

“Synthetic Cannabis” and Mental Health

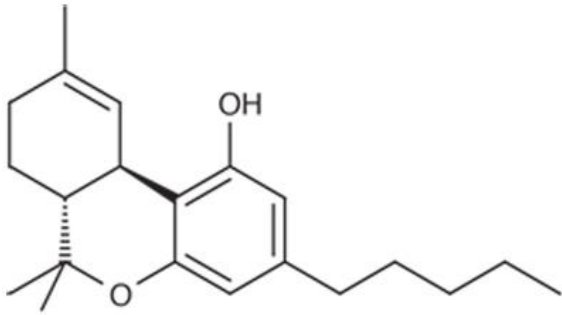
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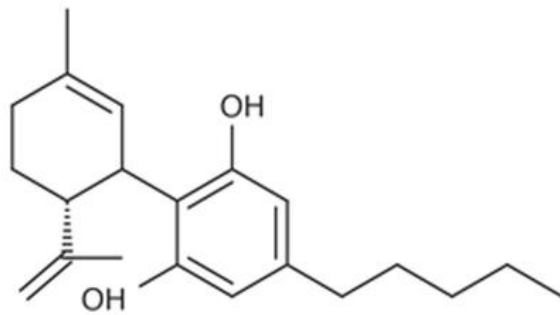
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What Is Synthetic Cannabis ?

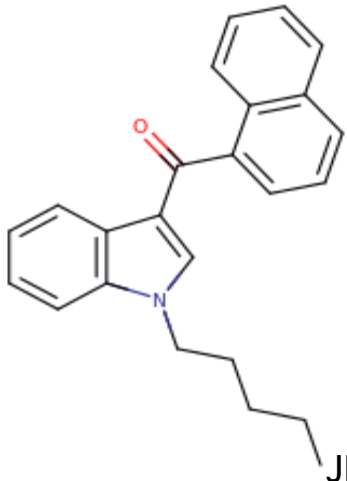
- Generally it is “inert” herbal smokable vegetation choose as it has some similarity in looks to cannabis.
- To this “inert” substance it is then infused by a number of different methods with Synthetic Cannabinoid Receptor Agonists (SCRAs)
- From this point on they will be referred to as SCRAs.



Delta-9-tetrahydrocannabinol (THC)



Cannabidiol

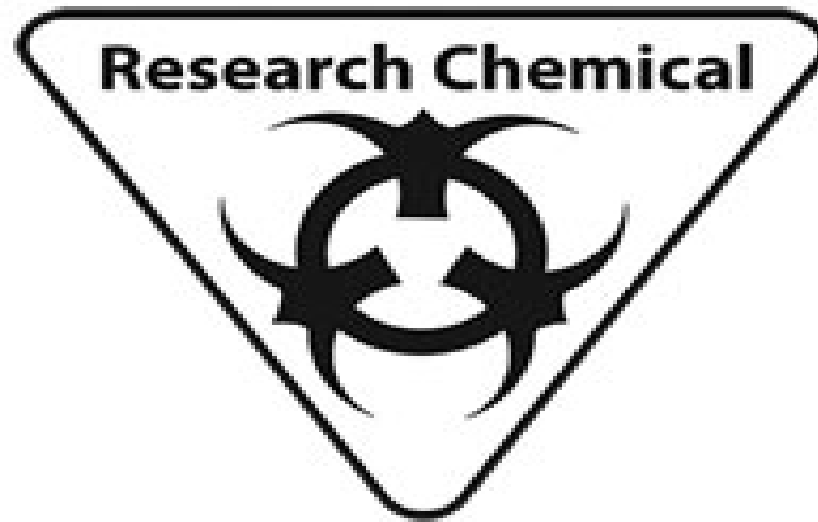


JHW-018 SCRA



Short History of SCRAs

- As with many compounds, drugs, and known substances research chemist experiment with different chemical regularly.
- SCRA's found there way in to production and out of the laboratory, with very limited animal trail's having been completed the first wave of SCRAs were noted to have a huge affinity with the CB1 and CB2 receptors.
- They were able to be produced and de to not being THC or CBD containing they were consider “ legal highs”. There was no law against the production, selling, possessing or using of these products anywhere in the world.
- Although they were first becoming available to buy in places such as Australia, the UK and the USA from the very early 2000s, there are some important dates to be aware of:
- 2005: Spice a leading brand of SCRA emerged as a very widely available and used alternative to cannabis.
- 2009: JWH-018 is identified as the psychoactive ingredient in Spice.
- 2011: Kronic (SCRA brand) emerged as a drug of concern in Australia and was being produced in NZ.
- WA in June of 2011 started to ban (SCRAs but was relying on having to identify each one i.e. JWH-073, JWH122, JWH-200 etc.



Continued:

- Between 2011 and 2017 numerous state and federal drug laws in Australia were changed to try and keep up with the new SCRA's that were being created and a again sold in stores and a great deal online.
- 2012 Broad groups of SCRA's pooled from all over the world were outlawed.
- 2013 consumer laws brought in listing and Banning every known brand of SCRA's on sale or possible sale.
- 2015 As a group and products that were being sold in stores on online that fit the profile of SCRA's and "has any psychoactive effect " was blanket banned.

Clinical considerations and reasons for use:

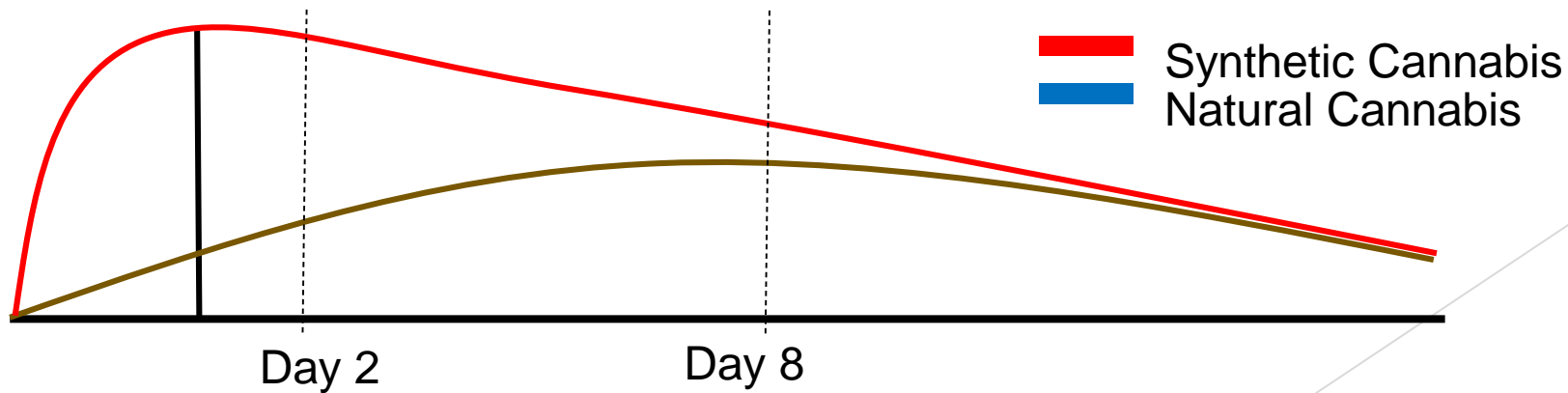
- 93% of Australian would rather some natural cannabis rather than SCRA's, however for some groups in the community there is a very big market for these products to this very day due to a number of reasons.
- Winstock, A. et al 2015 note that those whom do use SCRA's do so for the following reasons:
 - 58 % More intense effect with shorter duration
 - 19 % easier to get than Cannabis
 - 15 % Avoiding detection in Urine Drug Screens.
- It then follows that workers in jobs that require drug testing are a specific population including the armed forces, mining (which is why WA where so quick of the mark), large industries, and large production facilities, correctional clients on parole or diversion, those in family court, etc.
- In shepparton from my experience the largest number of people I have treated with a SCRA's abuse or dependence problem, have been from large factories that drug test and construction sites that test.

Intoxication/withdrawal symptoms and possible Mental health effects:

- Cognitive - confusion, disorganized thoughts, memory problems, and difficulty thinking clearly.
- Behavioral - Agitation, restlessness, Aggression
- Mood Affect - Anxiety, irritability, inappropriate laughter
- Sensory perceptual- Paranoia, perception distortions, delusions, hallucinations, and psychosis.
- Physical- Tachycardia, hypertension, nausea, vomiting, tremors, numbness, tingling, light-headedness and seizures.

SCRAs Withdrawal:

- More complex than natural cannabis
- Much more acute and severe than natural cannabis with higher incidence of psychosis and seizures.
- Much higher and more intense CWAS scores as below.



So how harmful are they and what is the short and long term effect on mental health ?

We can have an educated guess more than what we actually know !

- Limited data but we know that SCRAAs are now made in huge amounts in china, and the further you get away from the first generation SCRAAs, the more dangerous they are becoming and again no idea what is being used as the novel psychoactive chemicals.
- The lack of CBD plays a huge part in leading to the seizures and psychosis, and the shorter duration of effect as we have found with many substances leads to higher to dependency.
- It is recommended that withdrawals for those dependent on SCRAAs be undertaken as an inpatient for obvious reasons, such as seizures and possible psychosis.

Thank you for your time and I encourage questions and group ideas on the mental health effects long term as we just don't know !



References:

Stephen Bright 20 “ Not for human consumption: new and emerging drugs in Australia”, Australian drug foundation.

Stephen Bright 2020 “Synthetic Cannabis and Other New Psychoactive Substances (NPS) , NDARC

Winstock, A. 2015 “Risk of emergency medical treatment following consumption of cannabis or synthetic cannabinoids in a large global sample”, Journal of Psychopharmacology”