

PRIOR AUTHORIZATION POLICY

POLICY: Oncology – Ayvakit Prior Authorization Policy

- Ayvakit® (avapritinib tablets – Blueprint Medicines)

REVIEW DATE: 06/23/2021; selected revision 8/4/2021

OVERVIEW

Ayvakit, a kinase inhibitor, is indicated in adults for the following uses:¹

- **Gastrointestinal stromal tumor (GIST)**, unresectable or metastatic, harboring a platelet-derived growth factor receptor alpha (*PDGFRA*) exon 18 mutation, including *PDGFRA D842V* mutations. Patients should be selected for treatment with Ayvakit based on the presence of a *PDGFRA* exon 18 mutation; an FDA-approved test for the detection of this mutation is not currently available.
- **Systemic mastocytosis**, advanced, including patients with aggressive systemic mastocytosis, systemic mastocytosis with an associated hematological neoplasm, and mast cell leukemia. Ayvakit is not recommended for the treatment of patients with advanced systemic mastocytosis with platelet counts of less than $50 \times 10^9/L$.

Guidelines

Ayvakit is discussed in the guidelines from National Comprehensive Cancer Network (NCCN):³

- **GIST:** NCCN guidelines (version 1.2021 – October 30, 2020), note that Ayvakit is one of the primary treatment options (category 2A) for GIST with *PDGFRA* exon 18 mutation, including *PDGFRA D842V* mutations.² Imatinib is a category 1 recommended option for primary treatment. The guidelines note that most mutations in the *PDGFRA* gene are associated with a response to imatinib, with the notable exception of *PDGFRA D842V* mutation. Ayvakit is listed as an additional option after failure on approval therapies. Ayvakit (for *PDGFRA* exon 18 mutations that are insensitive to imatinib, including the *D842V* mutation) is listed as a preferred regimen for neoadjuvant therapy for resectable GISTs with significant morbidity. Imatinib is also a preferred regimen for neoadjuvant and adjuvant therapy.
- **Myeloid/Lymphoid Neoplasms with Eosinophilia and Tyrosine Kinase Fusion Genes:** The NCCN guidelines (version 3.2021 – August 21, 2020) notes that since Ayvakit targets *PDGFRA* exon 18 mutation, it may have a role for use in patients with *FIP1L1-PDGFRA* positive myeloid/lymphoid neoplasms with eosinophilia harboring *PDGFRA D842V* mutation, which is resistant to imatinib (category 2A).⁴ If clinical trial of Ayvakit for this condition is available, then the clinical trial is preferred, rather than off-label use.
- **Systemic Mastocytosis:** The NCCN guidelines (version 3.2021 – July 9, 2021) recommend single-agent Ayvakit if the patient has platelets $\geq 50 \times 10^9/L$ (50,000) as preferred treatment of aggressive systemic mastocytosis, systemic mastocytosis with an associated neoplasm, and mast cell leukemia with or without an associated hematologic neoplasm (category 2A).⁵

POLICY STATEMENT

Prior Authorization is recommended for prescription benefit coverage of Ayvakit. All approvals are provided for the duration noted below.

Automation: None.

RECOMMENDED AUTHORIZATION CRITERIA

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

FDA-Approved Indications

1. **Gastrointestinal Stromal Tumor.** Approve for 3 years if the patient meets the following criteria (A and B):
 - A) Patient is ≥ 18 years of age; AND
 - B) Patient meets ONE of the following criteria (i or ii):
 - i. The tumor is positive for platelet-derived growth factor receptor alpha (*PDGFRA*) exon 18 mutation; OR
Note: *PDGFRA* exon 18 mutation includes *PDGFRA D842V* mutations.
 - ii. Patient has tried each of the following (a, b, c, and d):
 - a) Imatinib; AND
 - b) Sutent (sunitinib capsules); AND
 - c) Stivarga (regorafenib tablets); AND
 - d) Qinlock (ripretinib tablets).
2. **Systemic Mastocytosis.** Approve for 3 years if the patient meets the following criteria (A, B and C):
 - A) Patient is ≥ 18 years of age; AND
 - B) Patient has a platelet count $\geq 50 \times 10^9/L$ ($\geq 50,000/\text{mcL}$); AND
 - C) Patient has one of the following subtypes of advanced systemic mastocytosis (i, ii, or iii):
 - i. Aggressive systemic mastocytosis; OR
 - ii. Systemic mastocytosis with an associated hematological neoplasm; OR
 - iii. Mast cell leukemia.

Other Uses with Supportive Evidence

3. **Myeloid/Lymphoid Neoplasms with Eosinophilia.** Approve for 3 years if the patient meets the following criteria (A and B):
 - A) Patient is ≥ 18 years of age; AND
 - B) The tumor is positive for platelet-derived growth factor receptor alpha (*PDGFRA*) *D842V* mutation.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of Ayvakit is not recommended in the following situations:

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. Ayvakit™ tablets [prescribing information]. Cambridge, MA: Blueprint Medicines Corporation; June 2021.
 2. The NCCN Gastrointestinal Stromal Tumors (GISTs) Clinical Practice Guidelines in Oncology (version 1.2021 – October 30, 2020). © 2021 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed on June 18, 2021.
 3. The NCCN Drugs & Biologics Compendium. © 2021 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed on June 18, 2021. Search term: avapritinib.
 4. The NCCN Myeloid/lymphoid neoplasms with eosinophilia and tyrosine kinase fusion genes Clinical Practice Guidelines in Oncology (version 3.2021 – August 21, 2020). © 2021 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed on June 18, 2021.
 5. The NCCN Systemic Mastocytosis Clinical Practice Guidelines in Oncology (version 3.2021 – July 9, 2021). © 2021 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed on August 3, 2021.
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HISTORY

Type of Revision	Summary of Changes	Review Date
Annual Revision	Gastrointestinal Stromal Tumor (GIST): Added age criterion of ≥ 18 years to define adults. Deleted criteria “patient has unresectable or metastatic disease” since guidelines recommend use of Ayvakit in the neoadjuvant setting. Myeloid/Lymphoid Neoplasms with Eosinophilia: Added new approval condition and criteria for this condition based on guidelines.	02/10/2021
Early Annual Revision	Gastrointestinal Stromal Tumor: For those tumors that are not positive for platelet-derived growth factor receptor alpha (<i>PDGFRA</i>) exon 18 mutation, the requirement was added that the patient has tried each of the following: imatinib, Sutent (sunitinib capsules), Stivarga (regorafenib tablets), and Qinlock (ripretinib tablets). Systemic Mastocytosis: Indication and criteria were added to FDA-approved indications based on new FDA labeling.	06/23/2021
Selected Revision	NCCN Systemic Mastocytosis guidelines were updated to include Ayvakit and these updates were added to the Overview section. Systemic Mastocytosis: Criteria was added that the patient has a platelet count $\geq 50 \times 10^9/L$ ($\geq 50,000/\text{mcL}$) based on updated NCCN guidelines.	08/04/2021