# Where others see cannabinoids, we see unlimited potential

Explore a new era of therapeutic possibilities

## Cannabinoid research and development is full of promise.

Strong evidence demonstrates the potential of medical cannabinoids – mainly cannabidiol (CBD) – in therapeutic areas such as central nervous system (CNS) diseases, pain disorders, cancer, mood disorders and more. This is creating significant opportunities to expand treatment options and support global patient health. Formulations can be customized to meet the individual needs of different populations.



#### Growing CBD market

**\$22.1 billion** Global cannabinoid market value in 2021<sup>1</sup>

> +22% CAGR 2022-2031<sup>1</sup>

**\$154 billion** Global cannabinoids market in 2031<sup>1</sup>



#### Promising CBD science

#### +200 CBD trials<sup>2</sup>

+15% number of CBD publications between 2010-2023<sup>3</sup>

25 indications for which CBD may have therapeutic benefits<sup>4</sup>

40% CBD trials linked to pain management<sup>3</sup>



#### Favorable regulatory landscape

Evolving regulations for use of cannabinoids in patient treatment and better patient access



## Discover a cannabinoid platform, delivered by experts

As a science-based end-to-end partner, dsm-firmenich and Brains Bioceutical offer a unique innovation platform to help unlock a new medical frontier of tailor-made cannabinoid-based pharmaceuticals.

We're passionate about patient-first innovation. This requires an approach inspired by patients' therapeutic needs and an API and solutions provider that is committed to purpose-led scientific and therapeutic advancements in the cannabinoid field.

## Supporting you at every stage of your cannabinoid-based drug development journey

Our ability to manufacture a range of cannabinoid APIs paired with leading-edge technical, regulatory and scientific expertise can help you navigate the ever-changing cannabinoid market with confidence.

#### **Discovery & Development**

- Regulatory approvable API
- Commercial viability (growing market and unmet need)
- Novel mechanism of action and benefits above standard of care

#### **Pre-Clinical Research**

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- Regulatory and scientific evaluation of pre-clinical and clinical evidence
- Clinical trial design with meaningful endpoints
- Established relationships with CROs, CMOs and KOLs

### BRAINS BIO<sup>°</sup>

## About Brains Bioceutical

Brains Bioceutical is an evidencebased and science-led pioneer of cannabinoid APIs.

#### Clinical Research

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- Finished dosage forms to support proof of concept & in-human clinical trials
- Bioavailability enhanced CBD oral solid dosage formulations
- Chemistry, Manufacturing, and Controls (CMC) and Formulation

#### **Regulatory & Quality**

• Review of regulatory pathway incl. accelerated pathways and data-pack gap analysis

#### Market Launch

• We can support with the commercial evaluation of your cannabinoid drug and securing a viable IP strategy

## Think cannabinoids. Think dsm-firmenich.

Together, let's unlock the therapeutic possibilities of cannabinoid-powered therapeutics. To learn more about our innovation platform and unique expert services.

Connect with us today to get started

 Transparency Market Research. Cannabinoids Market (Product Type: Cannabinoids, tetrahydrocannabinol, cannabidiol, and others) – Global industry analysis, size, share, growth, trends and forecast, 2022–2031.

2. IQIVA. DSM CBD market landscape, 2023.

4. DSM CBD market landscape - March 2023.



<sup>3.</sup> Pubmed – Number of scientific publications per year for "Cannabidiol".