

COX-2 Inhibitors

To Initiate a Coverage Review, call 1 800 753-2851

Covered Medication

- celecoxib (*Celebrex*®)

What They Do and How They're Used

- Nonsteroidal anti-inflammatory drugs (NSAIDs) work to decrease pain and inflammation by inhibiting the production of prostoglandins (PGs). Cyclo-oxygenase (COX) is the key enzyme responsible for catalyzing the biosynthesis of PGs. There are two distinct forms of the enzyme: COX-1 and COX-2.
- COX-1 enzymes play an important role in maintaining the integrity of the stomach lining. COX-2 enzymes play an important role in the process of inflammation.
- Older, traditional NSAIDs regulate pain and inflammation by blocking both COX-2 and COX-1.
- COX-2 Specific Inhibitors are a new class of NSAIDs that selectively inhibit COX-2 and spare COX-1, thereby relieving pain and inflammation with a lower potential for causing gastrointestinal (GI) side effects.
- For persons who have had or are at high risk of gastrointestinal bleeding, COX-2 Specific Inhibitors are a safer alternative for relieving pain and inflammation than traditional NSAIDs.
- *Celebrex*® is indicated for the relief of pain and inflammation due to osteoarthritis, adult and juvenile rheumatoid arthritis, ankylosing spondylitis, acute pain in adults, and menstrual pain. It may also be used to reduce the number colon polyps in Familial Adenomatous Polyposis (FAP) as an adjunct to standard care. Higher doses (800 mg/day) are required for the treatment of FAP and this higher dose has been associated with greater cardiovascular risk.

Cardiovascular Risk: *Celebrex*® may cause an increased risk of serious cardiovascular thrombotic events, myocardial infarction, and stroke, which can be fatal. All NSAIDs may have a similar risk. This risk may increase with duration of use. Patients with cardiovascular disease or risk factors for cardiovascular disease may be at greater risk. Celecoxib is contraindicated for the treatment of perioperative pain in the setting of coronary artery bypass graft (CABG) surgery.

GI Risk: NSAIDs, including *Celebrex*®, cause an increased risk of serious GI adverse events including bleeding, ulceration, and perforation of the stomach or intestines, which can be fatal. These events can occur at any time during use and without warning symptoms. Elderly patients are at greater risk for serious GI events.

- *Celebrex*® should be used in the lowest effective dose for the shortest duration consistent with individual patient treatment goals.

Rationale for Coverage Authorization

To provide coverage for COX-2 inhibitors in situations where patients are at risk for experiencing adverse GI events with traditional NSAIDs or for situations where the use of traditional NSAIDs is not warranted (e.g., in the presence of concurrent anticoagulant therapy).

Benefit Design

Coverage for *Celebrex*® is provided immediately (without requiring a coverage review process) in situations where Rx history contains an active claim for *Celebrex*® (i.e., patient is currently taking an available COX-2) OR where the patient is greater than or equal to 65 years of age OR where Rx history contains an active claim within the last 180 days for an anti-*H. pylori* medication (e.g., *Prevpac*® or *Helidac*®), anticoagulant, antiplatelet agent or oral glucocorticoid. In situations where one of these qualifications do not exist, coverage for *Celebrex*® is determined through prior authorization in accord with the following criteria.

Coverage Authorization Criteria

1. Coverage is provided in situations where the patient is at high risk of NSAID-induced adverse GI events as evidenced by any of the following:

Presence of any of the following conditions

- patient has a history or presence of peptic ulcer disease
- patient has a history or presence of NSAID-related ulcer
- patient has a history or presence of clinically significant GI bleeding

Patient is ≥ 65 years of age

Presence of any of the following concomitant drug therapy

- anticoagulants (e.g., warfarin, heparin, or LMW heparin)
- chronic use of oral corticosteroids

OR

2. Coverage is provided in situations where the patient has previously been unable to tolerate therapy with at least two other different NSAIDs.

OR

3. Coverage is provided for use in reducing the number of adenomatous colorectal polyps in FAP at a total daily dose not to exceed 800 mg per day.

OR

4. Coverage is provided for the treatment of juvenile rheumatoid arthritis in patients at least 2 years of age.

AND

5. Coverage is not provided:

- for the prevention or treatment of Alzheimer's disease or cancer.
- when no GI risk factors exist (as defined above) or (absent GI risk factors) if the patient has not been intolerant to therapy with at least two other different NSAIDs.
- **for FAP when prescribed at doses greater than 800 mg per day**

Benefit approval duration: 12 months (Please note that approval for juvenile rheumatoid arthritis is for lifetime.)

The prescriber shall be informed of the following:

For *Celebrex*[®] only: Information about the cardiovascular risk for *Celebrex*[®] is evolving. Alternatives to *Celebrex*[®] should be considered based on individual patient needs and risk factors. If alternatives to *Celebrex*[®] are not acceptable, consider prescribing the lowest effective dose of *Celebrex*[®] necessary.

Please reconsider the need for continued ulcer prophylaxis with an H₂ antagonist or PPI in a patient who is now prescribed a COX-2 inhibitor.

References

Product Information: celecoxib (*Celebrex*[®] - Pfizer), 2007.

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Simon LS, Hatoum HT, Bittman RM, et al. Risk factors for serious nonsteroidal-induced gastrointestinal complications: regression analysis of the MUCOSA trial. *Fam Med*. 1996;28:204-210.