



PRIOR AUTHORIZATION POLICY

POLICY: Oncology – Tasigna® (nilotinib capsules – Novartis)

TAC APPROVAL DATE: 03/20/2019

OVERVIEW

Tasigna, a kinase inhibitor, is indicated for the treatment of adult and pediatric patients ≥ 1 year of age with newly-diagnosed Philadelphia positive (Ph+) chronic myeloid leukemia (CML) in chronic phase (CP).¹ Tasigna is also indicated for the treatment of CP and accelerated phase (AP) Ph+ CML in adult patients resistant or intolerant to prior therapy that included Gleevec® (imatinib tablets, generic). Tasigna is also indicated for use in pediatric patients ≥ 1 year of age with Ph+ AML-CP resistant or intolerant to prior TKI therapy.¹ Currently, there are four other tyrosine kinase inhibitors (TKIs) approved for the treatment of Ph+ CML: Gleevec, Sprycel® (dasatinib tablets), Bosulif® (bosutinib tablets), and Iclusig® (ponatinib tablets).²⁻⁵ These agents are indicated for the treatment of Ph+ CML in various phases; some TKIs are indicated after resistance or intolerance to prior therapy. Iclusig is approved for patients with T315I-positive CML and in adult patients with CML for whom no other TKI therapy is indicated.⁵ Gleevec, Sprycel and Iclusig are also indicated for patients with Ph+ acute lymphoblastic leukemia (ALL).

Guidelines

The National Comprehensive Cancer Network (NCCN) guidelines for CML (version 1.2019 – August 1, 2018) state that for patients with CP CML with a low-risk score, the primary treatment recommended includes a first-generation TKI (Gleevec or generic imatinib 400 mg QD [Category 1]), or a second-generation TKI (Bosulif 400 mg QD [Category 1], Sprycel 100 mg QD [Category 1], or Tasigna 300 mg BID [Category 1]).⁶ For patients with CP CML with an intermediate- or high-risk score, a second-generation TKI is preferred (Bosulif 400 mg QD [Category 1], Sprycel 100 mg QD [Category 1], or Tasigna 300 mg BID [Category 1]). A first-generation TKI (Gleevec or generic imatinib 400 mg QD) is an alternative [Category 2A]. Iclusig is an option for patients with a T315I mutation and for with disease that has not responded to multiple TKIs or in whom another TKI is not indicated.⁶

NCCN guidelines for ALL (version 1.2018 – March 12, 2018) recommend Tasigna for patients with in various induction regimens, as well as in relapsed or refractory ALL.¹¹ Tasigna is also recommended for patients with specific mutations and in certain maintenance regimens. Data are also available regarding use of Tasigna in ALL.¹²⁻¹⁴

The NCCN soft tissue sarcoma guidelines (version 2.2019 – February 4, 2019) indicate that Tasigna is a treatment option for patients with gastrointestinal stroma tumor (GIST) who have disease progression after imatinib, Stivarga® (regorafenib tablets), and Sutent® (sunitinib capsules).⁷

Other Uses with Supportive Evidence

Data are available regarding use of Tasigna in GIST. In one Phase III study (n = 248) Tasigna was compared with best supportive care (BSC) [BSC without TKI therapy; BSC plus imatinib; BSC plus Sutent) in patients with GIST resistant to or intolerant of imatinib and Sutent.⁸ Median progression-free survival (PFS) was similar between arms (109 days with Tasigna vs. 111 days with BSC; P = 0.56). A trend in longer overall survival (OS) was noted with Tasigna vs. BSC (332 days vs. 280

days; $P = 0.29$). Tasigna also demonstrated modest activity in one Phase II study ($n = 13$) in patients with GIST previously treated with imatinib and Sutent.⁹ In a randomized, open-label, multicenter, Phase III trial involving patients (aged ≥ 18 years) with histologically-confirmed unresectable or metastatic GIST ($n = 647$) showed that PFS was higher with imatinib overall compared with Tasigna and that Tasigna is not an ideal first-line treatment for GIST.¹⁰

POLICY STATEMENT

Prior authorization is recommended for prescription benefit coverage of Tasigna. All approvals are provided for 3 years in duration.

Automation: None.

RECOMMENDED AUTHORIZATION CRITERIA

Coverage of Tasigna is recommended in those who meet the following criteria:

FDA-Approved Indications

1. **Chronic Myeloid Leukemia (CML) That is Philadelphia Chromosome Positive (Ph+).**
Approve for 3 years.

Other Uses with Supportive Evidence

2. **Acute Lymphoblastic Leukemia (ALL) That is Philadelphia Chromosome Positive (Ph+).**
Approve for 3 years if the patient has tried one other tyrosine kinase inhibitor that is used for Philadelphia chromosome positive ALL (e.g., Gleevec® [imatinib tablets], Sprycel® [dasatinib tablets]).
3. **Gastrointestinal Stromal Tumor (GIST).** Approve for 3 years if the patient meets the following criteria (A, B, and C):
 - A) Patient has tried Gleevec® (imatinib tablets); AND
 - B) Patient has tried Sutent® (sunitinib capsules); AND
 - C) Patient has tried Stivarga® (regorafenib tablets).

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Tasigna has not been shown to be effective, or there are limited or preliminary data or potential safety concerns that are not supportive of general approval for the following conditions. Rationale for non-coverage for these specific conditions is provided below. (Note: This is not an exhaustive list of Conditions Not Recommended for Approval.)

1. Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

REFERENCES

1. Tasigna® capsules [prescribing information]. East Hanover, NJ: Novartis Pharmaceuticals, Inc.; July 2018.
2. Gleevec® tablets [prescribing information]. East Hanover, NJ: Novartis; July 2018.

3. Sprycel® tablets [prescribing information]. Princeton, NJ: Bristol-Myers Squibb; December 2018.
4. Bosulif® tablets [prescribing information]. New York, NY: Pfizer Inc; October 2018.
5. Iclusig® tablets [prescribing information]. Cambridge, MA: Ariad Pharmaceuticals; October 2018.
6. The NCCN Chronic Myeloid Leukemia Clinical Practice Guidelines in Oncology (Version 1.2019 – August 1, 2018). © 2018 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed on March 12, 2019.
7. The NCCN Soft Tissue Sarcoma Practice Guidelines in Oncology (Version 2.2019 – February 4, 2019). © 2019 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed on March 12, 2019.
8. Reichardt P, Blay JY, Gelderblom H, et al. Phase III study of nilotinib versus best supportive care with or without a TKI in patients with gastrointestinal stromal tumors resistant to or intolerant of imatinib and sunitinib. *Ann Oncol*. 2012;23:1680-1687.
9. Cauchi C, Somaiah N, Engstrom PF, et al. Evaluation of nilotinib in advanced GIST previously treated with imatinib and sunitinib. *Cancer Chemother Pharmacol*. 2012;69:977-982.
10. Blay JY, Shen L, Kang YI, et al. Nilotinib versus imatinib as first-line therapy for patients with unresectable or metastatic gastrointestinal stromal tumours (ENESTg1): a randomized phase 3 trial. *Lancet Oncol*. 2015;16(5):550-560.
11. The NCCN Acute Lymphoblastic Leukemia Clinical Practice Guidelines in Oncology (Version 1.2018 – March 12, 2018). © 2018 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed on March 2, 2018.
12. Ottmann OG, Larson RA, Kantarjian HM, et al. Phase II study of nilotinib in patients with relapsed or refractory Philadelphia chromosome-positive acute lymphoblastic leukemia. *Leukemia*. 2013;27(6):1411-1413.
13. Kantarjian H, Giles F, Wunderle L, et al. Nilotinib in imatinib-resistant CML and Philadelphia chromosome-positive ALL. *N Engl J Med*. 2006;354:2542-2551.
14. Kim AY, Joo YD, Lim SN, et al, for the Adult Acute Lymphoblastic Leukemia Working Party of the Korean Society of Hematology. Nilotinib combined with multiagent chemotherapy for newly diagnosed Philadelphia-positive acute lymphoblastic leukemia. *Blood*. 2015;126(6):746-756.

HISTORY

Type of Revision	Summary of Changes*	TAC Approval Date
Annual revision	No criteria changes.	03/01/2017
Annual revision	For the indication regarding ALL, changed the criteria from requiring two TKIs to one TKI that is used for Philadelphia chromosome positive ALL. Removed the criteria allowing for approval if the patient has been started on Tasigna for an indication or condition addressed as an approval in the Recommended Authorization section.	03/07/2018
Annual revision	No criteria changes	03/20/2019

* For a further summary of criteria changes, refer to respective TAC minutes available at: <http://esidepartments/sites/Dep043/Committees/TAC/Forms/AllItems.aspx>; TAC – Therapeutic Assessment Committee; ALL – Acute lymphoblastic leukemia; TKI(s) – Tyrosine kinase inhibitor(s); CML – Chronic myelogenous leukemia.