Expert Committee on Drug Dependence
Thirty-ninth Meeting
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Expert Peer Review for AB-PINACA

1. Comments based on the review report
   a. Evidence on dependence and abuse potential
      Dependence potential: No animal or human studies addressing the dependence potential of AB-PINACA could be identified.
      
      Abuse potential: Information on the abuse potential of AB-PINACA is very limited. The critical review mentions one drug discrimination study conducted in mice. AB-PINACA was shown to fully substitute for $\Delta^9$–THC but in only two of the nine mice suggesting that the dose needed to impair behavior/induce intoxication and the dose needed to produce behavioural toxicity may be very close or even indistinguishable. The data suggests that AB-PINACA may have abuse liability but further studies are necessary.
   
   b. Risks to individual and society because of misuse
      Ingestion of synthetic cannabinoids has been associated with serious adverse events including, acute kidney failure, shortness of breath, hypertension, tachycardia, chest pain, myocardial infarctions, agitation, psychosis, delirium, seizures, hallucinations, suicidal ideation, coma and death. These serious events are attributed to the higher potency of the synthetic cannabinoids (including AB-PINACA). AB-PINACA acts as a full cannabinoid agonist and is more potent than $\Delta^9$–THC (a partial agonist). This higher potency may put individuals at risk for accidental overdose. Synthetic cannabinoids also pose a risk to public health. Two studies have implicated AB-PINACA in cases of impaired driving and motor vehicle collisions. The critical review also highlights the fact that synthetic cannabinoids are used by marginalized and stigmatized members of society such as prisoners or homeless individuals.
   
   c. Magnitude of the problem in countries (misuse, illicit production, smuggling etc)
      Many international bodies have provided reports relating to the appearance of AB-PINACA. The European Early Warning System reported that AB-PINACA (first
detected in 2013) was found in seizures in Sweden, Hungary, Turkey, Germany, France, Croatia, Latvia, Bulgaria, Slovakia, Spain and Slovenia. AB-PINACA began appearing in USA in 2013 and in 2014 it was one of two most common synthetic cannabinoid receptor agonists reported. This figure subsequently dropped in 2015 which could reflect the emergence of new synthetic cannabinoids possibly due to the temporary scheduling of AB-PINACA in Schedule 1 of the Controlled Substances Act.

d. Need of the substance for medical (including veterinary) practice
   No known medical use.

e. Need of the substance for other purposes (e.g. industrial)
   No known industrial or other uses.

f. Measures taken by countries to curb misuse
   In USA AB-PINACA is in Schedule I of the Controlled Substances Act.

g. Impact if this substance is scheduled
   Since no medical, industrial or other uses have been identified, the impact would be nil.

2. Are there absent data that would be determinative for scheduling?
   Additional studies on the abuse and dependence liability of AB-PINACA would be useful.

3. Other comments or opinions
   No additional comments.

4. Expert reviewer’s view on scheduling with rationale
   AB-PINACA is a synthetic cannabinoid receptor agonist that is manufactured clandestinely. It produces a number of effects that are similar to those produced by the naturally occurring phytocannabinoid Δ⁹-THC but it is more potent. Although epidemiological estimates are not available there are consistent reports of serious adverse events in the literature. This compound has no therapeutic use and poses a serious risk to public health. Due to its similarity to Δ⁹-THC and to other internationally controlled synthetic cannabinoids it is recommended that AB-PINACA be placed under international control in Schedule II of the 1971 Convention on Psychotropic Substances.