CanAscen Group

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CanAscen Group Submission to the House of Commons Standing Committee on Health (HESA) regarding C-45, *An Act respecting cannabis and to amend the Controlled Drugs and Substances Act, the Criminal Code and other Acts*

The CanAscen Group is pleased to provide its input to the House of Commons Standing Committee on Health (HESA) as it studies Bill C-45, *An Act respecting cannabis and to amend the Controlled Drugs and Substances Act, the Criminal Code and Other Acts (Cannabis Act).*

The CanAscen Group ("CAG") is a Vancouver, British Columbia corporation that was spun out of the international biotechnology company, Teewinot Life Sciences ("TLS"). Over the past 8 years, Teewinot and its subsidiaries have developed technology for the manufacture of pharmaceutically pure cannabinoids to advance medical research and product development, improving patient therapies and addressing unmet medical needs. CanAscen was established to focus on this mission in the emerging medical and recreational markets of Canada, and has acquired New Life Botanicals ("NLB"), a late stage ACMPR applicant based out of Steinbach, Manitoba. NLB is located on 20 acres with plans to develop a 20,000 square foot facility to service the medical industry with dried flower, extracted oil, and upon regulatory guidance, infused products.

Teewinot Life Sciences operates two subsidiaries with specialized focus, and CanAscen will have the opportunity to engage in strategic relationships with both;

Canadian Medical Hemp Biotechnologies ("CMHB") is the center of all research and development for the Teewinot organization, operating federally licensed laboratories in Vancouver, British Columbia and Steinbach, Manitoba. Both locations hold controlled substance licenses from Health Canada. The laboratory facility in Steinbach, Manitoba has recently been expanded and houses significant research capacity in the fields of plant breeding, research analytics, and formulation technologies. Within the Vancouver, BC laboratory, CMHB continues to enhance in-house research and development capabilities around the scaling and refinement of biosynthesis, biocatalysis, microbiology and organic chemistry.

Full Spectrum Laboratories ("FSL") serves as the Intellectual Property repository and global patent filer for the Teewinot organization. Located in Dublin, Ireland, FSL is responsible for all IP management and licensing agreements.

CanAscen and FSL/CMHB relationships provide CAG exclusive access to technology around cannabinoid production, research & development, analytical services, and product development.

CanAscen believes the introduction of Bill C-45, is an important step in providing a stable, predictable framework to legalize, regulate and restrict access to cannabis. However, in our view it is essential that, in the months ahead, the government work to ensure that the proposed regulatory framework that accompanies the *Cannabis Act* is one that is supportive of cannabis research, science and evidence building.

CanAscen views are in keeping with recommendations made by the Task Force on Cannabis Legalization and Regulation which noted explicitly the importance of ensuring that a legislative framework be appropriately flexible and nimble to adapt to new bodies of evidence.

Challenges in Cannabis Research

There is consensus among the research and scientific community that many of the public policy challenges we face today emanate from gaps in existing cannabis evidence. Canada's emerging leadership in cannabis public policy is expected to drive its status as a global leader for cannabis research.

Given that cannabis is currently a controlled substance, this has to some degree inhibited the ability of researchers to access and fully study the safety and efficacy of its use. It is difficult for researchers to obtain the necessary legal supplies of cannabis that enables their studies.

Cannabis benefits are derived from their individual compounds known as cannabinoids. Up until now, cannabinoids have been produced one of two ways: by growing crops or by chemical synthesis, both of which are expensive, time consuming, and requires the use of a lot of resources. Additionally, cannabinoid results vary from harvest to harvest yielding a limited ability to standardize for research purposes and chemical cannabinoids are similar but not identical to their crop cousins and may produce side effects.

Researchers around the world are demanding better access to the therapeutically important, and demonstrably effective sub-set of cannabinoids to inform further research and clinical trials to fill critical gaps in current and future pharmaceutical offerings.

Recommendation: It is vital that as the Government of Canada develops and refines the regulatory framework that accompanies the proposed Cannabis Act, it consider the importance of ensuring that clinical researchers are assured appropriate access to cannabis to make scientific advances to build the body of evidence required to inform public policy decisions.

Our Work

CanAscen is focused on utilizing the innovative research of partner institutions to unlock the medicinal properties of cannabinoids found within the cannabis plant. We develop customized therapeutic solutions with targeted applications through a disciplined approach to research and development that leverages the experience and expertise of our industry partners, consumer product companies, manufacturers and local communities.

Cannabis Act

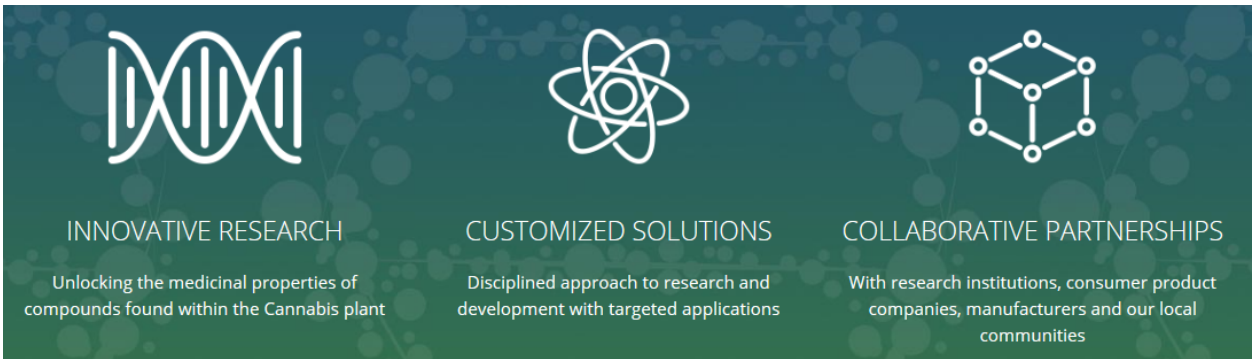
CanAscen supports several sections of the proposed *Cannabis Act* that speak to and recognize the importance of access to cannabis within the scientific community. Provisions of note include those which enable a transitional approach which ensures the validity of existing licenses, permits and exemptions is maintained.

Section 61(2) restricts the authorization for cannabis import/export to product being used for medical or scientific purposes or in the context of the industrial hemp industry. Furthermore, the proposed legislation also affords the minister the power to issue exemptions from the Act for a medical or scientific purpose, or is in the public interest.

The Way Forward

The Final Report of the Task Force on Cannabis Legalization and Regulation made several recommendations which emphasize the need to support more cannabis research.

In ensuring that researchers have appropriate means to access cannabis for scientific and clinical purposes, the Government of Canada will be helping the research community grow the body of evidence required to develop more responsive solutions for other important public policy challenges.



I. Production

In its Final Report to Health Canada, the Task Force articulated concerns about the dangers and safety risks associated with the production of same cannabis products – especially when it comes to the use of toxic and combustible solvents used to extract cannabinoids like THC.

II. Potency

The Task Force's Final Report also reflected concerns about potential risks associated with the consumption of cannabis or cannabis products with high levels of THC – one of the main chemical properties of cannabis which is known for its psychological effects.

Not only will research enable us to better understand the risks and clinical benefits associated with cannabis consumption, but innovative production methods will allow producers to control for potency as required.

III. Medical Advancements

It has been acknowledged that gaps in clinical cannabis research has created a level of discomfort in the medical community.

CMHB research advances the use of biosynthetic methods to offer the product stability required for use in pre-clinical and clinical trials and to build the science supporting legitimate therapeutic product developments. CanAscen aims to be leader in the field for delivery of these solutions to the Canadian markets.