Clinical Policy: Imatinib (Gleevec)

Reference Number: PA.CP.PHAR.65
Effective Date: 06/11
Last Review Date: 04/18 Revision Log

Description
The intent of the criteria is to ensure that patients follow selection elements established by Pennsylvania Health and Wellness® clinical policy for imatinib (Gleevec®).

FDA Approved Indication(s)
Gleevec is indicated:

- For the treatment of newly diagnosed adult and pediatric patients with Philadelphia chromosome positive (Ph+) chronic myeloid leukemia (CML) in chronic phase
- For the treatment of patients with Ph+ CML in blast crisis, accelerated phase, or in chronic phase after failure of interferon-alpha therapy
- For the treatment of adult patients with relapsed or refractory Ph+ acute lymphoblastic leukemia (ALL)
- For the treatment of pediatric patients with newly diagnosed Ph+ ALL in combination with chemotherapy
- For the treatment of adult patients with myelodysplastic/myeloproliferative diseases (MDS/MPD) associated with platelet-derived growth factor receptor (PDGFR) gene re-arrangements
- For the treatment of adult patients with aggressive systemic mastocytosis (ASM) without the D816V c-Kit mutation or with c-Kit mutational status unknown
- For the treatment of adult patients with hypereosinophilic syndrome (HES) and/or chronic eosinophilic leukemia (CEL) who have the FIP1L1-PDGFRα fusion kinase (mutational analysis or FISH demonstration of CHIC2 allele deletion) and for patients with HES and/or CEL who are FIP1L1-PDGFRα fusion kinase negative or unknown
- For the treatment of adult patients with unresectable, recurrent and/or metastatic dermatofibrosarcoma protuberans (DFSP)
- For the treatment of patients with Kit (CD117) positive unresectable and/or metastatic malignant gastrointestinal stromal tumors (GIST)
- For the treatment of adjuvant treatment of adult patients following complete gross resection of Kit (CD117) positive GIST

Policy/Criteria
It is the policy of health plans affiliated with Pennsylvania Health and Wellness® that imatinib (Gleevec) is **medically necessary** when one of the following criteria is met:

I. Initial Approval Criteria

A. FDA Labeled Indications (must meet all):

1. One of the following diagnoses - and mutation if applicable:
   a. CML: Ph/BCR-ABL1-positive;
   b. ALL: Ph/BCR-ABL1-positive;
   c. MDS/MPD: PDGFR-positive;

d. ASM: D816V c-KIT-negative or c-Kit mutational status unknown;
e. HES or CEL;

2. Prescribed by or in consultation with an oncologist or hematologist;
3. Age ≥ 18 years if diagnosis is MDS/MPD, ASM, DFSP, or GIST;
4. Dose does not exceed any of the following (a, b, or c):
   a. 800 mg/day: CML, DFSP, GIST;
   b. 600 mg/day: ALL;
   c. 400 mg/day: MDS/MPD, ASM, HES or CEL.

Approval duration:6 months

B. Off-Label Indications (must meet all):

1. One of the following diagnoses - and mutation if applicable:
   a. Central nervous system metastasis with history of Gleevec treatment for non-small cell lung cancer that is EGFR-positive;
   b. AIDS-related Kaposi sarcoma;
   c. Chordoma (a type of bone cancer);
   d. Melanoma: KIT-positive;
   e. Desmoid tumor (i.e., aggressive fibromatosis);
   f. Pigmented villonodular synovitis/tenosynovial giant cell tumor;
2. Prescribed by or in consultation with an oncologist or hematologist;
3. Age ≥ 18 years;
4. Request meets one of the following (a or b):
   a. Dose does not exceed 800 mg/day;
   b. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

Approval duration: 6 months

C. Other diagnoses/indications:

1. Refer to CP.PHAR.57 Global Biopharm Policy.

II. Continued Approval

A. All Indications in Section I (must meet all)**:**

1. Currently receiving medication via Pennsylvania Health and Wellness benefit or member has previously met all initial approval criteria; or the Continuity of Care policy (PA.LTSS.PHAR.01) applies;
2. Member is responding positively to therapy.
3. If request is for a dose increase, new dose does not exceed one of the following:
   a. 800 mg/day: CML, DFSP, GIST;
   b. 600 mg/day: ALL;
   c. 400 mg/day: MDS/MPD, ASM, HES or CEL;
   d. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

Approval duration: 12 months

B. Other diagnoses/indications (1 or 2):
1. Currently receiving medication via Pennsylvania Health and Wellness benefit and documentation supports positive response to therapy; or the Continuity of Care policy (PA.LTSS.PHAR.01) applies;
   Approval duration: Duration of request or 6 months (whichever is less); or
2. Refer to PA.CP.PHAR.57 - Global Biopharm Policy.

Background

Description/Mechanism of Action:
Imatinib mesylate is a small molecule protein-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. 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.

Formulations:
Tablet, oral administration
Gleevec: 100 mg, 400 mg

Appendices

Appendix A: Abbreviation Key
ALL: acute lymphoblastic leukemia
ASM: aggressive systemic mastocytosis
CEL: chronic eosinophilic leukemia
CML: chronic myelogenous leukemia
DFSP: dermatofibrosarcoma protuberans
FISH: fluorescent in situ hybridization
GIST: gastrointestinal stromal tumor
HES: hypereosinophilic syndrome
MDS: myelodysplastic syndromes
MPD: myeloproliferative diseases
PDGFR: platelet-derived growth factor receptor
Ph+: positive Philadelphia chromosome
PVNS: pigmented villonodular synovitis
TGCT: tenosynovial giant cell tumor
TKI: tyrosine kinase inhibito

Reviews, Revisions, and Approvals	Date	Approval Date
2Q 2018 annual review: added age; summarized NCCN and FDA approved uses for improved clarity; added specialist involvement in care; off-label CNS/NSCLC, Kaposi sarcoma added; references reviewed and updated.	02.13.18	

References

1. Gleevec Prescribing Information. East Hanover, NJ: Novartis Pharmaceuticals Corporation; September 2017. Available at

https://www.pharma.us.novartis.com/sites/www.pharma.us.novartis.com/files/gleevec_tabs.pdf. Accessed February 2018.

2. Imatinib mesylate. In: National Comprehensive Cancer network Drug and Biologics Compendium. Available at www. NCCN.org. Accessed February 2018.