

STEP THERAPY POLICY

POLICY: Cyclooxygenase-2 Inhibitor Step Therapy Policy

- Celebrex® (celecoxib capsules – Pfizer, generic)

REVIEW DATE: 09/07/2022

OVERVIEW

Celecoxib (Celebrex, generic) is a nonsteroidal anti-inflammatory drug (NSAID) indicated for the following uses:¹

- Osteoarthritis (OA);
- Rheumatoid arthritis;
- Juvenile rheumatoid arthritis in patients ≥ 2 years of age;
- Ankylosing spondylitis;
- Acute pain; and
- Primary dysmenorrhea.

Celecoxib works primarily by inhibiting prostaglandin synthesis by way of cyclooxygenase-2 (COX-2) and at therapeutic concentrations in humans, celecoxib does not inhibit the cyclooxygenase-1 (COX-1) isoenzyme.¹ Overall, it appears that celecoxib and NSAIDs have similar clinical efficacy at equipotent doses for the management of acute and chronic pain and other conditions associated with pain; however, individual responses to NSAIDs vary among patients for reasons that are not well understood.

Guidelines/Consensus Statements

American College of Rheumatology (ACR) OA guidelines (2019) do not address the relative merits of different NSAIDs.² However, older ACR OA guidelines (2012) provide recommendations for use of a COX-2 inhibitor in certain settings (e.g., history of upper gastrointestinal [GI] bleed).³ OA Research Society International guidelines (2019) for non-surgical management of knee, hip, and polyarticular OA also comment on the role of COX-2 inhibitors.⁴ In the setting of knee OA, COX-2 inhibitors and other NSAIDs are given equal support (Level 1B) for patients without comorbidities. For patients with GI comorbidities, COX-2 inhibitors are preferred (Level 1B) over nonselective NSAIDs + proton pump inhibitor (Level 2). Recommendations are overall similar for hip and polyarticular OA.

Per the American Geriatrics Society updated Beers Criteria (2019), several nonselective NSAIDs are noted to increase the risk of GI bleeding or peptic ulcer disease in high-risk groups, including patients > 75 years of age or taking parenteral corticosteroids, anticoagulants, or antiplatelet agents.⁵ The quality of evidence is moderate and the strength of the recommendation is strong. The Beers Criteria also note that in patients with a history of gastric or duodenal ulcers, non-COX-2 selective NSAIDs should be avoided because it may exacerbate existing ulcers or cause new or additional ulcers.

Surgery

Guidelines on the management of postoperative pain from the American Pain Society (2016) recommend acetaminophen and/or NSAIDs as part of multimodal analgesia for management of postoperative pain in patients without contraindications.⁶ It is noted that GI risks are thought to be lower with celecoxib vs. nonselective NSAIDs. Celecoxib is also recommended preoperatively for patients who are undergoing major surgery; association with reduced opioid requirements is noted in the guideline. The evidence was considered insufficient to recommend a preoperative dose of nonselective NSAIDs.

POLICY STATEMENT

This program has been developed to encourage the use of two Step 1 Products (oral NSAIDs) prior to the use of the Step 2 Product (generic celecoxib). Approval for a Step 3 Product (brand Celebrex) may be authorized if the patient has tried two Step 1 Products (oral NSAIDs) and has tried the Step 2 Product (generic celecoxib). If the Step Therapy rule is not met for the requested Product at the point of service, coverage will be determined by the Step Therapy criteria below. All approvals are provided for the duration noted below.

Automation: The following automation is applied in this policy:

- **Step 2 (generic celecoxib):** A patient with a history of two Step 1 Products (oral NSAIDs) within the 130-day look-back period can receive the Step 2 Product (generic celecoxib). Alternatively, a patient with a history of one of the following within the 130-day look-back period: warfarin, clopidogrel, prasugrel, Brilinta™ (ticagrelor tablets), Xarelto® (rivaroxaban tablets and oral suspension), Pradaxa® (dabigatran capsules), Eliquis® (apixaban tablets), or Savaysa™ (edoxaban tablets) can receive the Step 2 Product (generic celecoxib).
- **Step 3 (brand Celebrex):** A patient with a history of two Step 1 Products (oral NSAIDs) and the Step 2 Product (generic celecoxib) within the 130-day look-back period can receive the Step 3 Product (brand Celebrex). Alternatively, a patient with the history of the Step 2 Product (generic celecoxib) and of one of the following, both within the 130-day look-back period: warfarin, clopidogrel, prasugrel, Brilinta™ (ticagrelor tablets), Xarelto® (rivaroxaban tablets and oral suspension), Pradaxa® (dabigatran capsules), Eliquis® (apixaban tablets), or Savaysa™ (edoxaban tablets) can receive the Step 3 Product (brand Celebrex).

Step 1 (oral NSAIDs):

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|-------------------------------------|---------------------------------|------------------|
| • Cataflam | • flurbiprofen | • mefenamic acid |
| • diclofenac potassium | • ibuprofen | • meloxicam |
| • diclofenac sodium (IR and ER) | • indomethacin (IR and ER) | • nabumetone |
| • diclofenac sodium and misoprostol | • ketoprofen IR 50 mg and 75 mg | • naproxen** |
| • etodolac (IR and ER) | • ketorolac (tablets) | • oxaprozin |
| • fenoprofen | • meclofenamate | • piroxicam |
| | | • sulindac |
| | | • tolmetin** |

**Some generic naproxen and tolmetin products are not Step 1 products

Step 2: generic celecoxib capsules

Step 3: brand Celebrex capsules

CRITERIA

1. Approve the Step 2 Product (generic celecoxib) for 1 year if the patient meets one of the following (A, B, C, D, or E):
 - A) Patient has tried two Step 1 Products (oral NSAIDs), either as prescription products or as over-the-counter (OTC) products, at prescription-strength doses for the current condition; OR
 - B) Patient is currently taking chronic systemic corticosteroid therapy (e.g., prednisone), warfarin, clopidogrel, prasugrel, Brilinta (ticagrelor tablets), Xarelto (rivaroxaban tablets and oral suspension), Pradaxa (dabigatran capsules), Eliquis (apixaban tablets), Savaysa (edoxaban tablets),

- chronic aspirin therapy, fondaparinux injection or a low molecular weight heparin product (i.e., enoxaparin injection, Fragmin [dalteparin injection]); OR
- C) Patient has reduced platelet counts or other coagulation disorders; OR
- D) Patient is > 75 years of age and is using celecoxib for a chronic condition; OR
- E) Patient has had a documented upper gastrointestinal bleed from a duodenal or gastric ulcer.
2. Approve the Step 2 Product (generic celecoxib) for 30 days if the patient is using the product during the preoperative/perioperative/postoperative period.
3. Approve the Step 3 Product (brand Celebrex) for 1 year if the patient meets the following (A and B):
- A) Patient meets one of the following (i, ii, iii, iv, or v):
- i. Patient has tried two Step 1 products (oral NSAIDs) either as prescription products or as over-the-counter (OTC) products at prescription-strength doses, for the current condition; OR
 - ii. Patient is currently taking chronic systemic corticosteroid therapy (e.g., prednisone), warfarin, clopidogrel, prasugrel, Brilinta (ticagrelor tablets), Xarelto (rivaroxaban tablets and oral suspension), Pradaxa (dabigatran capsules), Eliquis (apixaban tablets), Savaysa (edoxaban tablets), chronic aspirin therapy, fondaparinux injection, or a low molecular weight heparin product (i.e., enoxaparin injection, Fragmin [dalteparin injection]); OR
 - iii. Patient has reduced platelet counts or other coagulation disorders; OR
 - iv. Patient is > 75 years of age and is using celecoxib for a chronic condition; OR
 - v. Patient has had a documented upper gastrointestinal bleed from a duodenal or gastric ulcer;
- AND
- B) Patient has tried the Step 2 Product (generic celecoxib).
4. Approve the Step 3 Product (brand Celebrex) for 30 days if the patient meets both of the following (A and B):
- A) Patient is using the product during the preoperative/perioperative/postoperative period.
- B) Patient has tried the Step 2 Product (generic celecoxib).

REFERENCES

1. Celebrex[®] capsules [prescribing information]. New York, NY: Pfizer; April 2021.
2. Kolasinski SL, Neogi T, Hochberg MC, et al. 2019 American College of Rheumatology/Arthritis Foundation guidelines for the management of osteoarthritis of the hand, hip, and knee. *Arthritis Care Res (Hoboken)*. 2020;72(2):149-162.
3. Hochberg MC, Altman RD, Toupin K, et al. American College of Rheumatology 2012 recommendations for the use of nonpharmacologic and pharmacologic therapies in osteoarthritis of the hand, hip, and knee. *Arthritis Care Res (Hoboken)*. 2012;64(4):465-474.
4. Bannuru RR, Osani MC, Baysbrot EE, et al. OARSI guidelines for the non-surgical management of knee, hip, and polyarticular osteoarthritis. *Osteoarthritis Cartilage*. 2019;27(11):1578-1589.
5. The American Geriatric Society 2019 Beers Criteria Update Expert Panel. American Geriatric Society 2019 Updated Beers Criteria for potentially inappropriate medication use in older adults. *J Am Geriatr Soc*. 2019;67:674-594.
6. Chou R, Gordon DB, de Leon-Casasola OA, et al. Management of postoperative pain: a clinical practice guidelines from the American Pain Society, the American Society of Regional Anesthesia and Pain Medicine, and the American Society of Anesthesiologists' Committee on Regional Anesthesia, Executive Committee, and Administrative Council. *J Pain*. 2016;17(2):131-157.