum Subscription Amount sought under the Offer. In that circumstance, a “Milestone Raise Event” under the terms of the Secured Debt Notes would not have been achieved, and mandatory conversion of the Secured Debt Notes would not occur. Those Secured Debt Notes amounting to \$2,926,000 plus accrued interest would remain on issue and mature on 31 January 2020. Should the Company not repay the Secured Debt Notes at maturity, the Secured Debt Noteholders may enforce their security over the assets and operations of the Company and its New Zealand subsidiary, Adherium (NZ) Limited.

In addition to the above risk, further business risks are set out below. The following is not intended to be an exhaustive list of the risk factors to which the Company is exposed and Shareholders should have regard to those risk factors that may be relevant to their own personal circumstances before deciding to invest in New Shares pursuant to this Offer.

(a) Business risks - Eligible Shareholders should consider the various risks and difficulties frequently encountered by companies early in their commercialisation, particularly companies that develop and sell medical devices. These risks include Adherium’s ability to: (a) implement and execute its business strategy; (b) expand its sales team and marketing programs; (c) increase awareness of its brand and products, and build adoption by healthcare participants; (d) manage expanding operations; and (e) respond effectively to competitive pressures and developments.

(b) Regulatory risks – Adherium’s services and products are subject to various laws and regulations including but not limited to product and quality compliance. Although Adherium has obtained US FDA and other clearances for a number of its products, there is no guarantee that compliance for future products will be achieved to support the Company’s commercialisation plans. Regular reviews by regulatory bodies are also a feature of the medical device industry Adherium operates in, and if non-compliance is identified Adherium may be subject to warning letters, penalties, restriction or suspension of activities or product recall. Changes in laws and regulations (including interpretation and enforcement) could also adversely affect the Company’s ability to market, distribute and sell its products and services. It is not possible to predict the likelihood, nature or extent of changes in government regulation that may arise.

(c) Failure to retain existing customers and attract new customers - The Company’s success depends on its ability to continue to retain its current customer base, grow the service requirements of those existing customers and attract new customers. This depends to a large extent on adoption of Adherium’s product offering by patients, physicians, disease management organisations,

Risks (continued)

hospitals and Payers. Failure to retain existing customers or attract new customers would materially impact the Company's ability to generate revenue which will have an adverse effect on the Company's operating and financial performance.

(d) Reliance on key personnel – The Company employs, or engages as consultants, a small management and development team. The loss of key personnel could cause a material disruption and adversely affect the Company including the achievement of its product and service development and commercialisation.

(e) Competitive risk - The medical device industry is highly competitive and subject to rapid technology change. The industry includes companies with significantly greater financial, technical, human, research and development, and marketing resources than Adherium. Competitors may commercialise products that compete directly or indirectly with Adherium's products. If competitors develop products or technologies that are more effective, Adherium's current or future products may become obsolete or uncompetitive.

(f) Sufficiency of funding - Adherium is currently not profitable and does not expect to become profitable until after achieving successful commercialisation of its products to allow sufficient sales revenue to fund on-going company operations. Adherium may need to finance its future cash needs through equity offerings, debt financing or corporate collaboration. There is no assurance that additional funding would be available in the future or would be secured on acceptable terms.

(g) Product liability risk - As with all medical device products, despite regulatory approvals, there is no assurance that unforeseen adverse events or

manufacturing defects will not arise. Adherium may be exposed to the risk of product liability claims, which are inherent in the design, manufacturing, marketing, and use of medical devices. While Adherium holds a level of product liability insurance, that insurance may not sufficiently cover the claims of a product liability suit. Product liability claims may damage Adherium's reputation and may destroy or substantially diminish Adherium's business. Defending a suit, regardless of its merits, could be costly and could divert management attention from core business activities.

(h) Disruption of business operations - The Company and its customers are exposed to a large range of operational risks relating to both current and future operations. Such operational risks include occupational health & safety and natural disasters. A disruption in the Company's operations or those of its customers may have an adverse impact on the Company's growth prospects, operating results and financial performance.

(i) General risks - There are risks associated with any share market investment. These include market fluctuation, liquidity, general economic conditions, and taxation amongst others. Other risks include those normally found in conducting business, including litigation resulting from breach of agreements or in relation to employees or any other cause. These could adversely affect Adherium's operations or the value of its shares.

