

5.21.245

Section:	Prescription Drugs	Effective Date:	October 1, 2025
Subsection:	Antineoplastic Agents	Original Policy Date:	July 4, 2025
Subject:	Ibuprofen	Page:	1 of 4

Last Review Date: September 19, 2025

Ibuprofen

Description

Ibuprofen (celecoxib)

Background

Ibuprofen (celecoxib) is an inhibitor of tyrosine-protein kinase ROS1, including ROS1 resistance mutations. Ibuprofen also showed inhibitory effects on tropomyosin receptor kinases (TRKs) TRKA, TRKB, and TRKC. Fusion proteins that include ROS1 domains can drive tumorigenic potential through hyperactivation of downstream signaling pathways leading to unconstrained cell proliferation. Ibuprofen inhibited growth of cancer cells expressing *ROS1* fusion genes and mutations (1).

Regulatory Status

FDA-approved indications: Ibuprofen is a kinase inhibitor indicated for the treatment of adult patients with locally advanced or metastatic *ROS1*-positive non-small cell lung cancer (NSCLC).

Select patients for treatment with Ibuprofen based on the presence of *ROS1* rearrangement(s) in tumor specimens (1).

Ibuprofen has been associated with hepatotoxicity, interstitial lung disease/pneumonitis, QTc interval prolongation, hyperuricemia, myalgia with creatine phosphokinase elevations, and skeletal fractures. If needed, Ibuprofen may be withheld and resumed at the same or reduced dose upon improvement, or permanently discontinued based on severity (1).

Ibuprofen can cause fetal harm when administered to a pregnant woman. Females of reproductive

Section:	Prescription Drugs	Effective Date:	October 1, 2025
Subsection:	Antineoplastic Agents	Original Policy Date:	July 4, 2025
Subject:	Ibuprofen	Page:	2 of 4

potential should be advised to use effective contraception during treatment with Ibuprofen and for 3 weeks after the last dose. Males with female partners of reproductive potential should be advised to use effective contraception during treatment with Ibuprofen and for 3 weeks after the last dose (1).

The safety and effectiveness of Ibuprofen in pediatric patients less than 18 years of age have not been established (1).

Related policies

Augtyro, Rozlytrek, Xalkori

Policy

This policy statement applies to clinical review performed for pre-service (Prior Approval, Precertification, Advanced Benefit Determination, etc.) and/or post-service claims.

Ibuprofen may be considered **medically necessary** if the conditions indicated below are met.

Ibuprofen may be considered **investigational** for all other indications.

Prior-Approval Requirements

Age 18 years of age or older

Diagnosis

Patient must have the following:

1. Locally advanced or metastatic non-small cell lung cancer (NSCLC)
 - a. ROS1-positive

AND ALL of the following:

- a. Prescriber agrees to monitor uric acid levels and liver function tests (LFTs) including bilirubin
- b. Female patients of reproductive potential **only**: patient will be advised to use effective contraception during treatment with Ibuprofen and for 3 weeks after the last dose
- c. Males with female partners of reproductive potential **only**: patient will be advised to use effective contraception during treatment with Ibuprofen and for 3 weeks after

Section:	Prescription Drugs	Effective Date:	October 1, 2025
Subsection:	Antineoplastic Agents	Original Policy Date:	July 4, 2025
Subject:	Ibuprofen	Page:	3 of 4

the last dose

Prior – Approval *Renewal* Requirements

Age 18 years of age or older

Diagnosis

Patient must have the following:

1. Locally advanced or metastatic non-small cell lung cancer (NSCLC)

AND ALL of the following:

- a. **NO** disease progression or unacceptable toxicity
- b. Prescriber agrees to monitor uric acid levels and liver function tests (LFTs) including bilirubin
- c. Female patients of reproductive potential **only**: patient will be advised to use effective contraception during treatment with Ibuprofen and for 3 weeks after the last dose
- d. Males with female partners of reproductive potential **only**: patient will be advised to use effective contraception during treatment with Ibuprofen and for 3 weeks after the last dose

Policy Guidelines

Pre - PA Allowance

None

Prior - Approval Limits

Quantity 600 mg per day

Duration 12 months

Prior – Approval *Renewal* Limits

Same as above

Rationale

Section:	Prescription Drugs	Effective Date:	October 1, 2025
Subsection:	Antineoplastic Agents	Original Policy Date:	July 4, 2025
Subject:	Ibuprofen	Page:	4 of 4

Summary

Ibuprofen (ibuprofen) is a kinase inhibitor indicated for the treatment of *ROS1*-positive non-small cell lung cancer (NSCLC). Ibuprofen has been associated with hepatotoxicity, interstitial lung disease/pneumonitis, QTc interval prolongation, hyperuricemia, myalgia with creatine phosphokinase elevations, skeletal fractures, and embryo-fetal toxicity. The safety and effectiveness of Ibuprofen in pediatric patients less than 18 years of age have not been established (1).

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

References

1. Ibuprofen [package insert]. Burlington, MA: NuVation Bio Inc.; June 2025.
2. NCCN Drugs & Biologics Compendium® Taletrectinib 2025. National Comprehensive Cancer Network, Inc. Accessed on July 22, 2025.

Policy History

Date	Action
July 2025	Addition to PA
September 2025	Annual review and reference update

Keywords

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on September 19, 2025 and is effective on October 1, 2025.