

## SPRIX

Federal Employee Program.

(ketorolac kromethamine)

### **RATIONALE FOR INCLUSION IN PA PROGRAM**

#### Background

Sprix is intranasal formulation of the potent non-steroidal anti-inflammatory drug (NSAID) ketorolac. It is an analgesic that inhibits the enzyme cyclooxygenase (COX), an early component of the arachidonic acid cascade, resulting in the reduced synthesis of prostaglandins, thromboxanes, and prostacyclin. Ketorolac is a racemic mixture of [–]S and [+]R-enantiomeric forms, with the S-form having analgesic activity. Ketorolac has anti-inflammatory, analgesic, and antipyretic effects. Ketorolac possesses no sedative or anxiolytic properties, and has no effect on gut motility (1).

#### **Regulatory Status**

FDA-approved indication: Sprix is a non-steroidal anti-inflammatory drug indicated in adult patients for the short term (up to 5 days) management of moderate to moderately severe pain that requires analgesia at the opioid level (1).

#### Limitations of Use

The total duration of use of ketorolac alone or sequentially with other formulations of ketorolac (IM/IV or oral) <u>must not exceed 5 days</u> because of the potential for increasing the frequency and severity of adverse reactions associated with the recommended doses. Treat patients for the shortest duration possible, and do not exceed 5 days of therapy with Sprix. Do not use Sprix concomitantly with other formulations of ketorolac or other NSAIDs (1).

Sprix has a boxed warning regarding the gastrointestinal, cardiovascular, bleeding and renal risk. Sprix can cause peptic ulcers, GI bleeding, and/or perforation of the stomach or intestines, which can be fatal. NSAIDS may cause an increased risk of serious CV thrombotic events, myocardial infarction, and stroke, which can be fatal. This risk may increase with duration of use. Patients with CV disease or risk factors for CV disease may be at greater risk (1).

Sprix is contraindicated for treatment of peri-operative pain in the setting of coronary artery bypass graft (CABG) surgery. Sprix is contraindicated in patients with peptic ulcer disease or history of GI bleeding. Sprix inhibits platelet function and is contraindicated in patients with suspected or confirmed cerebrovascular bleeding, hemorrhagic diathesis, incomplete hemostasis, or high risk of bleeding. Sprix is contraindicated in patients with advanced renal impairment and in patients at risk for renal failure due to volume depletion (1).



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Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS) has been reported in patients taking NSAIDs such as Sprix. If symptoms of DRESS are present, such as fever, rash, lymphadenopathy, and/or facial swelling, Sprix should be discontinued and the patient evaluated immediately (1).

Sprix, and other NSAIDs, should be avoided in pregnant women at about 30 weeks gestation and later. NSAIDs (such as Sprix) can increase risk of premature closure of the fetal ductus arteriosus at this gestational age. Sprix should also be avoided at 20 weeks gestation or later in pregnancy due to risk of fetal renal dysfunction leading to oligohydramnios. Oligohydramnios is often, but not always, reversible upon treatment discontinuation. If NSAID treatment is necessary between 20 and 30 weeks gestation, use should be limited to lowest effective dose and duration. Sprix should be discontinued and monitored according to clinical practice, if oligohydroamnios occurs (1).

Safety and effectiveness in pediatric patients under the age of 18 have not been established (1).

#### Summary

Sprix is nasally administered potent non-steroidal anti-inflammatory drug (NSAID) ketorolac. It is indicated in adult patients for the short term (up to 5 days) management of moderate to moderately severe pain that requires analgesia at the opioid level. The total duration of use of Sprix and other ketorolac formulations should not exceed 5 days (1).

Prior authorization is required to ensure the safe, clinically appropriate and cost-effective use of Sprix while maintaining optimal therapeutic outcomes.

#### References

1. Sprix [package insert]. Wayne, PA: Zyla Life Sciences US Inc.; April 2021.