

# A Death-Like Slumber Toxic Outbreak of AB-FUBINACA

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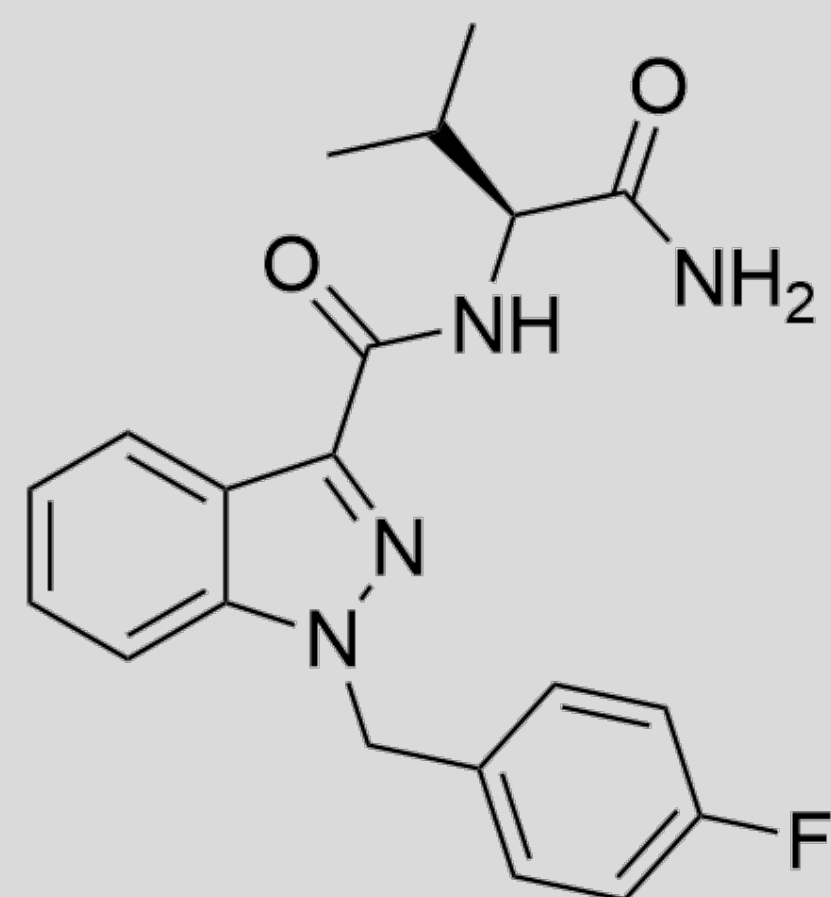
## Conclusion

**AB-FUBINACA toxicity was variable among this cohort, ranging from sedation to severe hypothermia, ventricular tachycardia, and refractory seizure.**

## Background

Synthetic cannabinoids (SCB) continue to evolve and elude both law enforcement and medical personnel treating SCB intoxication.

We report a case series of 4 patients exposed to AB-FUBINACA, a third generation SCB, confirmed by drug specimen and urine analysis.



[https://commons.wikimedia.org/wiki/File:AB-FUBINACA\\_structure-rev1.png](https://commons.wikimedia.org/wiki/File:AB-FUBINACA_structure-rev1.png)

## Case #1:

21 y.o. male found **unresponsive** in bed 10 hours post-ingestion. Bystander CPR initiated.

Defibrillated twice for **ventricular tachycardia**.

The patient achieved ROSC and was intubated by EMS.

The patient had unexplained hypothermia with core temperature of 31.6°C. Comatose with 3mm fixed pupils. No hyperreflexia or clonus.

Pressor support with norepinephrine and **therapeutic hypothermia** initiated.

Discharged within 8 days of cardiac arrest with no neurologic sequelae.

## Case #2:

20 year-old male, no PMH, presented 12 hours post-ingestion with **sedation** and altered mental status.

14 hours post-exposure, **refractory seizure**.

Intubation and sedation with propofol.

Normal vital signs with normal reflexes on propofol. Pupils were 6mm sluggishly reactive.

Extubated the following day and discharged on hospital day #3 with normal neurologic function.

## Case #3 & 4:

18 yo female and 19 yo male presented 12-14 hours post-ingestion with **significant sedation**, but vital signs were within normal limits. Monitored for 24 hours and discharged home.

## Case Discussion

This case series demonstrates the variable toxicity of AB-FUBINACA with a propensity for sedation. Life threatening ventricular tachycardia and refractory seizure seem to be unrelated to dose. Advanced techniques such as therapeutic hypothermia may be considered.

## Methods/Case Series

All reported ingesting the same capsule of white powder, thought to be "Molly".

Urine was analyzed by LC/MS-MS for 12 synthetic cannabinoid metabolites including AB-FUBINACA.

All patients ingested at the same time, and presented 10-12 hours later to a local ED.

The 4 patients presented here were deemed critical, and transferred to a tertiary care center.

## References

- Andrew A. Monte, AC Bronstein, DJ Cao, KJ Heard, JA Hoppe, CO Hoyte, JL Iwanicki, EJ Lavonas. An Outbreak of Exposure to a Novel Synthetic Cannabinoid. N Engl J Med 2014; 370:389-390
- Drug Enforcement Administration, Department of Justice. Schedules of Controlled Substances: Extension of Temporary Placement of PB-22, 5F-PB-22, AB-FUBINACA and ADB-PINACA in Schedule I of the Controlled Substances Act. final order. Fed Regist. 2016 Feb 5;81(24):6175-7.
- Banister SD, Moir M, Stuart J1, Kevin RC, Wood KE, Longworth M, Wilkinson SM, Beinat C, Buchanan AS2, Glass M3, Connor M1, McGregor IS, Kassiou M. Pharmacology of Indole and Indazole Synthetic Cannabinoid Designer Drugs AB-FUBINACA, ADB-FUBINACA, AB-PINACA, ADB-PINACA, 5F-AB-PINACA, 5F-ADB-PINACA, ADBICA, and 5F-ADBICA. ACS Chem Neurosci. 2015 Sep 16;6(9):1546-59

## Special Thanks to:

Charles McKay, M.D. and the staff at the Connecticut Poison Control Center  
Mark Anderson and Robert Deluca from DESPP Forensic Toxicology Lab

