

Buprenorphine for chronic pain: A quick start guide

NOTE: A DEA X-license is not required to prescribe buprenorphine for *treatment of chronic pain* (if your patient does not meet criteria for opioid use disorder).

General Considerations:

- Buprenorphine is a Schedule III drug (up to 6 refills permitted); nearly all other opioids are Schedule II.
- Addiction and misuse risk is lower for buprenorphine than other opioids.
- Buprenorphine has similar side effects to other opioids (constipation, nausea, etc.).

Toxicology Monitoring Considerations

- Many urine toxicology assays do not detect buprenorphine
 - DRUG6 does **NOT** detect
 - DRUG10 **USUALLY** detects
 - GCMS does **NOT** detect
- Urine buprenorphine enzyme immune assay (EIA) like a gas chromatography-mass spectrometry (GC-MS) is ordered separately.
- Call toxicology lab for verification if toxicology is unexpectedly negative for buprenorphine.
- Metabolites from transdermal buprenorphine are often difficult to detect due to the low overall dose. Adherence to treatment can be monitored by checking for presence of patch during physical exam.

Assessment/monitoring/follow-up

- Assess pain at each visit by using a validated tool like the [PEG](#) can be a good way to gauge medication effectiveness.
- Monitor for functional improvement as well as pain control; if patient doesn't experience either, then discontinue medication.
- Encourage exercise, discuss sleep hygiene, and treat psychiatric comorbidities- these are also crucial to controlling patient's pain!

Transdermal buprenorphine (Butrans® or generic)

Dose range 5-20 mcg/hour

Replace patch every 7 days

NOTE:

- The manufacturer's prescribing information states that when initiating transdermal buprenorphine all opioid-experienced patients should be tapered down to <30 MME prior to initiating therapy to avoid the risk of precipitated withdrawal. It also states that all other opioids be discontinued with initiation of transdermal buprenorphine.
- However, newer studies explore low-dose initiations (starting opioid users on small doses of buprenorphine while continuing long-acting opioid for up to 7 days). In these studies, patients are started on transdermal mcg doses of buprenorphine while continuing their full opioid agonist without opioid tapers or precipitated withdrawal.
- We suggest that the evidence from the low dose initiation buprenorphine protocols supports that in most cases there is no need to taper the full opioid agonist to < 30 MME prior to starting transdermal buprenorphine to minimize risk of precipitated withdrawal.
- Given that the transdermal patch can take up to 72 hours to reach steady state, we suggest that continuing PO opioids on day 1 of placing the transdermal buprenorphine patch is safe and treats breakthrough symptoms.

Choose your patient:

- Taking less than 80 MME
- Has insurance coverage for medication

Initiation Protocol:

Initial dosing:

MME	Recommended initial dose
< 15 (or opioid naive patient)	5 mcg/hr
15-29	7.5 mcg/hr
30-59	10 mcg/hr

- Apply patch to hairless site. Patient can continue to use their full agonist medication as needed for one day.
- Titrate dose after 7 days.
- Patches can be cut.
- Do not stop for surgery. Continue during peri- and post-operative period.
- If patients do not achieve adequate analgesia on 20 mcg/hour patch, consider adding non-opioid pain medication or transitioning to buccal buprenorphine rather than supplementing with other opioids.

Good to know:

- Patients may develop irritation to adhesion; can pretreat skin with intranasal fluticasone or low-potency topical steroid. Rotating patch sites can reduce irritation.
- Refer to [manufacturer website](#) for patient information, including on patch application and disposal.

Buccal buprenorphine formulated for pain (Brand Belbuca®)

Maximum recommend dose 900 mcg BID

NOTE:

- As noted above with transdermal buprenorphine, manufacturer prescribing information states that when initiating buccal buprenorphine, there is a potential risk of precipitated withdrawal for patients physically dependent on opioids and to reduce this risk, taper patients to <30 MME prior to starting buccal buprenorphine.
- There is a referenced case report that documents a low-dose initiation using buccal buprenorphine. Again, in this published case, a patient initiated on buccal buprenorphine while continued full agonist opioids for several days without experiencing precipitated withdrawal.
- Given this evidence and the acceptance of low dose initiations, in our protocol below, we suggest it may be safe to initiate buccal buprenorphine without MME taper.

Choose your patient:

- Patient should be using less than 160 MME
- Has insurance coverage for medication

Initial Dosing:

Recommended initial dosing per manufacturer

MME	Recommended initial dose
< 30	75 mcg BID
30-89	150 mcg BID
90-160	300 mcg BID

Initiation Protocol:

- No need to taper full opioid agonist medication prior to starting buccal buprenorphine; just initiate buccal buprenorphine and discontinue other opioids.
- Films can be cut.
- Titrate dose every 4-8 days
- Anecdotally, many patients prefer dividing the total daily dose into TID dosing instead of BID dosing.

Prescribing off-label buprenorphine/naloxone (Suboxone®, etc.) for pain

- State “off-label use for pain management” on script in sig or pharmacy comments or prescribe using X-DEA for treatment of opioid use disorder.
- Often the only option for patients with Michigan Medicaid.
- Insurers often will not pay for off-label use for pain management.
- No expert consensus how formulations of buprenorphine indicated for pain (Butrans, Belbuca) compare to buprenorphine/naloxone (Suboxone) films in terms of serum levels.
- Doses should be divided TID-QID to maximize analgesic effect.
- Patient with opioid use disorder and chronic pain will often need doses in the opioid use disorder range (8mg to 16mg daily of buprenorphine/naloxone (Suboxone)).

Suggested Initial Dosing:

Recent MME opioid dose	Total SL Bup/nal dose/day
< 50	0.5-3 mg
50-150	3-6 mg
> 150	6-8 mg

Additional Resources:

Converting prescription opioid doses into MME: <https://www.mdcalc.com/morphine-milligram-equivalents-mme-calculator>

Butrans official site: <https://butrans.com/dosing/prescribing-considerations.html>

Belbuca official site: <https://www.belbuca.com/hcp#>

Michigan Medicine Ambulatory Pain Management Guidelines: <https://michmed-public.policystat.com/policy/7109483/latest/>

References:

Cohen, Shawn M., Melissa B. Weimer, Ximena A. Levander, Alyssa M. Peckham, Jeanette M. Tetrault, and Kenneth L. Morford. “Low Dose Initiation of Buprenorphine: A Narrative Review and Practical Approach.” *Journal of Addiction Medicine* Publish Ahead of Print (December 23, 2021). <https://doi.org/10.1097/ADM.0000000000000945>.

Kornfeld, Howard, and Heidi Reetz. “Transdermal Buprenorphine, Opioid Rotation to Sublingual Buprenorphine, and the Avoidance of Precipitated Withdrawal: A Review of the Literature and Demonstration in Three Chronic Pain Patients Treated With Butrans.” *American Journal of Therapeutics*, 2015, 7.

Raheemullah, Amer, and Anna Lembke. “Initiating Opioid Agonist Treatment for Opioid Use Disorder in the Inpatient Setting: A Teachable Moment.” *JAMA Internal Medicine* 179, no. 3 (March 1, 2019): 427. <https://doi.org/10.1001/jamainternmed.2018.6749>.

Webster, Lynn, Jeffrey Gudín, Robert B Raffa, Jay Kuchera, Richard Rauck, Jeffrey Fudin, Jeremy Adler, and Theresa Mallick-Searle. “Understanding Buprenorphine for Use in Chronic Pain: Expert Opinion.” *Pain Medicine* 21, no. 4 (April 1, 2020): 714–23. <https://doi.org/10.1093/pm/pnz356>.

Weimer, Melissa B., Michael Guerra, Gina Morrow, and Kathleen Adams. “Hospital-Based Buprenorphine Micro-Dose Initiation.” *Journal of Addiction Medicine* 15, no. 3 (May 2021): 255–57. <https://doi.org/10.1097/ADM.0000000000000745>.

Zimmerman, Amanda, Rami Bikdash, and Richard Rauck. “Conversion of Schedule II Opioids to Buprenorphine Buccal Film: A Retrospective Analysis.” *Pain Medicine* 22, no. 5 (May 21, 2021): 1109–15. <https://doi.org/10.1093/pm/pnaa226>.

These guidelines should not be construed as including all proper methods of care or excluding other acceptable methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding any specific clinical procedure or treatment must be made by the physician in light of the circumstances presented by the patient.