

Investor Presentation

May 2019

Medlab, an ethical socially responsible investment into the positive improvement and quality of life for patients suffering chronic illness

KEY UPDATES:

1. Commercialisation – \$1M+ Sales APR 2019
2. Research – produces revenue earning nutraceuticals and drug candidates with global potential
3. Patent portfolio - extensive, growing, across research and medical device



Who is Medlab

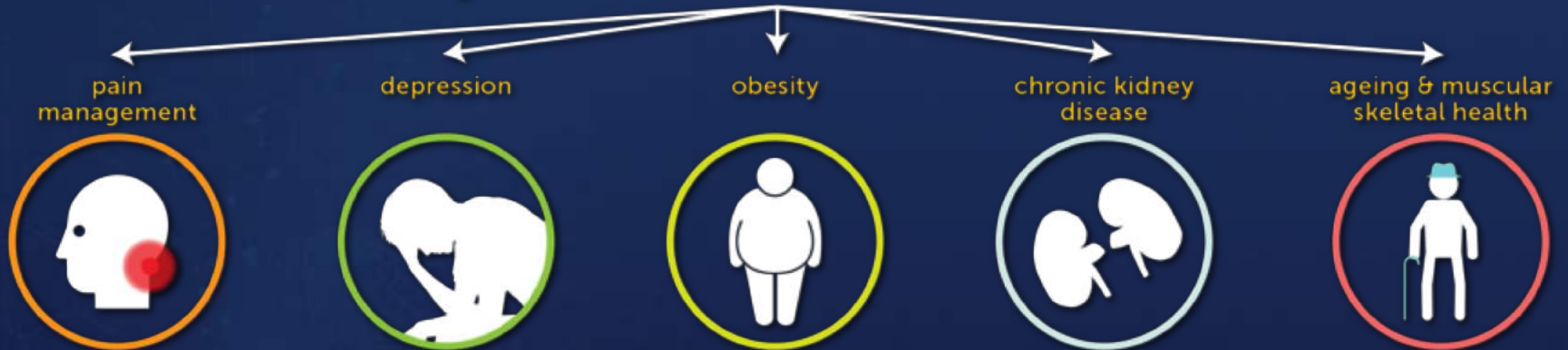
Medlab is an Australian life science company listed on the Australian Securities Exchange (ASX:MDC) specialising in novel therapeutic discoveries to counter today's chronic disease and improve quality of life.

Our research has three main components:

- Bacteria-based, from the human microbiome, producing revenue earning nutraceuticals and drug candidates
- Cannabis based medicine, producing drug candidates for pain management
- A nano-particle medicine delivery platform, NanoCelle™, achieving faster absorption, lower dosage

Our aim, in the midst of today's chronic disease, is to provide **More Choice.**

5 key research areas in chronic diseases



SIGNIFICANT Market Potential Chronic Disease

Advanced Cancer Pain	Pre-Diabetes	Type II Diabetes	Seizures
AUSTRALIA 130,000 new patients every year ¹	USA 86,000,000 & growing ²	USA 30,000,000 & growing ³	65,000,000 worldwide ⁹
Depression	Mucositis	CVD	CINV
5% of the world population ⁴	Over 40% of chemotherapy patients ⁵	Australia: 1,200,000 ⁶ USA: 85,600,000 ⁷	70-80% of patients undergoing chemotherapy ⁸

Strategic pillars

1. Chronic disease focus	<ul style="list-style-type: none">• Large human need• Regulators support early market access• Medlab can make a difference
2. Research driven	<ul style="list-style-type: none">• Microbiome/bacteria nutraceuticals and drug discovery• Creates early revenue and point of difference• Inspired cannabis and NanoCelle™ development
3. Pharmacy sales force	<ul style="list-style-type: none">• Medlab invests in education• Research establishes marketing edge• Patents protect against competition
4. Drug development	<ul style="list-style-type: none">• Following the rule book, from lab to trials, regulator contact• Process governs timelines
5. Partnering	<ul style="list-style-type: none">• Offers earlier and larger market access• Potential across all Medlab developments

Research driving revenue, our point of difference



Business Model

WE ARE A COMMERCIAL BIOTECH with 3 emerging revenue streams

1/. Sale of our researched branded Products:

- Nutraceuticals
- Pharmaceuticals

1ST \$1M+ Sales
in April 2019

2/. Licencing of our researched technologies

- HoA with PharmaScience
- 4 potential others in discussions

3/. Fee for service for our research facilities

- Contract research work
- Contract analytical work



Core Strengths

Our strengths:

- Research
- Innovation
- Clinical trial work
- Improving medicines

Presented at 45 global medical/scientific conferences

59 peer reviewed publications:

<https://www.medlab.co/education/publications>

Strong Patent and IP Position

GRANTED INNOVATION PATENTS	GRANTED AUSTRALIAN PATENT	PATENT APPLICATIONS	PROVISIONAL SPECIFICATION PROPOSED	DRAFT SPECIFICATION PREPARED
6	1	28	1	2

Research & Development Progression

Cannabis

- NanaBis™ Stage 1 – completed with strong, encouraging data.
- NanaBis™ Stage 2 – approximately 50% completed.
- NanaBidal™ - Human intervention completed, analytical underway.

NanoCelle™ Delivery Platform

- NanoStat™ (NanoCelle™ Atorvastatin) – completed.

Depression In collaboration with Queensland University of Technology (QUT)

- NRGBiotic™ 2 x Phase 1– successful completion with positive outcomes.
- NRGBiotic™– Phase 2b approximately 1/3 complete.

Mucositis/Neutropenia

- MultiBiotic™ - human intervention underway.

IN MARKET



Key Findings

NanaBis™ (NanoCelle™ 1:1 CBD:THC) – Cancer pain	NRGBiotic™ – Treatment resistant Depression	T2Biotic™ – pre and type 2 Diabetes	NanoCelle™ – Delivery platform
<ul style="list-style-type: none">• Safe, tolerable• Reduces pain, improves QoL• Allows for reduction or removal of other prescribed pain medications	<ul style="list-style-type: none">• Safe, tolerable• Significantly improves QoL• Vastly improves patient outcomes in 8 weeks	<ul style="list-style-type: none">• Safe, tolerable• Reduces HbA1c without any other lifestyle or dietary change• Reduces weight without any other lifestyle or dietary change	<ul style="list-style-type: none">• Safe, tolerable, over 100,000 units sold• Effective, fast, convenient• Non- invasive, discrete

Financials – March Quarter 2019

- Cash – \$13.169m
- Sales continue to increase:
 - Highest quarterly sales in March quarter 2019
 - 39% growth in sales from December 2018 quarter
- Costs increased from nutraceuticals launch to pharmacies nationally
- Strong balance sheet - Net assets \$16m, Debt \$400k
- April 2019 monthly sales over \$1m for the first time
- From April's nutraceuticals launch, sales expected to increase substantially
- Over 4,100 shareholders, market capitalisation of approx. \$80m



Nutraceuticals | AU Pharmacy Deals



Foundations Set for the Next #1 Professional Nutraceutical Range

Why Pharmacists are getting onboard



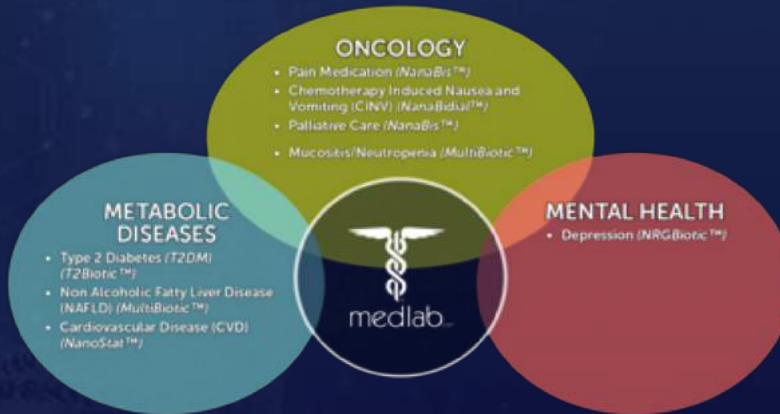
Watch here: <https://youtu.be/bcQn740ltso>

Nutraceuticals

- The Medlab product range now includes 34 premium formulations, many protected under patents
- Medlab have signed two significant trade deals in recent months:
 1. TerryWhite Chemmart **22nd February 2019**
 2. Australian Pharmaceutical Industries **30th January 2019**
 3. Roll out commenced March/April 2019, covering 2500 AU Pharmacies
- Medlab's nutraceuticals are **scientifically validated**, innovative and **Practitioner-only** products that provide therapeutic support for various conditions.
- Medlab's Principals have strong experience in the life science business. Medlab CEO, Dr Sean Hall is well known for building FIT-BioCeuticals which sold to Blackmores in July 2012.



Pharmaceutical



Medlab has an outstanding research portfolio in early phase drug discovery across obesity, chronic kidney disease, depression, muscular loss associated with ageing and non opioid pain management.

The Lab

- Bioanalytical capacity
- HPLC, LCMS, GCM available technology
- Genetics
- In-Vitro cell culture investigations
- Microbiological/Microbiome studies
- Sub micron particle developmental studies
- CRO
- PoC development
- Method development



Medlab has local research facilities in Sydney, Australia



NanaBis™ NanoCelle™ Cannabis (CBD/THC)



Cannabis is an illicit narcotic drug in Australia – within that regime, Medlab has government approval to:

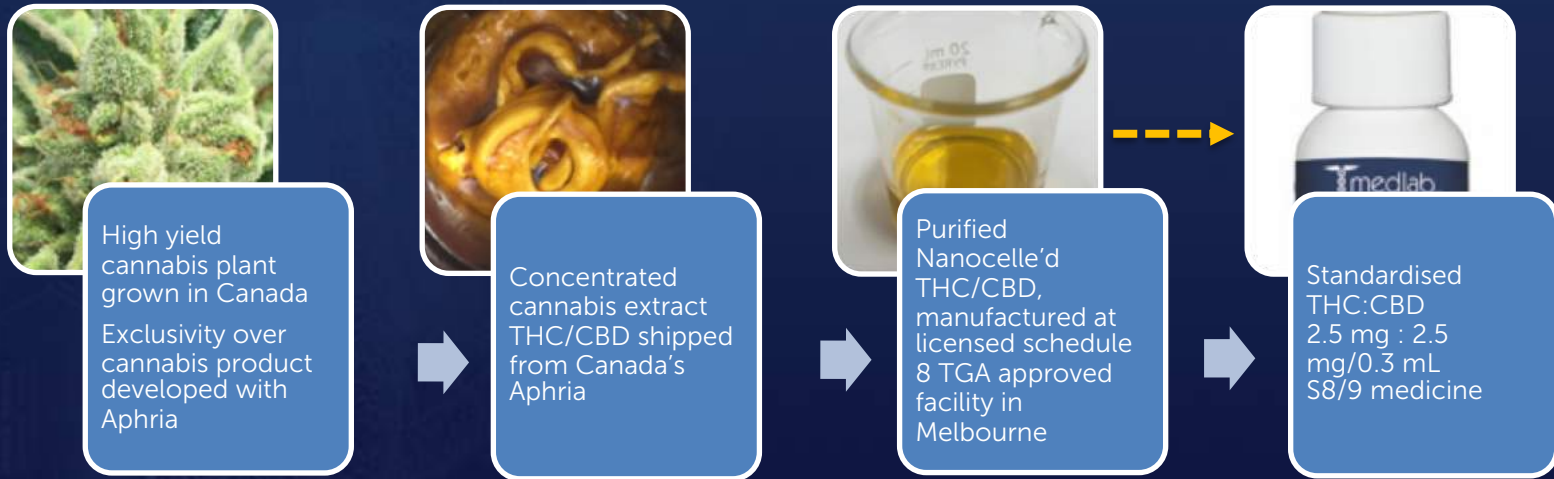
- Supply NanaBis™ Nationally
- Sell NanaBis™ when prescribed by a medical practitioner under the Gov't SAS
- Research cannabis for potential medical use
- Import cannabis raw material for production of NanaBis™
- Export NanaBis™ to other foreign countries

Completion of the NanaBis™ clinical trial, and registration with TGA, would enable wider sale, via medical practitioner prescription. Registration is also being pursued with US and European markets

NANABIS™ – PAIN MANAGEMENT ALTERNATIVE IN MIDST OF OPIOID CRISIS

- Cancer pain a huge issue globally – two-thirds of patients describe it as moderate to severe, 50% claim their pain is undertreated.
- Standard treatment are opioids and/or opioid derivatives
- But the world is in the midst of an opioid crisis:
 - US says it has an epidemic of opioid addiction, causing death, rising costs in healthcare, criminal system and workplace
 - Similar trends in Australia, ranked 8th globally for opioid consumption
- Unregulated cannabis market in US, Australia and Europe offers no certainty of ingredient quality
- NanaBis™, with reduced psycho-toxicity component, offers “a real” alternative

NanoCelle™ Cannabis (NanaBis™)



Manufacturing a standardised, scientifically validated drug

Trial Underway – near completion

NanaBis™ is in a high grade trial at leading hospital, Royal North Shore Hospital led by Professor Stephen Clarke.

- Results of stage 1 positive, stage 2 is 50% complete
- Pathway under SAS is complete, proceeding to registration and market access
- Only trial of its kind in the world for cancer pain management

The buccal administration of a *Cannabis sativa L./Cannabis indica L.* extract as an adjunct to opioid analgesia for the management of intractable pain in patients diagnosed with advanced cancer: a safety, tolerability and exploratory end-point pilot study.

Stage I: THC/CBD pharmacokinetics study in advanced cancer [n=5]

Stage II: THC/CBD intractable pain management study in advanced cancer [n=25]

When compared to competitor products such as Sativex® (an Australian TGA approved CBD:THC product for MS) our data to date shows that NanaBis™ provides a similar plasma level of THC and CBD at half the dose, with a faster rate of absorption.



SAS NanaBis™ Case Studies

5 case studies provided by 5 separate doctors who have lawfully prescribed NanaBis™ under the Government **Special Access Scheme (SAS).**



SAS case studies



Female, 37 years
Severe chronic pain

Medication pre-NanaBis™:

- Diazepam 5mg daily
- Pregabalin 25mg b.i.d.
- Meloxicam 15mg dail
- Paracetamol 1g q.i.d
- Oxycodone 2 tablets q.i.d.
- Tramadol sustained-released 200mg b.i.d.

All medications have been ceased after 1 month whilst being on 2 sprays t.i.d. of NanaBis™



Male, 57 years
Chronic pain

Medication pre-NanaBis™:

- Mersyndol®
(Codeine/Paracetamol/Doxylamine)
2 tablets q.i.d.

Mersyndol® has been reduced to b.i.d. 10 days after commencing NanaBis™



Male, 42 years
Fibromyalgia and chronic fatigue syndrome

Medication pre-NanaBis™:

- Paracetamol 500mg tablets: 2 tablets q.i.d.
- Ibuprofen 200mg tablets: 2 tablets t.i.d.
- Voltaren 50mg tablets: 1 tablet t.i.d.
- Panadeine Forte®: 2 tablets q.i.d.
- Oxycodone IR 5mg tablets: 1-2 tablets q.i.d.

Four days of taking NanaBis™ and the patient is no longer needing Panadeine Forte® or oxycodone. Two weeks after commencing NanaBis™ patient was only taking NanaBis™, paracetamol at 1g 2-3 times weekly.

Prescription abbreviations: more information please contact our head office on 02 8298 0313 or email helios@medlab.co

b.i.d. – twice a day

t.i.d. – three times a day

q.i.d. – four times a day

SAS case studies



Female 69 yrs
Severe chronic back pain

Medication pre-NanaBis™:

- Panadeine Forte® - 2 tablets q.i.d.
- Tapentadol Sustained Release 50mg b.i.d.

Patient ceased the use of Panadiene Forte® after 2 weeks and continues to use NanaBis™ as well as Tapentadol SR 50mg.



Male 51 yrs
Neuropathic Pain (Peripheral neuropathy and fibromyalgia)

Medication pre-NanaBis™:

- Oxycontin® 20mg twice a day
- Panadeine Forte® 2 tablets q.i.d.

Patient found pain relief within the first few days of taking NanaBis™. Patient ceased taking Oxycontin® and Panadeine Forte® as it was causing cognitive impairment. Dosage due to side effects of Oxycontin® and Panadeine Forte® increased to 6 sprays t.i.d. in first months. As of Feb 2019, dosing has decreased to q.i.d.

Prescription abbreviations: more information please contact our head office on 07 8288 0313 or email hello@medlab.co

b.i.d. – twice a day

t.i.d. – three times a day

q.i.d. – four times a day

Where We Are Today

NanaBis™ is:

- A patented, purified fixed dose combination of CBD and THC in a nanoparticle delivery platform, indicated for the management of cancer patients with moderate to severe pain.
- Strongly aligned to global regulatory models, and the National health priorities for Australia, United States, Europe and United Kingdom.

NanaBidual™ NanoCelle™ Cannabis (CBD)

NanaBidual™ is an investigative new product containing 20 mg/mL of Cannabidiol (CBD) and <1mg/mL of delta-9-tetrahydrocannabinol (THC), in a sub-micron spray (NanoCelle™) applied to the oro-buccal membrane.



NanaBidual™

Research update:

- Safety trial conducted at Scientia Clinical Research, NSW has been completed.
- Bloods are currently under analysis.
- No safety issues have been reported.
- Indicated for seizures.

What is NanoCelle™?



Nanotechnology describes the science, engineering and technology that is conducted at the nanoscale that deals with particle dimensions of **less than 100 nanometres**.

Watch here: <https://youtu.be/HahDCiJdXnM>

NanoCelle™

Our proprietary delivery platform



- Strong patents
- 27 drug exemplars such as:
 - Atorvastatin, insulin, testosterone and antidepressants.
- Very small particles for very fast absorption.
- Generally, 1mg NanoCelle™ API equates to 4 times that in a tablet.
- Characterisation done by Sydney University, NanoScale Unit.
- Over 100,000 units of NanoCelle™ sold.

Partnering

- Medlab has executed a Heads of Agreement (HoA) for NanaBis™ with Canadian pharmaceutical company, Pharmascience Inc for the further commercialisation of NanaBis™.
- 4 other potential agreements are currently in development.

Outlook

Pathway to progression

NanaBis™ – progressing towards Registration, and global market access

NanaBidal™ – “crunching the data” and awaiting results

NRGBiotic™ – depression research Phase 2 progressing well

NanoCelle™ – preparing for wider application, discussions under way

Nutraceuticals – AU national pharmacy rollout progressing, revenue increasing, more expected

Partnering – to speed market access, discussions across all developments

Research driving new product development, current and future revenue

Executive Team



Michael Hall
CPA
Chairman



Dr Sean Hall
MD, MBA (Clin Pharm Mgt)
**CEO
Managing Director**



Alan Dworkin
CA, ACSA, GAICD
**Chief Financial Officer
Company Secretary**



Paul Vilner
BSc, MRes
**Director
Commercial Operations**



Dr Jeremy Henson
MBBS PhD BSc(Hons)
Medical Affairs Director



Dr David Rutolo
PhD, JD
Director of Science



Professor Luis Vitetta
BSc (Hons), PhD, Grad Dip Nutr & Enviro Med,
Grad Dip Integr Med
Director of Medical Research

Thank You

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