Expert Committee on Drug Dependence
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World Health Organization

1. Comments based on the review report

a. Evidence on dependence and abuse potential

BZP was first synthesized in the 1940s but has only become popular in more recent years. There is evidence stretching back for a number of years, but the total amount of published research on this compound is still limited.

BZP shares with other stimulants the potential to increase extracellular levels of dopamine, noradrenaline (norepinephrine) and serotonin. This occurs through blockade of re-uptake and increased release. The main effects seem to be on dopaminergic neurons. These actions, together with its reported effects, suggest effects similar to those of amphetamine and, to some extent, MDMA.

Animal studies predictive of abuse potential show that BZP is self-administered by monkeys and has discriminative effects similar to stimulants such as amphetamine.

While there is not a large body of evidence, what is available suggests that BZP has a similar abuse potential as amphetamine.

BZP is commonly used in conjunction with TFMPP. While chemically related, the latter compound has stronger serotonergic action than BZP, whereas BZP has more prominent dopaminergic effects that make it more amphetamine like. Anecdotal reports suggest that the combination of BZP and TFMPP produces effects similar to those of MDMA. Animal studies suggest that the abuse potential of BZP is reduced by the combination with TFMPP.

b. Risks to individual and society because of misuse

There are a number of reports relating to the toxic effects of BZP. Many of the reported cases are compromised by significant confounders, particularly the consumption of multiple drugs. Acknowledging these confounding factors, the evidence from these reports is consistent with BZP producing amphetamine and MDMA like toxicity with associated risk of medical emergencies and fatalities. Seizures seem to be particularly prominent in cases of BZP overdose. BZP does not appear to produce the level of psychotic effects found in cases of amphetamine/methamphetamine toxicity.

c. Magnitude of the problem in countries (misuse, illicit production, smuggling etc)
Use of BZP appears to have been most widespread when available as a legal drug, with decreases in use when legal controls were implemented. This has been best documented in the case of New Zealand.

Approximately half of the responding Member States reported information on BZP. Manufacture has been reported by only a few countries; trafficking and an internet market were reported by a number of respondents.

d. Need of the substance for medical (including veterinary) practice

No known use.

e. Need of the substance for other purposes (e.g. industrial)

No known use. Some use in scientific research.

f. Measures taken by countries to curb misuse

Almost all countries reporting some information on BZP indicated that they had legal controls in place.

g. Impact if this substance if scheduled

Very little impact expected.

2. Additional information to the review report

While there is potential for BZP to produce dependence of the amphetamine type, there do not appear to be any reports of this occurring. While this does not negate the potential for such dependence, it suggests that it is not a common phenomenon.

3. Other comments or opinions

None

4. Expert reviewer's view on scheduling with rationale

As an amphetamine like substance BZP could potentially be grouped as a Schedule 2 substance under the 1971 Convention. However, unlike some other stimulants it has no known legitimate uses outside of research and use for analytical purposes and there is little likelihood of this changing. It would therefore be most appropriately classified as a Schedule 1 substance. This would also classify it together with MDMA, with which it shares a number of common properties.