



**BlueCross
BlueShield**

Federal Employee Program.

ANTI-INFLAMMATORY AND PAIN COMPOUNDING POWDERS
Celecoxib Powder, Diclofenac Powder, Fenoprofen Powder, Flurbiprofen Powder,
Ibuprofen Powder, Ketoprofen Powder, Meloxicam Powder, Naproxen Powder,
Tramadol Powder

RATIONALE FOR INCLUSION IN PA PROGRAM

Background

Pharmacy compounding is an ancient practice in which pharmacists combine, mix or alter ingredients to create unique medications that meet specific needs of individual patients. Some examples of the need for compounding products would be: the dosage formulation must be changed to allow a person with dysphagia (trouble swallowing) to have a liquid formulation of a commercially available tablet only product, or to obtain the exact strength needed of the active ingredient, to avoid ingredients that a particular patient has an allergy to, or simply to add flavoring to medication to make it more palatable.

Celecoxib, diclofenac, fenoprofen, flurbiprofen, ibuprofen, ketoprofen, meloxicam, and naproxen are non-steroidal anti-inflammatory drugs (NSAID) that decrease inflammation, pain and fever by inhibiting COX-1 and 2 enzymes, which then inhibit the production of prostaglandins and leukotrienes (1-7). Tramadol is a centrally acting synthetic opioid analgesic used to treat moderate to moderately severe chronic pain in adults. Tramadol has been shown to inhibit reuptake of norepinephrine and serotonin, as have some other opioid analgesics (8).

Regulatory Status

FDA-approved indications:

1. Celecoxib is FDA approved in an oral formulation for osteoarthritis (OA), rheumatoid arthritis (RA), juvenile rheumatoid arthritis (JRA) in patients 2 years and older, ankylosing spondylitis (AS), acute pain (AP), primary dysmenorrhea (PD) (1).
2. Diclofenac is FDA approved in oral formulations for osteoarthritis (OA), rheumatoid arthritis (RA), and ankylosing spondylitis (2).
3. Fenoprofen is FDA approved in an oral formulation for the relief of mild to moderate pain in adults and for the relief of the signs and symptoms of rheumatoid arthritis (RA) and osteoarthritis (OA) (3).
4. Flurbiprofen is FDA approved in an oral formulation for the relief of the signs and symptoms of osteoarthritis (OA) and rheumatoid arthritis (RA) (4). Flurbiprofen ophthalmic solution is



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indicated for the inhibition of intraoperative miosis (5).

5. Ibuprofen is FDA approved in an oral formulation for osteoarthritis (OA), rheumatoid arthritis (RA), mild to moderate pain and primary dysmenorrhea (5).
6. Ketoprofen is FDA-approved in an oral formulation for the treatment of osteoarthritis, pain management, primary dysmenorrhea and rheumatoid arthritis (7).
7. Meloxicam is FDA approved in an oral formulation for osteoarthritis (OA), rheumatoid arthritis (RA), juvenile rheumatoid arthritis (JRA) in patients 2 years and older (8).
8. Naproxen is FDA approved in an oral formulation for the relief of minor aches and pains and for the temporary reduction of fever (9).
9. Tramadol is FDA approved in an oral formulation for the management of moderate to moderately severe pain in adults (10).

All NSAIDs carry a boxed warning for cardiovascular risk. Non-steroidal anti-inflammatory drugs (NSAIDs) may cause an increased risk of serious cardiovascular thrombotic events, myocardial infarction and stroke. This risk may increase with duration of use. Patients with cardiovascular disease or risk factors for cardiovascular disease may be at greater risk (1-9).

The boxed warning also includes GI risk. NSAIDs cause an increased risk of serious GI adverse reactions including bleeding, ulceration and perforation of the stomach or intestines. These reactions can occur at any time during use and without warning symptoms. Elderly patients are at greater risk for serious GI reactions (1-9).

Possible illegal or illicit use should be considered when prescribing or dispensing Ultram in situations where the physician or pharmacist is concerned about an increased risk of misuse, abuse, or diversion. Misuse or abuse poses a significant risk to the patient that could result in overdose and death. Tramadol should be used in caution with patients with respiratory depression, head trauma, and when used in conjunction with alcohol or other drugs that cause central nervous system depression (10).

Off-Label Uses:



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Celecoxib, diclofenac, fenoprofen, flurbiprofen, ibuprofen, ketoprofen, meloxicam, naproxen, and tramadol compounded topical preparations have not been shown to be superior to commercially available topical diclofenac preparations.

Summary

Compounded drug products may be considered medically necessary if the compounded product is being used for an FDA-approved indication, the formulation requested is an FDA-approved formulation; the strength requested is not available commercially and does not exceed the maximum FDA-approved strength of the product; and is not being used for cosmetic or erectile dysfunction purposes (1-10).

Prior authorization is required to ensure the safe, clinically appropriate, and cost-effective use of celecoxib, diclofenac, fenoprofen, flurbiprofen, ibuprofen, ketoprofen, meloxicam, naproxen, and tramadol powder while maintaining optimal therapeutic outcomes.

References

1. Celebrex [package insert]. New York, NY: Searle & Co and Pfizer Inc.; April 2021.
2. Ansaid [package insert]. New York, NY: Pfizer; May 2016.
3. Fenoprofen [package insert]. Largo, FL: Belcher Pharmaceuticals, LLC; April 2017.
4. Voltaren XR [package insert]. East Hanover, NJ: Novartis Pharmaceuticals Corp; May 2016.
5. Ocufen [package insert]. Irvine, CA: Allergan Inc; July 2012.
6. Ibuprofen [package insert]. NY: Time-Cap Labs Inc.; November 2017
7. Ketoprofen [package insert]. Morgantown, WV: Mylan Pharmaceuticals Inc; July 2015.
8. Mobic [package insert]. Ridgefield, CT: Boehringer Ingelheim Pharmaceuticals, Inc.; June 2016.
9. Aleve [package insert]. Whippany, NJ: Bayer HealthCare LLC; July 2017.
10. Ultram [package insert]. Titusville, NJ: Janssen Pharmaceuticals, Inc.; September 2021.