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| <b>Clinical Policy Title:</b>              | celecoxib             |
| <b>Policy Number:</b>                      | RxA.60                |
| <b>Drug(s) Applied:</b>                    | Celebrex®             |
| <b>Original Policy Date:</b>               | 02/07/2020            |
| <b>Last Review Date:</b>                   | 03/09/2021            |
| <b>Line of Business Policy Applies to:</b> | All lines of business |

## Background

Celebrex® is a nonsteroidal anti-inflammatory drug (NSAID). It is indicated for the treatment of:

- Osteoarthritis (OA)
- Rheumatoid arthritis (RA)
- Juvenile rheumatoid arthritis (JRA) in patients 2 years and older
- Ankylosing spondylitis (AS)
- Acute pain (AP)
- Primary dysmenorrhea (PD)

## Dosing Information

| Drug Name  | Indication                                   | Dosing Regimen  | Maximum Dose                   |
|--|--|---|--------------------------------|
| celecoxib (Celebrex®)  | Osteoarthritis (OA)                          | 200 mg PO once daily or 100 mg PO BID   | 200mg/day                      |
| celecoxib (Celebrex®)  | Rheumatoid arthritis (RA)                    | 100 to 200 mg PO BID  | 400mg/day                      |
| celecoxib (Celebrex®)  | Juvenile rheumatoid Arthritis (JRA)          | 10-25 kg: 50 mg PO BID<br>> 25 kg: 100 mg PO BID  | 200 mg/day                     |
| celecoxib (Celebrex®)  | Ankylosing spondylitis (AS)                  | 200 mg PO once daily or 100 mg PO BID. If no effect is observed after 6 weeks, a trial of 400 mg (single or divided doses) may be of benefit. | 400mg/day                      |
| celecoxib (Celebrex®)  | Acute pain (AP) or Primary dysmenorrhea (PD) | 400 mg PO initially, followed by a 200 mg dose if needed on the first day. On subsequent days, 200 mg PO BID as needed                        | 400 mg/day (600mg for one day) |
| <ul style="list-style-type: none"> <li>• <b>Hepatic Impairment:</b> Reduce daily dose by 50% in patients with moderate hepatic impairment (Child-Pugh Class B).</li> </ul> |  |   |                                |

This clinical policy has been developed to authorize, modify, or determine coverage for individuals with similar conditions. Specific care and treatment may vary depending on individual need and benefits covered by the plan. This policy is not intended to dictate to providers how to practice medicine, nor does it constitute a contract or guarantee regarding payment or results. This document may contain prescription brand name drugs that are trademarks of pharmaceutical manufacturers that are not affiliated with RxAdvance.

- Poor Metabolizers of CYP2C9 Substrates: Consider a dose reduction by 50% (or alternative management for JRA) in patients who are known or suspected to be CYP2C9 poor metabolizers

## Dosage Forms

- Capsules: 50 mg, 100 mg, 200 mg, and 400 mg

## Clinical Policy

Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

### I. Initial Approval Criteria

#### A. All Indications (must meet all):

1. Age  $\geq$  2 years;
2. Member meets one of the following (a, b, c, d, or e):
  - a. Age > 65 years;
  - b. Current use of a corticosteroid;
  - c. Current use of an anticoagulant (e.g., aspirin, warfarin, low molecular weight heparin, direct thrombin inhibitors, factor Xa inhibitors, clopidogrel);
  - d. Prior gastrointestinal bleed or active peptic ulcer disease (not gastroesophageal reflux disease [GERD]);
  - e. Both of the following (i and ii):
    - i. Failure of a  $\geq$  4 week trial of meloxicam at up to maximally indicated doses unless contraindicated or clinically significant adverse effects are experienced;
    - ii. Failure of a  $\geq$  4 week trial of one additional generic NSAID at up to maximally indicated doses unless contraindicated or clinically significant adverse effects are experienced;
3. Dose does not exceed 400 mg/day (1 capsule/day).

#### Approval Duration

**Commercial:** 12 months

**Medicaid:** 12 months

### II. Continued Therapy Approval

#### A. All Indications (must meet all):

1. Currently receiving medication that has been authorized by RxAdvance or member has previously met initial approval criteria;
2. Member is responding positively to therapy;
3. If request is for a dose increase, new dose does not exceed 800 mg/day (2 capsules/day).

#### Approval Duration

**Commercial:** 12 months

**Medicaid:** 12 months

### III. Appendices

#### APPENDIX A: Abbreviation/Acronym Key

FDA: Food and Drug Administration

GERD: Gastroesophageal Reflux Disease

NSAID: Nonsteroidal Anti-Inflammatory Drug

**APPENDIX B: Therapeutic Alternatives**

Below are suggested therapeutic alternatives based on clinical guidance. Please check drug formulary for preferred agents and utilization management requirements.

| Drug Name                        | Dosing Regimen                                     | Dose Limit/<br>Maximum Dose |
|----------------------------------|--|-----------------------------|
| naproxen sodium<br>(Anaprox DS®) | 275 - 550 mg PO BID                                | 1650 mg/day                 |
| sulindac                         | 150 mg - 200 mg PO BID                             | 400 mg/day                  |
| salsalate (Disalcid®)            | 500 - 750 mg PO TID, titrated up<br>to 3000 mg/day | 3000 mg/day                 |
| piroxicam (Feldene®)             | 10 - 20 mg PO once daily                           | 20 mg/day                   |
| indomethacin                     | 25 - 50 mg PO BID -TID                             | 200 mg/day                  |
| indomethacin SR                  | 75 mg PO once daily - BID                          | 150 mg/day                  |
| meclofenamate                    | 50 - 100 mg PO Q4-6hr                              | 400 mg/day                  |
| meloxicam (Mobic®)               | 7.5 – 15 mg PO once daily                          | 15 mg/day                   |
| ibuprofen (Motrin®)              | 400 - 800 mg PO every 6-8hr                        | 3200 mg/day                 |
| fenoprofen (Nalfon®)             | 200 mg PO Q4-6hr                                   | 3200 mg/day                 |
| naproxen (Naprosyn®)             | 250 – 500 mg PO BID                                | 1500 mg/day                 |
| ketoprofen                       | 25 - 75 mg PO Q6-8hr                               | 300 mg/day                  |
| nabumetone (Relafen®)            | 1000 mg PO once daily or 500 mg<br>PO BID          | 2000 mg/day                 |
| tolmetin (Tolmetin® DS)          | 400 mg PO TID, titrated up to<br>1800 mg/day       | 1800 mg/day                 |
| diclofenac sodium<br>(Voltaren®) | 50 mg PO TID                                       | 150 mg/day                  |
| oxaprozin (Daypro®)              | 600 - 1200 mg PO BID                               | 1800 mg/day                 |
| etodolac (Lodine®)               | 400 - 500 mg PO BID                                | 1200 mg/day                 |

*Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.*

### **APPENDIX C: Contraindications/Boxed Warnings**

- **Contraindication(s):**
  - Hypersensitivity to celecoxib or any components of the drug product or sulfonamides;
  - History of asthma, urticaria, or other allergic-type reactions to aspirin or other NSAIDs;
  - In the setting of coronary artery bypass graft (CABG) surgery;
  
- **Boxed Warning(s):**
  - Nonsteroidal anti-inflammatory drugs (NSAIDs) cause an increased risk of serious cardiovascular thrombotic events, including myocardial infarction and stroke, which can be fatal. This risk may occur early in the treatment and may increase with duration of use.
  - CELEBREX is contraindicated in the setting of coronary artery bypass graft (CABG) surgery.
  - NSAIDs cause an increased risk of serious gastrointestinal (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 and patients with a prior history of peptic ulcer disease and/or GI bleeding are at greater risk for serious GI events.

### **APPENDIX D: General Information**

- The risk vs. benefit of COX-II therapy should be individualized based on patient's previous GI history, other co-morbid conditions (e.g., angina, ischemic heart disease, myocardial infarction (MI), coronary artery disease, stroke), age, concurrent medications (e.g., warfarin, oral corticosteroids), duration and dose.
- Celebrex has been associated with an increased risk of serious adverse cardiovascular (CV) events in a long-term placebo controlled trial. Based on the currently available data, FDA has concluded that an increased risk of serious adverse CV events appears to be a class effect of NSAIDs. FDA has requested that the package insert for all NSAIDs, including Celebrex, be revised to include a boxed warning to highlight the potential increased risk of CV events and the well described risk of serious, and potentially life-threatening, gastrointestinal bleeding.

### **References**

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6. Yeomans ND. A comparison of omeprazole with ranitidine for ulcers associated with nonsteroidal anti-inflammatory drugs. *N Engl J Med* 1998;338:727-734.
7. Silverstein, et al. Gastrointestinal toxicity with celecoxib vs. nonsteroidal antiinflammatory drugs for

osteoarthritis and rheumatoid arthritis (CLASS Study). JAMA 2000;284:1247- 1255.

8. Mukherjee, et al. Risk of cardiovascular events associated with selective COX-2 inhibitors. JAMA 2001;286:954-959.
9. Juni, et al. Are selective COX 2 inhibitors superior to traditional non steroidal anti- inflammatory drugs. BMJ 2002;324:1287-1288.
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| Review/Revision History            |   |                                | Review/Revision Date | P&T Approval Date |
|------------------------------------|---|--------------------------------|----------------------|-------------------|
| Policy was established             |   |                                | 01/2020              | 02/07/2020        |
| Updated max doses:                 |   |                                | 4/29/2020            | 05/20/2020        |
| Indication                         | Dosing Regimen  | Maximum Dose                   |                      |                   |
| Osteoarthritis                     | 200 mg PO once daily or 100 mg PO BID   | 200mg/day                      |                      |                   |
| Rheumatoid arthritis               | 100 to 200 mg PO BID  | 400mg/day                      |                      |                   |
| Juvenile rheumatoid arthritis      | 10-25 kg: 50 mg PO BID<br>> 25 kg: 100 mg PO BID  | 200 mg/day                     |                      |                   |
| Ankylosing spondylitis             | 200 mg PO once daily or 100 mg PO BID. If no effect is observed after 6 weeks, a trial of 400 mg daily may be of worthwhile | 400mg/day                      |                      |                   |
| Acute pain or Primary dysmenorrhea | 400 mg PO initially, followed by a 200 mg   | 400 mg/day (600mg for one day) |                      |                   |

|   |   |  |                   |                   |
|---|---|--|-------------------|-------------------|
|   | <p>dose if needed on the first day. On subsequent days, 200 mg PO BID as needed</p> |  |                   |                   |
| <p>Updated Criteria II, A, i to:</p> <p>Currently receiving medication that has been authorized by Rxadvance, or documentation supports that member is currently receiving Cabometyx® or Cometriq® for a covered indication and has received this medication for at least 30 days;</p>  |   |  | <p>05/08/2020</p> | <p>05/20/2020</p> |
| <p>Policy was reviewed:</p> <ol style="list-style-type: none"> <li>1. Clinical Policy Title Table was updated.</li> <li>2. Drug(s) Applied was updated.</li> <li>3. Last Review Date was updated.</li> <li>4. Line of Business Policy Applies to was update to all lines of business.</li> <li>5. APPENDIX B: Therapeutic Alternatives verbiage was updated to "Below are suggested therapeutic alternatives based on clinical guidance...."</li> <li>6. APPENDIX C: Contraindications/Boxed Warnings were updated.</li> <li>7. Initial Approval criteria: Medicaid approval duration were updated from length of benefit to 12 months.</li> <li>8. Continued Approval criteria: Medicaid approval duration were updated from length of benefit to 12 months.</li> <li>9. Anaprox®, Indocin®, Indocin SR®, Meclomen®, Orudis®, Clinoril® were removed from therapeutic alternatives table due to off market.</li> <li>10. References were updated.</li> </ol> |   |  | <p>02/03/2021</p> | <p>03/09/2021</p> |

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| <p>11. Updated indication and dosing information to include abbreviations:<br/>Osteoarthritis (OA), Rheumatoid arthritis (RA), Juvenile rheumatoid arthritis (JRA) in patients 2 years and older, Ankylosing spondylitis (AS), Acute pain (AP), Primary dysmenorrhea (PD)</p> <p>12. Updated dosing information for Ankylosing Spondylitis: If no effect is observed after 6 weeks, a trial of 400 mg (single or divided doses) may be of benefit.</p> <p>13. Dosing information updated to include: Hepatic Impairment: Reduce daily dose by 50% in patients with moderate hepatic impairment (Child-Pugh Class B). Poor Metabolizers of CYP2C9 Substrates: Consider a dose reduction by 50% (or alternative management for JRA) in patients who are known or suspected to be CYP2C9 poor metabolizers.</p> |  |  |
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