

## Advisory Council on the Misuse of Drugs

Addendum to ACMD's report on the use and harms of 2-benzyl benzimidazole ('nitazene') and piperidine benzimidazolone ('brorphine-like') opioids

On 18 July 2022 the Advisory Council on the Misuse of Drugs (ACMD) published its advice on 2-benzyl benzimidazole (nitazene) and piperidine benzimidazolone (brorphine-like) opioids. Since publication the ACMD has received evidence that a further 2-benzyl benzimidazole, *N*-Desethylisotonitazene, has also been detected in drug seizures in the UK.

*N*-Desethylisotonitazene is a potent Mu opioid receptor (MOR) agonist [Vandeputte et al 2022; Palkovic et al, 2022] and the ACMD has concluded that its potential harms are commensurate with those of the other nitazene compounds listed in Recommendation 1.Therefore, the ACMD recommends *N*-Desethylisotonitazene be added to Class A of the Misuse of Drugs Act 1971, consistent with the classification of other potent opioids. As *N*-Desethylisotonitazene has no known legitimate medicinal use, it is recommended that it should be added to Schedule 1 of the Misuse of Drugs Regulations 2001 (as amended).

*N*-Desethylisotonitazene would be caught by the generic definition proposed in Recommendation 3 of the report.

## **Revised Recommendation 1:**

The following compounds should be added to Class A of the Misuse of Drugs Act 1971, consistent with the classification of other potent opioids.

As these materials have no medical use it is recommended that they should be placed in schedule 1 of the Misuse of Drugs Regulations 2001 (as amended).

- Metonitazene
- Protonitazene
- Isotonitazene
- Butonitazene
- Flunitazene
- Metodesnitazene (metazene)
- Etodesnitazene (etazene)
- *N*-Pyrrolidino-etonitazene (etonitazepyne)
- *N*-Piperidinyl-etonitazene (etonitazepipne)
- Brorphine
- N-Desethylisotonitazene

Lead: Home Office

**Measure of outcome:** The inclusion of the listed compounds in Class A of the Misuse of Drugs Act 1971 and Schedule 1 of the Misuse of Drugs Regulations 2001.

## References

Palcovic B, Malcom NJ, McCorvy JC, Langer TM, Callison JJ, Stuth EA, Zuperku EJ, Strucke AG. Nitazenes are potent mu-opioid receptor agonists with profound respiratory depression. The FASEB Journal, 36:. https://doi.org/10.1096/fasebj.2022.36.S1.R4024

Vandeputte, M., Van Uytfanghe, K., Layle, N., St Germaine, D., Iula, D., & Stove, C. (2021). Synthesis, chemical characterization, and mu-opioid receptor activity assessment of the emerging group of "nitazene" 2-benzylbenzimidazole synthetic opioids. ACS Chemical Neuroscience 12(7), 1241– 1251. https://doi.org/10.1021/acschemneuro.1c00064