Clinical Policy: Ibrutinib (Imbruvica)
Reference Number: CP.PHAR.126
Effective Date: 10.01.15
Last Review Date: 02.21
Line of Business: Commercial, HIM, Medicaid

See Important Reminder at the end of this policy for important regulatory and legal information.

Description
Ibrutinib (Imbruvica®) is a Bruton tyrosine kinase (BTK) inhibitor.

FDA Approved Indication(s)
Imbruvica is indicated for the treatment of:
- Adult patients with mantle cell lymphoma (MCL) who have received at least one prior therapy
  - Accelerated approval was granted for this indication based on overall response rate.
    - Continued approval for this indication may be contingent upon verification and description of clinical benefit in a confirmatory trial.
- Adult patients with chronic lymphocytic leukemia (CLL)/small lymphocytic lymphoma (SLL)
- Adult patients with chronic lymphocytic leukemia (CLL)/small lymphocytic lymphoma (SLL) with 17p deletion
- Adult patients with Waldenström’s macroglobulinemia (WM)
- Adult patients with marginal zone lymphoma (MZL) who require systemic therapy and have received at least one prior anti-CD20-based therapy
  - Accelerated approval was granted for this indication based on overall response rate.
    - Continued approval for this indication may be contingent upon verification and description of clinical benefit in a confirmatory trial.
- Adult patients with chronic graft-versus-host disease (cGVHD) after failure of one or more lines of systemic therapy

Policy/Criteria
Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of health plans affiliated with Centene Corporation® that Imbruvica is medically necessary when the following criteria are met:

I. Initial Approval Criteria
   A. Mantle Cell Lymphoma (B-cell lymphoma subtype) (must meet all):
      1. Diagnosis of MCL (a B-cell lymphoma subtype);
      2. Prescribed by or in consultation with an oncologist or hematologist;
      3. Age ≥ 18 years;
      4. For Imbruvica request, medical justification supports inability to use ibrutinib, if available, (e.g., contraindications to excipients);
5. Member meets one of the following* (a or b):
   a. Prescribed in combination with rituximab as pretreatment in order to limit the number of cycles of aggressive induction therapy with RHyperCVAD (rituximab, cyclophosphamide, vincristine, doxorubicin, and dexamethasone);
   b. Received ≥ 1 prior line of systemic therapy (see Appendix B);

   *Prior authorization may be required

6. Request meets one of the following (a, b, or c):*
   a. For dose ≤ 420 mg per day, request is for capsules and prescribed quantity does not exceed 3 capsules per day;
   b. For dose ≥ 420 mg (not to exceed 560 mg) per day, request is for tablets and prescribed quantity does not exceed 1 tablet per day;
   c. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (prescriber must submit supporting evidence).

   *Prescribed regimen must be FDA-approved or recommended by NCCN

Approval duration:
Medicaid/HIM – 6 months
Commercial – Length of Benefit

B. Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma (must meet all):
   1. Diagnosis of CLL or SLL;
   2. Prescribed by or in consultation with an oncologist or hematologist;
   3. Age ≥ 18 years;
   4. For Imbruvica request, medical justification supports inability to use ibrutinib, if available, (e.g., contraindications to excipients);
   5. Prescribed as a single agent or in combination with one of the following* (a, b, c, or d):
      a. Rituxan® (rituximab);
      b. Gazyva® (obinutuzumab);
      c. Bendamustine and Rituxan;
      d. For histologic (Richter's) transformation of CLL/SLL to diffuse large B-cell lymphoma (DLBCL), Opdivo® (nivolumab) or Keytruda® (pembrolizumab), or refer to off-label DLBCL criteria;

   *Prior authorization may be required

6. Request meets one of the following (a, b, or c):*
   a. For dose ≤ 420 mg per day, request is for capsules and prescribed quantity does not exceed 3 capsules per day;
   b. For 420 mg dose per day, request is for tablets and prescribed quantity does not exceed 1 tablet per day;
   c. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (prescriber must submit supporting evidence).

   *Prescribed regimen must be FDA-approved or recommended by NCCN

Approval duration:
Medicaid/HIM – 6 months
Commercial – Length of Benefit
C. Waldenström’s Macroglobulinemia (must meet all):
   1. Diagnosis of WM;
   2. Prescribed by or in consultation with an oncologist or hematologist;
   3. Age ≥ 18 years;
   4. For Imbruvica request, medical justification supports inability to use ibrutinib, if available, (e.g., contraindications to excipients);
   5. Prescribed as a single agent or in combination with Rituxan*;
      *Prior authorization may be required
   6. Request meets one of the following (a, b, or c):*
      a. For dose ≤ 420 mg per day, request is for capsules and prescribed quantity does not exceed 3 capsules per day;
      b. For 420 mg dose per day, request is for tablets and prescribed quantity does not exceed 1 tablet per day;
      c. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).
      *Prescribed regimen must be FDA-approved or recommended by NCCN
   Approval duration:
   Medicaid/HIM – 6 months
   Commercial – Length of Benefit

D. Marginal Zone Lymphoma (*B-cell lymphoma subtype*) (must meet all):
   1. Diagnosis of one of the following MZL subtypes (a, b, c, or d):
      a. Gastric MALT lymphoma;
      b. Nongastric MALT lymphoma (noncutaneous);
      c. Nodal MZL;
      d. Splenic MZL;
   2. Prescribed by or in consultation with an oncologist or hematologist;
   3. Age ≥ 18 years;
   4. For Imbruvica request, medical justification supports inability to use ibrutinib, if available, (e.g., contraindications to excipients);
   5. Received ≥ 1 line of systemic therapy* (see Appendix B);
      *Prior authorization may be required
   6. Request meets one of the following (a, b, or c):*
      a. For dose ≤ 420 mg per day, request is for capsules and prescribed quantity does not exceed 3 capsules per day;
      b. For dose ≥ 420 mg (not to exceed 560 mg) per day, request is for tablets and prescribed quantity does not exceed 1 tablet per day;
      c. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).
      *Prescribed regimen must be FDA-approved or recommended by NCCN
   Approval duration:
   Medicaid/HIM – 6 months
   Commercial – Length of Benefit
E. Chronic Graft-Versus-Host Disease (must meet all):
   1. Diagnosis of cGVHD;
   2. Prescribed by or in consultation with an oncologist, hematologist, or bone marrow transplant specialist;
   3. Age ≥ 18 years;
   4. For Imbruvica request, medical justification supports inability to use ibrutinib, if available, (e.g., contraindications to excipients);
   5. Member has a history of bone marrow/stem cell transplant;
   6. Member meets one of the following (a and b):
      a. Failure of a systemic corticosteroid (see Appendix B) at up to maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced;
      b. Failure of a systemic immunosuppressant (see Appendix B) at up to maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced;
      *Prior authorization may be required
   7. Request meets one of the following (a, b, or c):*
      a. For dose ≤ 420 mg per day, request is for capsules and prescribed quantity does not exceed 3 capsules per day;
      b. For 420 mg dose per day, request is for tablets and prescribed quantity does not exceed 1 tablet per day;
      c. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (prescriber must submit supporting evidence).
      *Prescribed regimen must be FDA-approved or recommended by NCCN

Approval duration:
Medicaid/HIM – 6 months
Commercial – Length of Benefit

F. NCCN Compendium Indications (off-label) (must meet all):
   1. Diagnosis of one of the following (a, b, or c):
      a. Primary CNS lymphoma;
      b. Hairy cell leukemia (HCL);
      c. B-cell lymphoma subtype (i, ii, iii, iv, v, or vi):
         i. AIDS-related non-germinal center DLBCL;
         ii. High-grade B-cell lymphoma;
         iii. Follicular lymphoma (grade 1-2) (FL);
         iv. Post-transplant lymphoproliferative disorder (PTLD);
         v. DLBCL;
         vi. Histologic transformation of MZL to DLBCL;
   2. Prescribed by or in consultation with an oncologist or hematologist;
   3. Age ≥ 18 years;
   4. For Imbruvica request, medical justification supports inability to use ibrutinib, if available, (e.g., contraindications to excipients);
   5. Member meets one of the following (a or b):
      a. For primary CNS lymphoma or B-cell lymphoma, received ≥ 1 prior line of systemic therapy (see Appendix B), unless contraindicated or clinically significant adverse effects are experienced to all;
b. For HCL, received ≥ 2 prior lines of systemic therapies (see Appendix B), unless contraindicated or clinically significant adverse effects are experienced to all;

6. Request meets one of the following (a, b, or c)*:
   a. For dose ≤ 420 mg per day, request is for capsules and prescribed quantity does not exceed 3 capsules per day;
   b. For dose ≥ 420 mg (not to exceed 560 mg) per day, request is for tablets and prescribed quantity does not exceed 1 tablet per day;
   c. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (prescriber must submit supporting evidence).

   *Prescribed regimen must be FDA-approved or recommended by NCCN

Approval duration:
Medicaid/HIM – 6 months
Commercial – Length of Benefit

G. Other diagnoses/indications
1. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid.

II. Continued Therapy
A. All Indications in Section I (must meet all):
   1. Currently receiving medication via Centene benefit, or documentation supports that member is currently receiving Imbruvica for a covered oncology-related indication and has received this medication for at least 30 days;
   2. Member is responding positively to therapy;
   3. For Imbruvica request, medical justification supports inability to use ibrutinib, if available, (e.g., contraindications to excipients);
   4. If request is for a dose increase, request meets one of the following (a, b, or c)*:
      a. MCL and MZL, new dose does not exceed 560 mg per day and one of the following (i or ii):
         i. For dose ≤ 420 mg per day, request is for capsules and prescribed quantity does not exceed 3 capsules per day;
         ii. For dose ≥ 420 mg (not to exceed 560 mg) per day, request is for tablets and prescribed quantity does not exceed 1 tablet per day;
      b. CLL/SLL, WM, and cGVHD, new dose does not exceed 420 mg and one of the following (i or ii):
         i. For dose ≤ 420 mg per day, request is for capsules and prescribed quantity does not exceed 3 capsules per day;
         ii. For 420 mg dose per day, request is for tablets and prescribed quantity does not exceed 1 tablet per day;
      c. New dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (prescriber must submit supporting evidence).

   *For oncology indications, prescribed regimen must be FDA-approved or recommended by NCCN

Approval duration:
Medicaid/HIM – 12 months
Commercial – Length of Benefit
**B. Other diagnoses/indications (must meet 1 or 2):**
1. Currently receiving medication via Centene benefit and documentation supports positive response to therapy.
   **Approval duration: Duration of request or 6 months (whichever is less); or**
2. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid.

**III. Diagnoses/Indications for which coverage is NOT authorized:**
A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid or evidence of coverage documents.

**IV. Appendices/General Information**

*Appendix A: Abbreviation/Acronym Key*
- BTK: Bruton’s tyrosine kinase
- cGVHD: chronic graft-versus-host disease
- CLL: chronic lymphocytic leukemia
- DLBCL: diffuse large B-cell lymphoma
- FDA: Food and Drug Administration
- FL: follicular lymphoma
- HCL: hairy cell leukemia
- MALT: mucosa-associated lymphoid tissue
- MCL: mantle cell lymphoma
- MZL: marginal zone lymphoma
- NCCN: National Comprehensive Cancer Network
- PTLD: post-transplant lymphoproliferative disorders
- SLL: small lymphocytic lymphoma
- WM: Waldenström’s macroglobulinemia

*Appendix B: Therapeutic Alternatives*
This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent for all relevant lines of business and may require prior authorization.

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Dosing Regimen</th>
<th>Dose Limit/Maximum Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examples of systemic therapies for B-cell lymphomas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bendeka®, Treanda® (bendamustine) ± Rituxan (rituximab) or Gazyva® (obinutuzumab)</td>
<td>Varies</td>
<td>Varies</td>
</tr>
<tr>
<td>CHOP + Gazyva (obinutuzumab)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPOCH [etoposide, prednisone, vincristine (Vincasar PFS®), cyclophosphamide, doxorubicin (Adriamycin®)] + Rituxan (rituximab)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NORDIC [dose-intensified induction immunotherapy with Rituxan (rituximab) + cyclophosphamide, vincristine (Vincasar PFS), doxorubicin, predisone] alternating with Rituxan (rituximab) and high-dose cytarabine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug Name</td>
<td>Dosing Regimen</td>
<td>Dose Limit/Maximum Dose</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>RCEOP [Rituxan (rituximab), cyclophosphamide, etoposide, vincristine (Vincasar PFS), prednisone]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCEPP [Rituxan (rituximab), cyclophosphamide, etoposide, prednisone, procarbazine]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCHOP [cyclophosphamide, doxorubicin (Adriamycin®), vincristine (Vincasar PFS), prednisone]/RDHAP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCVP [Rituxan (rituximab), cyclophosphamide, doxorubicin (Adriamycin®), vincristine (Vincasar PFS)]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RDHAP [Rituxan (rituximab), dexamethasone, cytarabine, cisplatin]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RDHAX [Rituxan (rituximab), dexamethasone, cytarabine, oxaliplatin]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revlimid® (lenalidomide) + Rituxan (rituximab)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rituxan (rituximab)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VR-CAP [bortezomib (Velcade®), Rituxan (rituximab), cyclophosphamide, doxorubicin (Adriamycin®), and prednisone]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Examples of systemic corticosteroids and immunosuppressants for cGVHD**

| Systemic corticosteroids (e.g., methylprednisolone, prednisone) | Varies | Varies |
| mycophenolate mofetil (Cellcept®) |  |  |
| cyclosporine (Gengraf®, Neoral®, Sandimmune®) |  |  |
| tacrolimus (Prograf®) |  |  |
| sirolimus (Rapamune®) |  |  |

**Examples of systemic therapies for primary CNS lymphoma**

High-dose methotrexate-based regimen [methotrexate (Rheumatrex®) + Rituxan (rituximab) and other agents (e.g., temozolomide, vincristine (Vincasar PFS), procarbazine, cytarabine)] | Varies | Varies |

**Examples of systemic therapies for HCL**

| Intron® A (interferon alfa-2b) | Varies | Varies |
| cladribine |  |  |
| Nipent™ (pentostatin) |  |  |

Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.

Appendix C: Contraindications/Boxed Warnings
None reported
V. Dosage and Administration

<table>
<thead>
<tr>
<th>Indication</th>
<th>Dosing Regimen</th>
<th>Maximum Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCL, MZL</td>
<td>560 mg PO QD</td>
<td>560 mg/day (3 capsules or 1 tablet per day)</td>
</tr>
<tr>
<td>CLL/SLL, WM, cGVHD</td>
<td>420 mg PO QD</td>
<td>420 mg/day (3 capsules or 1 tablet per day)</td>
</tr>
</tbody>
</table>

VI. Product Availability

- Capsules: 70 mg, 140 mg
- Tablets: 140 mg, 280 mg, 420 mg, 560 mg

VII. References


Reviews, Revisions, and Approvals

<table>
<thead>
<tr>
<th>Description</th>
<th>Date</th>
<th>P&amp;T Approval Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Added new FDA approved indication: MZL. MCL: added off-label use per NCCN compendium. CLL/SLL: removed “with or without 17p deletion” as that has no impact on coverage. Other diagnoses/indications: added hairy cell leukemia per NCCN compendium. Continued approval: Removed reasons to discontinue. Added requirement for documentation of positive response to therapy.</td>
<td>03.17</td>
<td>03.17</td>
</tr>
<tr>
<td>Converted to new template. Added new FDA approved indication: cGVHD. Increased continued approval duration from 6 to 12 months.</td>
<td>08.09.17</td>
<td>11.17</td>
</tr>
<tr>
<td>Reviews, Revisions, and Approvals</td>
<td>Date</td>
<td>P&amp;T Approval Date</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------------------------</td>
<td>----------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Created criteria for hairy cell leukemia per NCCN guidelines/compendium.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Added Appendix B: General Information.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3Q 2018 annual review: Policies combined for commercial, HIM, and Medicaid lines of business; For all lines of business: off-label NCCN compendium-supported uses were added, tablet formulations were added, age requirement was added for FDA-labeled indications, specialist requirement was added for all indications; For commercial: added off-label use of ibrutinib pretreatment for MCL per NCCN guidelines; For Medicaid, removed age requirement for pretreatment use of ibrutinib for MCL per NCCN guidelines; references reviewed and updated.</td>
<td>05.15.18</td>
<td>08.18</td>
</tr>
<tr>
<td>Per SDC, added preferencing for capsule formulation.</td>
<td>10.05.18</td>
<td></td>
</tr>
<tr>
<td>1Q 2019 annual review: for CLL/SLL, added requirement for single agent use per updated NCCN guidelines since combo use is category 2B; for FL, revised requirement of trial and failure to one prior therapy instead of two per updated NCCN guidelines; for CNS lymphoma, added hematologist prescriber option; consolidated criteria for NCCN compendium off-label uses; references reviewed and updated.</td>
<td>11.06.18</td>
<td>02.19</td>
</tr>
<tr>
<td>1Q 2020 annual review: no significant changes; references reviewed and updated.</td>
<td>11.26.19</td>
<td>02.20</td>
</tr>
<tr>
<td>RT4: modified CLL/SLL and WM criteria to allow combination use per updated FDA labeling (indication language remains unchanged). Revised maximum quantity by dose to maximize dose form cost effectiveness per data analytics recommendation; removed requirement for medical justification why capsules cannot be used.</td>
<td>04.28.20</td>
<td></td>
</tr>
<tr>
<td>1Q 2021 annual review: oral oncology generic redirection language added; for MCL, NCCN directed language inserted to clarify combination therapy with rituximab; for CLL/SCC, histologic transformation combination therapy added per NCCN; for MZL, subtypes delineated for clarity, therapy trials broadened beyond rituximab per NCCN; for cGVHD, trial requirement edited to require a systemic corticosteroid and an immunosuppressant agent per NCCN and the Imbruvica pivotal trial; Appendix B reorganized by B-cell lymphomas vs. other indications; references to HIM.PHAR.21 to revised to HIM.PA.154; references reviewed and updated.</td>
<td>11.09.20</td>
<td>02.21</td>
</tr>
</tbody>
</table>

**Important Reminder**

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional...
organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

This clinical policy is the property of the Health Plan. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members and their representatives agree to be bound by such terms and conditions by providing services to members and/or submitting claims for payment for such services.

Note:
For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.