

## Bosulif<sup>®</sup> (bosutinib) (Oral)

Document Number: IC-0021

Last Review Date: 07/01/2019

Date of Origin: 11/01/2012

Dates Reviewed: 12/2012, 11/2013, 08/2014, 07/2015, 07/2016, 08/2017, 01/2018, 07/2018, 07/2019

### I. Length of Authorization

Coverage will be provided for six months and may be renewed.

### II. Dosing Limits

#### A. Quantity Limit (max daily dose) [Pharmacy Benefit]:

- Bosulif 100 mg tablets: 6 tablets per day
- Bosulif 400 mg tablets: 1 tablet per day
- Bosulif 500 mg tablets: 1 tablet per day

#### B. Max Units (per dose and over time) [Medical Benefit]:

- 600 mg per day

### III. Initial Approval Criteria

Coverage is provided in the following conditions:

- Patient is at least 18 years old; **AND**

#### Chronic myelogenous leukemia †

- Patient's disease is confirmed by either a Philadelphia chromosome-positive (Ph+) or *BCR-ABL1* positive laboratory test result; **AND**
- Chronic or accelerated or blast phase disease †
  - Patient is resistant, or intolerant, or had an inadequate response to prior tyrosine kinase inhibitor (TKI) therapies, consisting of a 3 month trial or longer, with any of the following: omacetaxine, imatinib, dasatinib, ponatinib, nilotinib, etc.
- Post-allogeneic hematopoietic stem cell transplant (HCT) ‡
  - Used as follow-up therapy in patients with molecular relapse after complete cytogenetic response (CCyR); **OR**
  - Used in patients with prior accelerated or blast phase with CCyR; **OR**

- Used as follow-up therapy in patients with relapse or those who are not in CCyR
- Primary Treatment ‡
  - Used as a single agent for newly diagnosed chronic phase disease †; **OR**
  - Used as a single agent for accelerated phase disease; **OR**
  - Used as a single agent for myeloid blast phase disease; **OR**
  - Used in combination with corticosteroids for lymphoid blast phase disease; **OR**
  - Used in combination with induction chemotherapy for disease in lymphoid blast phase or myeloid blast phase
- Switch Therapy ‡
  - Initial therapy was one of the following: imatinib, dasatinib, or nilotinib; **AND**
  - Patient has *BCR-ABL1* transcript levels:
    - >1% to 10% at 12 months
    - >1% to 10% at >15 months
    - >10% at any response milestone
- Continued Therapy ‡
  - Patient has *BCR-ABL1* transcript levels:
    - ≤0.1% at any response milestone
    - >1% to 10% at 3, 6, or 12 months
    - >10% at 3 months
- Patient has one of the following mutations: E255K/V, F317L/V/I/C, F359V/C/I, T315A, or Y253H ‡

#### Acute Lymphoblastic Leukemia (ALL) ‡

- Patient's disease is Philadelphia chromosome-positive (Ph+); **AND**
- Used for relapsed or refractory disease; **AND**
  - Used as a single agent; **OR**
  - Used in combination with an induction therapy not previously used; **OR**
  - Used in patients with any of the following mutations: E255K/V, F317L/V/I/C, F359V/C/I, T315A, or Y253H of *BCR-ABL1*

† FDA Approved Indication(s); ‡ Compendia Recommended Indication(s)

## IV. Renewal Criteria

Coverage can be renewed based upon the following criteria:

- Patient continues to meet criteria as defined by section III; **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include the following: hepatic toxicity, renal toxicity, fluid retention, myelosuppression, gastrointestinal toxicity, etc.; **AND**

- Patient has been adherent to therapy; **AND**

### Chronic myelogenous leukemia †

- Treatment response as indicated by one of the following *BCR-ABL1* (IS) transcript levels:
  - ≤ 10% at 3 months; **OR**
  - ≤ 10% at 6 months; **OR**
  - < 1% at 12 months; **OR**
  - < 0.1% beyond 12 months

NOTE: cytogenetic assessment of response may be used if quantitative RT-PCR (QPCR) using International Scale (IS) for *BCR-ABL1* is not available

### Acute Lymphoblastic Leukemia (ALL) ‡

- Treatment response or stabilization of disease as indicated by CBC, bone marrow cytogenic analysis, QPCR, or FISH

## V. Dosage/Administration

Indication	Dose
CML	<u>Newly diagnosed CP Ph+ CML</u> 400 mg orally once daily with food.
All Other Indications	500 mg orally once daily with food. <ul style="list-style-type: none"> <li>• Consider dose escalation to 600 mg orally once daily in patients who do not reach complete hematologic response by week 8 or complete cytogenetic response by week 12 and do not have Grade 3 or greater adverse reactions.</li> </ul>

## VI. Billing Code/Availability Information

### HCPCS:

- J8999 – Prescription drug, oral, chemotherapeutic, NOS
- C9399 – Unclassified drugs or biologicals (*Hospital Outpatient Use ONLY*)

### NDC:

- Bosulif 100 mg tablet: 00069-0135-xx
- Bosulif 400 mg tablet: 00069-0193-xx
- Bosulif 500 mg tablet: 00069-0136-xx

## VII. References

1. Bosulif [package insert]. New York, NY; Pfizer, Inc; October 2018. Accessed June 2019.
2. Referenced with permission from the NCCN Drugs and Biologics Compendium (NCCN Compendium®) for bosutinib. National Comprehensive Cancer Network, 2019. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are

trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed June 2019.

3. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) for Chronic Myelogenous Leukemia 1.2019. National Comprehensive Cancer Network, 2019. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed June 2019.
4. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) for Acute Lymphoblastic Leukemia 2.2019. National Comprehensive Cancer Network, 2019. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed June 2019.
5. Gambacorti-Passerini C, Kantarjian HM, Kim DW, et al. Long-term efficacy and safety of bosutinib in patients with advanced leukemia following resistance/intolerance to imatinib and other tyrosine kinase inhibitors. Am J Hematol. 2015 Sep;90(9):755-68.

## Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
C91.00	Acute lymphoblastic leukemia not having achieved remission
C91.01	Acute lymphoblastic leukemia, in remission
C91.02	Acute lymphoblastic leukemia, in relapse
C92.10	Chronic myeloid leukemia, BCR/ABL-positive, not having achieved remission
C92.11	Chronic myeloid leukemia, BCR/ABL-positive, in remission
C92.12	Chronic myeloid leukemia, BCR/ABL-positive, in relapse

## Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD) and Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. They can be found at: <http://www.cms.gov/medicare-coverage-database/search/advanced-search.aspx>. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD): N/A

**Medicare Part B Administrative Contractor (MAC) Jurisdictions**

<b>Jurisdiction</b>	<b>Applicable State/US Territory</b>	<b>Contractor</b>
E (1)	CA, HI, NV, AS, GU, CNMI	Noridian Healthcare Solutions, LLC
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC
5	KS, NE, IA, MO	Wisconsin Physicians Service Insurance Corp (WPS)
6	MN, WI, IL	National Government Services, Inc. (NGS)
H (4 & 7)	LA, AR, MS, TX, OK, CO, NM	Novitas Solutions, Inc.
8	MI, IN	Wisconsin Physicians Service Insurance Corp (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.
J (10)	TN, GA, AL	Palmetto GBA, LLC
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA, LLC
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA)	Novitas Solutions, Inc.
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)
15	KY, OH	CGS Administrators, LLC