

# Commercial PA Criteria Effective: May 4, 2016

**Prior Authorization:** Imatinib

<u>Products Affected</u>: imatinib mesylate oral tablet, Gleevec oral tablets (brand name), Imkeldi (Imatinib mesylate) oral solution

#### **Medication Description**

Imatinib mesylate is a protein-tyrosine kinase inhibitor that inhibits the BCR-ABL tyrosine kinase, the constitutive abnormal tyrosine kinase created by the Philadelphia chromosome abnormality in CML. Imatinib inhibits proliferation and induces apoptosis in BCR-ABL positive cell lines as well as fresh leukemic cells from Philadelphia chromosome positive chronic myeloid leukemia. Imatinib inhibits colony formation in assays using *ex vivo* peripheral blood and bone marrow samples from CML patients.

*In vivo*, Imatinib inhibits tumor growth of BCR-ABL transfected murine myeloid cells as well as BCR-ABL positive leukemia lines derived from CML patients in blast crisis.

Imatinib is also an inhibitor of the receptor tyrosine kinases for platelet-derived growth factor (PDGF) and stem cell factor (SCF), c-kit, and inhibits PDGF- and SCF-mediated cellular events.

#### **Covered Uses:**

- 1. Acute lymphoblastic leukemia (ALL), Philadelphia chromosome positive (Ph+), in adults with relapsed or refractory disease.
- 2. **ALL**, newly diagnosed and Ph+, in combination with chemotherapy in pediatric patients.
- 3. **Aggressive systemic mastocytosis**, without the D816V c-Kit mutation or with unknown c-Kit mutational status, in adults.
- 4. Chronic myeloid leukemia (CML) newly diagnosed and Ph+, chronic phase in adult and pediatric patients.
- 5. **CML**, Ph+, in blast phase, accelerated phase, or in chronic phase in patients after failure of interferon alfa therapy.
- 6. **Dermatofibrosarcoma protuberans** in adults with unresectable, current, and/or metastatic disease.
- 7. **Gastrointestinal stromal tumors (GIST)**, in patients with KIT (CD117) positive unresectable and/or metastatic malignant disease.
- 8. **GIST**, Kit (CD117) positive, as adjuvant treatment of adults following resection.
- 9. **Hypereosinophilic syndrome and/or chronic eosinophilic leukemia**, in adults who have the *FIP1L1-PDGFR* alpha fusion kinase (mutation analysis or fluorescence in situ hybridization demonstration of CICH2 allele deletion) and for patients with hypereosinophilic syndrome and/or chronic eosinophilic leukemia who are *FIP1l1-PDGFR* alpha fusion kinase negative or unknown.
- 10. **Myelodysplastic/myeloproliferative diseases**, associated with platelet-derived growth factor receptor (*PDGFR*) gene rearrangements in adults.

**Exclusion Criteria:** N/A

# **Required Medical Information:**

- 1. Diagnosis
- 2. For indications of ALL and CML, the Philadelphia chromosome (Ph) status of the leukemia must be reported

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- 3. For indications of MDS and Myeloproliferative disorder, PDGFR gene rearrangement must be reported
- 4. Prior therapies tried and failed

#### Age Restrictions:

- 1. For pediatric ALL and CML, 1 year of age and older
- 2. Aggressive systemic mastocytosis: 18 years of age and older
- 3. Dermatofibrosarcoma: 18 years of age and older
- 4. GI stromal tumors: 18 years of age and older
- 5. Chronic eosinophilic leukemia: 18 years of age or older
- 6. Hypereosinophilic syndrome: 18 years of age or older
- 7. Myelodysplastic/myeloproliferative diseases: 18 years of age and older
- 8. Systemic mast cell disease: 18 years of age and older

**Prescriber Restrictions:** Prescribed by, or in consultation with, an Oncologist.

Coverage Duration: 3 years

# Other Criteria:

- 1. Newly diagnosed Chronic Myeloid Leukemia (CML) in chronic phase
  - a. Patient has a diagnosis of Chronic Myeloid Leukemia; AND
  - b. Patient has CML that is Philadelphia chromosome positive (Ph+); AND
  - c. Patient has CML that is chronic phase.

    Note: If requesting brand name Gleevec: Patient must have an intolerance or contraindication to generic imatinib.
- 2. Chronic Myeloid Leukemia (CML) in blast crisis, accelerated phase, or in chronic phase after failure of interferon-alpha therapy
  - a. Patient has a diagnosis of Chronic Myeloid Leukemia; AND
  - b. Patient has CML that is Philadelphia chromosome positive (Ph+); AND
  - c. Patient's disease is in one of the following:
    - i. Blast crisis OR
    - ii. Accelerated phase OR
    - iii. chronic phase after failure of interferon-alpha therapy.
      Note: If requesting brand name Gleevec: Patient must have an intolerance or contraindication to generic imatinib.
- 3. Adult Patients with Ph+ Acute Lymphoblastic Leukemia (ALL)
  - a. Patient has a diagnosis of Acute Lymphoblastic Leukemia (ALL); AND
  - b. Patient has Acute Lymphoblastic Leukemia that is Philadelphia chromosome positive (Ph+ ALL); AND
  - Patient's disease is relapsed or refractory; AND
     Note: If requesting brand name Gleevec: Patient must have an intolerance or contraindication to generic imatinib.
- 4. Pediatric Patients with Ph+ Acute Lymphoblastic Leukemia (ALL)

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- a. Patient has a diagnosis of Acute Lymphoblastic Leukemia (ALL); AND
- b. Patient has Acute Lymphoblastic Leukemia that is Philadelphia chromosome positive (Ph+ ALL); AND
- c. Patient is using imatinib in combination with chemotherapy; **AND**Note: If requesting brand name Gleevec: Patient must have an intolerance or contraindication to generic imatinib.

## 5. Myelodysplastic/Myeloproliferative Diseases

- a. Patient has a diagnosis of Myelodysplastic/myeloproliferative diseases; AND
- Patient's disease is associated with PDGFR (platelet-derived growth factor receptor) gene rearrangements as determined with an FDA-approved test in adult patients; AND Note: If requesting brand name Gleevec: Patient must have an intolerance or contraindication to generic imatinib.

### 6. Aggressive Systemic Mastocytosis

- a. Patient has a diagnosis of aggressive systemic mastocytosis; AND
- b. Patient has disease without the D816V c-Kit mutation as determined with an FDA-approved test; **AND**Note: If requesting brand name Gleevec: Patient must have an intolerance or contraindication to generic imatinib.

## 7. Hypereosinophilic Syndrome and/or Chronic Eosinophilic Leukemia

- a. Patient has a diagnosis of Hypereosinophilic Syndrome and/or Chronic Eosinophilic Leukemia; AND
- b. Patient has FIP1L1-PDGFRα fusion kinase (mutational analysis or FISH demonstration of CHIC2 allele deletion) positive, negative, or unknown.

Note: If requesting brand name Gleevec: Patient must have an intolerance or contraindication to generic imatinib.

# 8. Dermatofibrosarcoma Protuberans

- a. Patient has a diagnosis of Dermatofibrosarcoma Protuberans; AND
- Patient's disease is unresectable, recurrent and/or metastatic.
   Note: If requesting brand name Gleevec: Patient must have an intolerance or contraindication to generic imatinib.

# 9. Kit+ Gastrointestinal Stromal Tumors (GIST)

- a. Patient has a diagnosis of gastrointestinal stromal tumors; AND
- b. Patient's disease is Kit (CD117) positive; AND
- Patient's disease is unresectable and/or metastatic.
   Note: If requesting brand name Gleevec: Patient must have an intolerance or contraindication to generic imatinib.

#### 10. Adjuvant Treatment of GIST

- Patient has a diagnosis of gastrointestinal stromal tumors; AND
- b. Patient's disease is Kit (CD117) positive; AND
- c. Patient is using as adjuvant treatment following complete gross resection.







Note: If requesting brand name Gleevec: Patient must have an intolerance or contraindication to generic imatinib.

#### References:

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- 2. Imatinib tablets [prescribing information]. Cranbury, NJ: Sun; Sept 2022.
- 3. The NCCN Acute Lymphoblastic Leukemia Clinical Practice Guidelines in Oncology (version 4.2023 February 5, 2024). © 2024 National Comprehensive Cancer Network. Available at: <a href="http://www.nccn.org">http://www.nccn.org</a>.
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- The NCCN Bone Cancer Clinical Practice Guidelines in Oncology (version 2.2024 March 12, 2024). © 2024 National Comprehensive Cancer Network. Available at: <a href="http://www.nccn.org">http://www.nccn.org</a>.
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#### **Policy Revision history**

Rev#	Type of Change	Summary of Change	Sections Affected	Date
1	New Policy	New Policy	All	03/09/2016
2	Removal of brand requirement	Removal of requirement of a trial with brand Gleevec prior to treatment with imatinib	Other criteria	01/31/17
3	Update	Update	Coverage Duration: Update to 3 years	07/01/2019
4	Update	Update	Updated age restrictions. 18 years and older for all indications except ALL and CML	4/29/2020
5	Update	Added trial of generic imatinib for Brand Gleevec requests Brand Gleevec added to products affected	Other criteria Products affected	5/20/2020
6	Update	Adopted EH Policy onto CCI template	ALL	08/21/2023







		Updated Medication description		
		Addition of Imkeldi (Imatinib mesylate)	Medication Description	
7	Update	oral solution	Products Affected	1/13/2025
		Update criteria to match FDA approved-	Criteria	
		indications		