



# New Horizons

ASX:ESE | Investor Presentation | June 2020



# Disclaimer

This presentation has been prepared by eSense-Lab Limited (eSense). It does not purport to contain all the information that a prospective investor may require in connection with any potential investment in the eSense. You should not treat the contents of this presentation, or any information provided in connection with it, as financial product advice or advice relating to legal, taxation or investment matters.

This presentation and the information contained herein and all electronic and/or hard copy documentation which comprise it are being provided to you solely for your information and may not be copied, reproduced, distributed, disclosed or published, in whole or in part, to any other person for any purpose whatsoever at any time without the prior written consent of eSense. This presentation is not an offer to any person nor is it a prospectus.

eSense has prepared this document based on information available to it at the time of preparation. No representation or warranty (whether express or implied) is made by the eSense or any of their officers, advisers, agents or employees as to the accuracy, completeness or reasonableness of the information, statements, opinions or matters (express or implied) arising out of, contained in or derived from this presentation or provided in connection with it, or any omission from this presentation, nor as to the attainability of any estimates, forecast or projections set out in this presentation.

This presentation is not investment or financial product advice (nor tax, accounting or legal advice) and is not intended to be used for the basis of making an investment decision. The information contained in this presentation has been prepared without taking into account the objectives, financial situation or needs of individuals.

This presentation is provided expressly on the basis that you will carry out your own independent inquiries into the matters contained in the presentation and make your own independent decisions about the affairs, financial position or prospects of eSense.

eSense reserve the right to update, amend or supplement the information at any time in their absolute discretion (without incurring any obligation to do so).

Neither eSense, nor their related bodies corporate, officers, their advisers, agents and employees accept any responsibility or liability to you or to any other person or entity arising out of this presentation including pursuant to the general law (whether for negligence, under statute or otherwise), or under the Australian Securities and Investments Commission Act 2001, Corporations Act 2001, competition and any such responsibility or liability is, to the maximum extent permitted by law, expressly disclaimed and excluded.

Nothing in this material should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities. It does not include all available information and should not be used in isolation as a basis to invest in eSense.

This presentation may contain forward looking statements. Forward looking statements include, but are not limited to, statements concerning eSense-Lab's business, future prospects and other statements that are not historical facts. Although eSense believes that its expectations reflected in these forward-looking statements are reasonable as at the date of this presentation, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements. eSense has no intention to update or revise forward-looking statements, regardless of whether new information, future events or any other factors affect the information contained in this presentation, except where required by law.



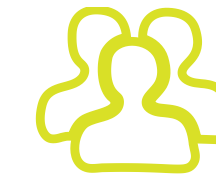




---

eSense is a biotech company, specialising in **Terpene research and technology**.

Driven by consumers' wellbeing we're seeking innovative, evidence-based applications of Terpenes in the medical, wellness, cosmetics and nutritional markets.



Strengthened leadership team



Optimised commercialisation strategy and structure



Multiple market opportunities on a global scale



Continued innovation, research and development







# Investment proposition



Unique plant-profiling technology



A range of commercial-ready applications



Highly scalable, low cost/high volume market opportunities



Low production cost



New commercialisation strategy considerably reducing costs associated with sales and distribution





# New horizons for eSense

---

eSense was established as a biotech company, with a unique technology to analyse and reverse-engineer the exact terpene profiles of Cannabis strains, without psychoactive ingredients and with lower production costs, by using alternate plant sources.

The technology also enables the creation of unique terpene profiles of rare and high value plants, providing sustainability and lower production costs. The company has premium products with great commercial value.

In addition to its existing products the new leadership has established an optimised business model and developed broader R&D plans.





# New strengthened leadership team

Significant changes have been made to eSense's leadership team to ensure that the Company is well positioned to deliver on its strategic and operational goals into the future.



## **Itzik Mizrahi - CEO**

Itzik brings vast experience in commercial, medical and clinical management roles in global Pharmaceutical companies. Over more than the past decade he was Country Manager (Israel) at Actelion Pharmaceuticals, leading commercial activity, overseeing clinical trials, medical and regulatory processes. This included, for several years, regional operations management for Israel, Greece and Turkey. Under his leadership, Actelion Israel repeatedly overshot benchmark sales predictions and company goals. Following Actelion's merger into JNJ, Itzik remained in position for 2 years, to ensure seamless organizational post-merger integration. Prior to this, Itzik was Medical Affairs Manager at MSD Israel, and before that, he served as Head of Clinical Operations at Pfizer Israel. All these positions involved operational and regulatory communications across global/multinational entities.



## **Moshe Hukaylo - CFO**

Moshe has vast CFO experience in public and private companies. Moshe served as CFO of Pfizer Israel and prior to that in Merck-Serono Israel and In InterPharm. Moshe has extensive experience in financial management, business strategy, process improvement and supply chain. Accompanies fast-growing companies from early stage through the regulated arena of public companies



# Corporate snapshot

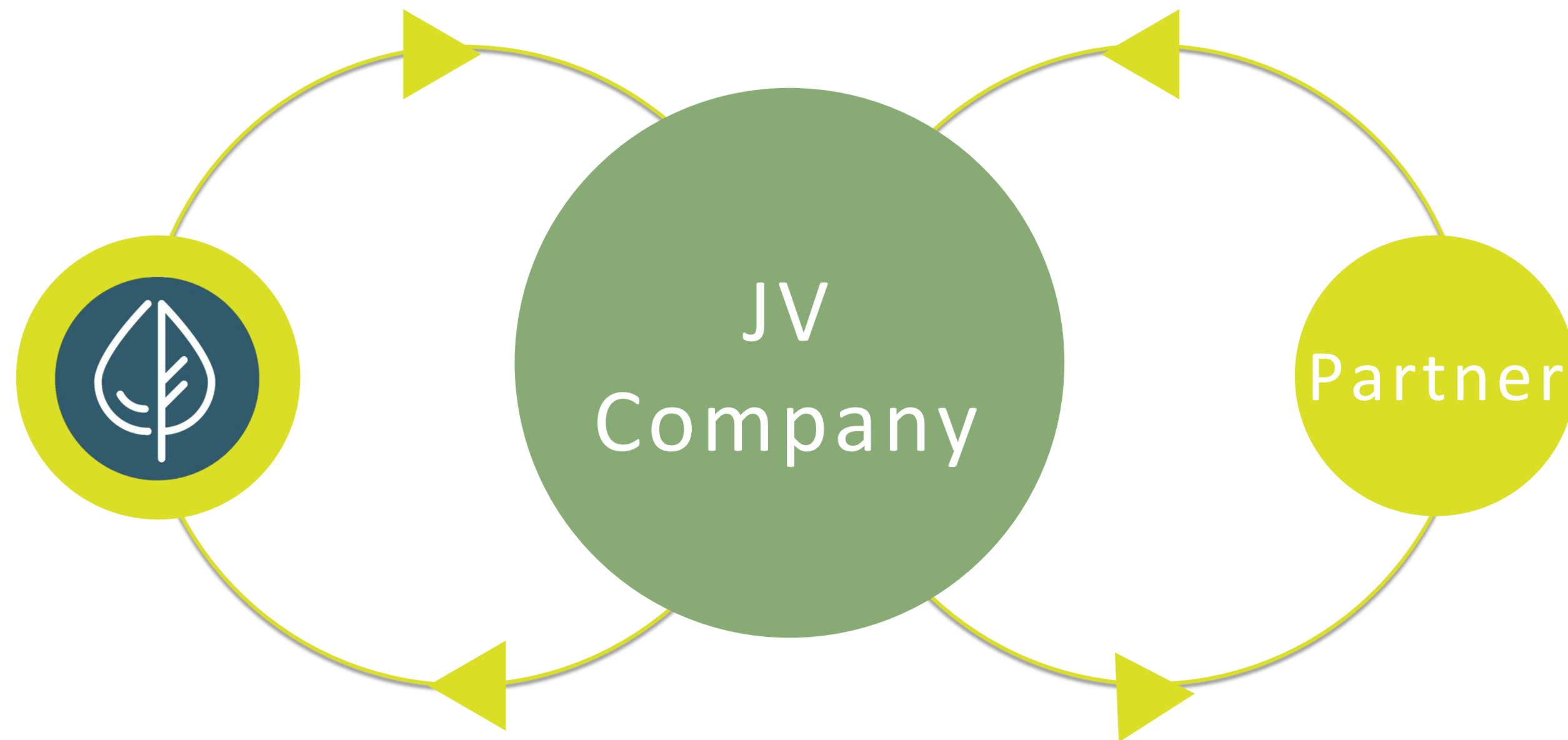
Listed on the ASX in February 2017 following an IPO that raised A\$3.5m

	Substantial Shareholders	19 May 2020
1	HSBC Custody Nominees Australia	8.01%
2	Benjamin Karasik	5.59%
3	Jamber Investments Pty Ltd	5.27%
4	Citicorp Nominees	4.6%
5	Romfal Sifat Pty Ltd	3.58%

Corporate Metrics	29 May 2020
Cash/Funds	~AU\$200k
Shares on issue	190M
Options and performance options*	48.6M
Market capitalization at 1.8c per share	AU\$3.42M
52-week high	3c
52-week low	0.4c



# Joint venture business model



- Establishing joint ventures of mutual development of products with different partners
- Agreements across multiple revenue-generating markets
- Reducing costs associated with sales and distribution
- Shared research and expertise

*The recent announcement of the **SeaLaria LOI** demonstrates this joint venture model.*



*eSense will work with SeaLaria to develop new products based on the synergistic effects of its terpene strains and SeaLaria's unique gelatinised red algae produce a number of consumer products, in particular anti-viral sanitisers.*



The background of the slide is a close-up photograph of numerous green leaves, likely from a plant like Salvia (Sage), showing detailed vein patterns and serrated edges. A semi-transparent green rectangular box is centered over the image, containing the title and subtitle text.

# Terpenes

Plant profiling technology



# Terpenes: a refresher

## Terpenes are naturally occurring compounds

(classified as phytochemicals) which account for the flavour and fragrance of plants. Each plant has its own unique terpene profile.

## Plants that produce terpenes are known as

**aromatic plants**, and its distinctive flavour and smell is derived from its unique blend of terpenes (basil, mint, oregano and cannabis).

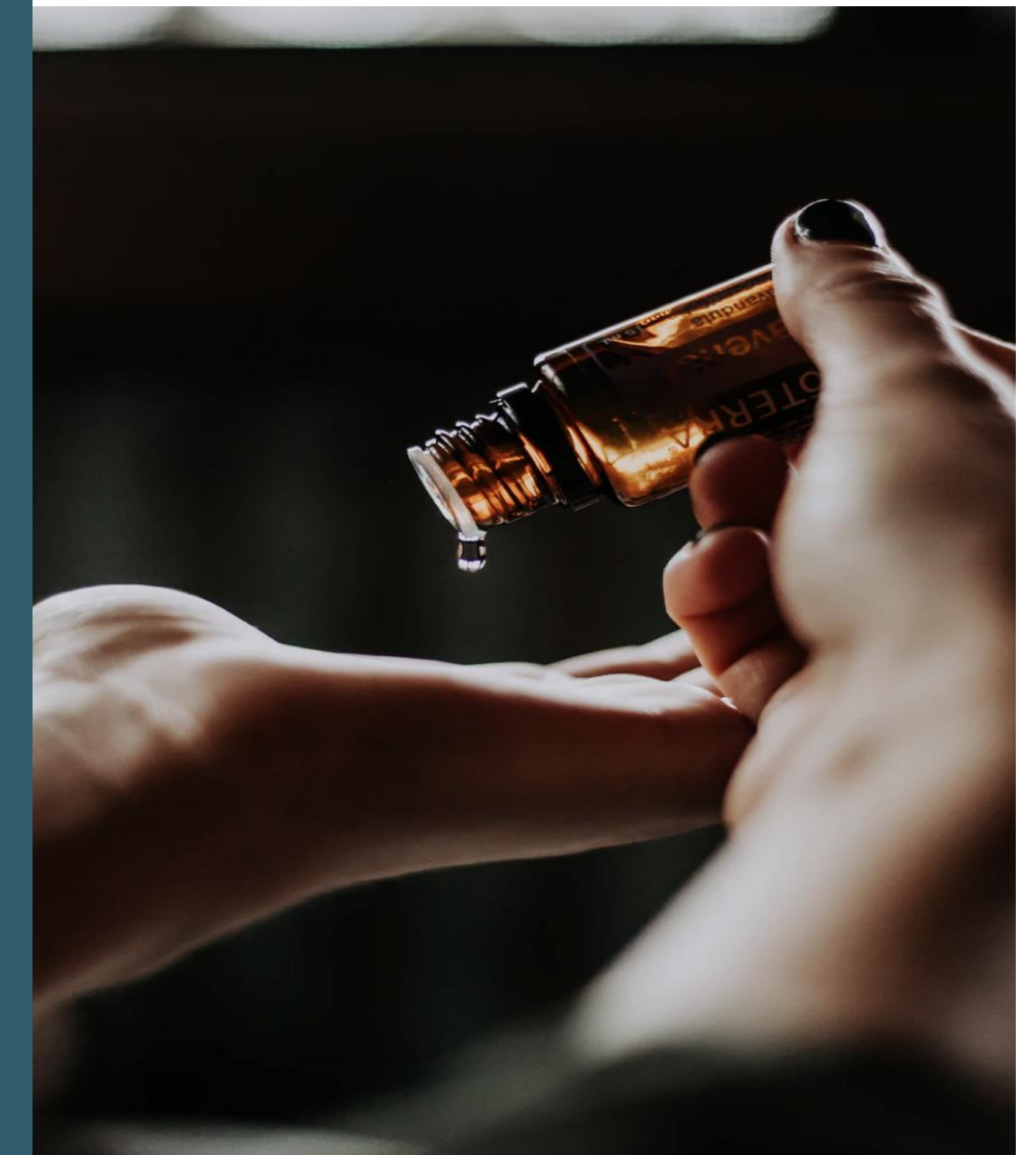
Along with that, **the terpenes play a critical role in the defence mechanism of the plants protecting them from virus, bacteria and insects.**

Numerous data and literature indicates terpenes as pharmaco-vigilant substances with an **ability to induce pain relief, anti-inflammatory, antioxidant, anti-bacterial, anti-viral, anti-parasite, anti-cancer, gastro protection, neuroprotection, anti-convulsant and sedative properties.**

Terpenes have long been used in the treatment and management of common respiratory conditions

**Oregano and thyme** are used as remedies for the common cold. Both contain the terpene carvacrol. Carvacrol is known to thin mucus and allow it to drain from the lungs and shows antimicrobial activity against a broad-spectrum of bacteria.

A key ingredient of Vicks® VapoRub™ is menthol, a terpene found in mint. **Menthol** is an example of a Bronchodilator, it works by relaxing the muscles in the lungs and widening the airways. They're often used to treat asthma. Other terpenes that act as bronchodilators include pinene and linalool.







Terpenes play a critical role in the defence mechanism of the plants protecting them from virus, bacteria and insects.

## Anti-viral activity

Terpenes are well described in the literature for their anti-viral activity

The anti-viral activity of terpenes can range between a dose of 0.0006% and up to 0.01%, which is considered very potent

*eSense is currently seeking to enhance the anti-viral potency and reduce the existing high alcohol content present in hand sanitisers and related products which will be tested and produced*





# The addition of terpenes in sanitisers could mean a reduction of harmful effects on skin, without compromising effectiveness

eSense's lab is researching and testing its gel-based, alcohol-free sanitiser to evaluate the terpene's anti-viral synergistic effects

The Company's intention is to develop a product that provides added protection against bacteria and viruses while reducing the ethanol content, making it safer and easier on the human skin

A superior product with pleasant smell, better feel and considerable reduction of the ethanol content





# Global market opportunity

---

Growing global awareness of health and hygiene



Sanitisers



CBD



R&D





# Hand sanitiser market

The Global Hand Sanitizer market is expected to grow in future with a consistent market value of US \$8.09B at the end of the year 2025.

COVID-19 has significantly impacted consumer behaviour with people becoming more aware of their hand-hygiene. People are being advised through government campaigns, advertisements and news to use hand sanitiser often. This has and is anticipated to continually boost market growth.

**eSense has and intends to continue partnering with companies through joint venture agreements to produce terpene infused hand and surface sanitiser products to take advantage of this growing market**

**2019**  
**> \$1.2BN**

**2025**  
**> \$8BN**





# CBD markets



Medicinal



Wellness



Cosmetics

The global CBD market is booming. From \$2.8 billion in 2019 it's expected to reach \$89 billion by 2026. Combined with terpenes, the infused product has **broader effects, higher bio-availability and better user experience**





# Medicinal applications

---

Terpenes are known to have medicinal effects, as standalone components and through the 'Entourage Effect', where they enhance the medicinal efficacy and the therapeutic properties of other substances.



Can be applied as **edibles, supplements and topical products**



Development of **OTC** healthcare products



Joint Venture with **pharmaceutical companies** for prescription drugs





## Wellness

CBD products are widely used by consumers for relaxation, pain management and rejuvenation, while terpene-infused CBD provides better results and user experience.

*eSense will focus on Terpene infused CBD products of the highest grade, to provide oils, tinctures, creams and other products, catering to consumers' demands*

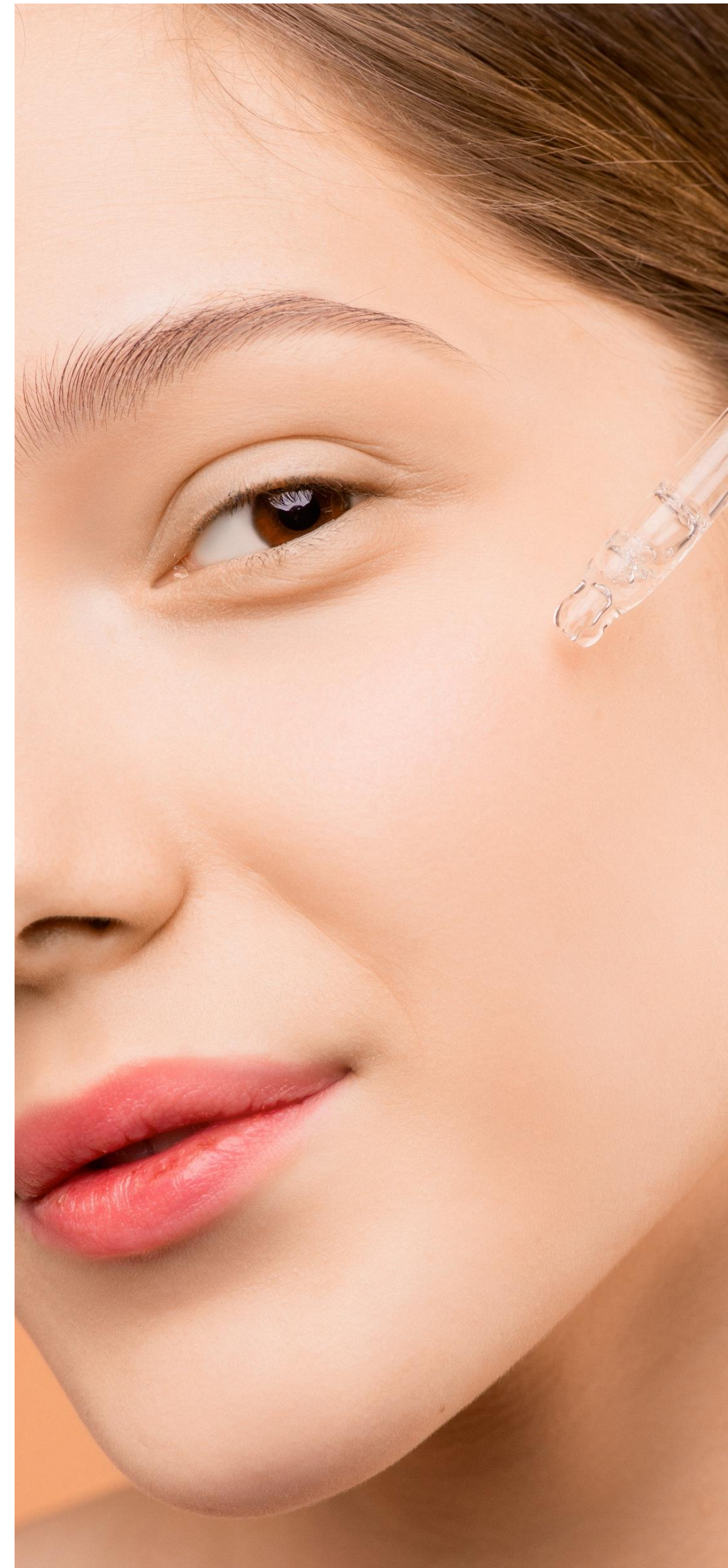




# Skincare

---

Terpenes provide direct added value in skin care and topical products, while also enhancing the bio-availability of other components into the skin



**Anti-aging**



**Skin care**







# Ongoing innovation and product development

eSense continues to research innovative, evidence-based applications of Terpenes in Medical areas such as Cancer, Virology, Neurodegeneration, Fibrosis, COPD, Endometriosis and other diseases, but also for the Wellness, Cosmetics and Nutritional markets.





# The process





# References

Effective Antiviral Activity of Essential Oils and their Characteristic Terpenes against Coronaviruses: An Update - BOUKHATEM Mohamed Nadjib, ***Journal of Pharmacology & Clinical Toxicology***, 2020.

Chemistry of Terpenes - Nita Yadav et al, ***Int. J. Pharm. Sci. Rev***, 2014. Chemistry of Terpenes - Nita Yadav et al, ***International Journal of Pharmaceutical Sciences Review and Research***, 2014.

Antimicrobial, Antioxidant, and Immunomodulatory Properties of Essential Oils: A Systematic Review - Magdalena Valdivieso-Ugarte, et al ***nutrients*** 2014

Medicinal properties of terpenes found in Cannabis sativa and Humulus lupulus- Tarmo Nuutinen, ***European Journal of Medicinal Chemistry***, 2018

Terpenes from Forests and Human Health- Kyoung Sang Cho, ***Toxicological Research***, 2017

Medicinal Properties of Cannabinoids, Terpenes, and Flavonoids in Cannabis, and Benefits in Migraine, Headache, and Pain: An Update on Current Evidence and Cannabis Science-Eric P. Baron DO, ***Headache Currents***, 2018

Global Hand Sanitizer Industry Size & Share (2020-2025) by Product, Sales Channel, Region, Country and Company, **Research and Markets, Global Hand Sanitizer Market Overview, 2020 – 2025**, 2020

Essential oils in the treatment of respiratory tract diseases highlighting their role in bacterial infections and their anti-inflammatory action: a review, G Horváth, K Ács - **Flavour and Fragrance Journal**, 2015





The background of the slide is a close-up photograph of several vibrant green mint leaves. The leaves have serrated edges and prominent veins, creating a textured, natural pattern. A semi-transparent green rectangular box is centered over the image, serving as a container for the text.

# Contact

---

## **Company Secretary**

James Bahen

+61 8 6555 2950

[james@smallcapcorporate.com.au](mailto:james@smallcapcorporate.com.au)

## **Investor Relations**

Gigi Penna

+61 404 147 568

[gigi@calderahouse.com.au](mailto:gigi@calderahouse.com.au)