

ASX RELEASE

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eSense Lab expands R&D program to evaluate use of its terpenes and cannabinoids for treatment of medical conditions

Initial studies to target treatment of diabetes-related wounds, Parkinson's and Alzheimer's

Investment highlights:

- Expanded R&D program to explore commercialisation of terpenes/cannabinoids for use in medical treatments
- Development of cell-based models for various diseases to measure the impact of eSense's terpene and cannabinoids combinations
- Initial studies to target treatment of diabetes-related wounds, Parkinson's and Alzheimer's diseases, which will have an estimated collective market size of over \$30 billion by 2026¹²³

Life sciences company eSense-Lab Ltd (**'eSense' or the 'Company'**) (ASX: ESE) is pleased to announce that it has expanded its research and development (R&D) program to include the feasibility evaluation of its terpenes/cannabinoids combination for use in medical treatments.

The goal of the program is to commercialise the Company's terpene specialized R&D and to support the Company's terpenes with experimental data that will demonstrate well-being related advantages in combination with cannabinoids.

eSense's R&D team is working intensively to develop cell-based models for various diseases to measure the impact of eSense's terpene and cannabinoid combinations upon them. The most effective compositions for specific indications will be selected for further research.

Initial target areas identified

eSense has chosen to begin with two studies associated with neurodegenerative disorders commonly occurring in elderly people and wound healing deficiency than usually occurs in diabetic patients.

eSense's R&D team has already engaged in the development of a neuronal cell system that will model both Parkinson's and Alzheimer's diseases. This model will serve as a screening platform to select the most effective terpene-cannabinoid combinations to be used in such diseases.

For wound healing, the Company is in the process of developing a wound model derived from fibroblast skin cells that will mimic chronic wounds in a high glucose environment. This model will serve as a screening platform to select the effective terpene-cannabinoid combinations with accelerated wound healing characteristic.

Both projects will allow the Company to provide the CBD market with unique terpene-based compositions that will be scientifically proven to alleviate conditions such as neurodegenerative disorders and chronic wounds in diabetic patients.

The potential market for these treatments is large and growing. Recent research from Reports and Data estimates the size of the wound care and Alzheimer's markets to reach \$14.89 billion¹ and \$12.43 billion² respectively by 2026. A report from Zion Market Research estimates the Parkinson's therapeutics market to be worth \$5.28 billion³ by 2025.

eSense CEO Haim Cohen said: *"We are very pleased to have commenced this evaluation program for our terpene combinations on neurodegenerative and chronic wounds disorders. This is an important step for eSense and will lead to greater exposure and markets for our terpene combinations. Supplying data on the use of our combinations to the CBD market, which is growing exponentially, will assist in increasing our market penetration and addressable market. We look forward to making further progress in our R&D program."*

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eSense-Lab Ltd (ASX:ESE) is a life sciences company creating virtual plant-based products for medicinal and recreational consumption. Headquartered in Israel, eSense-Lab combines genetics, mRNA expression, phytochemical characterisation and unique formulations to generate comprehensive models of rare or high value plants. With multi-disciplinary research and development expertise, eSense has game-changing techniques and unique reverse-engineering capabilities, placing it at forefront of the growing international terpene market. eSense has created virtual cannabis, with all the characteristics of the real plant, without the psychoactive and heavily regulated cannabinoid compound, for mass consumer consumption.

To learn more, please visit www.esense-lab.com.

¹ <https://www.globenewswire.com/news-release/2019/04/25/1809968/0/en/Advanced-Wound-Care-Market-To-Reach-USD-14-89-Billion-By-2026-Reports-And-Data.html> (accessed September 9 2019)

² <https://www.globenewswire.com/news-release/2019/05/02/1815518/0/en/Alzheimer-s-Therapeutics-Market-to-Reach-USD-12-43-Billion-By-2026-Reports-And-Data.html> (accessed September 9 2019)

³ <https://www.globenewswire.com/news-release/2019/06/10/1866265/0/en/Global-Parkinson-s-Disease-Therapeutics-Market-Will-Reach-to-USD-5-28-Billion-By-2025-Zion-Market-Research.html> (accessed September 9 2019)