Necho

July 2020

# **CEO Presentation**



#### Safe Harbour Statement

This presentation, and any representations made before, during or after the presentation, may include forward-looking statements that are inherently subject to risks and uncertainties. These statements relate to, but are not limited to: (1) the safety or efficacy of, or potential applications for, Avecho's TPM® platform technology; (2) the strength of Avecho's intellectual property; (3) the timelines for Avecho's clinical trials and regulatory processes for its different products; (4) the scalability and efficiency of manufacturing processes; (5) revenue projections, market share expectations, share price expectations and capital requirements.

Actual results may differ from the expectations expressed in these forward-looking statements, and the differences may be material (whether positive or negative). The risks that may cause Avecho's actual results, performance or achievements to be materially different from those expressed or implied by such forward-looking statements, include but are not limited to: (1) risks inherent in the development, approval and commercialization of potential products; (2) uncertainty of clinical trial results or regulatory approvals or clearances; (3) changes to market trends or government laws or regulations; (4) the potential need for future capital; (5) dependence upon collaborators; and (6) protection of intellectual property rights, among others. Accordingly, you should not place undue reliance on these forward-looking statements.

### Company Snapshot

Shares 1,577M

Market cap \$14M

Options 3.8M

Cash <sup>1</sup> \$3.1M

Last qtr gross burn <sup>1</sup> (\$0.5M)

Headquarters Melbourne

Board Greg Collier (Chair)

Ross Murdoch (NED)

David Segal (NED)

Matt McNamara (NED)

Substantial shareholders Mark Kerr (12.7%)



<sup>&</sup>lt;sup>1</sup> Quarter ending 31 March 2020

## Overview of Avecho's TPM® technology

TPM® is a proprietary combination of two forms of phosphorylated vitamin E

TPM® is a unique excipient that encapsulates drug molecules

TPM® has been used to formulate drugs to improve their:

- solubility
- stability
- oral bioavailability
- transdermal delivery
- pharmacokinetic profile

TPM® has an excellent safety profile making it ideal for drug reformulation

TPM® reformulated drugs have:

- improved pharmaceutical properties and performance
- provide opportunities to secure additional patent protection

#### Propofol TPM®







Without TPM®

### Strategic Focus

Avecho has a clear, strategic focus to deliver on two fronts:

Realise value from its portfolio of existing human and animal health assets

- Minimal investment going forward
- Active business development effort
- Focus on deals that provide near-term cash
- Multiple assets to license

Leverage its proprietary TPM® platform to develop new cannabinoid-based pharmaceuticals

- TPM® is ideal for formulating cannabinoids
- Allows the creation of highly differentiated products
- Will address long term needs of medical market

#### International advisory firm engaged to broaden outreach

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#### **Priority**

Priority products for licensing with the aim to secure a commercial deal for 1 or more of these products over the next 12 months

- Daptomycin TPM®
- Propofol TPM<sup>®</sup>
- Vitamin K TPM®
- Animal health programs

#### Prospective

Assets ready for ongoing business development effort and presentation to potential partners over the next 12 months

- Oxycodone TPM<sup>®</sup> patch
- Oxymorphone TPM® patch
- TPM<sup>®</sup> injectable portfolio
- Diclofenac TPM<sup>®</sup>
- TPM<sup>®</sup>



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# Cannabinoid Pharmaceuticals



#### Cannabinoid-based Pharmaceuticals

In the past decade, there has been a transformational shift resulting from a recognition of the therapeutic potential of cannabis and cannabis extracts

The majority of countries around the world have recently enacted legalisation permitting the use of cannabis extracts for medicinal purposes

Due to the previous illegal nature of cannabis, R&D into its medicinal uses has been minimal resulting in:

- limited data on its therapeutic benefits and risks
- limited development of suitable formulations and delivery formats
- poor integration in existing healthcare practices

The majority of medicinal cannabis products currently being prescribed are based on botanical material or plant extracts, both of which can be highly variable

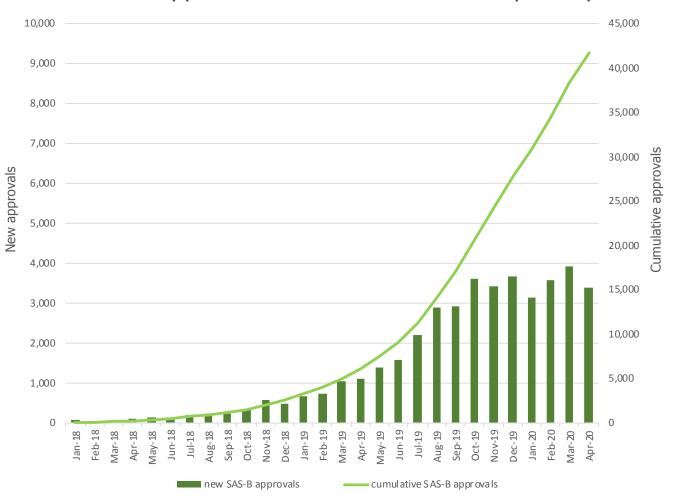
In the longer term, patients and doctors will require pharmaceutical products



#### Growing market for therapeutic uses of cannabis

- In more mature markets (Canada, Colorado and California), around 1-2% of the population use cannabis products for therapeutic purposes
- In Australia, this would equate to 250,000-500,000 potential patients that could benefit from using therapeutic cannabis products
- Fresh Leaf Analytics<sup>1</sup> estimates there were ~10,000 active Australian patients in Dec-2019
- As cannabis products are not registered as medicines in Australia, patients currently have to pay for them out-of-pocket
- Australian patients are currently paying \$250-400/mth to access cannabis products

#### Australian approvals for medicinal cannabis prescriptions<sup>2</sup>



<sup>&</sup>lt;sup>1</sup> Fresh Leaf Analytics Q1 2020 – Australian Medicinal Cannabis Market

<sup>&</sup>lt;sup>2</sup> https://www.tga.gov.au/access-medicinal-cannabis-products-

### Medical market likely to focus on pharmaceutical products

Pharmaceutically developed products are expected to dominate the medical cannabis market in the long term:

- standardised pharmaceutical delivery formats
- clinical safety and efficacy data
- registered products are physician preferred

Patient registrations have typically slowed, and even declined, in markets following the legalisation of consumer use of cannabis:

- many patients self-diagnose / self prescribe
- precise dosing and cannabinoid profile not critical for many indications
- flexible delivery format (vaping, edibles) possible for some patient groups

Long term, the medical market is expected to comprise of premium-priced, pharmaceutical-type products targeting:

- specific indications
- specific patient groups, such as pediatric or elderly patients
- patients on other medications or who have other contra-indications
- conditions that require precise or specific dosing





## TPM® is ideal for pharmaceutical formulation of cannabinoids

Cannabinoids (the key active compounds in cannabis) are oil soluble molecules with low solubility in water

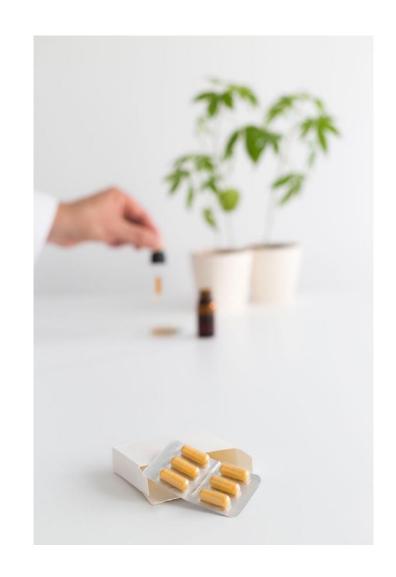
Oil soluble molecules have poor oral bioavailability, which is also true for cannabinoids (3-8% absorbed)

This presents challenges for developing formulations that can deliver cannabinoids to the body efficiently

With other oil soluble molecules, formulations with TPM® have:

- increased aqueous solubility allowing new dosage forms
- improved bioavailability and absorption better therapeutic profile
- allowed optimisation of pharmacokinetics speed and duration of affect
- increased stability major issue with current cannabis oils and extracts

TPM® provides Avecho with an opportunity to develop proprietary, cannabinoid pharmaceuticals which perform better than other medicinal cannabis products



### Focus is on developing pharmaceutical cannabinoid products

Avecho intends to use TPM® to develop cannabinoid-based pharmaceuticals:

- with known and consistent dosing
- delivered in a familiar, pharmaceutical format
- backed by robust clinical evidence
- able to be manufactured at scale

Taking a pharmaceutical approach for cannabinoid-based medicines:

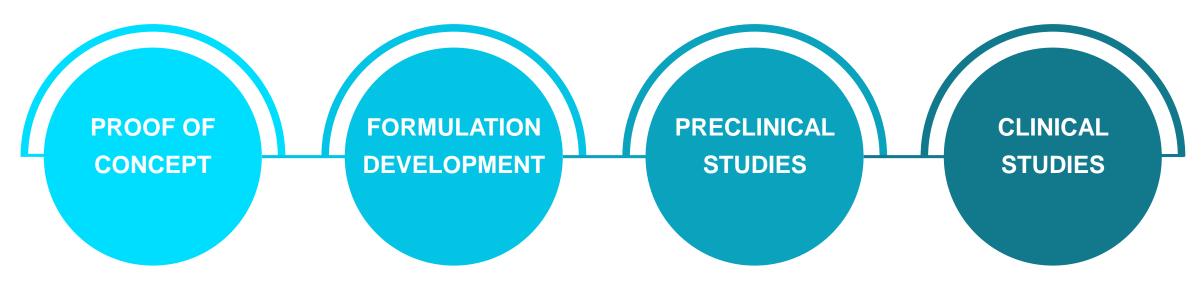
- integrates with current medical practices
- supports potential registration and payment coverage
- less vulnerable to competition from consumer products

Avecho is currently evaluating both purified synethic cannabinoids and natural extracts for use as active ingredients in its cannabinoid-based pharmaceuticals:

- pure synthetic cannabinoids supply agreement with PuriSys
- cannabinoid extracts supply agreement with Tasmanian Alkaloids



## Plan for developing TPM® formulation of cannabinoids



COMPLETED

Demonstrated that TPM® can improve the solubility of cannabinoids

IN PROGRESS

Initial formulation tests under way in Denmark.

Examining enhanced CBD solubility using in-vitro gastric digestion model

**LATE 2020** 

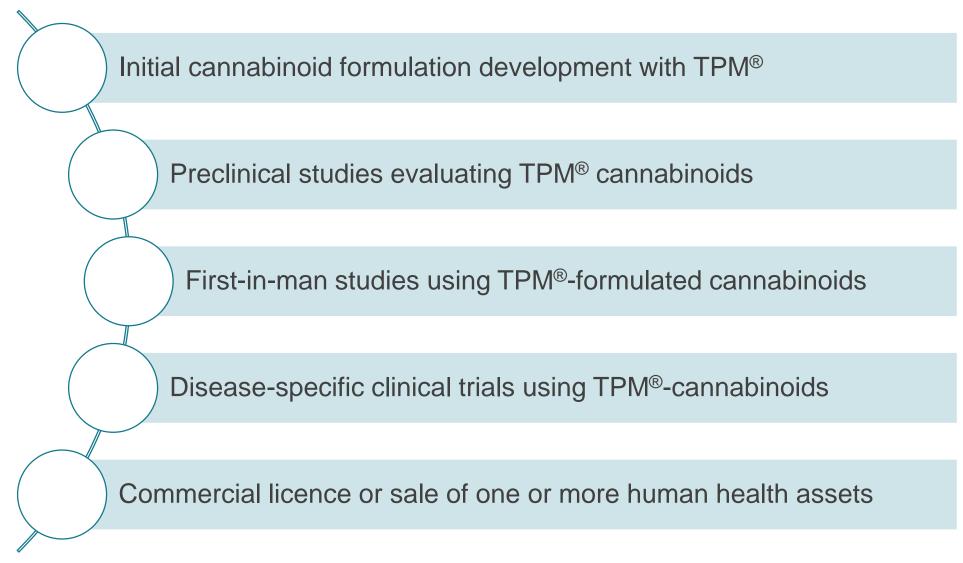
Animal studies
establishing bioavailability
to inform design and
dosing for human studies

2021

Human safety,
pharmacokinetic and
efficacy data from clinical
studies in patients



#### Anticipated news over next 12 months



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# Questions

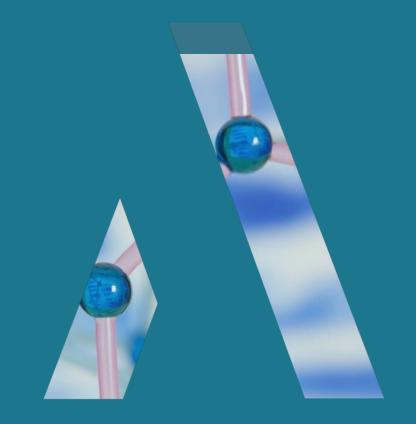


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