

EXPERT-ADVISORY COMMITTEE ON DRUGS

11 November 2010

AGENDA ITEM 4

SYNTHETIC CANNABINOMIMETIC SUBSTANCES: JWH-018 AND JWH-073

Formal Assessment

Part One - Background

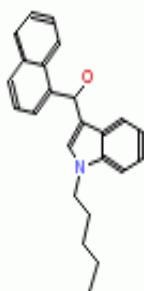
1. "Spice" was the first in a series of products sold as 'legal highs' that purport to be a legal alternative to cannabis. These products contain differing varieties of vegetable matter that has been infused with synthetic cannabinomimetic substances. These products are then generally smoked to administer the psychoactive substances they contain. For the purpose of this assessment these products will be referred to throughout this paper as "herbal smoking blends."
2. Herbal smoking blends are available in quantities of 1g (NZ \$20), 3g, (NZ \$50) 1 ounce, (NZ \$350) and more recently, as pre-assembled cigarettes or 'joints', which cost \$9.95 and are marketed as "enough for three people."
3. The strength of these products differ between brands but generally herbal smoking blends are designed to be of similar potency to cannabis, meaning that the same quantity of vegetable matter as cannabis, would be smoked to induce a broadly comparable psychoactive effect.



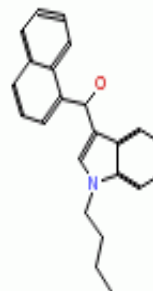
4. The primary psychoactive components contained within herbal smoking blends have changed over the past 24 months to comply with New Zealand law. In March 2009, the Ministry of Health arranged for the forensic testing of three varieties of herbal smoking blends by ESR and the results of that testing identified the presence of the 1,1-dimethyloctyl homologue of the substance CP 47,497. It was subsequently determined that 1,1-dimethyloctyl homologue of the substance

CP 47,497 was substantially similar in chemical structure to tetrahydrocannabinol (THC) and therefore a controlled drug analogue of THC, meaning this substance is a Class C controlled drug.

- Herbal smoking blends containing the 1,1-dimethyloctyl homologue of the substance CP 47,497 were then removed from the market in New Zealand. However, immediately following the removal of these products, new products of this type emerged containing other uncontrolled cannabinomimetic substances. Testing by ESR of five varieties of these products has revealed the presence of a combination of the substances **JWH-018** (1-pentyl-3-(1-naphthoyl)indole) and **JWH-073** (1-butyl-3-(1-naphthoyl)indole).



JWH-018



JWH-073

- The substitution of the 1,1-dimethyloctyl homologue of CP 47,497 with these two substances from the naphthoylindole chemical family mirrors the experience in overseas jurisdictions whereby moves to restrict one synthetic cannabinomimetic type substance, such as CP 47,497, has simply resulted in the inclusion of other uncontrolled psychoactive ingredients.
- The Ministry of Health is aware of at least 80 synthetic cannabinomimetic substances from the chemical classes of naphthoylindoles, phenylacetylindoles, benzoylindoles, naphthoylpyrroles, cyclohexylphenols and classical cannabinoids. Some of these substances, particularly those of the classical cannabinoid and cyclohexylphenol classes are arguably substantially similar in chemical structure to THC and accordingly are likely to be deemed controlled drugs analogues under New Zealand Law. However, a number of synthetic cannabinomimetic substances are likely uncontrolled in New Zealand and have the potential to be incorporated into herbal smoking blends purporting to provide a legal alternative to cannabis.
- The Ministry of Health has not been able to provide the Committee with a thorough review of all legally available cannabinomimetic substances. Additionally, for the majority of these substances there is no evidence of use in New Zealand and no international peer reviewed evidence that would inform an assessment of their appropriate classification by the Committee.
- Accordingly, this paper focuses specifically on the substances JWH-018 and JWH-073 of the naphthoylindole group of substances which have been identified in herbal smoking blends in New Zealand. These substances were first synthesised *circa* 1995 for experimental purposes, potentially as a viable alternative to medicinal cannabis and the most commonly studied of these compounds is JWH-018.

Current Classification

10. JWH-018 and JWH-073 are not classified under any international drug control treaties. These substances are not classified in New Zealand under the Misuse of Drugs legislative framework as controlled drugs, controlled drug analogues or restricted substances.
11. Some herbal smoking blends containing these substances meet the following definition of a herbal smoking product under the Smoke-free Environments Act 1990 as a product that:
 - Contains vegetable matter
 - Does not contain tobacco
 - Is intended to be smoked.
12. The products that meet these criteria are limited to those with packaging that states they are intended to be smoked, such as the pre rolled joints. These products can not legally be sold to anyone under the age of 18 years. However, the majority of herbal smoking blends are marketed as "herbal incense" and "not for human consumption." Accordingly, most of these products are not thought to meet the definition of a herbal smoking product and are not controlled under the Smoke-free Environments Act 1990.

Expert Advisory Committee on Drugs consideration of Herbal smoking blends and submissions from the targeted consultation with the industry trading in these products

13. At the meeting on 16 April 2010, the Committee agreed to a new two-step approach to drug classifications whereby the Committee would undertake a preliminary assessment of new substances to ascertain whether or not any further consideration is warranted before undertaking a formal review at a later meeting.
14. The Committee considered a preliminary assessment of "the JWH compounds" on 29 July 2010 and agreed to undertake a formal assessment of these substances at a later meeting. The Ministry of Health wrote to manufacturers, retailers and other parties with an interest in these substances on 2 September 2010 and invited them to provide a submission to inform the Committee's consideration of these substances by 16 October 2010. Three submissions from industry were received and these submissions have been analysed and incorporated into the body of this report where appropriate.
15. One submission - from the Social Tonics Association of New Zealand (STANZ) - recommends *inter alia* that the following compounds be placed into Schedule 3 (Class C) of the MoDA:
 - "JWH-018, due to issues with toxicity and abuse potential. This compound has proved unusually problematic and has a particular tendency to cause anxiety and serious adverse reactions, even when diluted in herbal smoking blends."
 - "HU-210, as it is very potent and has severe side effects and a very long duration of action."
 - "AM-694, as many toxicity concerns have been raised about its chemical makeup."

16. STANZ also suggests that the majority of other cannabinomimetic compounds would appropriately be scheduled as restricted substances under the Misuse of Drugs Amendment Act 2005 (MoDAA) as these substances are likely to have less potential to cause harm than the substances STANZ submits should be classified in paragraph 12 above.
17. Another industry submitter stated that synthetic cannabinomimetic substances have therapeutic application and a valuable harm reduction role to play. This submitter claimed that cannabinoids are non-toxic to healthy cells and that a fatal overdose is not possible. This submitter recommended that synthetic cannabinomimetic substances be scheduled as restricted substances under the MoDAA.

Part Two - Assessment

The following section of this paper has been structured in accordance with the criteria set out in the Misuse of Drugs Act 1975 that the EACD must consider when advising the Minister of Health on drug classification issues.

The likelihood or evidence of drug abuse, including such matters as the prevalence of the drug, levels of consumption, drug seizure trends, and the potential appeal to vulnerable populations

Prevalence

18. There is no quantified data available on the use of herbal smoking blends in New Zealand. However, a survey undertaken by the University of Auckland shows that use of these products is low but may be increasing. It is also likely that media coverage around the clarification that the substance CP 47,497 is illegal, as well as more recent media coverage on herbal smoking blends generally, may have increased the recognition of, and demand for, these types of products.
19. The Ministry of Health notes that the marketing and availability of herbal smoking blends has increased substantially over the past 12 months. Websites such as www.kronic.co.nz have been set up to deal exclusively in these products and offer a number of different “blends” purporting to have differing physiological effects. Such websites also heavily discount these products by offering promotions such as “buy one ounce, get one free”, which would roughly equate to hundreds of doses for NZ \$300. Additionally, the emergence of different forms of these products such as pre-rolled cigarettes or ‘joints’ makes their consumption easier and may have the effect of appealing to a market that does not have prior experience consuming cannabis. However, the Ministry of Health notes that only one manufacturer offers a “pre-rolled joint” product and that based on submissions to the Committee on this matter and comment in the media, the majority in this industry does not approve of this practice.
20. A member of the industry who submitted to the EACD on this matter states that usage rates in New Zealand appear to be substantially lower than in some European jurisdictions such as Germany, most likely because actual cannabis is easier to obtain and subject to lighter penalties in New Zealand than compared to many overseas jurisdictions.

Levels of consumption

21. Refer to “Prevalence” section above.

Drug seizure trends

22. Drug seizure trends are not applicable as herbal smoking blends are not illegal in New Zealand. However, data from New Zealand Customs indicates that importation of these products has likely increased significantly over the past two years. The Ministry of Health also considers it likely that herbal smoking blends are now being manufactured in New Zealand using the imported cannabinomimetic substances JWH-018 and JWH-073.

Potential appeal to vulnerable populations

23. The Ministry of Health is concerned that the marketing of herbal smoking blends to young people has escalated as this industry has expanded over the past 18 months. The shifting of these substances from stores that generally enforce a voluntary minimum age requirement of 18 years, such as party pill stores, to less restricted outlets such as convenience stores and internet based retailers may result in increased product recognition and use by young people. Additionally, the market has evolved to offer herbal smoking blends in different forms, such as pre-rolled joints and flavoured blends, which are arguably more appealing to young people who may not have the expertise, tools or intent to otherwise prepare these products for inhalation.
24. Finally, the aggressive marketing and free of charge giveaways of herbal smoking blends over social networking sites such as “Facebook” may further the appeal of these products to young people. An example being the recent offer by one New Zealand based manufacturer of a pre-rolled, foot long joint as a prize to the user who invited the most people to join that manufacturer’s Facebook page.
25. The Ministry of Health is also aware of research conducted by a Consultant Forensic Psychiatrist that details the use of herbal smoking blends at a New Zealand secure inpatient mental health service. This qualitative research identified that all of the patients who volunteered to participate in this study were familiar with herbal smoking blends and that 86% of the patients in this study, who were inpatients at this service, had used these products in the past 12 months with frequency of use ranging from three to six times per week.¹
26. The appeal of herbal smoking blends to the inpatients of this service was explored and participants disclosed that it is the fact that these products are undetectable when mixed with tobacco, both in terms of smell and appearance and also undetectable in urine screens that was valued by the participants in this research.

“Lots of people smoke it all the time, especially on Thursdays [day benefit received]. Maybe about 80% of the people here are using it. They have been doing it for the last year. The staff can’t tell. It doesn’t show up in urinalysis. Some people spend all their money on it.”²

“I’m one of only about half a dozen here who don’t use it.”³

“It’s like wild fire here...Honestly, of the special patients here there’s only two that don’t touch it.”⁴

“It’s very popular here. I think the whole ward’s doing it. It’s more popular than marijuana. It’s legal, available, no law against it. They told me it don’t show up in urine.”⁵

¹ Every-Palmer (2010) *It’s not just the buzz you’re paying for, it’s the free urine test*. A review of the literature and qualitative exploration of cannabinomimetic JWH-018 and psychosis in a New Zealand forensic psychiatric service.

² Ibid

³ Ibid

⁴ Ibid

⁵ Ibid

27. This research also investigated the health effects of herbal smoking blends on the inpatients that used them. Seven patients expressed predominantly positive attitudes to these products (e.g. *"I like it"*, *"I love it"*, *"it changed my life"*) four patients described negative experiences (e.g. *"I don't like anything about it"*) and one patient was neutral. The patients that had negative experiences described deterioration in their mental state listing symptoms consistent with psychotic relapse and anxiety. Three of these patients felt that this deterioration in mental state had resolved within days and the other two thought that it had taken weeks of abstinence from these products to recover.⁶
28. Whilst this research is useful for documenting the appeal, and potential harms, of Spice type products to those with severe mental health impairments, the Ministry of Health suggests that these findings are likely not able to be generalised to the wider population.

Specific effects of the drug including pharmacological, psychoactive and toxicological effects

Pharmacological

29. The JWH compounds act as agonists at the CB1 and CB2 receptors. JWH-018 is alleged to be active at doses around 2-4mgs when smoked as a pure chemical and is understood to produce physiological effects very similar to THC, but with a longer onset of effect and shorter duration of action.
30. The United Kingdom Advisory Council on the Misuse of Drugs (ACMD) produced a table documenting the mean affinity constants (Ki) for the CB1 receptor for each of the JWH compounds. The lower a substances Ki, the higher the affinity of that substance at the receptor. For example THC (Ki 10.2nM) has an approximately 10x higher affinity for the CB1 receptor than a substance with a Ki of 100nM. The following table compares the Ki values of the substances JWH-018 and JWH-073 to THC⁷:

Substance	Ki (nM)
THC	10.2
JWH 018	2.9
JWH 073	8.9

31. This table indicates that the substance JWH-073, commonly included in herbal smoking blends sold within New Zealand, has a broadly comparable affinity for the CB1 receptor as THC. Whereas JWH-018, which is the principal psychoactive ingredient in herbal smoking blends, sold within New Zealand, has a significantly greater affinity for the CB1 receptor than THC.
32. Whilst these data indicate the affinity of the JWH-018 and JWH-073 for the CB1 receptor, they do not necessary allow for conclusions to be drawn about the strength of herbal smoking blends containing these substances for two reasons. Firstly, the affinity of a substance to bind to a receptor does not indicate strength of psychoactive effect. Secondly, without a quantification of the amount of these substances incorporated into herbal smoking blends, comparisons of the strength of these products compared to cannabis can not be drawn. However, subjective

⁶ Ibid

⁷ Advisory Counsel on the Misuse of Drugs Report on the major cannabinoid agonist

reports from users of these products do indicate a broadly comparable strength to that of leaf cannabis:

“And after my experience in the weekend of getting a little to wasted on Green Puff I'm satisfied that these actually are as strong as the real deal ... albeit still lacking that overall 'warmth' I get from MJ, but without the next day Zombie feeling. I happy with the tradeoff⁸”

Psychoactive

33. As documented above, the JWH substances have an affinity for the CB1 receptor. Accordingly, the psychoactive effects of these substances are broadly similar to that of cannabis. However, subjective reports from users of these products indicate that there are subtle differences in physiological effect between herbal smoking blends and leaf cannabis:

“There's something different about MJ to all of these. The fact that it's biphasic and in the second half you tend to become more introspective, I think that's a very important part of weed to me, and so far this hasn't been replicated with any of the other cannabinoids⁹”

“It's a slightly different high than any strain of weed, but it's unmistakably cannabinoid in nature. Compared to weed, there is less sedation, less munchies, more tactile enhancement,. I also got some slight visuals the first time I smoked it¹⁰”

Toxicological effects

34. There is no peer reviewed literature on the toxicological effects of the JWH compounds. However, one anonymous study, the credibility of which, can not be determined has surfaced on the internet which elaborates on JWH-018 in relation to:

- Fluorescent Cytochrome P450 inhibition,
- Cytotoxicity,
- Genotoxicity,
- QT Interval Prolongation,
- Rat Pharmacokinetics,
- Repeat Rat Toxicity.

35. The Secretariat has not analysed the results of this study. However, there would be merit in the Committee scrutinising this research into the toxicity of JWH-018. Accordingly, this study is attached to this report as Appendix A.

36. An industry submitter has stated that anxiety is a commonly noted side effect in the majority of individuals who use synthetic cannabinomimetic substances and that this is especially evident with use of the comparatively more potent compounds such as JWH-018. The submitter stated that when used by inexperienced users, in high dosages, and particularly when vaporised as a pure powder rather than diluted in herbal smoking blends, overdose of compounds such as JWH-018 can produce severe anxiety and paranoia, sometimes progressing to full blown panic attack. This submitter further stated that the

⁸ www.tripme.co.nz

⁹ Ibid

¹⁰ www.bluelight.ru

naphthoylindoles JWH-018 and JWH-073 may have a greater tendency to produce anxiety and paranoia than THC.

The risks, if any, to public health

Risks from smoking

37. The Ministry of Health is not aware of any scientific studies investigating the effect on the respiratory system of smoking vegetable matter containing the substances JWH-018 and JWH-073. However, the Ministry notes that smoking any substance is likely to have an adverse effect on health and that like smoking tobacco or cannabis, herbal smoking blends may put users at risk of developing pulmonary conditions such as chronic bronchitis and lung cancer. It has also been noted by users of these products that the inhaled smoke of some of these products feels more harsh than that of tobacco or cannabis;

"If you can get over the foul taste theres a nice buzz to be had till the peaks over but i just dont know if its worth the "explosion" it has on my lungs and head ughh!"¹¹

"To anybody who smokes this regularly you have the lungs of an iron horse."¹²

38. The Ministry of Health notes however that concerns around the risks of smoking herbal smoking blends containing the substances JWH-018 and JWH-073 relate to the medium in which these substance are sold and administered and do not necessarily demonstrate the risks of these pure chemicals.

Risks of driving or operating machinery whilst under the influence of JWH-018 or JWH-073

39. The Ministry of Health is not aware of any research into the effect on driving performance of the substances JWH-018 or JWH-073. However, given the sedating and hallucinatory effects expected of a substance that acts as an agonist at the CB1 receptor, it is likely that a person could become significantly impaired following the use of these substances.

The therapeutic value of the drug, if any

40. Literature suggests that JWH-018 was likely first synthesised during an investigation into the application of THC analogues for the treatment of nausea, glaucoma and as appetite stimulants.¹³

41. Despite there being no officially recognised therapeutic use of the JWH substances, qualitative data suggests that users of products containing these substances find that they have therapeutic value in self medicating for a number of conditions:

"It works wonders for my depression. I've been diagnosed with severe depression and have replaced SSRI's with these blends for more than 14 months now with greater results and much less (dare I say "no") side effects..."

¹¹ www.tripme.co.nz

¹² www.tripme.co.nz

¹³ <http://www.clemson.edu/chemistry/people/huffman.html>

“Myself, I get decent anti-nausea and anti-pain effects. Not quite on a par with the naughty stuff, but still alot more useful than any pharmaceutical for nausea.”

“Another great thing about the legal blends. I can blaze all weekend and yet on Monday feel motivated enough to go to the gym and do a quality workout. Just finished one now and I feel pretty good. If that was a weekend of bud I'd feel way to lethargic to bother doing any exercise”¹⁴

42. A retailer of herbal smoking blends has submitted to the Committee that the legal availability of synthetic cannabinomimetic substances has the following benefits:

- *Customers tell us they use these products to remove themselves from the illicit market. They tell us they do not want to consort with gangsters in tinny houses.*
- *Customers like being able to buy a product of known strength, dosage and purity.*
- *Customers like not having to go anywhere “dodgy” to score, and the pay tax on it.*
- *Customers perceive a benefit to themselves from the product. They enjoy using it. It brings them pleasure, relaxation, and stress release.*
- *Several customers use cannabis medicinally to relieve pain. They tell us they also get a therapeutic effect from these products, without having to break the law.*
- *Customers consistently tell us that if these products were not available, they would drink more alcohol and/or smoke more cannabis*
- *Our customers include tourists, who are mostly accustomed to cannabis laws that are more liberal or tolerant, and who frequently express disappointment to us about how “uptight” the laws are here. We are concerned that if they attempt to score cannabis illegally they could be arrested and thrown out of the country, or exposed to dodgy people who may be selling other drugs or have ulterior motives.*

43. Since some of the therapeutic aspects of cannabis may be produced more strongly by certain synthetic cannabinomimetic drugs with a higher affinity for the CB1 and CB2 receptor than cannabis itself, it is likely that synthetic cannabinomimetic substances, including JWH-018 and JWH-073, do have efficacy in treating certain conditions. However, no pharmaceutical preparations containing the JWH compounds have been brought to market.

The potential for use of the drug to cause death

44. No credible information on the LD-50 for any of the JWH compounds could be found. However, based on the similarities of these substances to THC which has an LD-50 of 42mg/kg, it could be speculated that the potential of the JWH substances to cause death is low.

The ability of the drug to create physical or psychological dependence

45. One unauthenticated study, attached to this report as Appendix A, claims that JWH-018 exhibits a traditional tachyphylactic response in repeated dosing, with a notable decrease in both effect and duration after 3 days of heavy use. It is likely that this tolerance is the result of CB1 and CB2 receptor down regulation, similar to the mechanism by which tolerance is developed to THC.

46. The following reports from users of herbal smoking blends containing JWH-018 /JWH-073 posted on internet message boards may further document the occurrence of tolerance to these substances:

¹⁴ Ibid

“As for tolerance, with blends that’s unavoidable, and personally I don’t mind. By the time I got through the bag, the last one [use] was still enjoyable”¹⁵

“At the very least, the side-effects of high dose 018 are unpleasant, and all JWH have massive amounts of tolerance making daily use quite pointless. After a few days of use, the effect would be basically zero. The idea of someone smoking JWH’s everyday seems pretty stupid to me, considering the diminishing effects.”¹⁶

“The tolerance thing is interesting. I find tolerances do build up fast but also lower very quickly. I day or two without any blend and I can get seriously mashed from one of my favs.”¹⁷

47. In regard to physical dependence, one article¹⁸ documents a case meeting the ICD-10 and DSM-IV criteria of physical dependence following the daily consumption of “Spice Gold” by a 20 year old male. This subject initially consumed 1g of Spice Gold daily but due to increased tolerance to the effect of the drug his dose gradually escalated over an 8 month period to the point where he was consuming 3 grams of “Spice Gold” daily, spread out over three to four doses each day, at the point of intervention. The subject voluntarily admitted himself for medical treatment for detoxification. Day one of the subject’s treatment was non-symptomatic, however on the evening of day two the subject complained of unrest and was sedated. By day four the patient had developed increasing internal unrest, a strong desire for “Spice Gold”, nightmares, profuse sweating, nausea, tremor and headaches which did not improve following sedation (7.5mg zopiclone). The patient’s blood pressure increased to a maximum of 180/90 and with a maximum heart rate of 125/min which had subsided by day seven. The authors of this study conclude that the symptoms described can be interpreted as a consequence of the discontinuation of “Spice Gold”.
48. The Ministry of Health notes that the consumption of 3 grams of herbal smoking blends daily as evident in this study would represent a very high level of use and is likely not reflective of general levels of consumption of these products. In New Zealand 3 grams of herbal smoking blends would cost between \$40-\$60. The Ministry of Health also notes that despite this article suggesting that both JWH-018 and CP47-797 were the substances likely responsible for the symptoms experienced by the subject in this study, testing of “Spice Gold” in New Zealand in 2009 identified only the 1,1-dimethyloctyl homologue of the substance CP 47,497. Accordingly, the Committee may wish to interpret the results of the above study carefully in relation to a formal assessment of the substances JWH-018 and JWH-073.
49. An industry member who submitted on this matter stated that synthetic cannabinoids are in most cases unable to induce physical or psychological dependence compared to cannabis. However, this submitter did note that some of the comparably more potent compounds, including the substance JWH-018, may produce physical or psychological dependence similar to or greater than that of cannabis following prolonged heavy use.

¹⁵ www.tripme.co.nz

¹⁶ www.tripme.co.nz

¹⁷ www.tripme.co.nz

¹⁸ Zimmermann et al (2009) “Withdrawal Phenomena and Dependence Syndrome After the Consumption of Spice Gold”

50. Subjective reports from users of herbal smoking blends containing JWH-018 and JWH-073 posted on internet message boards claim that these substances actually cause less dependence than cannabis:

“Much less addictive than the real thing, very similiar feel generally, little mental stress paranoia wise and id personally guess no psychosis unlike MJ, and easy as hell to get. Win win.”¹⁹

“At least my experience has been, that blends are much less addictive personally, than pot. Pot used to run my life, it ruined it. I craved it all week, went to extraordinary lengths to score it, felt constant depressed and emotionally and mentally off balance. It was messy, and I dont think potheads realise how messy it gets with pot addiction. Blends on the other hand I have no such trouble with. No craving, no mental off balance. Im very grateful to have found something I can enjoy, while having my life in completely in balance. I smoke two days a week, most weeks and then just go on with my life normally. What a difference!”²⁰

The international classification and experience of the drug in other jurisdictions

51. Neither JWH-018 nor JWH-073 are subject to international control under the United Nations drug control conventions.
52. The following countries have prohibited either the substance JWH-018 specifically, or a larger number of the JWH compounds: Austria, Belarus, France, Germany, Ireland, Italy, Latvia, Poland, South Korea, Sweden, Estonia, Romania, Russia, Ukraine, United Kingdom. The United States of America has not prohibited these substances at the Federal Level, however a number of American States have promulgated their own bans on these substances including; Alabama, Arkansas, Georgia, Hawaii, Idaho, Illinois, Iowa, Kansas, Kentucky, Louisiana, Michigan, Mississippi, Missouri, North Dakota, Oregon, and Tennessee.
53. The United Kingdom and Ireland have enacted “catch-all” structure bans attempting to cover all naphthoylindoles, naphthoylpyrroles, naphthylmethylandanes, naphthylmethylindenes, phenylacetylindoles, cyclohexyphenoles and some other cannabiniomimetic drugs. An industry submitter has noted that this catch-all provision may have placed under legal control thousands of compounds which are either inactive or are selective CB2 agonists which have no abuse potential but might have beneficial medical uses. This submitter also claimed that these catch-all provisions missed a number of substances, such as the substance AM-694 (1-(5-fluoropentyl)-3-(2-iodobenzoyl)indole), which have since been brought to the market in these jurisdictions.
54. The Ministry of Health has reviewed the advice of the Advisory Council on the Misuse of Drugs on the “Major Cannabinoid Agonists” which informed the classification of these substances as Class B2 controlled drugs in the United Kingdom. The Ministry notes that the publicly available version of this report largely focuses on the similarities of the JWH compounds, and other synthetic cannabiniomimetic substances, to that of THC and does not investigate the potential for these substances to cause harm in any detail. The Secretariat

¹⁹ www.tripme.co.nz

²⁰ www.tripme.co.nz

made a request to the ACMD Secretariat for supporting documents, which may not be publicly available, but did not receive a response.

Any other matters that the Minister considers relevant

55. Should the Committee determine that sufficient evidence of harm exists to recommend classifying the substances JWH-018 and JWH-073 as controlled drugs under the MoDA, the Ministry of Health suggests that these reclassifications will not address the overall availability of herbal smoking blends in New Zealand.

56. Every jurisdiction that has moved to restrict some synthetic cannabinometric substances has seen the emergence of new, uncontrolled compounds in place of the banned substance. Indeed, the Ministry of Health is aware of a number of compounds that, pending further analysis, may be uncontrolled and potentially incorporated into herbal smoking blends in New Zealand in place of the substances JWH-018 and JWH-073.

Options for control

57. The Committee may wish to consider the following three options:

1. Recommend that the status quo be maintained

In choosing this option the Committee would advise that insufficient evidence is available to make a recommendation that the substances JWH-018 and JWH-073 be controlled under the Misuse of Drugs legislative framework.

In this instance the Ministry of Health will undertake further analysis into the appropriateness of using other legislative frameworks such as the Smoke-free Environments Act 1990 or the Hazardous Substances and New Organisms Act 1996 to place harm preventive restrictions on the marketing and availability of products containing these substances.

2. Recommend that JWH-018 and JWH-073 be scheduled as restricted substances

In choosing this option the Committee would advise that sufficient evidence is available to make a recommendation that the substances JWH-018 and JWH-073 pose a low risk of harm and should be scheduled as restricted substances under the Misuse of Drugs Amendment Act 2005.

In this instance products containing JWH-018 and JWH 073 would be regulated subject to:

- a. A minimum purchase age of 18 years,
- b. Prohibitions on free of charge distribution or the offering of such products as a reward,
- c. Restrictions limiting all advertising (except internet based advertising) to only the inside of a premise selling restricted substances and a requirement that such advertising not be visible or audible from outside such a premise,
- d. Prohibitions on selling such products from any venue with a liquor license, or from service stations, or from non fixed premises such as caravans or street carts,

- e. Prohibitions on selling such products from places where children or minors gather including, but not limited to, schools, recreational facilities and sporting facilities ,
- f. Requirements for all products to contain warning labels, including warning against driving or operating machinery following use and contact details of the manufacturer and the National Poisons Centre,
- g. Requirements that all such products be sold in child resistant and tamper proof containers.

3. Recommend that JWH-018 and JWH-073 be classified as controlled drugs

In choosing this option the Committee would advise that sufficient evidence is available to make a recommendation that the substances JWH-018 and JWH-073 pose a moderate or higher risk of harm and should be classified as either Class A, B or C controlled drugs under the Misuse of Drugs Act 1975.

In this instance JWH-018 and JWH-073 would be illegal and criminal penalties would apply to their manufacturer, importation, exportation, supply, sale, possession and use.

END.