

New targeted therapeutics herald a medical revolution



As the knowledge of the subtleties of cannabis compounds and the complex functions of the endocannabinoid system advances, targeted therapeutics is positioned to transform patient care. By **Thomas Walker**.

With the development of targeted therapeutics in the cannabis industry, the field of medicine is undergoing a profound transformation. Traditional medicine frequently adopts a one-size-fits-all philosophy, when treatments are given based on general diagnoses. However, targeted therapeutics is positioned to transform patient care as knowledge of the complex functions of the endocannabinoid system (ECS) and the subtleties of cannabis compounds advances.

THE ENDOCANNABINOID SYSTEM

Balance and homeostasis are crucially maintained by the body's intricate network of receptors and chemicals, known as the endocannabinoid system. It has an impact on a range of physiological processes, including immune response, mood control, and pain perception. The cannabis plant's cannabinoids interact with this system and may have medicinal effects.

PRECISION MEDICINE

Targeted therapeutics in cannabis medicine is akin to precision medicine, a concept gaining traction across medical fields. It entails adjusting therapies to each patient's unique traits. This involves figuring out the precise cannabinoids, terpenes, and ratios of cannabis that would be most beneficial for a given disease.

For instance, a cannabis product high in CBD and beta-caryophyllene, a terpene known for its possible anti-inflammatory qualities, may be beneficial for a patient with chronic pain. On the other hand, someone looking for relief from anxiety might find a CBD and limonene combination more useful. Customisation is the key to targeted

therapies. There are more than 100 cannabinoids and terpenes found in cannabis. These substances each provide a distinct contribution to the actions of the plant. Healthcare providers can create a treatment plan that best utilises cannabis's therapeutic potential by considering a patient's medical history, genetic composition, and particular symptoms.

ADVANCEMENTS IN RESEARCH

Research and technological advances promote a shift towards targeted therapeutics.

HEALTHCARE PROVIDERS CAN CREATE A CUSTOMISED TREATMENT PLAN

Researchers can now precisely profile strains' cannabinoid and terpene content using analytical techniques, helping them to better understand how various chemicals interact. Building on this understanding, specific treatments can be created.

Genetic testing is also becoming more important in cannabis treatment. The way a person reacts to cannabis can vary genetically. Understanding these genetic influences can help medical professionals design treatments that are both efficient and well-tolerated.

SPECIALISED FORMULATIONS

A variety of illnesses may benefit from targeted therapeutics. With the flexibility to alter cannabis formulations, individuals who may not have responded well to conventional treatments for

conditions like chronic pain, epilepsy, anxiety, or autoimmune illnesses have new options available to them.

Additionally, unique formulas are being created, including fast-acting sublingual sprays for immediate relief, transdermal patches for regulated and sustained cannabis release, and even custom capsules that mix precise cannabinoid and terpene ratios.

A COLLABORATIVE APPROACH

Targeted therapeutics in cannabis medicine rely on the co-operation of doctors, researchers and patients to be successful.

Patients should take a proactive role in their own care, offering feedback on the effects of various formulations. This feedback loop can assist medical professionals in adjusting therapies over time to get the best results.

A NEW ERA OF HEALING

A new era of healing that goes beyond the constraints of conventional medicine is heralded by targeted therapeutics in cannabis therapy. Patients can receive relief that is not only efficient but also in line with their unique biology by personalising how cannabinoids and terpenes are used.

Targeted treatments have an abundance of potential that will grow as research and technology develop. Cannabis treatments will soon be as exact and individualised as the patients they treat, ushering in a new era of healthcare that really values each person's individuality.

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