

**Expert Committee on Drug Dependence**

**Thirty-ninth Meeting**

**Geneva, 6-10 November 2017**



**Expert Peer Review for Ocfentanil**

**1. Comments based on the review report**

**a. Evidence on dependence and abuse potential**

*Dependence potential:* Studies on the dependence potential of ocfentanil could not be identified.

*Abuse potential:* Studies assessing the abuse liability of ocfentanil in either animals or humans could not be found.

**b. Risks to individual and society because of misuse**

Ocfentanil is a synthetic analgesic structurally related to fentanyl and is approximately equipotent. In common with other fentanyls it produces analgesia, sedation, euphoria, feelings of relaxation and potentially serious dose-related respiratory depression. Users are at risk for developing opioid use disorders and experiencing fatal and non-fatal overdose. Ocfentanil related deaths have been reported in Belgium, Switzerland, Ireland, France, United States and Canada (Misailidi et al, 2017).

The high potency of ocfentanil poses public health concerns due to the risk of fatal and non-fatal overdoses but also because of reports that it is being used as an adulterant in heroin.

**c. Magnitude of the problem in countries (misuse, illicit production, smuggling etc)**

Epidemiological estimates of use are not available. Ocfentanil appears to be available on the dark net.

**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**

Ocfentanil is a scheduled substance in Canada, China, Czech Republic, Denmark, Estonia, Finland, Italy, Japan, Lithuania, Sweden, United Kingdom

**g. Impact if this substance is scheduled**

Preclinical data suggested that ocfentanil might have a better safety profile (cardiovascular effects, respiratory depression) compared to fentanyl. However, studies in humans revealed a similar potency and side-effect profile as fentanyl and therefore further clinical development ceased. 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?**

None identified.

**3. Other comments or opinions**

A recent review article by Misailidi et al (2017) provides additional information on ocfentanil particularly on fatal and non-fatal intoxications.

Misailidi, N et al.(2017). Fentanyls continue to replace heroin in the drug arena: the cases of ocfentanil and carfentanil. Forensic Toxicol. DOI 10.1007/s11419-017-0379-4.

**4. Expert reviewer's view on scheduling with rationale**

Ocfentanil is an opioid analgesic that is structurally related to fentanyl and approximately equipotent in effect. Fentanyl is currently scheduled under the 1961 Single Convention on Narcotic Drugs (Schedule I). The recommendation is that ocfentanil be scheduled under the 1961 Single Convention on Narcotic Drugs, Schedule I.