



## Avicanna Announces Pre-Clinical Data Supporting Enhanced Absorption and Patent Filing for Novel Oral Delivery Platform

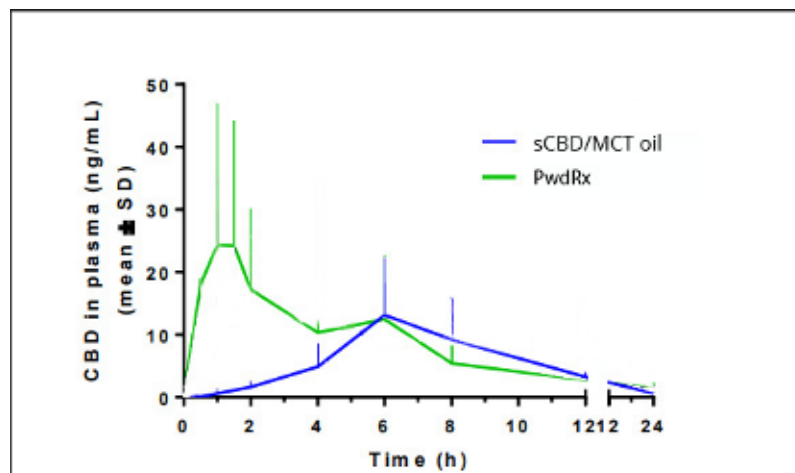
*PwdRx novel drug delivery platform demonstrated superior bioavailability and accelerated absorption of cannabinoids in preclinical studies*

*Provisional patent application on the novel drug delivery platform which can be loaded into products such as tablets, capsules, sachets and pouches*

TORONTO, Nov. 19, 2025 -- Avicanna Inc. ("Avicanna" or the "Company") (TSX: AVCN) (OTCQX: AVCNF) (FSE: ONN), a biopharmaceutical company focused on the development, manufacturing, and commercialization of plant-derived cannabinoid-based pharmaceuticals, today announced positive preclinical results and the filing of a provisional patent application with the United States Patent and Trademark Office (USPTO) for its novel Powder Drug Delivery System ("**PwdRx**") platform.

The drug delivery platform has been specifically developed to address key formulation challenges associated with highly lipophilic cannabinoids (CBD, CBG, THC and CBN), which often exhibit poor water solubility, low and variable bioavailability, and delayed onset of action. In preclinical pharmacokinetic studies, the PwdRx formulations demonstrated enhanced bioavailability and faster uptake compared to conventional medium-chain triglyceride (MCT) oil-based formulations.

Recent in-vitro study of Avicanna's PwdRx technology demonstrated statistically significant results including 74% higher bioavailability (AUC), 63% faster peak plasma levels (TMAX) and a 134% higher peak plasma concentration (CMAX) when compared to MCT oil formulation.



*Figure 1. Comparative pharmacokinetic profile of cannabidiol in plasma following oral administration of Avicanna's proprietary technology (PwdRx, green) versus a standard MCT oil-based formulation (sCBD/MCT oil, blue) in a healthy invitro-model (n=16). The PwdRx formulation demonstrated significantly higher and faster absorption profile with increased AUX, reduced TMAX and greater CMAX ( $p<0.001$ ).*

In addition to enhanced bioavailability and faster uptake, the technology is also designed to deliver long-term stability and manufacturing versatility, including supporting scalable pharmaceutical production in a range of solid-oral and powder-based formats, including tablets, capsules, sachets, and pouches. The pharmaceutical dosage form is also designed to offer tunable drug release capabilities to enable differentiated product profiles to further enable tailoring to specific patient needs

"By improving dispersion, solubility and consistency of uptake, the PwdRx platform has the potential to enable health care providers greater flexibility to tailor potential treatment options for patients managing conditions associated with pain and inflammation," said Dr. Karolina Urban, EVP, Medical and Scientific Affairs of Avicanna. "We are encouraged by the data and look forward to further advancing the technology into our pharmaceutical pipeline and for further clinical evaluation."

The provisional patent filing covers the composition, methods of use, and potential utility of the PwdRx platform in pain and inflammation, including conditions such as rheumatoid arthritis, osteoarthritis, neuropathic pain, fibromyalgia, migraine, and multiple sclerosis.

“The advancement of our PwdRx platform represents another significant step forward in the science and technology of cannabinoid delivery and further strengthens our global intellectual property portfolio,” said Aras Azadian, Chief Executive Officer of Avicanna. “We believe this novel technology will unlock potential new and different pharmaceutical and commercial product opportunities and further demonstrates Avicanna’s leadership in advancing innovation in the science and technology of cannabinoids.

#### **About Avicanna:**

Avicanna is a commercial-stage international biopharmaceutical company focused on the advancement and commercialization of cannabinoid-based products and formulations for the global medical and pharmaceutical market segments. Avicanna has an established scientific platform including R&D and clinical development leading to the commercialization of more than thirty proprietary, evidence-based finished products and supporting four commercial stage business pillars.

- **Medical Cannabis formulary (RHO Phyto™):** The formulary offers a diverse range of proprietary products including oral, sublingual, topical, and transdermal deliveries with varying ratios of cannabinoids, supported by ongoing patient and medical community education. RHO Phyto™ is an established brand in Canada currently available nationwide across several channels and expanding into new international markets.
- **Medical cannabis care platform (MyMedi.ca):** MyMedi.ca is a medical cannabis care platform formed with the aim to better serve medical cannabis patients’ needs and enhance the medical cannabis patients’ journey. MyMedi.ca is operated by Northern Green Canada Inc. and features a diverse portfolio of products and bilingual pharmacist-led patient support programs. MyMedi.ca also provides specialty services to distinct patient groups such as veterans and collaborates with public and private payers for adjudication and reimbursement. MyMedi.ca provides educational resources to the medical community to facilitate the incorporation of medical cannabis into health care regimens.
- **Pharmaceutical pipeline:** Leveraging Avicanna’s scientific platform, vertical integration, and real-world evidence, Avicanna has developed a pipeline of proprietary, indication-specific cannabinoid-based candidates that are in various stages of clinical development. These cannabinoid-based candidates aim to address unmet needs in the areas of dermatology, chronic pain, and various neurological disorders.
- **Active pharmaceutical ingredients (Aureus Santa Marta™):** Active pharmaceutical ingredients supplied by the Company’s majority owned subsidiary Santa Marta Golden Hemp SAS (“SMGH”) is a commercial-stage business dedicated to providing various forms of high-quality CBD, THC and CBG to the Company’s international partners for use in the development and production of food, cosmetics, medical, and pharmaceutical products. SMGH also forms part of the Company’s supply chain and is a source of reliable input products for its consumer retail, medical cannabis, and pharmaceutical products globally.

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For more information about Avicanna, visit our website or contact Ivana Maric by email at [info@avicanna.com](mailto:info@avicanna.com).

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A photo accompanying this announcement is available at

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