

ASX ANNOUNCEMENT

Friday 4, April 2025

Australian research reveals medicinal cannabis delivers long-term relief for a wide range of chronic conditions

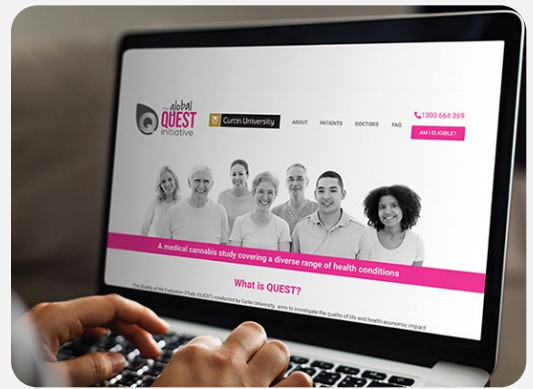
Highlights:

- The Quality of Life Evaluation Study (QUEST Initiative) is one of the world's largest longitudinal clinical studies investigating the effect of medicinal cannabis on patient quality of life and chronic conditions
- An analysis of the 12-month follow-up results from 2,353 QUEST Initiative patients shows:
 - clinically meaningful improvements across all patients for health-related quality of life (HRQL), fatigue, and sleep
 - clinically meaningful reductions in anxiety, pain, depression and sleep disorders in patients diagnosed with these conditions
- Peer reviewed findings are now available in open-access journal PLOS One
- Study supporter, HIF member data shows a year-on-year 38% increase in members claiming medicinal cannabis treatments
- Australian producer, LGP exclusively supplied the medicinal cannabis products used in the study

Little Green Pharma Ltd (ASX: LGP, "LGP" or the "Company") is pleased to share the analysis of the 12-month results from the QUEST Initiative, which continue to demonstrate clinically meaningful improvements for all patients in overall Health Related Quality of Life (HRQL), fatigue levels, and sleep, and clinically meaningful improvements in anxiety, depression, sleep disturbance, and pain for patients diagnosed with these conditions.



The award-winning¹ QUEST Initiative, sponsored by LGP, is one of the world’s largest longitudinal clinical studies investigating the effect of medicinal cannabis on patient quality of life. The University of Sydney led the study, with LGP exclusively providing Australian-made medicinal cannabis oils to participants at a discounted cost. These medications contained different ratios of active ingredients, and many patients used CBD-only formulations, allowing them to drive during the study.



The study was also supported by not-for-profit private health insurance provider Health Insurance Fund of Australia (HIF), guided by an experienced advisory group, and endorsed by a range of national bodies, including MS research Australia, Chronic Pain Australia, Arthritis Australia and Epilepsy Australia.

The QUEST Initiative 12-month findings have been peer-reviewed and published in the open-access journal, PLOS One here: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0320756>.

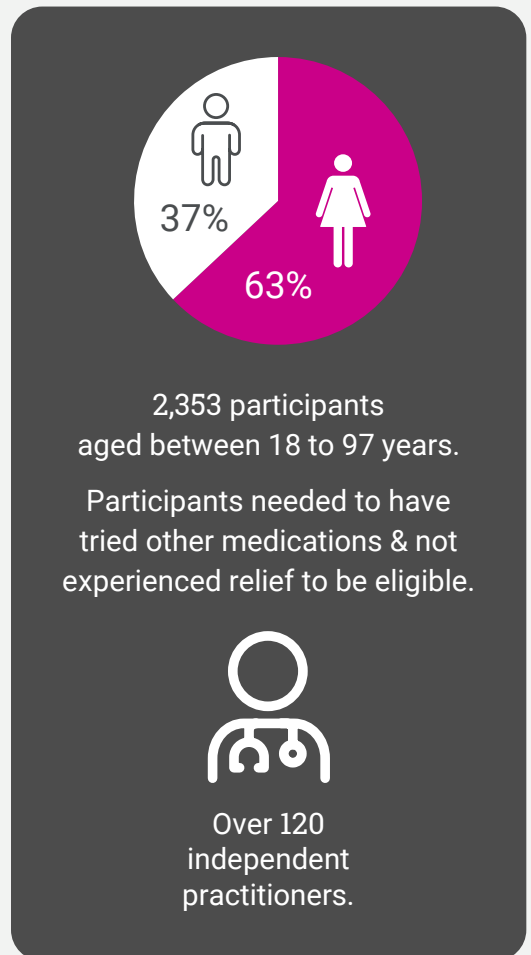
Overview

Between November 2020 and December 2021, the QUEST Initiative invited adult patients in Australia who were new to medicinal cannabis and who suffered from chronic conditions including chronic pain, fatigue, sleep, depression and anxiety, to participate in the study.

Study participants were aged between 18 and 97 years (average age: 51 years) and were 63% female. Chronic musculoskeletal pain and chronic neuropathic pain (63%), sleep disorders (23%), and generalised anxiety disorder and depression (11%) were the most reported conditions, with half of the patients treated for more than one condition.

Participants were recruited across six states by 120 independent doctors, with participants completing a baseline questionnaire before starting medicinal cannabis treatment and then subsequent questionnaires 2 weeks later and every 1 – 2 months thereafter for 12-months.

It's important to note that participants were required to have previously faced unsuccessful outcomes with standard pharmaceuticals or experienced adverse side effects to qualify for the QUEST study.



1. <https://www.cannabiz.com.au/cannabizawards/>

Results

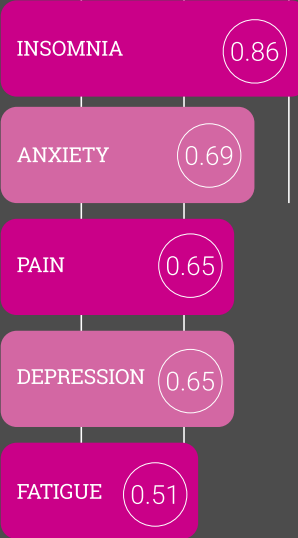
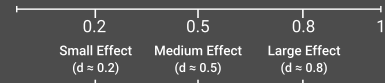
Results from the 12-month analysis found very strong evidence ($p < 0.001$) of clinically meaningful improvements in HRQL, sleep, and fatigue; and clinically meaningful reductions in anxiety, pain, depression and sleep disorders within the anxiety, pain, depression and sleep patient groups. "Clinically meaningful results" refer to findings that have a significant and important impact on a person's health or well-being that can make a real difference in how healthcare professionals understand or treat a medical condition².

All participants in the study used oral medicinal cannabis according to the protocol and had previously experienced unsuccessful results with other standard pharmaceutical treatments.

The analysis concluded that it was remarkable for a single medication to exhibit a positive impact on treatment-resistant patients across such a broad range of medical conditions³. These 12-month results also support the validity of the initial 3-month QUEST Initiative results published in PLOS One in September 2023.

Clinically meaningful change

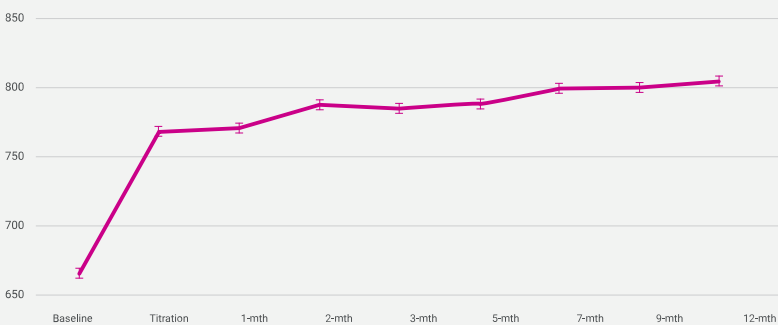
Standardised measure of effect (Cohen's coefficient)¹



0.52 = Clinically meaningful improvement in Quality of Life

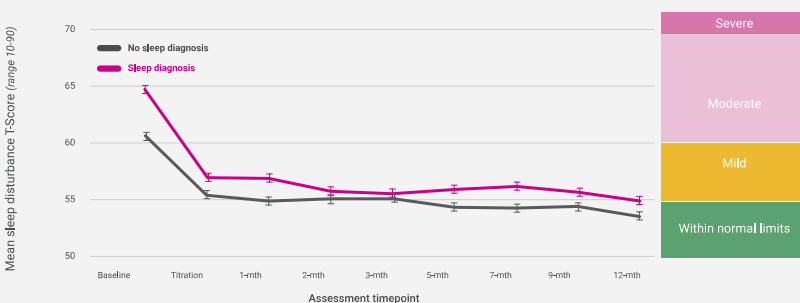
Change in the Quality of Life (mean EQ-5D-5L Scores) over 12-months for Patients with Chronic health conditions prescribed Little Green Pharma medicinal cannabis products.

Mean EQ-5D-5L Index Scores (range 0-1) with 95% CI



After adjusting for age, sex, and duration of pain, EQ-5D Index scores improved from baseline to mean follow-up (MD=0.116, SD=0.219; d=0.52)

Change in Mean DASS21 Sleep Scale Scores over 12-months (with SE bars)



Sleep disturbance (n=2353): MD=-6.02 (SD=9.59; 95%CI:5.63 to 6.40) – clinically meaningful improvement (greater than 3 T-scores) [d=0.63]
 Sleep disturbance for insomnia group (n=546): MD=-8.05 (SD=9.37; 95%CI:7.27 to 8.83) – clinically meaningful improvement [d=0.86]

² Crosby RD, Kolotkin RL, Williams GR. Defining clinically meaningful change in health-related quality of life. J Clin Epidemiol. 2003 May;56(5):395-407. doi: 10.1016/s0895-4356(03)00044-1. PMID: 12812812.

³ Abelev S, Warne LN, Benson M, Hardy M, Nayee S, Barlow J. Medicinal Cannabis for the Treatment of Chronic Refractory Pain: An Investigation of the Adverse Event Profile and Health-Related Quality of Life Impact of an Oral Formulation. Med Cannabis Cannabinoids. 2022 Feb 9;5(1):20-31. doi: 10.1159/000521492. PMID: 35950052; PMCID: PMC9235063.

Curtin University's Assistant Professor Richard Norman, Health Economics Advisor for the QUEST Initiative said,

"The results are significant, as they indicate that medicinal cannabis can play a role in longer-term health outcomes for a range of chronic conditions, rather than being seen as a band-aid solution."

"These 12-month real-world results are incredibly promising and indicate that medicinal cannabis can be an effective part of a GP's toolkit when seeking to treat patients with chronic conditions which are stubbornly resistant to conventional treatments options."

"Importantly, the results appear to be robust across different health conditions ranging from pain to anxiety to sleep issues. If medicinal cannabis can be shown to help these groups, then there is likely to be knock-on effects in other areas of the person's life."



HIF Chief Data and Proposition Officer, Nikesh Hirani, said,

"Investment in ongoing research about the potential health benefits of medicinal cannabis is important for our members, medical practitioners, and the broader community."

"HIF was the first major Australian health fund to publicly declare support for access to medicinal cannabis treatments via our partnership with Little Green Pharma. Four years on, it's encouraging to see scientific evidence from QUEST highlight the positive impact of medicinal cannabis on a number of debilitating health conditions."

"A particular area of interest for us is the effect of medicinal cannabis on sleep disturbance and sleep disorders, as we believe sleep to be one of the key pillars of health, alongside diet and exercise. QUEST Researchers found clinical improvements in cohorts suffering with sleep issues when using medicinal cannabis, and importantly, these improvements were maintained over a 12-month period."

"Improving quality of life for our members through choice and access to health treatment options continues to be our core purpose as a member-based health fund. HIF member data shows a year-on-year 38% increase in our members claiming medicinal cannabis treatments from their eligible Extras policies.¹ The fact our members continue to claim these services indicates they are likely seeing potential benefits from medicinal cannabis as a treatment option."



1. HIF member data sourced from FY2024.

LGP's MD, Paul Long, said,

"Little Green Pharma is proud to continue leading medicinal cannabis research and supporting this significant study on the effects of medicinal cannabis on patient quality of life. The study's findings are particularly important for Australian doctors, as they demonstrate the effectiveness of Australian-grown medicinal cannabis in treating Australian patients. By using local products and involving local participants, we are delivering highly relevant data that can confidently guide doctors in their prescribing decisions, ultimately enhancing patient care across Australia."

"In addition to the medical benefits for patients, this study also provided access to experienced prescribers and more affordable medication, which has continued in the ongoing QUEST Global study."



Next steps

The next phase of the QUEST Initiative, [the QUEST Global study](#) led by Curtin University and sponsored by Little Green Pharma and HIF, was launched in August 2023. QUEST Global will assess whether medicinal cannabis reduces the health economic impact of chronic disease by reducing both the number of medications a patient requires and their need for healthcare services. The QUEST Global study (Curtin HRE2022-0085) is currently recruiting patients and is also expected to provide invaluable insights for prescribers, researchers and the medicinal cannabis industry.

**ENDS
BY ORDER OF THE BOARD**

A handwritten signature in black ink, appearing to be "Alistair Warren", written over a horizontal line.

Alistair Warren
Company Secretary

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About Little Green Pharma

Little Green Pharma is a global, vertically integrated and geographically diverse medicinal cannabis business with operations from cultivation and production through to manufacturing and distribution.

The Company has two global production sites for the manufacture of its own-branded and white-label ranges of medicinal grade cannabis products, with its Danish facility being one of the largest GMP medicinal cannabis production sites in Europe (if not the largest) and its Western Australia site a premium indoor production facility specialising in premium hand-crafted cannabis strains.

Little Green Pharma products comply with all required Danish Medicines Agency and Therapeutic Goods Administration regulations and testing requirements. With a growing range of products containing differing ratios of active ingredients, Little Green Pharma supplies medical-grade cannabis products to Australian, European and overseas markets.

The Company has a strong focus on patient access in the emerging global medicinal cannabis market and is actively engaged in promoting education and outreach programs, as well as participating in clinical investigations and research projects to develop innovative new delivery systems.

For more information about Little Green Pharma go to: www.littlegreenpharma.com

Help us be Green

LGP investors are encouraged to go paperless and receive Company communications, notices and reports by email. This will help to reduce our costs and environmental footprint.

To easily update your communication preferences, visit: www.computershare.com.au/easyupdate/lgp