

# Induction without withdrawal: Low-dose buprenorphine inductions

Category: Workshop

## Abstract Body

Buprenorphine is the recommended first-line treatment for opioid use disorder due to its similar efficacy and superior safety profile compared to other opioid agonist treatment medications. However, because of its high binding affinity at  $\mu$ -opioid receptors ( $\mu$ ORs) and its high lipophilicity, buprenorphine abruptly displaces other opioids from  $\mu$ ORs and has persistent but lower intrinsic efficacy at brain  $\mu$ ORs compared with full agonists, which can lead to precipitated withdrawal. To avoid this outcome, patients are instructed to abstain from opioids and experience at least moderate withdrawal before initiating buprenorphine. This requirement of prior withdrawal and risk of precipitated withdrawal, which can lead to treatment dropout, relapse with unregulated opioids, and subsequent overdose, are major barriers to buprenorphine use among patients and healthcare staff. Low-dose inductions (also known as micro-dosing, micro-inductions) involve the administration of small, frequent doses of buprenorphine negating the need for a period of withdrawal and opioid abstinence prior to the start of treatment and aims to reduce the risk of precipitated withdrawal. Building upon the Bernese method, we have developed novel, more rapid methods of low-dose buprenorphine inductions. Utilizing practical real-life cases as well as patient testimonial videos, we will teach low-dose induction techniques (low-dose induction, rapid low-dose induction, ultra-rapid low-dose induction, rapid transdermal buprenorphine induction onto buprenorphine/naloxone and buprenorphine extended-release) for varied patient populations (e.g., chronic pain, geriatric, child and adolescent) and clinical scenarios (e.g., mechanically ventilated patient, inpatient and outpatient settings).

## Key Words

- Opiate Agonist Therapy
- Opioids/Opiates
- Pharmacology/Toxicology
- Withdrawal Management

## Learning Objective # 1

Utilize buprenorphine/naloxone low-dose inductions in inpatient and outpatient settings, in the chronic pain/prescription opioid tolerant setting, and in varied populations, such as geriatric patients, youth, and adolescents.

## Learning Objective # 2

Utilize transdermal buprenorphine to rapidly initiate patients onto buprenorphine/naloxone and buprenorphine extended-release.

### Reference # 1

Klaire, S., Zivanovic, R., Barbic, S. P., Sandhu, R., Mathew, N., & Azar, P. (2019). Rapid micro-induction of buprenorphine/naloxone for opioid use disorder in an inpatient setting: A case series. *Am J Addict*, 28(4), 262-265. <https://doi.org/10.1111/ajad.12869>

### Reference # 2

Azar, P., Wong, J. S. H., Mathew, N., Vogel, M., Perrone, J., Herring, A. A., Krausz, R. M., Montaner, J. S. G., Greenwald, M. K., & Maharaj, A. R. (2022). 48-hour Induction of Transdermal Buprenorphine to Sublingual Buprenorphine/Naloxone: The IPPAS Method. *Journal of addiction medicine*, 10.1097/ADM.0000000000001072. <https://doi.org/10.1097/adm.0000000000001072>

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