

Cannabinoids and Terpenoids: Pharmacology, Pharmacogenomics and the Complex Interactions of the Endocannabinoid System with Terpenoids and Phytocannabinoids - and Implications in Oncology

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Introduction:

Cannabinoids are a necessary part of the toolbox of oncology. Cannabinoid therapeutics are complex, as cannabinoids are a large family of terpene-phenolic acids. Phytocannabinoids (especially THC) do not function solo. To maximize the efficacy of Phytocannabinoids therapeutics, clinicians must understand the functional effectors of the endocannabinoid system and the complex relationship between phytocannabinoids and terpenoids. Phytocannabinoids pose agonist, antagonist and inverse agonist activity with cannabinoid receptors. Terpenoids pose synergistic and antagonistic activity with respect to cannabinoid response; much of this activity is independent of cannabinoid receptors. This aim of this presentation is to provide a clinical rationale for cannabis therapeutics.

Educational Objectives:

- Understand the functional effectors of the endocannabinoid system
- Understand the complex relationship between phytocannabinoids and terpenoids
- Provide clinical rationale for cannabis therapeutics
- Understand the immuno-modulating effects of cannabinoids and terpenoids.

Methods:

This is not a clinical outcomes talk, but an introduction to cannabinoids in integrative oncology for clinicians.

Results:

NA

Conclusion:

Cannabinoid therapies are gaining popularity globally as many countries are legalizing cannabis for medical use. Regardless of the legal status of cannabis, cancer patients have for decades been using cannabis for pain relief, sleep enhancement and alleviation of the emotional trauma of cancer diagnosis. Regardless of the opinion of the oncologist regarding the use of cannabis therapies, it is important for them to understand the pharmacology of cannabis therapies. Patients will seek cannabis therapies with or without the recommendation of the oncologist the best scenario is when the oncologist is aware of the use of cannabis therapies and understands the pharmacology of these therapies in order to most effectively guide the patient.