REAL PSYCHIATRY

An Educational Experience Designed for and by
APPs on the Frontline of Modern Practice

ENGAGED & COMMITTED

BUILDING SUCCESSFUL PATIENT-CENTERED SUBSTANCE USE DISORDERS TREATMENT

— JANUARY 13, 2024 —

Program Overview

CHALLENGES

- Opioids are the **leading cause of drug overdose-related deaths**
- Historically, the management of **opioid use disorder (OUD)** was limited to agents that targeted the **μ-opioid receptor** such as methadone, buprenorphine, and naltrexone
- While the active ingredients in many of the agents are the same, the need to understand the differences between the many options makes it **challenging to select and optimize agents**

OPPORTUNITIES

- **Newer formulations of traditional agents** help to address the challenges of medication nonadherence
- **Newer medications** with unique pharmacokinetic properties provide additional therapeutic options for potent opioid overdoses

To address these challenges, this module will examine novel and up-to-date treatment options and considerations for the medications and their many formulations for the treatment of opioid use disorder.

Presenting Faculty

Carmen Kosicek, MSN, PMHNP-BC, APNP

CEO, Founder, Provider

Alay Health Team

Tucson, AZ

Mark Jankelow, MSN, PMHNP-BC, APNP

CEO/Owner, Provider

Springbok Health, Inc

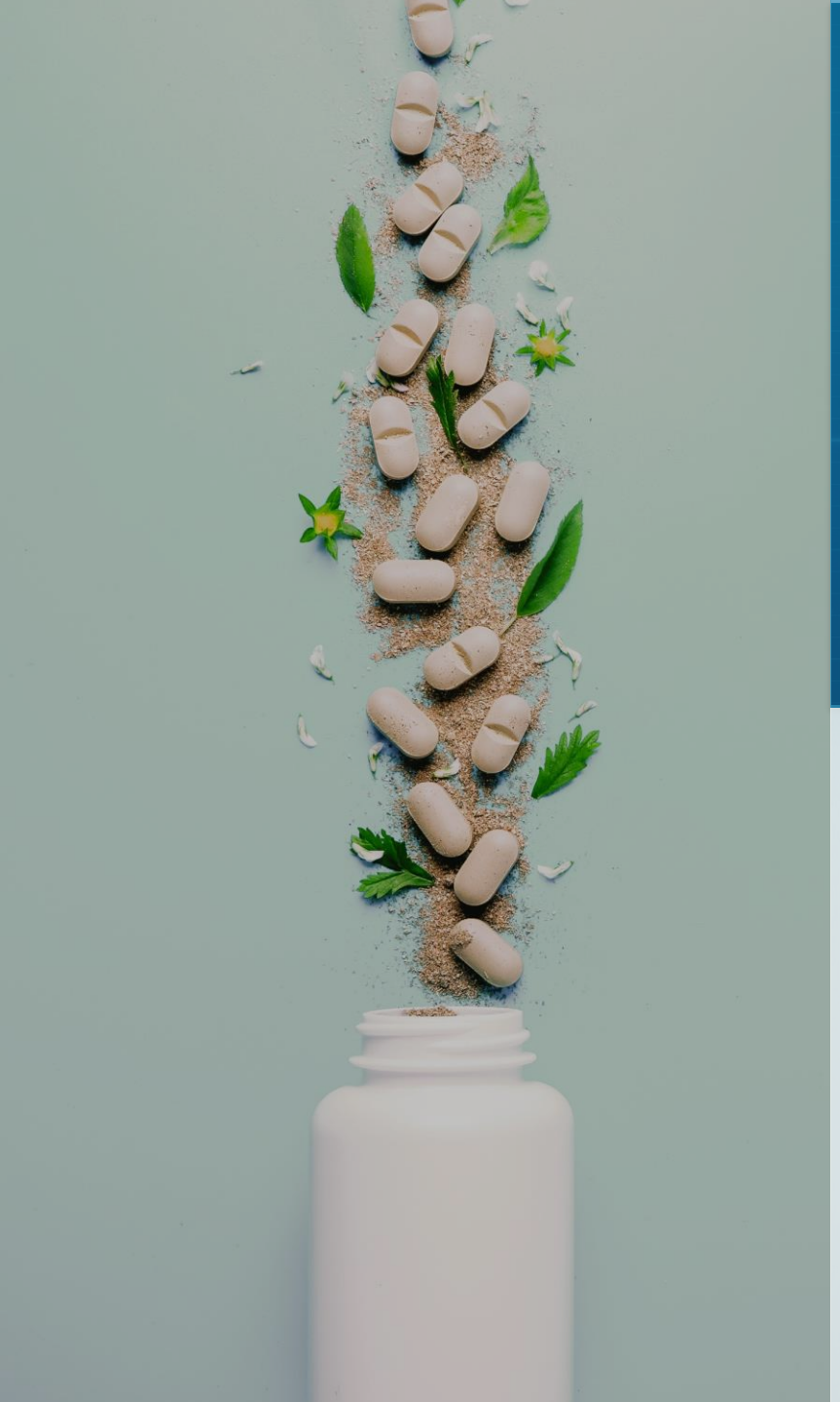
Colorado Springs, CO

Ann Barbaro, MSN, PMHNP-BC, APRN

Psychiatric Nurse Practitioner

Alay Psychiatry

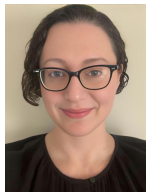
Pewaukee, WI



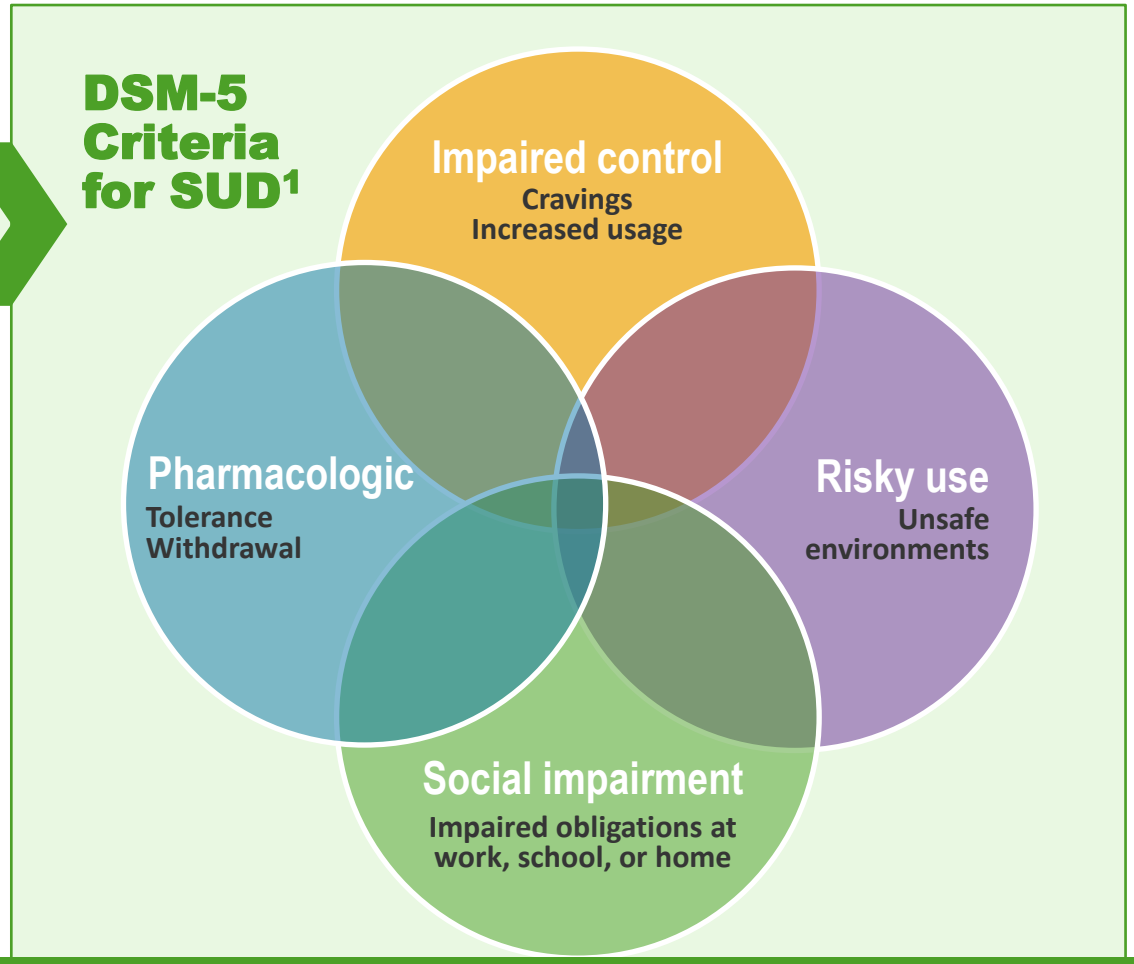
MODULE
— 1 —

OVERVIEW OF STANDARD OF CARE AND NOVEL THERAPEUTICS

SUBSTANCE USE DISORDER



- Addiction underlies/mediates **substance use disorder (SUD)**[1]
  - SUD is a **DSM-5 diagnosis**[2]
- **Withdrawal**: Signs/symptoms that occur when blood/tissue levels of a substance decrease[2]
  - Seek substance to relieve withdrawal symptoms
- **Overdose:** Excessive/dangerous/lethal amount of a prescribed or illicit substance

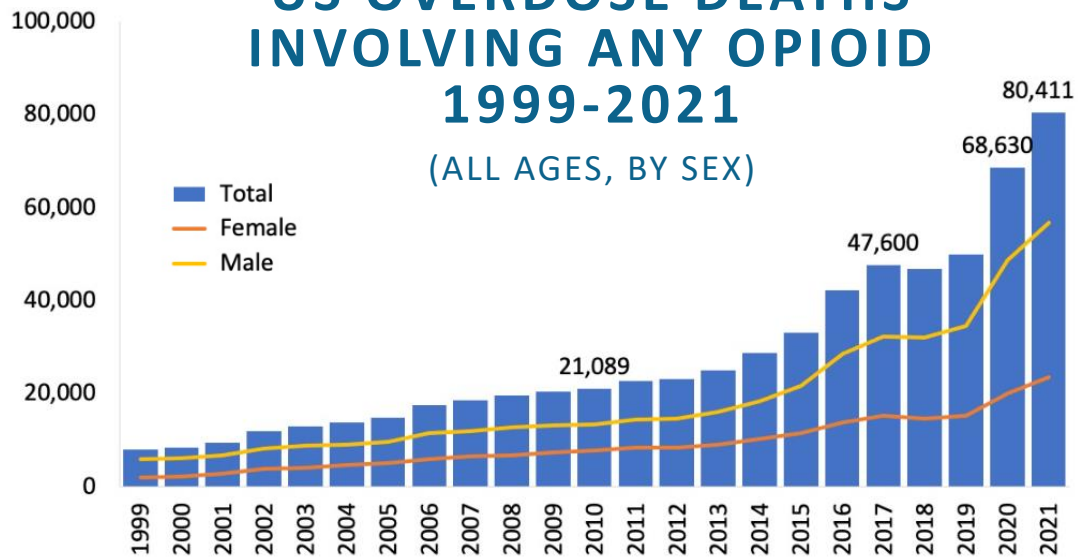


MAJORITY OF DRUG-RELATED OVERDOSE DEATHS ARE DUE TO OPIOIDS[3]

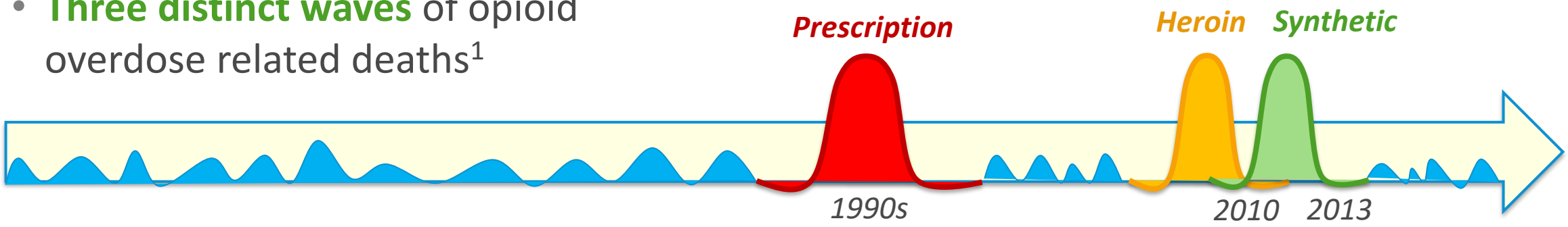
1. Kalin NH. Substance use disorders and addiction: mechanisms, trends, and treatment implications. *Am J Psychiatry.* 2020;177(11):1015-1018. 2. McNeely J et al. *Substance Use Screening and Risk Assessment in Adults*. Johns Hopkins University; October 2020. 3. Centers for Disease Control and Prevention. Opioid data analysis and resources. August 8, 2023. Accessed January 2, 2024. https://www.cdc.gov/opioids/data/analysis-resources.html

RIDING THE OPIOID WAVES

- Continued rise in opioid overdose deaths[1] (worsening impact from COVID pandemic[2])
  - ~ 645,000 deaths from 1999 through 2021[1]
  - **10-fold increase** from 1999 through 2021[1]
- **Three distinct waves** of opioid overdose related deaths[1]



From Drug overdose death rates • National Institute on Drug Abuse.



1. Centers for Disease Control and Prevention. Opioid data analysis and resources. August 8, 2023. Accessed January 2, 2024. https://www.cdc.gov/opioids/data/analysis-resources.html. **2.** Ghose R et al. Impact of the COVID-19 Pandemic on Opioid Overdose Deaths: a Spatiotemporal Analysis. *J Urban Health*. 2022;99(2):316-327.

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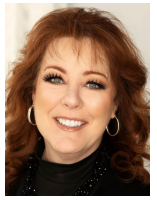


KEY ROLE OF APPS

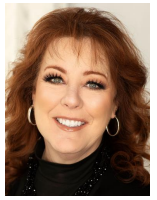
- 2018: ***Waiver acquisition (training) required*** to prescribe buprenorphine[1]
  - That same year, NPs represented the ***greatest increase*** in buprenorphine prescribing rates[1]
- 2023: Omnibus bill[1,2]
  - ***Rescinds*** **waiver acquisition**
  - Goal to increase access to buprenorphine

APPS ARE KEY TO EXPANDING THE OPIOID TREATMENT WORKFORCE

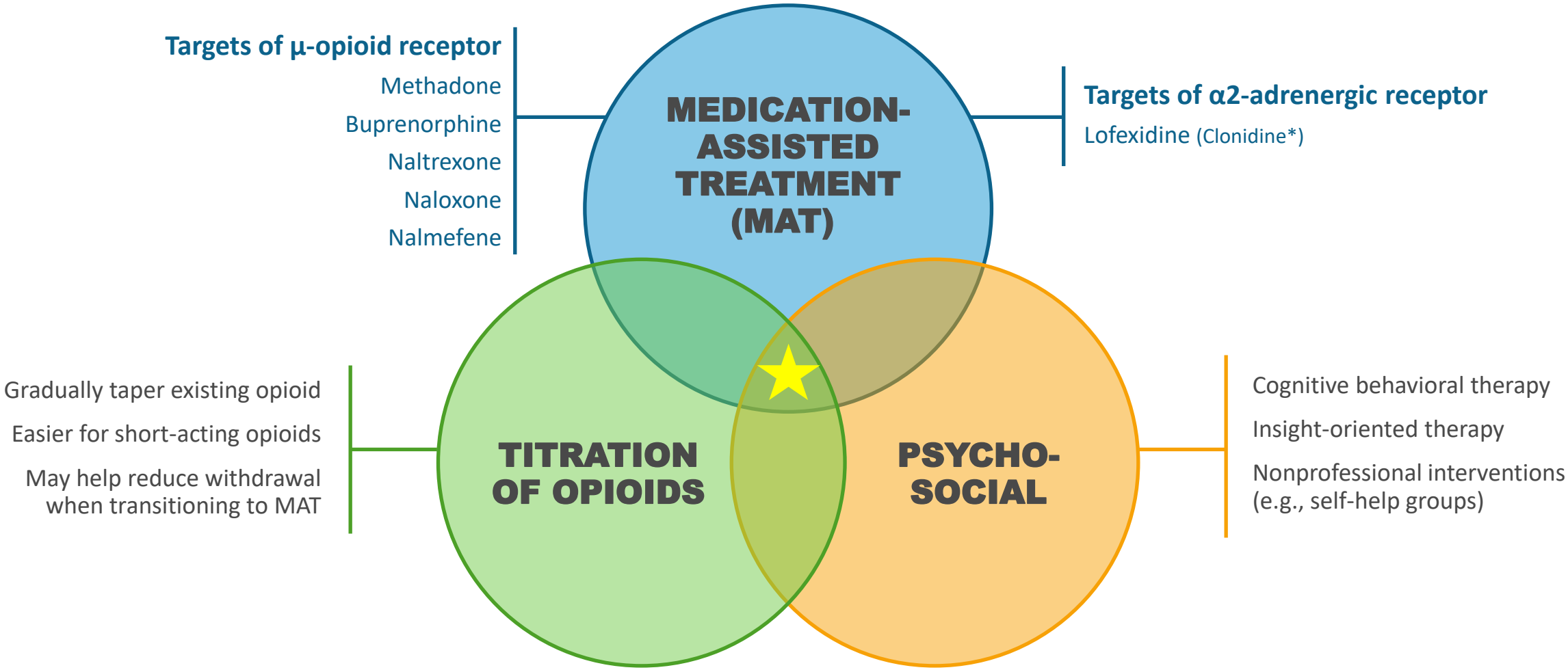
APPS MUST STAY UP TO DATE ON USE AND ADMINISTRATION OF BUPRENORPHINE AND OTHER MEDS

1. Klein TA et al. The impact of CARA mandates on nurse practitioner controlled substance prescribing in Oregon: a cohort study. *Subst Abuse Treat Prev Policy*. 2022;17(1):5. **2.** Characteristics and prescribing patterns of clinicians waivered to prescribe buprenorphine for opioid use disorder before and after release of new practice guidelines. *JAMA Health Forum.* 2023;4(7):e231982.

APP: advanced practice provider



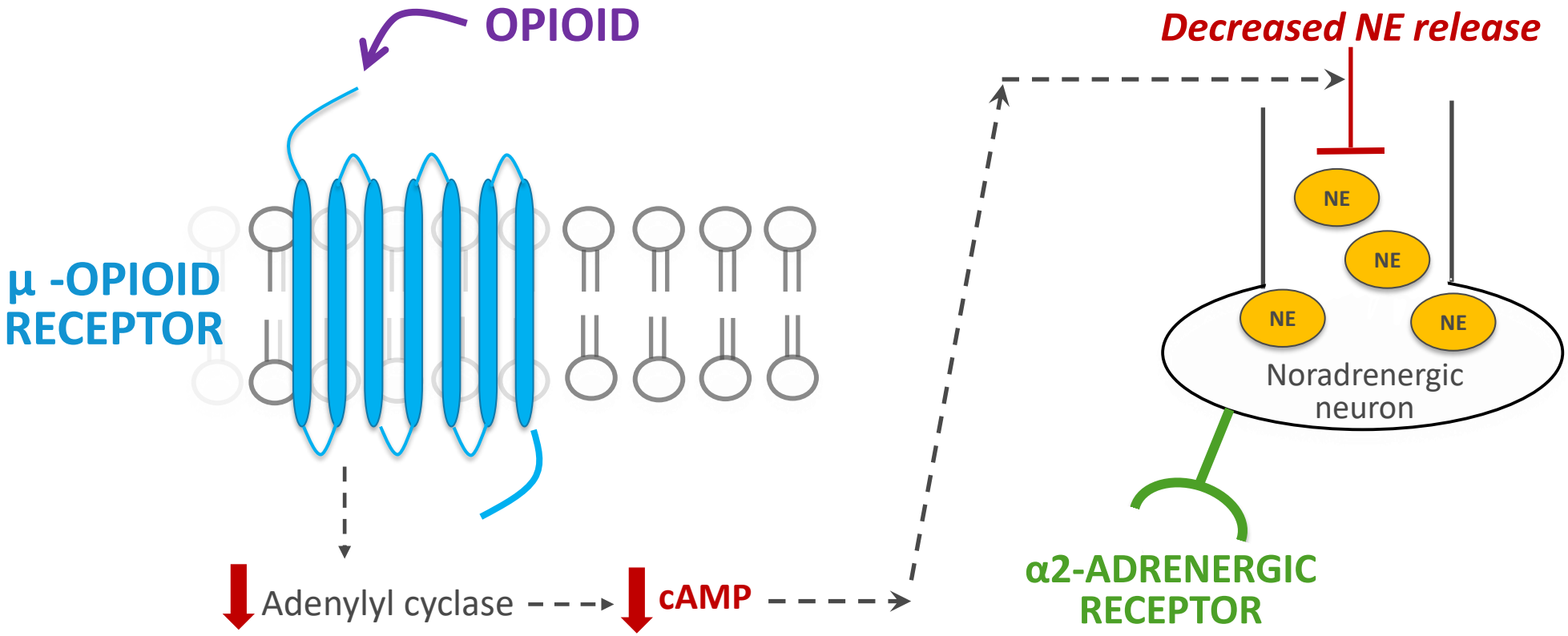
STANDARD OF CARE
OPIOID USE DISORDER



*Off-label use. Not FDA-approved for the symptomatic treatment of opioid withdrawal

1. The ASAM National Practice Guideline for the Treatment of Opioid Use Disorder: 2020 Focused Update. *J Addict Med*. 2020;14(2S Suppl 1):1-91

PATHOPHYSIOLOGY OF OPIOID USE

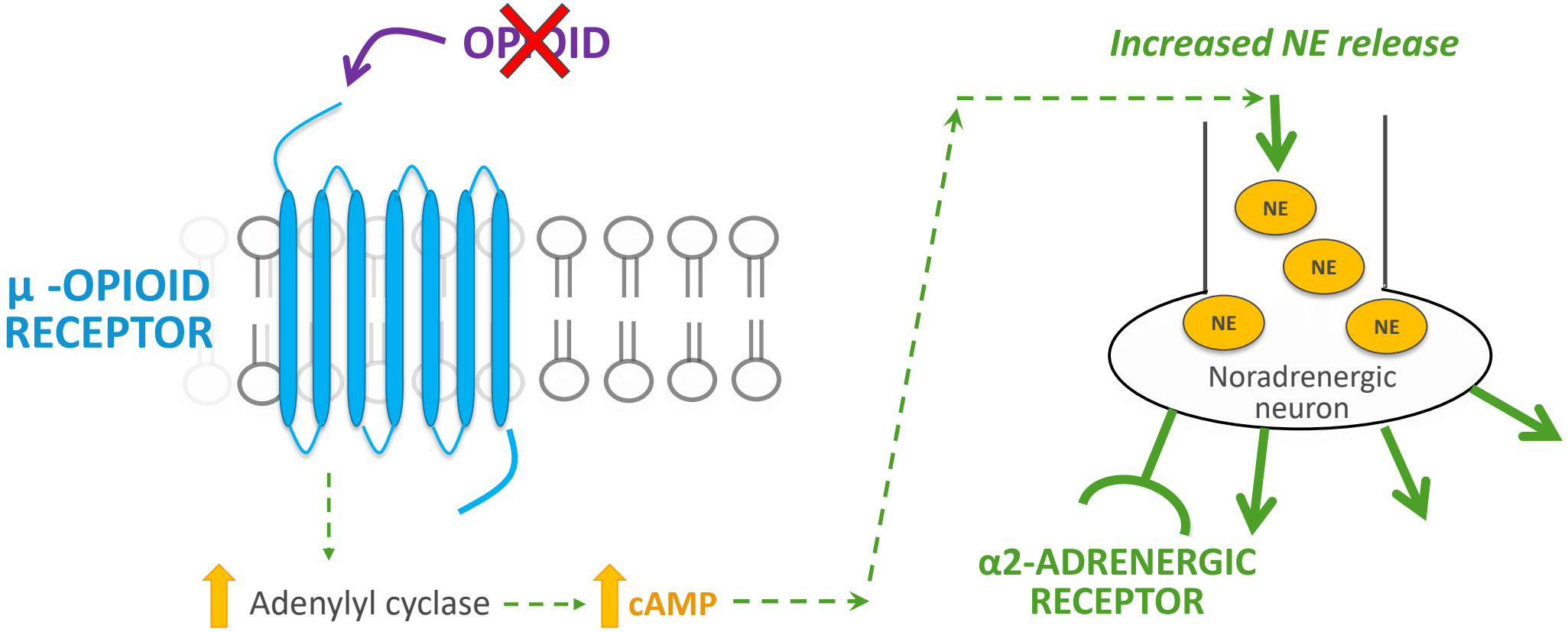


μ (mu)-opioid receptor reduces cAMP, decreasing NE release in the brainstem,[1] **CONTRIBUTING TO OPIOID INTOXICATION/OVERDOSE**

1. Srivastava AB et al. New directions in the treatment of opioid withdrawal. *Lancet*. 2020;395(10241):1938-1948.

NE: norepinephrine

PATHOPHYSIOLOGY OF OPIOID USE



In the absence of opioids for chronic users, cAMP increases resulting in NE release, leading to **WITHDRAWAL**.

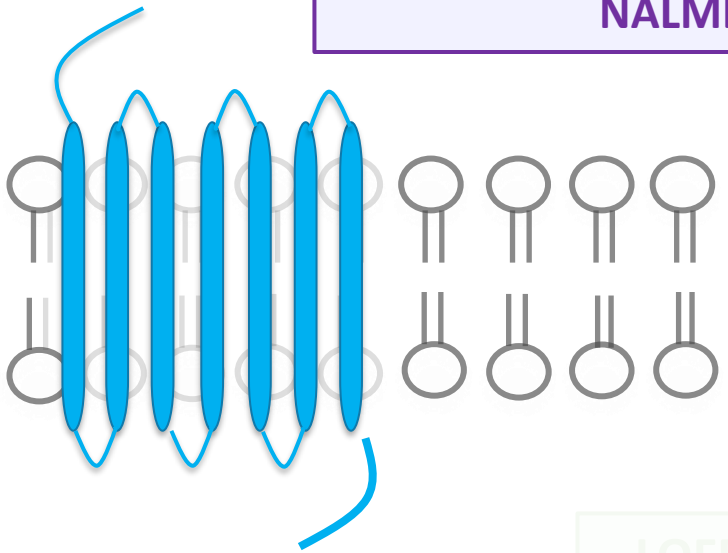
1. Srivastava AB et al. New directions in the treatment of opioid withdrawal. *Lancet*. 2020;395(10241):1938-1948.

NE: norepinephrine

PHARMACOTHERAPY

OPIOID USE DISORDER AND OPIOID OVERDOSE

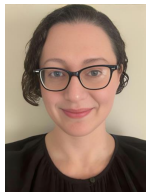
METHADONE ● BUPRENORPHINE ● NALTREXONE ● NALOXONE ● NALMEFENE



Let's start with the μ-opioid receptor

The therapeutic effect of opioid-based therapies depends on their action at the μ-opioid receptor

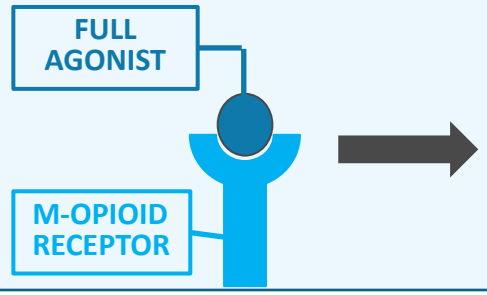
1. Srivastava AB et al. New directions in the treatment of opioid withdrawal. *Lancet*. 2020;395(10241):1938-1948.



AGONIST VS ANTAGONIST

OPIOID-NAÏVE / ABSENT

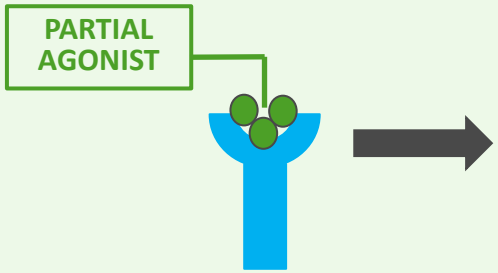
FULL AGONIST



FULL OPIOID EFFECT

METHADONE
Opioid use disorder

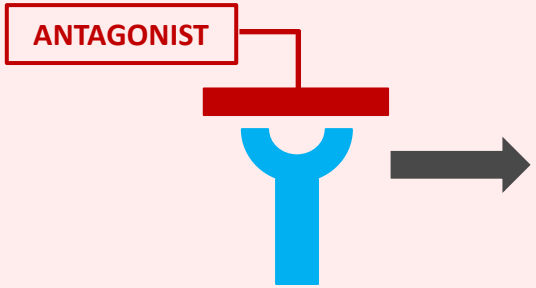
PARTIAL AGONIST



LIMITED OPIOID EFFECT

BUPRENORPHINE
Opioid use disorder

ANTAGONIST



NO OPIOID EFFECT

NALTREXONE
Opioid use disorder

NALMEFENE
Opioid overdose

→ **Long-acting**

NALOXONE
Opioid overdose

→ **Short-acting**

1. Strang J et al. Opioid use disorder. *Nat Rev Dis Primers*. 2020;6(1):3.

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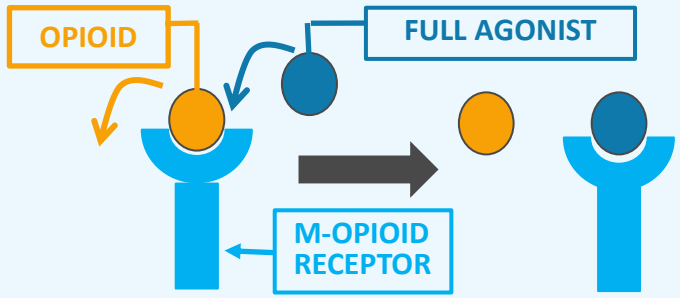
AGONIST VS ANTAGONIST

OPIOID-DEPENDENT

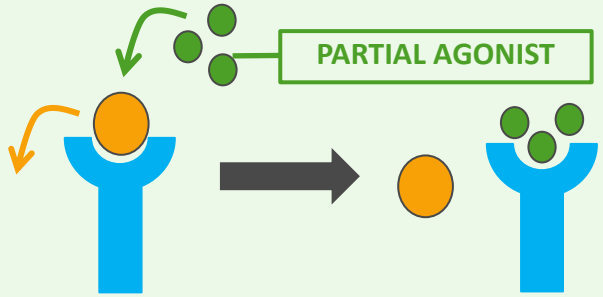
FULL AGONIST



Displaces original (strong) opioid with new (strong) opioid response

NO PRECIPITATED WITHDRAWAL

PARTIAL AGONIST

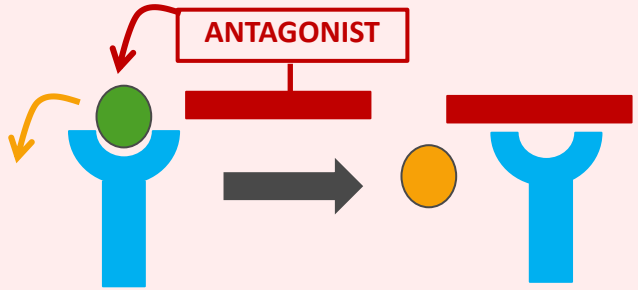


Displaces original (stronger) opioid with new (weaker) opioid response

PRECIPITATED WITHDRAWAL

Wait until withdrawal symptoms start

ANTAGONIST



Displaces original (strong) opioid with no opioid response

PRECIPITATED WITHDRAWAL

Patients must be fully detoxified to prevent precipitated withdrawal

1. Strang J et al. Opioid use disorder. *Nat Rev Dis Primers*. 2020;6(1):3.

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AUDIENCE POLL

Buprenorphine has demonstrated all of the following advantages over methadone in trials **EXCEPT**:

a) Greater treatment retention over time
b) Reduced cocaine use
c) Reduced opioid cravings
d) Reduced anxiety
e) Improved patient satisfaction
f) I do not know / I am unsure.

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BUPRENORPHINE VS METHADONE

STUDY DESIGN

Meta-analysis (32 RCTs and 69 observational studies comparing buprenorphine and methadone)

RESULTS

METHADONE ASSOCIATED WITH:

- **Greater retention in treatment** vs buprenorphine

Supported by RCTS

BUPRENORPHINE ASSOCIATED WITH:

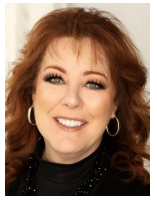
- **Reduced cocaine use, craving, anxiety, and cardiac dysfunction**
- **Greater patient satisfaction**

Primarily based on limited observational studies

Do you have a preference for methadone or buprenorphine?

1. Degenhardt L et al. Buprenorphine versus methadone for the treatment of opioid dependence: a systematic review and meta-analysis of randomised and observational studies. *Lancet Psychiatry*. 2023;10(6):386-402.

RCTS: randomized controlled trials

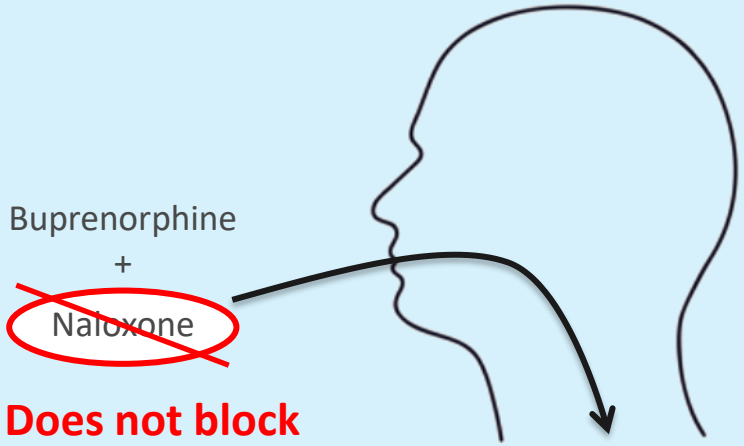


BNX: BUPRENORPHINE + NALOXONE

BUPRENORPHINE: Opiate agonist

NALOXONE: Added to prevent abuse and reduce cravings when inhaled or injected[1]

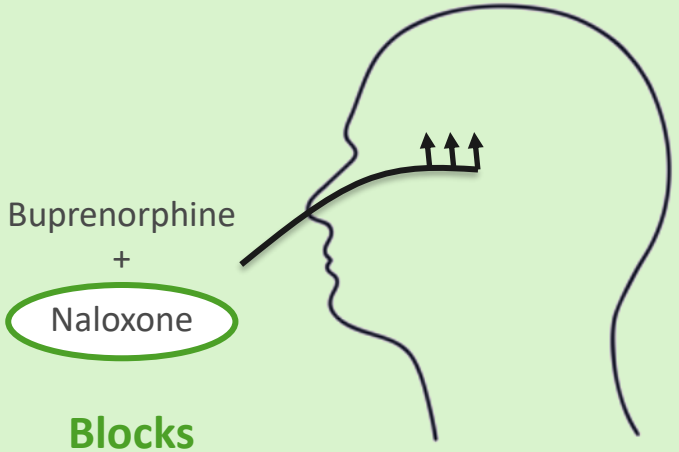
ORAL



Does not block buprenorphine

Limited oral naloxone bioavailability (<2%)[2] compared with intranasal (~50%),[3] IM (>50%),[4,5] or IV routes (~100%)[5]

INTRANASAL



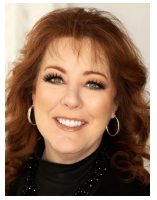
Blocks buprenorphine

IM/IV

Blocks buprenorphine

1. Velander JR. Suboxone: rationale, science, misconceptions. *Ochsner J.* 2018;18(1):23-29. **2.** Smith K et al. Low absolute bioavailability of oral naloxone in healthy subjects. *Int J Clin Pharmacol Ther.* 2012;50(5):360-367. **3.** Tylleskar I et al. The pharmacokinetic interaction between nasally administered naloxone and the opioid remifentanil in human volunteers. *Eur J Clin Pharmacol*. 2021;77(12):1901-1908. **4.** Skulberg AK et al. Pharmacokinetics and –dynamics of intramuscular and intranasal naloxone: an explorative study in healthy volunteers. *Eur J Clin Pharmacol.* 2018;74(7):873-883. **5.** Ryan SA et al. Pharmacokinetic properties of intranasal and injectable formulations of naloxone for community use: a systematic review. *Pain Manag.* 2018;8(3):231-245.

IM: intramuscular; **IV:** Intravenous



BNX – DOES NALOXONE REALLY HELP?

IN THEORY[1]	IN REALITY[1]
Naloxone serves as a deterrent for IV/IM/intranasal misuse	Buprenorphine has a **higher binding affinity and half-life,** suggesting a **limited antagonistic effect of naloxone**
IV naloxone reduces subjective rewarding effects of buprenorphine	Patient's may feel **"high" once the naloxone wears** off due to **differences in half-life**
Buprenorphine and BNX have similar safety and efficacy profiles	**Increased hospitalization and mortality rates from opioid overdose posttreatment,[2]** possibly due to **loss of tolerance** from **upregulated μ-opioid receptors**

1. Blazes CK et al. Reconsidering the Usefulness of Adding Naloxone to Buprenorphine. *Front Psychiatry*. 2020;11:549272. **2.** Kelty E et al. Buprenorphine alone or with naloxone: Which is safer?. *J Psychopharmacol*. 2018;32(3):344-352.

BUPRENORPHINE
FORMULATIONS

There have been **MANY** formulations of buprenorphine and BNX[1-3] over the years used for opioid withdrawal…

	Sublingual tablet	Film formulation	Subcutaneous extended release	IV/IM	Transdermal patch	Subdermal implant
Buprenorphine	SUBUTEX (2002)	BELBUCA (2015; buccal)	SUBLOCADE (2017) BRIXADI (2023)	BUPRENEX (1982)	BUTRANS (2010)	PROBUPHINE (2016)
Buprenorphine + naloxone	ZUBSOLV (2013) SUBOXONE (2010)	SUBOXONE (2010) BUNAVAIL (2013; buccal)				

Generics available[2]

BUT WHICH ARE AVAILABLE TODAY?

BNX: buprenorphine + naloxone; **IV:** intravenous; **IM:** intramuscular

1. Heidbreder C et al. History of the discovery, development, and FDA-approval of buprenorphine medications for the treatment of opioid use disorder. *Drug Alcohol Depend Rep*. 2023;6:100133. 2. Poliwoda S et al. Buprenorphine and its formulations: a comprehensive review. *Health Psychol Res*. 2022;10(3):37517.
3. Shulman M et al. Buprenorphine Treatment for Opioid Use Disorder: An Overview. *CNS Drugs*. 2019;33(6):567-580

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BUPRENORPHINE
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	Sublingual tablet	Film formulation	Subcutaneous extended release	IV/IM	Transdermal patch	Subdermal implant
Buprenorphine	~~SUBUTEX (2002)~~ **(discontinued)**	~~BELBUCA (2015, buccal)~~	SUBLOCADE (2017) BRIXADI (2023)	~~BUPRENEX (1982)~~ **(for analgesia)**	~~BUTRANS (2010)~~ **(for analgesia)**	~~PROBUPHINE (2016)~~ **(discontinued)**
Buprenorphine + naloxone	ZUBSOLV (2013) SUBOXONE (2010)	SUBOXONE (2010) ~~BUNAVAIL (2013, buccal)~~				

Generics available[2]

HOW DO YOU CHOOSE / DIFFERENTIATE BETWEEN ALL OF THESE OPTIONS?

BNX: buprenorphine + naloxone; **IV:** intravenous; **IM:** intramuscular

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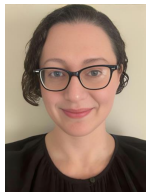
3. Shulman M et al. Buprenorphine Treatment for Opioid Use Disorder: An Overview. *CNS Drugs*. 2019;33(6):567-580



BUPRENORPHINE FORMULATIONS

PHARMACOKINETICS

Formulation / route of administration determines pharmacokinetics[1]

Formulation	Time to peak concentration	Mean half-life
Sublingual BNX film/tablet	Shortest (0.5 – 2.5 hours)	Shortest (24 – 42 hours)
Sublingual buprenorphine		
Subcutaneous ER buprenorphine - BRIXADI		
Subcutaneous ER buprenorphine - SUBLOCADE	Longest (24 hours)	Longest (43 – 60 days)

NEW, LONG-ACTING FORMULATIONS MAY HELP TO IMPROVE ADHERENCE AND REDUCE UNAUTHORIZED DISTRIBUTION[1]

1. Shulman M et al. Buprenorphine Treatment for Opioid Use Disorder: An Overview. *CNS Drugs*. 2019;33(6):567-580.

BNX: buprenorphine + naloxone;
ER: extended-release

BUPRENORPHINE: LONG-ACTING

A TALE OF TWO BRANDS

	FORMULATIONS OF SUBCUTANEOUS INJECTABLE EXTENDED-RELEASE BUPRENORPHINE	
	SUBLOCADE[1-3]	**BRIXADI**[1,2,4]
ADMINISTRATION	Abdomen (forms hard nodule)	Buttock, thigh, abdomen, upper arm (forms soft gel)
DOSING	≥ 26 days between doses	Both weekly and monthly options (must use as intended)
PREREQUISITE	≥ 7 days of transmucosal buprenorphine	At least 4-mg test dose of transmucosal buprenorphine
STORAGE	Requires refrigeration	No refrigeration required

Only BRIXADI was compared directly with sublingual BNX in trials

HOW DO YOU CHOOSE BETWEEN FORMULATIONS FOR YOUR PATIENTS?

1. Poliwoda S et al. Buprenorphine and its formulations: a comprehensive review. *Health Psychol Res*. 2022;10(3):37517. **2.** Shulman M et al. Buprenorphine Treatment for Opioid Use Disorder: An Overview. *CNS Drugs*. 2019;33(6):567-580. **3.** Sublocade (buprenorphine extended-release). Prescribing information. Indivior Inc; 2023. **4.** Brixadi (buprenorphine). Prescribing information. Braeburn Inc; 2023.

AUDIENCE POLL

Sublingual tablet formulations of buprenorphine-naloxone may potentially be associated with the following advantages over film formulations:

a) Improved adherence (e.g., better taste)
b) Improved efficacy
c) More favorable side effect profile
d) I do not know/I am unsure.

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Sublingual tablet formulations of buprenorphine-naloxone may potentially be associated with the following advantages over film formulations:

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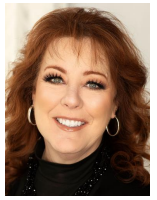
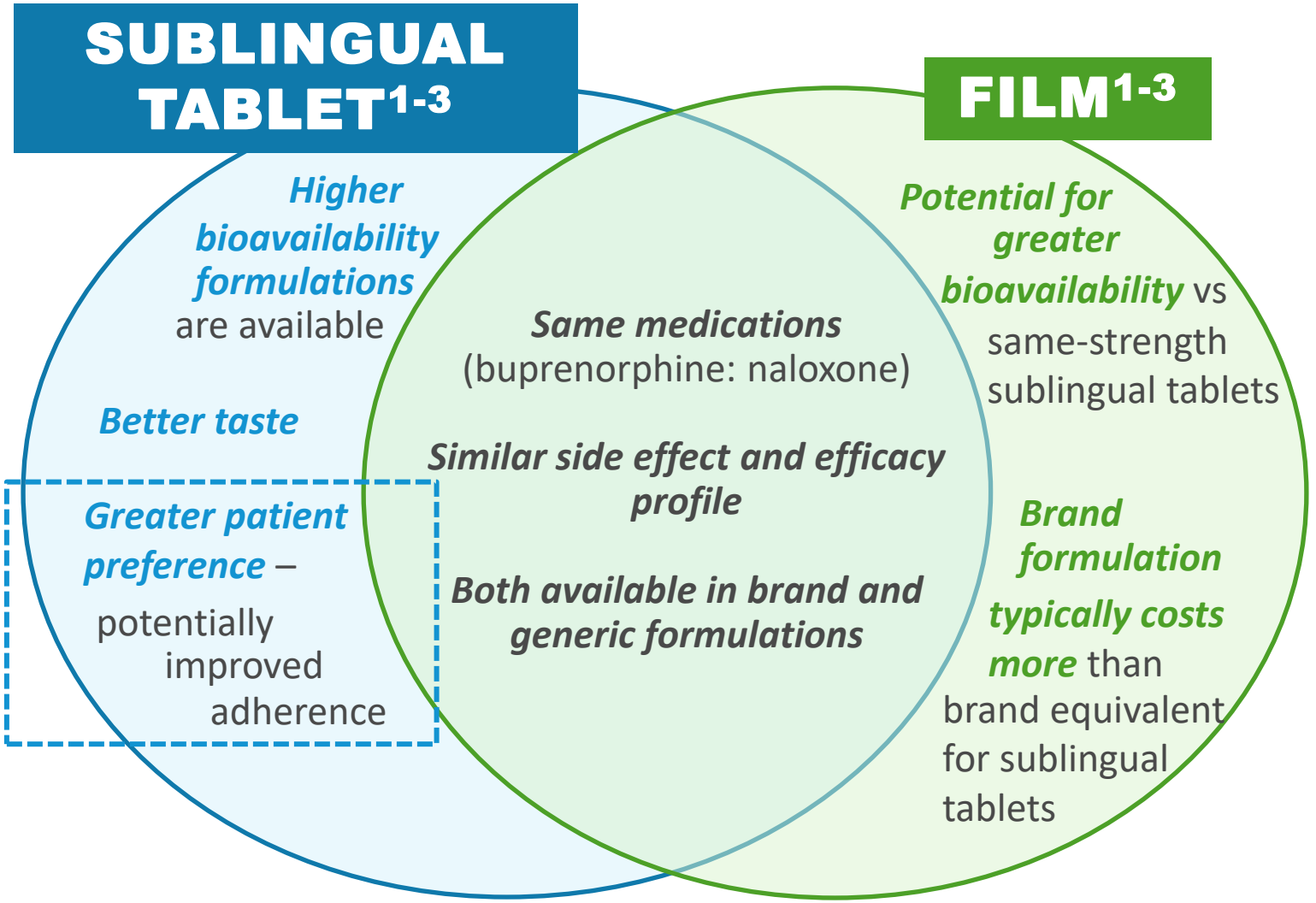
BNX





Do you prescribe one formulation more than the other?

1. Heo YA et al. Buprenorphine/Naloxone (Zubsolv®): A Review in Opioid Dependence. *CNS Drugs*. 2018;32(9):875-882. 2. Gunderson EW et al. Effects of a higher-bioavailability buprenorphine/naloxone sublingual tablet versus buprenorphine/naloxone film for the treatment of opioid dependence during induction and stabilization: a multicenter, randomized trial. *Clin Ther*. 2015;37(10):2244-2255. 3. Poliwoda S, Noor N, Jenkins JS, et al. Buprenorphine and its formulations: a comprehensive review. *Health Psychol Res*. 2022;10(3):37517.

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BNX VS. EXTENDED-RELEASE BUPRENORPHINE

STUDY DESIGN

- Double-blind, randomized controlled-trial

INTERVENTION

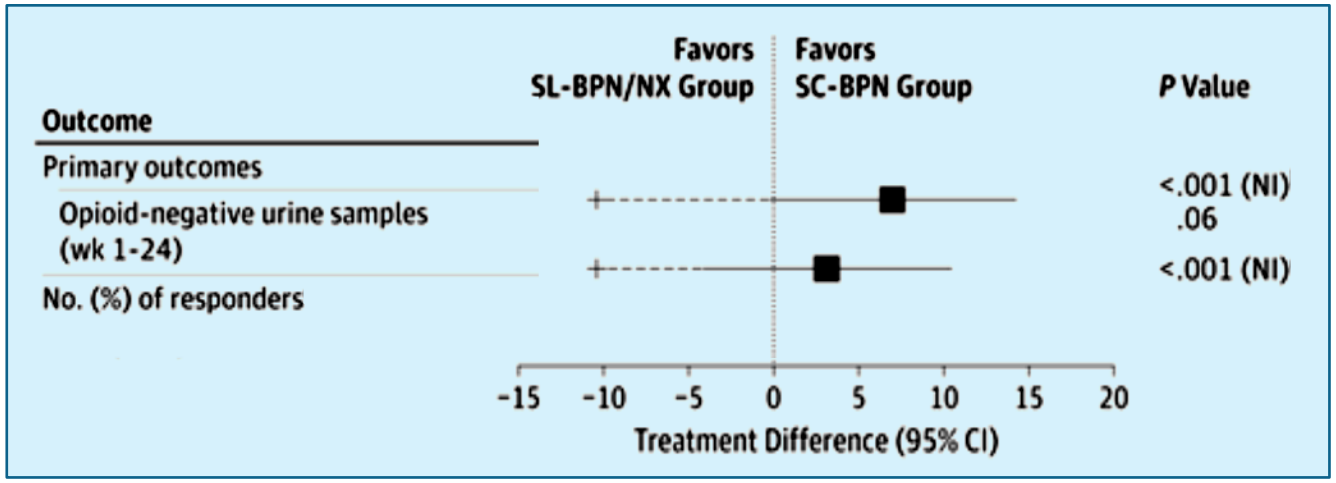
- 428 patients with OUD randomized to either standard of care sublingual BNX (n=215) or subcutaneous ER buprenorphine (n=213)

RESULTS

- Subcutaneous ER buprenorphine was **non-inferior** to sublingual BNX

CONCLUSION

- Subcutaneous extended-release buprenorphine has ***similar clinical efficacy*** to sublingual BNX



WHAT CLINICAL EXPERIENCE DO YOU HAVE WITH LONG-ACTING INJECTABLE BUPRENORPHINE?

1. Lofwall MR et al. Weekly and Monthly Subcutaneous Buprenorphine Depot Formulations vs Daily Sublingual Buprenorphine With Naloxone for Treatment of Opioid Use Disorder: A Randomized Clinical Trial. *JAMA Intern Med*. 2018;178(6):764-773.

ER: extended-release; **OUD:** opioid use disorder

XR-NALTREXONE VS. SUBLINGUAL BNX

STUDY DESIGN

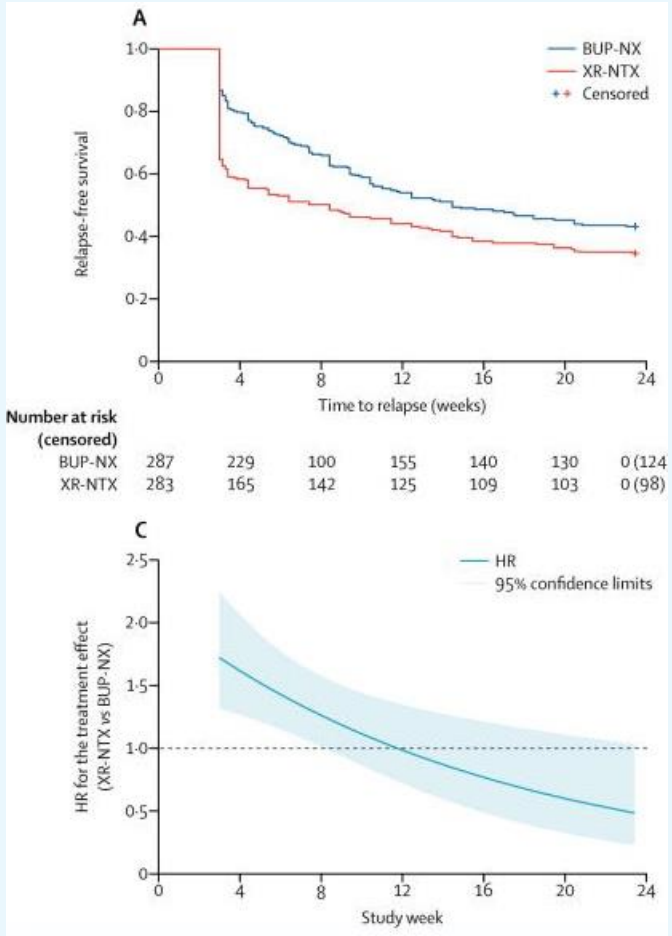
- Multicenter open-label, randomized controlled trial

INTERVENTION

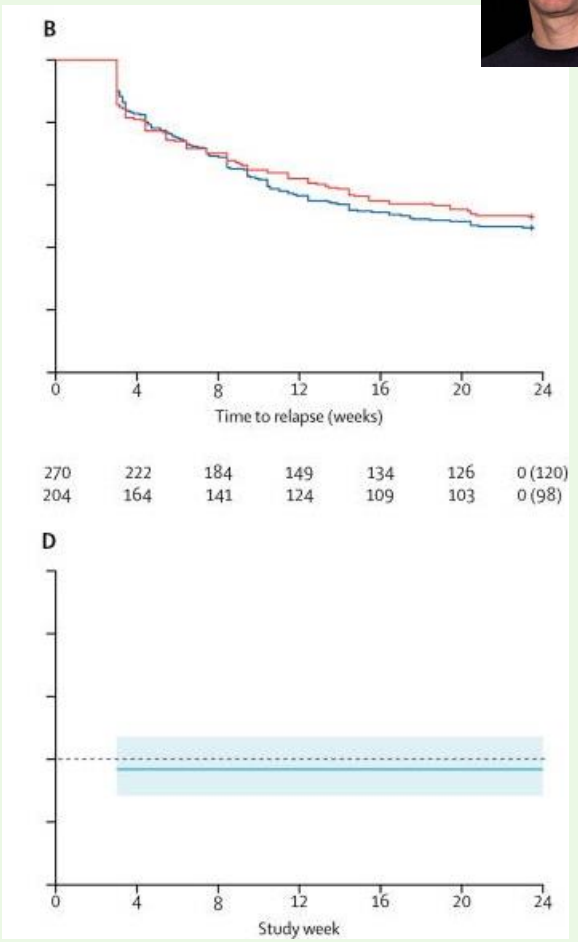
- 570 patients with opioid-use disorder underwent 1:1 randomization with XR naltrexone (n=283) or sublingual BNX (n=287)

RESULTS

- ***XR-naltrexone more difficult to initiate*** (more induction failures) than sublingual BNX (28% vs. 6%; *P*<0.0001)
- Once initiated, both medications are equally safe and effective



All patients (including those where induction failed)



Only patients with successful induction

WHEN DO YOU CONSIDER USING NALTREXONE OVER BNX?

1. Lee JD et al. Comparative effectiveness of extended-release naltrexone versus buprenorphine-naloxone for opioid relapse prevention (X:BOT): a multicentre, open-label, randomised controlled trial. *Lancet*. 2018;391(10118):309-318.

XR: extended-release

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NALOXONE
ACUTE OPIOID OVERDOSE

CONSIDERATIONS[1]
If known, how long-acting was the opioid the patient overdosed on?

Redosing vs higher doses

FORMULATIONS[2]
Intranasal (KLOXXADO [higher-dose], **OTC: NARCAN, RiVive)**
Intramuscular (generic, NARCAN, ZIMHI [higher-dose])
Intravenous

In 2023, the FDA approved the first two OTC naloxone nasal sprays (NARCAN[3] and RiVive[4])

1. Jordan MR et al. Naloxone. In: *StatPearls*. NCBI Bookshelf. StatPearls Publishing; April 29, 2023. Accessed January 2, 2024. https://www.ncbi.nlm.nih.gov/books/NBK441910/ **2.** Britch SC, Walsh SL. Treatment of opioid overdose: current approaches and recent advances. *Psychopharmacology (Berl)*. 2022;239(7):2063-2081. **3.** US Food and Drug Administration. FDA approves first over-the-counter naloxone nasal spray. March 29, 2023. Accessed January 2, 2024. https://www.fda.gov/news-events/press-announcements/fda-approves-first-over-counter-naloxone-nasal-spray **4.** US Food and Drug Administration. FDA approves second over-the-counter naloxone nasal spray product. July 28, 2023. Accessed January 2, 2024. https://www.fda.gov/news-events/press-announcements/fda-approves-second-over-counter-naloxone-nasal-spray-product

AUDIENCE POLL

If access/reimbursement was not an issue, which of the following agents are you most likely to prioritize to combat acute overdose in someone using a **strong synthetic opioid**?

a) Buprenorphine-naltrexone sublingual film (Zubsolv)
b) Naloxone HCl nasal spray (NARCAN)
c) Nalmefene nasal spray (Opvee)
d) I do not know/I am unsure.

AUDIENCE POLL

If access/reimbursement was not an issue, which of the following agents are you most likely to prioritize to combat acute overdose in someone using a strong synthetic opioid ?

a) Buprenorphine-naltrexone sublingual film (Zubsolv)

b) Naloxone HCl nasal spray (NARCAN)

c) Nalmefene nasal spray (Opvee) **FACULTY RECOMMENDED**

d) I do not know/I am unsure.

ACUTE OPIOID OVERDOSE
NALMEFENE

MECHANISM OF ACTION / FORMULATION

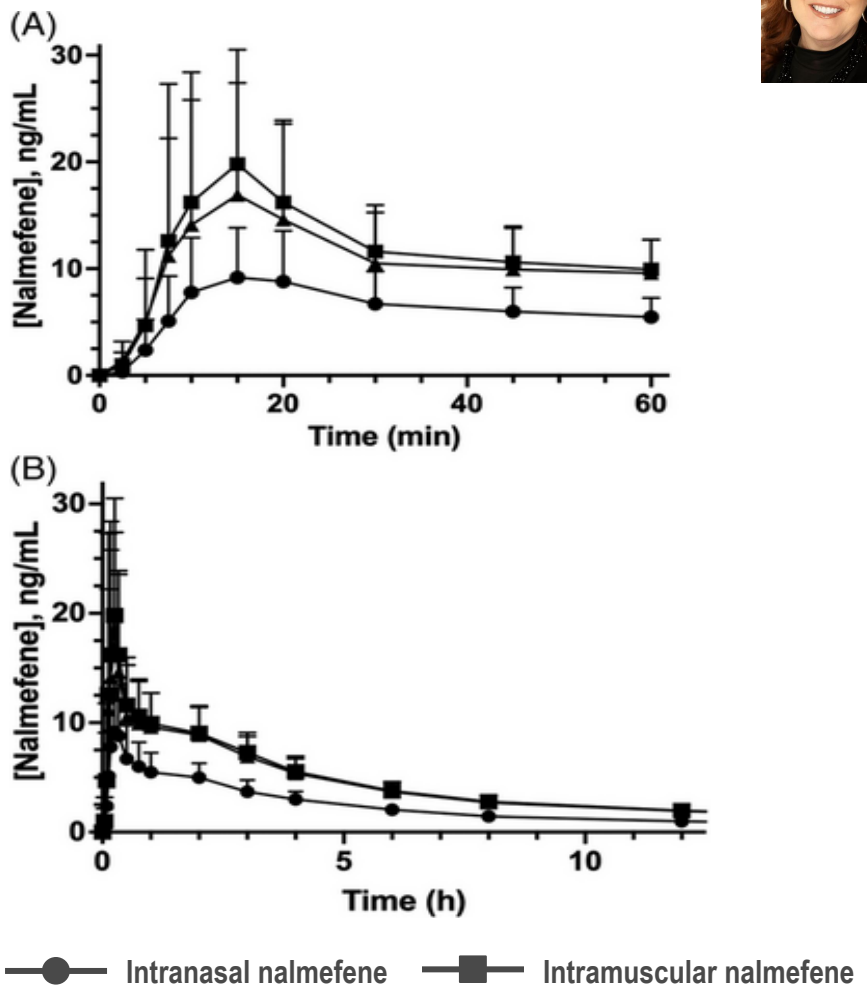
- **Long-duration (~11 hours)**, high-affinity opioid antagonist
- Intranasal (2.7 mg in 0.1 mL) vs intramuscular (1 mg)

PHARMACOKINETICS

- Intranasal formulation has a ***faster onset of action*** (0.008 ng·h/mL vs. 0.002 ng·h/mL; *P*<0.001) and a ***higher plasma concentration*** (10.3 ng/mL vs. 1.50 ng/mL; *P*<0.001)

IMPLICATIONS

- Pharmacokinetic properties of intranasal nalmefene may help to combat ***stronger synthetic opioid overdose*** that would otherwise require ***higher doses of naloxone***



HOW DO YOU COUNSEL PATIENTS ON THE APPROPRIATE USE OF THIS AGENT?

1. Crystal R et al. Pharmacokinetic Properties of an FDA-approved Intranasal Nalmefene Formulation for the Treatment of Opioid Overdose. *Clinical Pharm in Drug Dev*. 2024;13(1):58-69.

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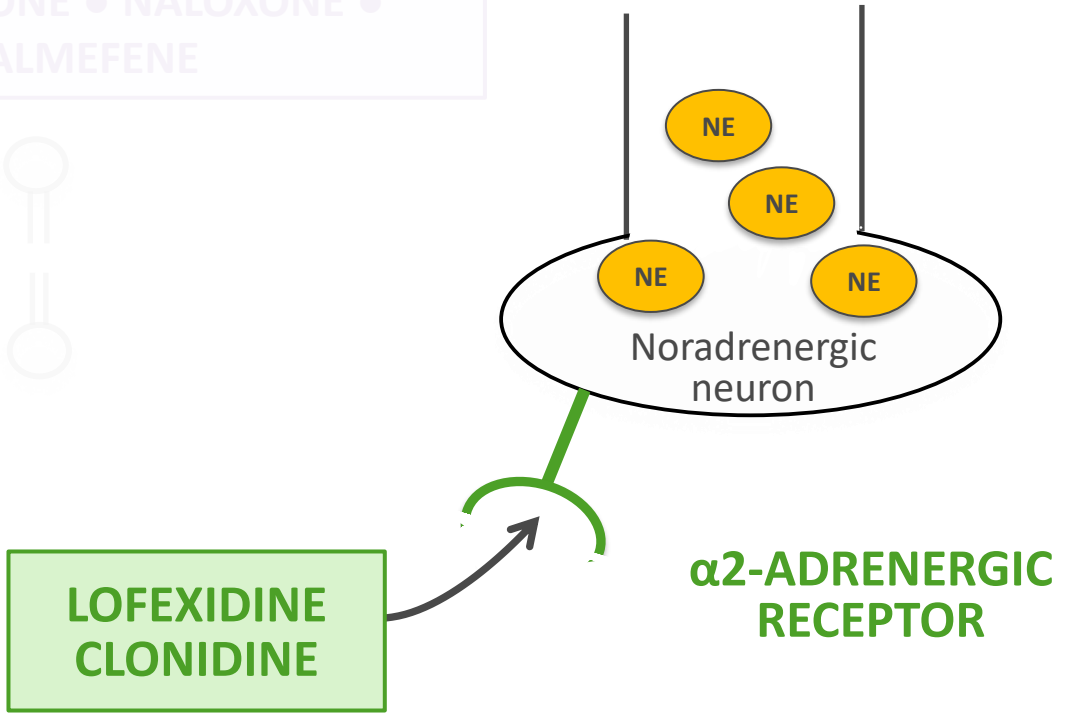
PHARMACOTHERAPY OF OPIOID USE DISORDER

Let's now take a look at the α2-adrenergic receptor



ALPHA-ADRENERGIC AGENTS TARGET THE SYMPATHETIC SYMPTOMS ASSOCIATED WITH WITHDRAWAL

1. Srivastava AB et al. New directions in the treatment of opioid withdrawal. *Lancet*. 2020;395(10241):1938-1948.

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OPIOID WITHDRAWAL

LOFEXIDINE VS CLONIDINE

INDICATIONS / PHARMACOKINETICS[1]

	LOFEXIDINE	CLONIDINE
Indication / approval	FDA-approved opioid withdrawal (2018)	Off-label
Peak plasma level	3-5 hours	3-5 hours
$t_{1/2}$	12 hours	12-16 hours
Typical oral dosing	0.54 mg 4x daily	0.1-0.2 mg every 6-8 hours
Maximum dosing	2.88 mg/day	1.2 mg/day

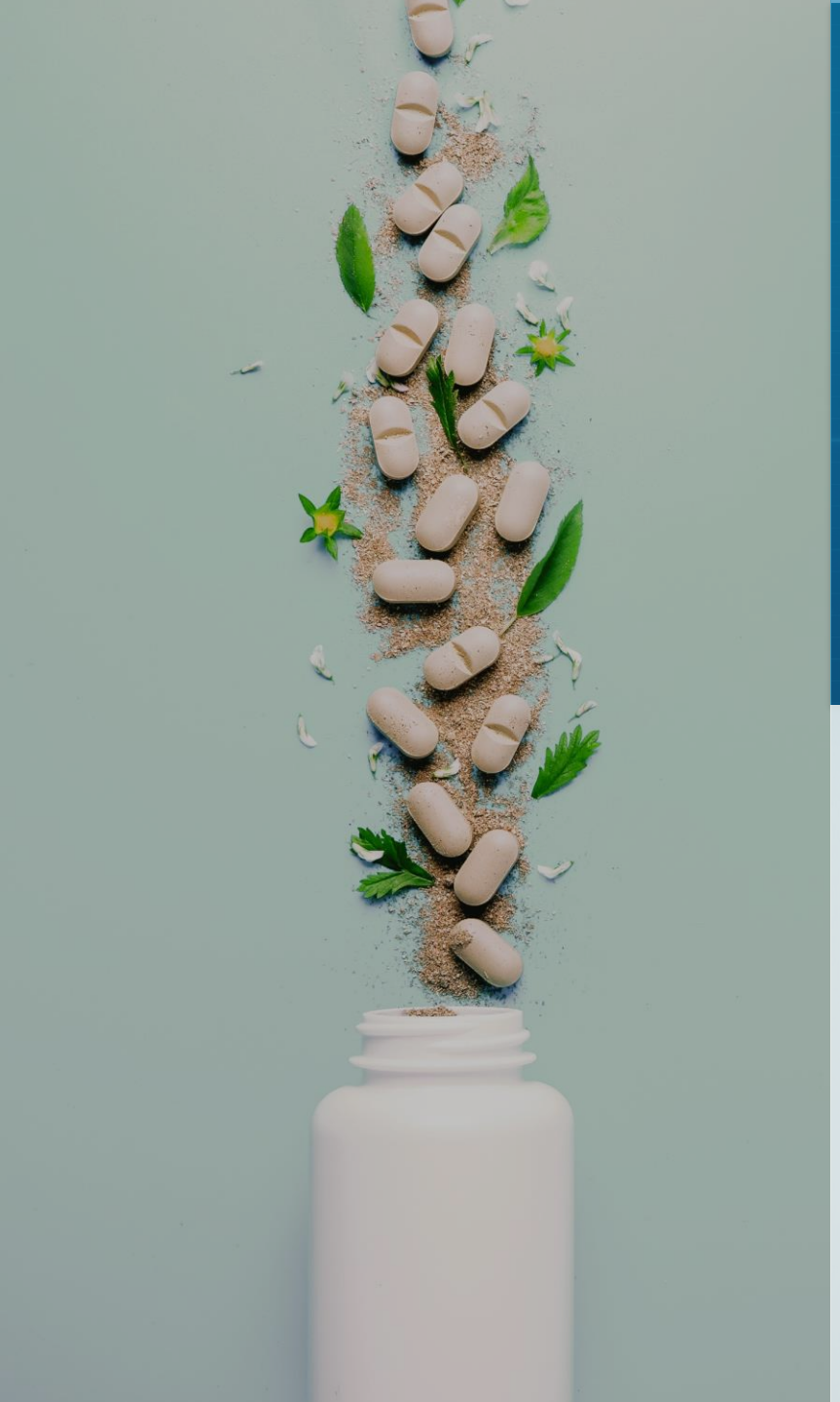
FINDINGS FROM SYSTEMATIC REVIEW OF 5 RANDOMIZED TRIALS[1]

- Lofexidine appeared to have ***equivalent efficacy*** to clonidine
- Lofexidine demonstrated ***lower incidence of adverse events*** (e.g., hypotension, fatigue, weakness) in 3 of 5 studies

ASAM Guidelines[2]:

Lofexidine is the **preferred choice** in the outpatient setting due to its **lower impact on blood pressure**

1. Kuszmaul AK et al. Lofexidine versus clonidine for mitigation of opioid withdrawal symptoms: A systematic review. *J Am Pharm Assoc*. 2020;60(1):145-152.
2. Gripshover J. Managing Opioid Withdrawal in an Outpatient Setting With Lofexidine or Clonidine. *Cureus*. 2022;14(8):e27639.



MODULE
— 2 —

PATIENT SELECTION FOR TREATMENT OPTIONS

FACTORS THAT INFLUENCE AGENT SELECTION

INDICATION	Dependence; Reversal / overdose; Withdrawal
DOSING	Frequency; Route of administration
ADDICTION/MISUSE RISK?	Opioid (agonist, partial agonist, antagonist); Non-opioid agents (noradrenergic)
PRE-DETOXIFICATION?	How to avoid precipitated withdrawal
ADVERSE EVENTS	CNS depression; QTc prolongation; Autonomic instability; Medication interactions
CARE CONTEXT	Inpatient; Outpatient
GENERIC AVAILABILITY	May only have brand formulation

CLINICAL TOOLS

ALGORITHM FOR IN-OFFICE INDUCTION OF BUPRENORPHINE/BNX[1]	https://www.samhsa.gov/sites/default/files/quick-start-guide.pdf
OPIOID PREVENTION TOOLKIT[2]	https://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit/SMA18-4742
NALMEFENE (INTRAMUSCULAR) BILLING GUIDELINES[3]	https://medicaid.ncdhhs.gov/blog/2022/08/24/nalmefene-hydrochloride-injection-revextm-hcpcs-code-j3490-billing-guidelines
ICD-10 CODE[4]: OPIOID DEPENDENCE, IN REMISSION	F11.21

DEFER TO INSTITUTIONAL PROTOCOLS POLICY BEFORE USING OTHER RECOMMENDATIONS / GUIDELINES

1. SAMHSA. HHS releases new buprenorphine practice guidelines, expanding access to treatment for opioid use disorder. April 27, 2021. Accessed January 2, 2024. https://www.samhsa.gov/newsroom/press-announcements/202104270930 2. SAMHSA. Buprenorphine quick start guide. Accessed January 2, 2024. https://www.samhsa.gov/sites/default/files/quick-start-guide.pdf 3. SAMHSA. Opioid Overdose Prevention Toolkit. SAMHSA Publications and Digital Products. June 2018. Accessed January 2, 2024. https://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit/SMA18-47424. NCDHHS. Nalmefene hydrochloride injection (ReVEXTM) HCPCS code J3490: billing guidelines. June 22, 2022. Accessed January 2, 2024. https://medicaid.ncdhhs.gov/blog/2022/08/24/nalmefene-hydrochloride-injection-revextm-hcpcs-code-j3490-billing-guidelines . 5. ICD List. 2024 ICD-10-CM diagnosis code F11.21. Opioid dependence, in remission. Accessed January 2, 2024. https://icdlist.com/icd-10/F11.21

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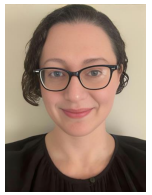
WORDSMITHING



STARTING A NEW MEDICATION

STEP 1:
Assess patient knowledge/goals

STEP 2:
Provide education on the therapeutic benefits of OUD/SUD medications

STEP 3:
Discuss possibilities of relapse/remission

STEP 4:
Discuss holistic care (therapy, support groups, treatment of co-morbid conditions)

TRANSITIONING MEDICATIONS

SHARED DECISION MAKING:[1]

- Provide rationale for transitioning medications
- Discuss pros and cons of medication options
  - How to use…
  - Ease of use…
  - Affordability
  - Accessibility

ADHERENCE

ASSESS THE FOLLOWING PATIENT-SPECIFIC FACTORS:

- Duration of substance use/misuse
- Quantity of substance use/misuse
- Attitudes/fears of withdrawal
- Motivation/goals for treatment
- Past experiences with withdrawal

DISCUSS THE FOLLOWING TREATMENT OPTIONS:

- Risk of withdrawal depending on agent
- Dosing/treatment protocols for each agent
- Use of lofexidine/clonidine for symptomatic management

1. Marshall T et al. Treatment options and shared decision-making in the treatment of opioid use disorder: A scoping review. *J Subst Abuse Treat*. 2022;135:108646

KEY TAKEAWAYS

APPs PLAY A CRITICAL ROLE!

2023 Omnibus bill rescinds buprenorphine waiver	It is the responsibility of APPs to stay up-to-date

THE ROLE OF NEW FORMULATIONS AND NOVEL AGENTS

New injectable ER buprenorphine may help with ***nonadherence***	***Lofexidine*** is the first non-opioid approved for ***opioid withdrawal*** → may have a more favorable safety profile	The ***first two OTC naloxone nasal sprays, approved in 2023,*** improve access to opioid reversal	The ***first nalmefene nasal spray, approved in 2023,*** may provide a valuable option for potent synthetic opioids or opioids with longer half-lives

MEDICATION SELECTION (MULTIFACTORIAL DECISION)

APP: advanced practice provider


Q&A