

# YEAR IN REVIEW

2022



AVICANNA™



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## A Look Back

Overall, 2022 was a challenging year for the global economy including both the biopharmaceutical and cannabis industries. Despite the challenges, it was a transformational year at Avicanna where we stayed focused and delivered on our business plan. Thanks to the unwavering support of our shareholders and dedication of our team we are proud to present an overview of the significant progress we have made across our Canadian and International research, commercial, business, and pharmaceutical programs.

### Commercial Highlights

Our aim in 2022 was to commercialize and advance our intellectual property portfolio across our 4 business units: Active Pharmaceutical Ingredients (API), Cosmetics, Medical, and Pharmaceutical, which have contributed to successful exports to 18 international markets. We are pleased to show significant progress on each vertical over the past year. Additionally, we are pleased to report progress on optimization and cost cutting initiatives which resulted in growth in revenue, coupled with reduction of SG&A.



### In Canada

We continued to validate the commercial potential of our intellectual property through our proprietary products in the more mature and competitive market in Canada. During this pivotal year, we successfully expanded our 4 brands and increased to 24 commercial SKUs through over 70 listings. These launches led to market acceptance across both adult use and medical channels as shown.

Our commercial priority has always been on our medical products and channels where we have several partnerships including Medical Cannabis by Shoppers™ with active patient sales across 23 SKUs. During 2022, we expanded our formulary into new medical platforms with a view towards increased access for patients. In addition, the acceptance and reach of the RHO Phyto formulary can be seen by its acceptance as the only brand to be sold at a hospital pharmacy at the Odette Cancer Centre Pharmacy at Sunnybrook Health Sciences Centre.

### The RHO Phyto™ Medical Formulary

Our RHO Phyto medical and wellness formulary includes proprietary formulations containing varying ratios of cannabinoids across a range of non-inhalation deliveries to support consumer and patient needs. The portfolio is supported by stability testing and consists of oral, sublingual, topical, and transdermal products designed to have controlled dosing and enhanced absorption.





### Expanded Product Portfolio

Pura Earth brand is our international CBD skin care line that we successfully commercialized in Canada with 3 products. The line is well suited for the expected acceptance of CBD-based preparations for sale over the counter products in Canada under CHP (Cannabis Health Products) guidelines.

Viola is a lifestyle brand rooted in purpose and social equity, and Re+Play is a sports recovery brand with official endorsement from the National Basketball Players Association, both of which made their Canadian debut through our arrangement with Al Harrington’s Viola Brands and Harrington Wellness.

Across adult-use sales channels, our four brands were also positioned to capture the wellness segment and made early traction in retailers through the 5 provinces.

Throughout the year, RHO Phyto experienced sales growth and line extensions including the addition of advanced transdermal and oral formulations using Cannabigerol (CBG), a minor cannabinoid.

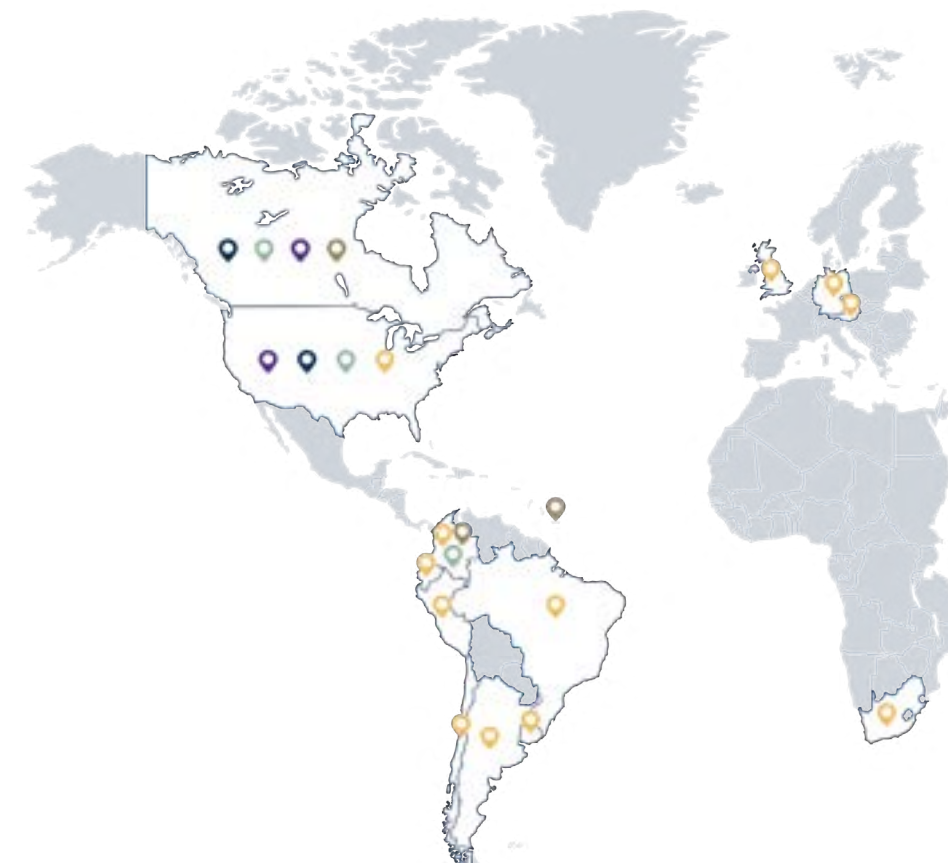
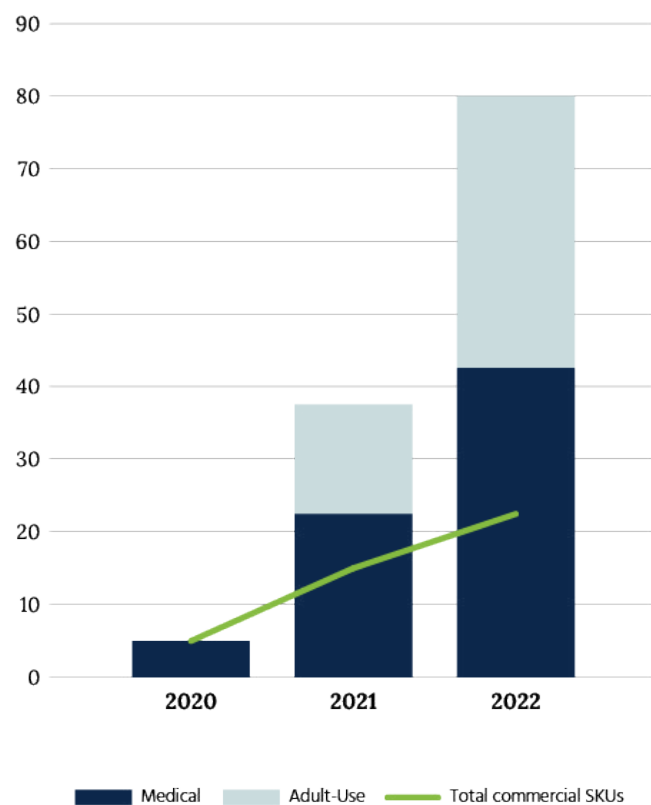
Additionally, we continued in our efforts to educate patients, consumers and the medical community by offering more resources and training programs through the launch of Avicenna Academy online portal. This dedicated online portal provides expanded educational and training modules for healthcare professionals.



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ACADEMY

The RHO Phyto portfolio supports the development of our pharmaceutical pipeline by providing us with a source of data generation through the participation of specific products in real world evidence studies. Overall, we are still in very early stages in realizing the potential of these products in Canada and internationally.

Canadian Commercial SKUs & Listings



### International Progress

While cannabis companies focusing on recreational products had been generally limited to specific states or countries, Avicanna has positioned itself to enter various international markets through API, CBD cosmetics, medical and pharmaceutical products as a biopharmaceutical company, which allows us access to market opportunities globally.

We continued to make progress through the opening of new international markets and formation of new strategic arrangements. These included exports of our active pharmaceutical ingredients, standardized seeds, and finished products, increasing our reach to 18 international markets. Furthermore, the Company’s operations in South America facilitated production of our topical and pharmaceutical preparations incorporating our proprietary active pharmaceutical ingredients and competitive pricing for international markets. An example of such efforts includes our initial export of finished cosmetics products into the European Union.

### Aureus Raw Material Portfolio

The Aureus portfolio gained further international exposure through exports of raw materials to new markets. Avicanna’s vertical integration infrastructure comprising sustainable, economical, and industrial-scale subsidiaries in Colombia continued to operate with GACP and NOP USDA organic certification. This subsidiary continued to serve as our supply chain and provide a source of reliable input material for Avicanna’s global consumer retail, medical cannabis, and pharmaceutical pipeline products. It served to provide a consistent, high-quality source of input materials for various international partners within the food, cosmetic, medical, and pharmaceutical sectors.

During 2022, we also formalized several new international supply agreements with pharmaceutical companies such as KNOP in Chile and completed exports into 16 international markets including the initial export to Portugal.

We continued to expand to our finished products including our pharmaceutical preparations across international markets which was signified through the [exclusive license and supply agreement with an established South American pharmaceutical company](#), to commercialize up to 4 proprietary cannabinoid-based pharmaceutical preparations. Through the license and supply agreement, Avicanna agreed to license the Company's intellectual property and supply final products starting with its proprietary 10% cannabidiol oral preparation. With this arrangement, Avicanna stands to earn up to \$1.3M CAD in initial licensing fees through achieving near-term milestones.

## R&D Pharmaceutical Advancements

It is important to highlight that we remained committed to our vision of becoming a biopharmaceutical leader in the cannabinoid industry. During the past year we advanced our scientific platform, which included broadened R&D efforts and clinical collaborations, and fortification of our intellectual property portfolio.

With more than 6 years of R&D, preclinical and clinical development on cannabinoids, Avicanna had established a cannabinoid based scientific platform and continued to fortify its intellectual property portfolio including the development of trade secrets and provisional patent submissions. Avicanna's dedication to product development and evaluation of the potential role of cannabinoids for therapeutic use has been at the core of the Company's vision since its inception. The Company had successfully developed and delivered over 30 proprietary commercial products from its scientific platform.

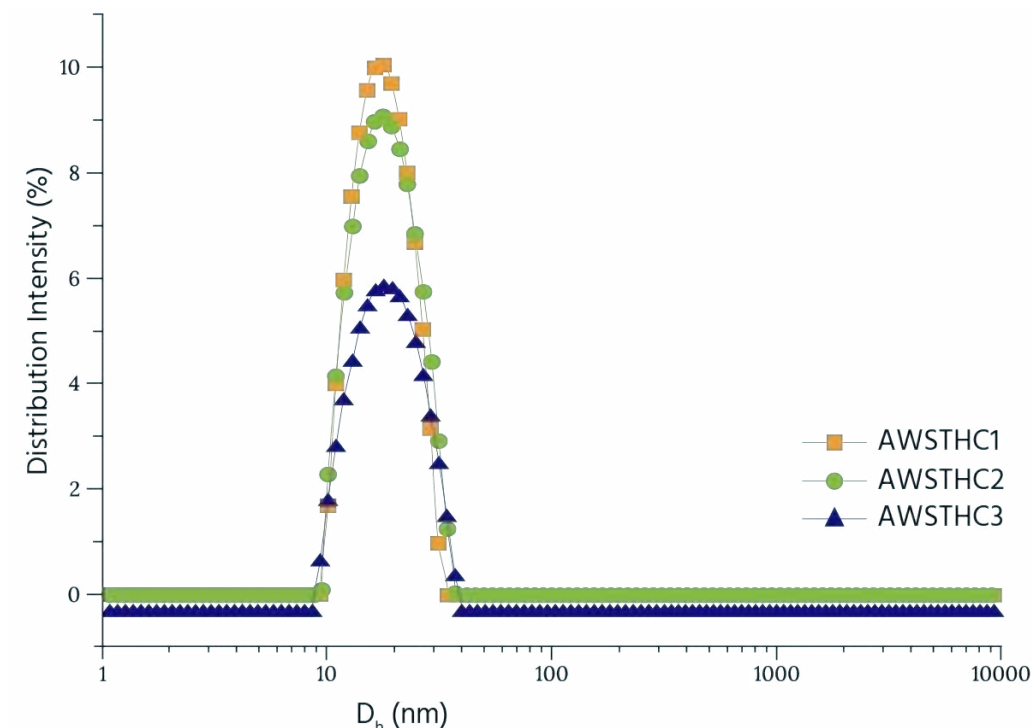
Leveraging this scientific platform, we developed a pipeline of proprietary pharmaceutical preparations and drug

candidates designed for indication-specific use and were in various stages of development or commercialization. These botanical cannabinoid-based drug formulations may provide potential options for unmet medical needs in the areas of dermatology, chronic pain, and various neurological disorders. Trunerox™, a 10% CBD oral emulsion, is Avicanna's first pharmaceutical preparation. Trunerox™ had undergone GMP pilot production and analysis under ICH standards. During the past year Avicanna completed and submitted drug dossiers to the relevant health authorities in Brazil, Colombia, and Ecuador for review and marketing authorization.



The Company also worked on finalizing and commercializing patent pending proprietary formulations including a range of liquids, capsules, powders, and controlled release tablets utilizing Avicanna's self-emulsifying drug delivery systems (SEDDS) technology. The formulations offer enhanced stability, solubility and controlled release of various cannabinoids including CBD, THC, CBG, CBN, and THCv. We intend to utilize the technology in medical and pharmaceutical products and develop these formulations for the treatment of neurological disorders. The initial utility of these advanced (SEDDs) formulations was demonstrated with [the water soluble Influid technology, initially launched under the Viola brand](#).

## Influid Water Soluble Technology



The figure demonstrates full cannabinoid solubilization and encapsulation in a stable nano-emulsion particle which if ingested improves their absorption onset.





## Research Collaborations in Epilepsy and Beyond

Avicanna expanded its epilepsy research program with a [new preclinical collaboration with Dr. Maxwell Burnham at the University of Toronto to evaluate its proprietary formulation.](#)

These studies expanded on the research findings originated from cannabinoid-based collaborations with leading epilepsy researcher, Dr. Peter Carlen, at the University Health Network (“UHN”), which showed promising pre-clinical results in reducing seizures and will continue to undergo preclinical observation as a future potential drug candidate. This led to the [filing of a US Patent Application for a novel cannabinoid formulation for reducing incidence of seizures and sudden unexpected death in epilepsy.](#)

We continue to focus on R&D and explore the potential role of cannabinoid based medicine across a number of therapeutic indications. This includes our academic and clinical collaborations, which over the past 4 years included the Hospital for Sick Children, University of Toronto, University of Guelph, University Health Network, Charles River, Thompson Rivers University and Sunnybrook Health Sciences Centre (Hospital).

## Observational Trials on our Pharmaceutical Pipeline and RHO Phyto Branded Products

In 2022, we commenced a prospective real world evidence study on patients with a rare skin condition Epidermolysis Bullosa at the Hospital for Sick Children (“SickKids”) led by Dr. Elena Pope and chronic pain at (“UHN”) led by Dr. Hance Clarke. Additionally, we launched a [real-world evidence study on our RHO Phyto transdermal and pharmaceutical drug candidate for musculoskeletal pain and inflammation.](#)

## Opportunities Beyond Cannabinoids

We looked beyond the horizon towards our evolution into a wellness and pharmaceutical company focused on all natural compounds. We announced the [expansion of our product development efforts beyond cannabinoids into the wellness area by taking steps to develop adaptogen nutraceuticals under an agreement with Ei. Ventures, Inc.](#) The agreement highlights utilizing our existing scientific platform and drug delivery systems to develop and commercialize functional fungi-based products under the Psilly™ brand. The initial focus of the research and development efforts will be on functional, apoptogenic, fungi-based formulations in the form of consumer friendly, single dosed products.

## Looking Ahead

It is estimated that by 2026\* the global sales of CBD in medical and adult-use cannabis could be worth more than US\$100.4 billion – in 2022 sales were approximated at US\$44.2 billion.

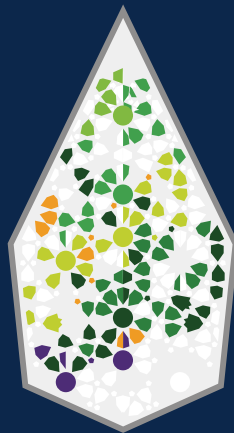
Internationally, we are encouraged by progressive global legislation towards legalization of medical cannabis and CBD products where we have a footprint. Additionally, we are excited about establishing and attaining pharmaceutical preparation approvals in 2023 and new potential strategic collaborations with international pharmaceutical companies. The continued progress of our R&D and clinical efforts coupled with regulatory advancements can provide us with significantly larger potential market opportunities for our pipeline of products aimed at medical needs in the areas of dermatology, chronic pain, and various neurological disorders.

In Canada, we look forward to potential growth and expansion of our product portfolio into new adult use and medical channels and continuing growth of our sales through prioritized education initiatives.

We remain committed to our strict dedication to evidence based cannabinoid products that have earned us our brand equity and foothold in several international markets. We look forward to materializing our pipeline during 2023.

\*Source: The global cannabis report 3rd edition by Prohibition partners





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