

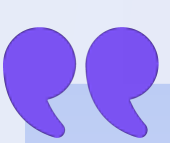
Radicle Science empowered MDbio – The Doctors Brand™ to substantiate their sleep supplement's **effectiveness and credibility**. The clinical trial demonstrated MDsleap's statistically significant improvement in sleep quality, and the secondary outcomes of anxiety, stress, and well-being in those reporting sleep disturbances.

Leveraging Radicle Science's Proof-as-a-Service paradigm, MDbio™ improved the speed and effectiveness of their product development process, launched a product with "clinically proven" claims, and **bolstered sales by increasing consumer trust**.

Purpose

MDbio sought to validate the effectiveness of their product, MDsleap™, and secure scientifically backed claims to **differentiate their brand in the supplement market**.

Additionally, MDbio wanted to improve their product development cycle by rigorously testing multiple candidates head-to-head to ensure the selection and launch of the most effective and **evidence-based formulations**.



"Our commitment to medical-grade botanical formulations is reflected in the results of this study, which shows how precision dosing of multiple ingredients (polypharmacology) makes a significant difference in clinical effectiveness. We are thrilled that the medical community can now proudly recommend a clinically proven sleep aid that is backed by the scientific rigor we expect as practitioners."

Dr. Babak Larian, MD, FACS; Co-Founder of MDbio™

Gold Standard Methodology

The **randomized, double-blind, placebo controlled, trial** consisted of 3 arms - 2 were products that MDbio had formulated but not yet launched and 1 was a matching placebo so a comparison could be made to determine the true effects of the formulations beyond the placebo effect. The trial quickly enrolled 620 diverse participants from across the USA with a desire for better sleep.

Radicle Science conducted the clinical trial in collaboration with faculty from UCLA, University of Maryland School of Medicine, and Harvard T.H. Chan School of Public Health and **delivered trial results within 6 months of the trial start to MDbio™**.

620 Participants
 Randomized
 Placebo Controlled
 Double Blinded



Scientific Findings

MDsleap™ significantly improved sleep, stress, anxiety, and well-being when compared to placebo.

Moreover, a majority of participants experienced **clinically meaningful change in their sleep (57%) and anxiety (60%)**, an improvement that could warrant change in their treatment of these health issues.

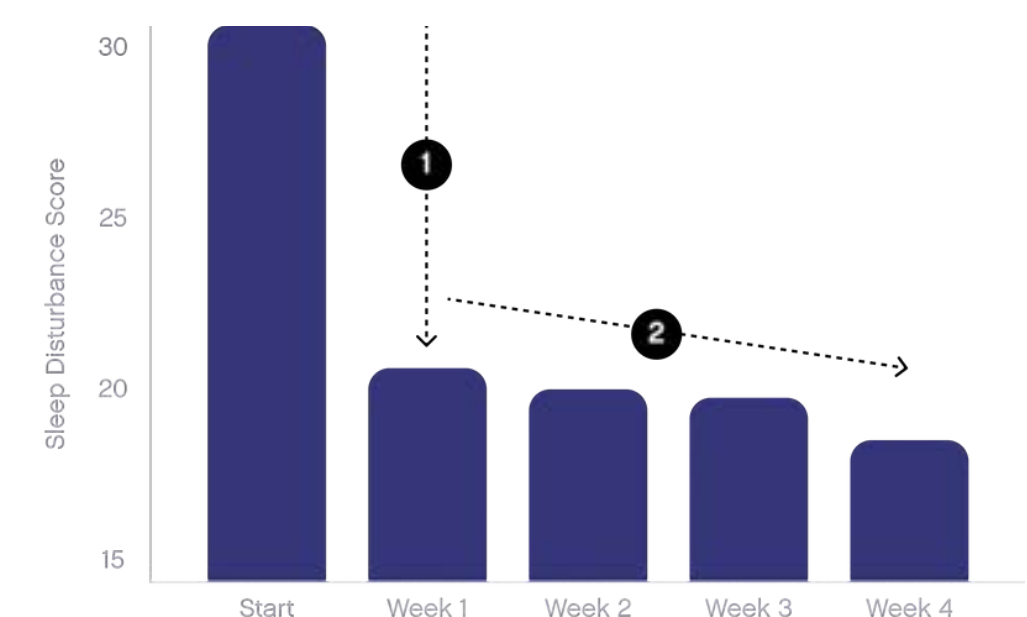
Sleep ↑ 57% Reported Improvement ↑ 35% Greater than Placebo	Stress ↑ 38% Reported Improvement ↑ 50% Greater than Placebo	Well-Being ↑ 14% Reported Improvement ↑ 64% Greater than Placebo	Anxiety ↑ 60% Reported Improvement ↑ 17% Greater than Placebo
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1 Fast Relief

Within the first week, participants' sleep disturbance score decreased by 18% demonstrating the quick onset and improvement in sleep quality when taking MDsleap™.

2 Lasting Effect

After the first week, those taking MDsleap™ still had improved sleep compared to before they start taking MDsleap, and compared to those taking the placebo, demonstrating sustained and meaningful improvement in sleep.



Business Outcomes

MDbio™ strategically utilized the trial results to launch MDsleep™, a winning product that leverages “clinically proven” claims to **bolster sales and consumer trust**. The trial established new marketing channels that highlight scientifically validated product benefits, resulting in **increased revenue streams**. Brand differentiation helped in customer retention, **attracting new customers seeking evidence-based supplements**.

1 Better Converting Social Media Ads



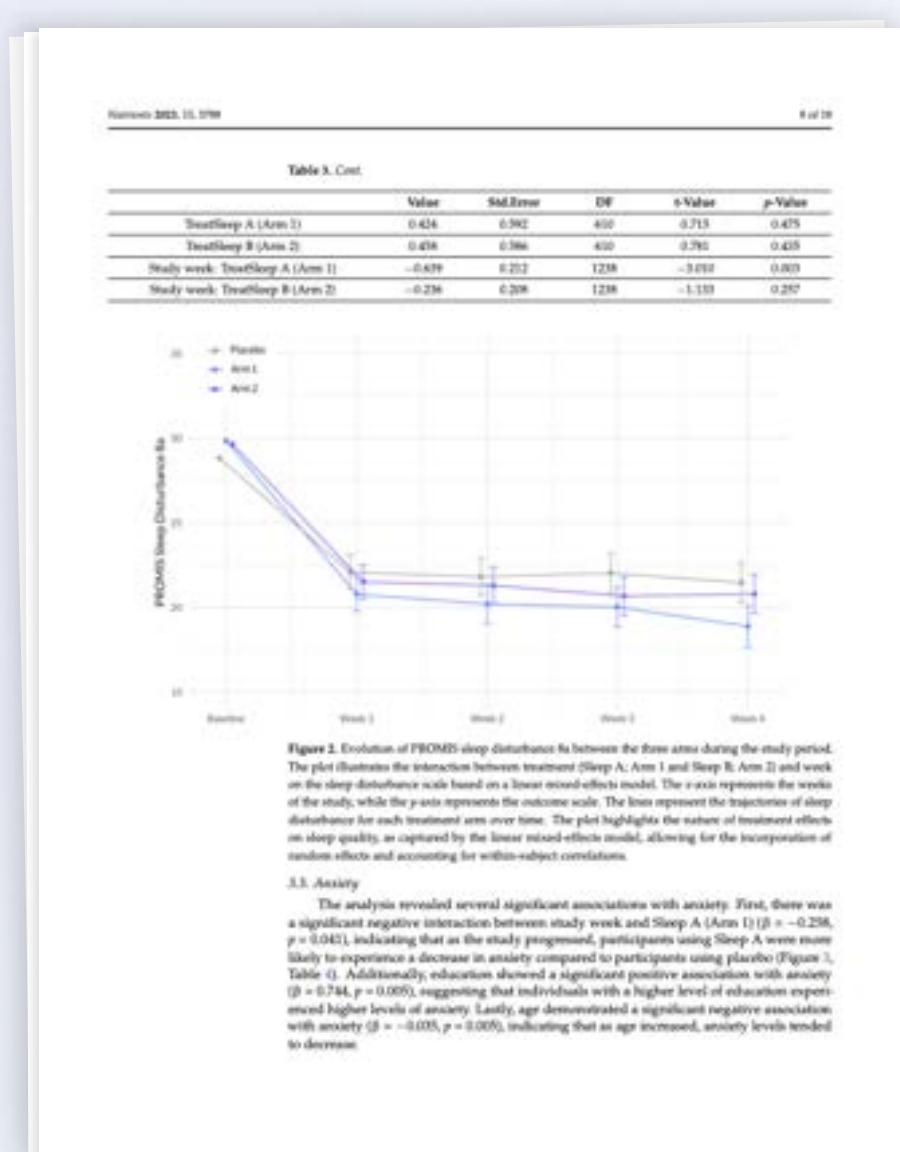
Compelling social media ads effectively communicate the scientific underpinnings and use evidence-based efficacy to **engage, educate, and persuade audiences**.

2 Efficacy Claims Supported by Clinical Proof

Category	Reported Improvement	Greater than Placebo
Sleep	↑ 57%	↑ 35%
Stress	↑ 38%	↑ 50%
Well-Being	↑ 14%	↑ 64%
Anxiety	↑ 60%	↑ 17%

The product landing page strategically leverages the clinically proven claims and showcases empirical evidence of the product's effects beyond placebo in order to **foster consumer trust and credibility**.

3 Peer-Reviewed Journal Article Validates Authority



A peer-reviewed research article published in a prestigious journal **communicates product efficacy within the scientific and medical communities as a superior product**.

4 Maximizes Earned Media

Editorial processes at most major media outlets only allow for the discussion of scientific results if they've been published in a peer-reviewed journal, creating a multitude of earned media opportunities for MDbio as they are **one of the few supplement brands to ever have positive clinical trial results published** in a peer-reviewed journal.

Media Outlet Exposure for MDbio Included:

- Bloomberg
- Nutrition Insight
- BioSpace

Further Details

Click to visit the MDsleep™ landing page, view the peer-reviewed publication, and explore the press release.