



# Dosing and Patient Management Guide

An educational resource for healthcare professionals treating adult patients with Advanced Systemic Mastocytosis with AYVAKIT® (avapritinib)

Please see Important Safety Information on pages 16-17 and the full [Prescribing Information](#) for AYVAKIT.

DOSING &  
MODIFICATIONS

ADVERSE  
REACTIONS

PATIENT  
COUNSELING

IMPORTANT SAFETY  
INFORMATION

CASE  
STUDIES

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**NCCN**  
RECOMMENDED

NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) recommend avapritinib (AYVAKIT) (if platelets  $\geq 50 \times 10^9/L$ ) as an NCCN Category 2A, preferred first-line treatment option for advanced systemic mastocytosis (SM), including aggressive SM (ASM), SM with an associated hematologic neoplasm (SM-AHN) (when the SM component requires prioritization over the AHN component), and mast cell leukemia (MCL).<sup>1</sup>

NCCN=National Comprehensive Cancer Network.

## INDICATION

AYVAKIT® (avapritinib) is indicated for the treatment of adult patients with advanced SM (AdvSM) including patients with aggressive systemic mastocytosis (ASM), systemic mastocytosis with an associated hematological neoplasm (SM-AHN), and mast cell leukemia (MCL).

Limitations of Use: AYWAKIT is not recommended for the treatment of patients with AdvSM with platelet counts of  $< 50 \times 10^9/L$ .

## SELECT SAFETY INFORMATION

**Intracranial Hemorrhage**—Serious intracranial hemorrhage (ICH) may occur with AYWAKIT treatment; fatal events occurred in  $< 1\%$  of patients. Overall, ICH (e.g., subdural hematoma, ICH, and cerebral hemorrhage) occurred in 2.9% of 749 patients who received AYWAKIT in clinical trials. In AdvSM patients who received AYWAKIT at 200 mg daily, ICH occurred in 2 of 75 patients (2.7%) who had platelet counts  $\geq 50 \times 10^9/L$  prior to initiation of therapy and in 3 of 80 patients (3.8%) regardless of platelet counts.

Monitor patients closely for risk factors of ICH which may include history of vascular aneurysm, ICH or cerebrovascular accident within the prior year, concomitant use of anticoagulant drugs, or thrombocytopenia. Symptoms of ICH may include headache, nausea, vomiting, vision changes, or altered mental status. Advise patients to seek immediate medical attention for signs or symptoms of ICH. Permanently discontinue AYWAKIT if ICH of any grade occurs.


A platelet count must be performed prior to initiating therapy. AYWAKIT is not recommended in AdvSM patients with platelet counts  $< 50 \times 10^9/L$ . Following treatment initiation, platelet counts must be performed every 2 weeks for the first 8 weeks. After 8 weeks of treatment, monitor platelet counts every 2 weeks or as clinically indicated based on platelet counts. Manage platelet counts of  $< 50 \times 10^9/L$  by treatment interruption or dose reduction.

**Please see Important Safety Information on pages 16-17 and the full [Prescribing Information](#) for AYWAKIT.**


# Recommended dosing instructions for your patients on AYVAKIT

The recommended starting dose for adult patients with Advanced SM is 200 mg.<sup>2</sup>


## AYVAKIT SHOULD BE TAKEN<sup>2</sup>:



One tablet orally



One time each day



On an empty stomach, at least 1 hour before or 2 hours after a meal

Continue treatment until disease progression or unacceptable toxicity. Modify dosage for adverse reactions.<sup>2</sup>

**A platelet count must be performed prior to initiation** of therapy, for the first 8 weeks, and potentially longer depending on what is clinically indicated.\* AYVAKIT is not recommended for patients with platelet counts  $<50 \times 10^9/L$ .<sup>2</sup>

### Additional instructions<sup>2</sup>:

Do not make up for a missed dose within 8 hours of the next scheduled dose.

Do not repeat dose if vomiting occurs after AYVAKIT but continue with the next scheduled dose.

Administration of antiemetic therapy is not required for treatment with AYVAKIT.

## SELECT SAFETY INFORMATION

**Cognitive Effects**—Cognitive adverse reactions can occur in patients receiving AYVAKIT and occurred in 33% of 995 patients overall in patients who received AYVAKIT in clinical trials including 28% of 148 AdvSM patients (3% were Grade  $\geq 3$ ). Depending on the severity and indication, withhold AYVAKIT and then resume at same dose or at a reduced dose upon improvement, or permanently discontinue.

## Dose strengths

The recommended starting dose of AYVAKIT is **200 mg** orally once daily on an empty stomach. AYVAKIT is also available in **100 mg**, **50 mg**, and **25 mg** dose strengths for dose modifications due to adverse reactions or drug interactions.<sup>2</sup>

If your patient experiences any adverse reactions while taking AYVAKIT, consider interrupting dose, reducing dose, or permanently discontinuing AYVAKIT.<sup>2</sup>



Available in bottles of 30 tablets.<sup>2</sup>

Dose Strength	Description <sup>2</sup>
25 mg tablet	Round, white, film-coated tablet with debossed text. One side reads "BLU" and the other side reads "25"
50 mg tablet	Round, white, film-coated tablet with debossed text. One side reads "BLU" and the other side reads "50"
100 mg tablet	Round, white, film-coated tablet, printed with blue ink "BLU" on one side and "100" on the other side
200 mg tablet	Capsule-shaped, white, film-coated tablet, printed with blue ink "BLU" on one side and "200" on the other side

\*A platelet count must be performed prior to initiating therapy. AYVAKIT is not recommended in Advanced SM patients with platelet counts  $<50 \times 10^9/L$ . Following treatment initiation, platelet counts must be performed every 2 weeks for the first 8 weeks. After 8 weeks of treatment, monitor platelet counts every 2 weeks or as clinically indicated based on platelet counts. Manage platelet counts of  $<50 \times 10^9/L$  by treatment interruption or dose reduction.

Please see Important Safety Information on pages 16-17 and the full [Prescribing Information](#) for AYVAKIT.

# AYVAKIT dose modification guidelines for adverse events

The majority of patients in the EXPLORER and PATHFINDER trials had their dose modified.<sup>2</sup>

Recommended dose reductions for adverse reactions <sup>2</sup>	
Dose Reduction	Starting Dose (200 mg) <sup>a</sup>
First	100 mg once daily
Second	50 mg once daily
Third	25 mg once daily

<sup>a</sup> Permanently discontinue AYVAKIT in patients who are unable to tolerate a dose of 25 mg daily.

Recommended dose modifications for patients experiencing specific adverse reactions <sup>2</sup>		
Adverse Reaction	Severity <sup>b</sup>	Dosage Modification
Intracranial Hemorrhage	Any grade	Permanently discontinue AYVAKIT.
Cognitive Effects	Grade 1	Continue AYVAKIT at same dose or reduced dose or withhold until improvement to baseline or resolution. Resume at same dose or reduced dose.
	Grade 2 or Grade 3	Withhold AYVAKIT until improvement to baseline, Grade 1, or resolution. Resume at same dose or reduced dose.
	Grade 4	Permanently discontinue AYVAKIT.
Thrombocytopenia	<50 x 10 <sup>9</sup> /L	Interrupt AYVAKIT until platelet count is ≥50 x 10 <sup>9</sup> /L, then resume at reduced dose (per table above). If platelet counts do not recover above 50 x 10 <sup>9</sup> /L, consider platelet support.
Other	Grade 3 or Grade 4	Withhold AYVAKIT until improvement is Grade ≤2. Resume same dose or reduced dose as clinically appropriate.

<sup>b</sup>Severity as defined by the National Cancer Institute Common Terminology Criteria for Adverse Events version 5.0.

# In clinical studies it was common to modify AYVAKIT dose for individual patients<sup>2</sup>

Among patients in clinical trials with Advanced SM who started at 200 mg (N=80), many had their dose reduced or interrupted due to adverse reactions.<sup>2</sup>

- Dose reduction: **68%** (median time to reduction of 6.9 weeks)<sup>2,3</sup>
- Dose interruption: **60%**<sup>2</sup>
- Permanent discontinuation due to adverse reaction: **10%**<sup>2</sup>

Adverse reactions requiring dosage interruption or dose reduction in >2% of patients who received AYVAKIT at 200 mg once daily<sup>2</sup>:

- Thrombocytopenia
- Neutropenia
- Anemia
- Elevated blood alkaline phosphatase
- Cognitive disorder
- Peripheral edema
- Periorbital edema
- Fatigue
- Arthralgia

## DOSE STRENGTHS FOR EXPLORER & PATHFINDER PATIENTS STARTED AT 200 MG (N=80) AND STILL RECEIVING AYVAKIT AT 2 MONTHS<sup>3</sup>:



There were 3 patients who discontinued treatment prior to 2 months and 4 patients who were not on treatment long enough at the time of data cut.<sup>3</sup>

## SELECT SAFETY INFORMATION

**Photosensitivity**—AYVAKIT may cause photosensitivity reactions. In all patients treated with AYVAKIT in clinical trials (n=1049), photosensitivity reactions occurred in 2.5% of patients. Advise patients to limit direct ultraviolet exposure during treatment with AYVAKIT and for one week after discontinuation of treatment.

Please see Important Safety Information on pages 16-17 and the full [Prescribing Information](#) for AYVAKIT.

# Adverse reactions (≥10%) observed in EXPLORER & PATHFINDER trials at 200-mg once-daily starting dose<sup>2</sup>

The majority of adverse reactions were Grade 1 or 2.<sup>2</sup>

Adverse Reactions <sup>2*</sup>	AYVAKIT (200 mg once daily) N=80	
	All Grades %	Grade ≥3 %
<b>General</b>		
Edema <sup>a</sup>	79	5
Fatigue/asthenia	23	4
<b>Gastrointestinal</b>		
Diarrhea	28	1
Nausea	24	1
Vomiting	18	3
Abdominal pain <sup>b</sup>	14	1
Constipation	11	0
<b>Nervous system</b>		
Headache	15	0
Cognitive effects <sup>c</sup>	14	1
Taste effects <sup>d</sup>	13	0
Dizziness	13	0
<b>Musculoskeletal and connective tissue</b>		
Arthralgia	10	1
<b>Respiratory, thoracic, and mediastinal</b>		
Epistaxis	11	0

\* Per National Cancer Institute Common Terminology Criteria for Adverse Events (CTCAE) version 4.03 and 5.0.

<sup>a</sup> Edema includes face swelling, eyelid edema, orbital edema, periorbital edema, face edema, peripheral edema, edema, generalized edema, and peripheral swelling.

<sup>b</sup> Abdominal pain includes abdominal pain, upper abdominal pain, and abdominal discomfort.

<sup>c</sup> Cognitive effects include memory impairment, cognitive disorder, confusional state, delirium, and disorientation.

<sup>d</sup> Taste effects include dysgeusia.

Please see Important Safety Information on pages 16-17 and the full [Prescribing Information](#) for AYVAKIT.

The safety of AYVAKIT in patients with Advanced SM was evaluated in EXPLORER and in PATHFINDER. Patients received a starting dose of AYVAKIT ranging from 30 mg to 400 mg orally once daily (N=131), including 80 patients who received the recommended starting dose of 200 mg once daily.<sup>2</sup>

**Serious adverse reactions** were seen in 34% (27/80) of patients receiving the recommended starting dose of 200 mg (N=80) and 50% (65/131) at all doses (30-400 mg, N=131).<sup>2</sup>

**Fatal adverse reactions** occurred in 2.5% (2/80) of patients receiving the recommended starting dose of 200 mg and 5.3% (7/131) at all doses (N=131)—including 300 mg dose. No specific adverse reaction leading to death was reported in more than 1 patient.<sup>2</sup>

Clinically relevant adverse reactions occurring in <10% of patients were<sup>2</sup>:

- Cardiac: cardiac failure (2.5%), and cardiac failure congestive (1.3%)
- Gastrointestinal: ascites (5%), gastrointestinal hemorrhage (1.3%), and large intestine perforation (1.3%)
- Hepatobiliary: cholelithiasis (1.3%)
- Infections and infestations: upper respiratory tract infection (6%), urinary tract infection (6%), and herpes zoster (2.5%)
- Vascular: flushing (3.8%), hypertension (3.8%), hypotension (3.8%), and hot flush (2.5%)
- Nervous: insomnia (6%)
- Musculoskeletal and connective tissue: pain in extremity (6%)
- Respiratory, thoracic and mediastinal: dyspnea (9%), and cough (2.5%)
- Skin and subcutaneous tissue: rash<sup>e</sup> (8%), alopecia (9%), pruritus (8%), and hair color changes (6%)
- Metabolism and nutrition: decreased appetite (8%)
- Eye: lacrimation increased (9%)
- Laboratory abnormality: decreased phosphate (9%)

<sup>e</sup> Grouped term including rash and rash maculo-papular.

To report suspected adverse reactions, contact **Blueprint Medicines Corporation at 1-888-258-7768** or the FDA at 1-800-FDA-1088 or [www.fda.gov/medwatch](http://www.fda.gov/medwatch).



## Select lab abnormalities ( $\geq 10\%$ ) worsening from baseline in EXPLORER & PATHFINDER at 200-mg once-daily starting dose<sup>2</sup>

Laboratory Abnormality	AYVAKIT (200 mg once daily) N=80	
	All Grades %	Grade $\geq 3$ %
<b>Hematology</b>		
Decreased platelets	64	21
Decreased hemoglobin	55	23
Decreased neutrophils	54	25
Decreased lymphocytes	34	11
Increased activated partial thromboplastin time	14	1
Increased lymphocytes	10	0
<b>Chemistry</b>		
Decreased calcium	50	3
Increased bilirubin	41	3
Increased aspartate aminotransferase	38	1
Decreased potassium	26	4
Increased alkaline phosphatase	24	5
Increased creatinine	20	0
Increased alanine aminotransferase	18	1
Decreased sodium	18	1
Decreased albumin	15	1
Decreased magnesium	14	1
Increased potassium	11	0

Please see Important Safety Information on pages 16-17 and the full [Prescribing Information](#) for AYVAKIT.

## Warnings and precautions

### SERIOUS INTRACRANIAL HEMORRHAGE MAY OCCUR WITH AYVAKIT TREATMENT<sup>2</sup>

In patients with Advanced SM who received AYVAKIT at 200 mg daily, intracranial hemorrhage (ICH) occurred in 2 of 75 patients (2.7%) who had platelet counts  $\geq 50 \times 10^9/L$  prior to initiation of therapy and in 3 of 80 patients (3.8%) regardless of platelet counts. Fatal events of ICH have occurred in  $<1\%$  of all patients treated with any dose of AYVAKIT in clinical studies.

Monitor patients closely for risk factors of intracranial hemorrhage which may include history of vascular aneurysm, intracranial hemorrhage or cerebrovascular accident within the prior year, concomitant use of anticoagulant drugs, or thrombocytopenia. Symptoms of ICH may include headache, nausea, vomiting, vision changes, or altered mental status. Advise patients to seek immediate medical attention for signs or symptoms of ICH.

**If any grade of ICH occurs, permanently discontinue AYVAKIT.**

### COGNITIVE EFFECTS CAN OCCUR IN PATIENTS ON AYVAKIT

Cognitive adverse reactions occurred in 28% of 148 patients with Advanced SM who received AYVAKIT; 3% were Grade  $\geq 3$ .

Of those patients who started on 200 mg dose of AYVAKIT (N=80), 14% experienced cognitive effects, of which 1% were Grade  $\geq 3$ .<sup>2</sup> No patients who received AYVAKIT at the recommended starting dose of 200 mg (N=80) required permanent discontinuation due to cognitive effects.<sup>3</sup>

**Depending on the severity, withhold AYVAKIT and then resume at the same dose or at a reduced dose upon improvement, or permanently discontinue AYVAKIT.<sup>2</sup>**

### AYVAKIT MAY CAUSE PHOTSENSITIVITY REACTIONS

In all patients treated with AYVAKIT in clinical trials (n=1049), photosensitivity reactions occurred in 2.5% of patients.

**Advise patients to limit direct ultraviolet exposure during treatment with AYVAKIT and for one week after discontinuation of treatment.**

### AYVAKIT CAN CAUSE FETAL HARM WHEN ADMINISTERED TO A PREGNANT WOMAN

**Advise pregnant women of the potential risk to a fetus. Advise females and males of reproductive potential to use an effective contraception during treatment with AYVAKIT and for 6 weeks after the final dose of AYVAKIT.**

# Patient monitoring

## MONITOR YOUR PATIENTS' PLATELET COUNTS<sup>2</sup>

Platelet monitoring should be performed prior to initiating therapy and throughout therapy as shown in the schedule below.<sup>2</sup>

Time on therapy	Monitoring plan	Treatment plan
<b>Prior to initiation</b>	Perform platelet count.	<b>AYVAKIT is not recommended in Advanced SM patients with platelet counts &lt;50 x 10<sup>9</sup>/L.</b>
<b>First 8 weeks</b>	Perform platelet count every 2 weeks regardless of baseline platelet count.	<p>If platelet count &lt;50 x 10<sup>9</sup>/L occurs, interrupt AYVAKIT until platelet count is ≥50 x 10<sup>9</sup>/L, then resume at reduced dose.</p> <p>If platelet counts do not recover above 50 x 10<sup>9</sup>/L, consider platelet support.</p>
<b>After 8 weeks</b>	<p>Monitor platelet counts:</p> <ul style="list-style-type: none"> <li>• Every 2 weeks if values are &lt;75 x 10<sup>9</sup>/L (or more frequently as clinically indicated)</li> <li>• Every 4 weeks if values are 75-100 x 10<sup>9</sup>/L</li> <li>• As clinically indicated if values are &gt;100 x 10<sup>9</sup>/L</li> </ul>	

Due to risk of ICH, dose interruptions and reductions should be considered if platelet counts decrease below 50 x 10<sup>9</sup>/L during treatment. Manage platelet counts of <50 x 10<sup>9</sup>/L by treatment interruption or dose reduction of AYVAKIT. Platelet support may be necessary.<sup>2</sup>

If any ICH event occurs, permanently discontinue AYVAKIT.<sup>2</sup>

**Dose interruptions and dose reductions for thrombocytopenia occurred in 20% and 22% of AYVAKIT-treated patients, respectively. Thrombocytopenia was generally reversible by reducing or interrupting AYVAKIT.<sup>2</sup>**

Advise patients to contact their healthcare provider immediately if experiencing neurological signs and symptoms that may be associated with intracranial hemorrhage.

Advise patients not to drive or operate hazardous machinery if they are experiencing cognitive adverse reactions.

**Please see Important Safety Information on pages 16-17 and the full [Prescribing Information](#) for AYVAKIT.**

## MONITOR FOR COGNITIVE EFFECTS

It is essential patients and caregivers understand the risk of cognitive effects and how they can present. You can help them by creating a monitoring plan.



### ESTABLISH A BASELINE

Work with your patients and their caregivers to establish a cognitive baseline, and set a schedule for periodic monitoring. Patients may experience some cognitive impairment such as brain fog at baseline.<sup>4</sup>



### ENSURE UNDERSTANDING OF COGNITIVE EFFECTS

Explain that they should be monitoring for changes in the following: forgetfulness, confusion, drowsiness, dizziness, hallucinations, changes in mood or behavior, and difficulty thinking or sleeping.<sup>2</sup>



### EXAMPLES FOR CAREGIVERS

Caregivers will be there to observe your patients when you are not—they may be your best resource for effective patient monitoring. Help your patients' caregivers create a list of activities to monitor, such as:

- Finding their way to familiar places (eg, work, store, friend's house)
- Remembering where they put commonly used items (eg, phone, keys, wallet)
- Speaking or thinking clearly

**It is critical that your patients and their caregivers inform you of any adverse reactions they observe so that you can determine if dose reduction or interruption is clinically appropriate.**

# Discussing AYVAKIT with patients and caregivers

## IT IS IMPORTANT TO ENSURE UNDERSTANDING BEFORE INITIATING PATIENTS ON THERAPY

Advise patients to read the FDA-approved Patient Information Guide.

### Explaining dose modifications<sup>2</sup>

While the recommended starting dose for AYVAKIT is 200 mg, you can inform your patients that their dosage may be lowered if certain side effects and drug interactions occur.

If they are experiencing any side effects—such as cognitive effects they or their caregiver observe—they should let you know as soon as possible, as their dose may need to be changed.

### Side effects<sup>2</sup>

AYVAKIT may cause certain side effects, such as edema, that a patient is not used to experiencing from other medications. Although it is important for you to monitor patients and recognize side effects as their healthcare provider, it is critical that your patients and their caregivers understand the potential effects.

The most common adverse reactions ( $\geq 20\%$ ) were edema, diarrhea, nausea, and fatigue/asthenia.

Advise patients to stop taking AYVAKIT and tell their healthcare provider right away if they develop any symptoms such as severe headache, vomiting, drowsiness, dizziness, confusion, or severe weakness on one or more side of their body.

AYVAKIT may cause photosensitivity reactions. In all patients treated with AYVAKIT in clinical trials (n=1049), photosensitivity reactions occurred in 2.5% of patients. Advise patients to limit direct ultraviolet exposure during treatment with AYVAKIT and for one week after discontinuation of treatment.

Advise females and males of reproductive potential to use effective contraception during treatment with AYVAKIT and for 6 weeks after the final dose. Advise women not to breastfeed during treatment with AYVAKIT and for 2 weeks following the final dose. Advise females of reproductive potential that AYVAKIT may impair fertility. Advise males of reproductive potential that AYVAKIT may decrease sperm production.

Ensure they understand the possible adverse reactions of treatment with AYVAKIT and know to contact you if they are experiencing side effects.

**Please see Important Safety Information on pages 16-17 and the full [Prescribing Information](#) for AYVAKIT.**



## Enroll your patients at time of prescription to support the patient experience and access to programs

YourBlueprint<sup>®</sup> provides dedicated, personalized support to help your patients from Day 1.

Blueprint Medicines offers a series of programs to support patient access, including:

- Co-pay Support
- Patient Assistance Program
- Quick Start
- Prior Authorization Support
- Coverage Interruption

### To see how we can help:



- Call: **1-888-BLUPRINT (1-888-258-7768)**  
Monday-Friday, 8 AM-8 PM Eastern Time (ET)
- Email: [info@yourblueprint.com](mailto:info@yourblueprint.com)
- Fax: **1-866-370-3082**
- Visit: [www.YourBlueprint.com/HCP](http://www.YourBlueprint.com/HCP)



# Indication & Important Safety Information

## INDICATION

AYVAKIT® (avapritinib) is indicated for the treatment of adult patients with advanced SM (AdvSM) including patients with aggressive systemic mastocytosis (ASM), systemic mastocytosis with an associated hematological neoplasm (SM-AHN), and mast cell leukemia (MCL).

**Limitations of Use:** AYVAKIT is not recommended for the treatment of patients with AdvSM with platelet counts of  $<50 \times 10^9/L$ .

## IMPORTANT SAFETY INFORMATION

**Intracranial Hemorrhage**—Serious intracranial hemorrhage (ICH) may occur with AYVAKIT treatment; fatal events occurred in  $<1\%$  of patients. Overall, ICH (e.g., subdural hematoma, ICH, and cerebral hemorrhage) occurred in 2.9% of 749 patients who received AYVAKIT in clinical trials. In AdvSM patients who received AYVAKIT at 200 mg daily, ICH occurred in 2 of 75 patients (2.7%) who had platelet counts  $\geq 50 \times 10^9/L$  prior to initiation of therapy and in 3 of 80 patients (3.8%) regardless of platelet counts.

Monitor patients closely for risk factors of ICH which may include history of vascular aneurysm, ICH or cerebrovascular accident within the prior year, concomitant use of anticoagulant drugs, or thrombocytopenia. Symptoms of ICH may include headache, nausea, vomiting, vision changes, or altered mental status. Advise patients to seek immediate medical attention for signs or symptoms of ICH. Permanently discontinue AYVAKIT if ICH of any grade occurs.

A platelet count must be performed prior to initiating therapy. AYVAKIT is not recommended in AdvSM patients with platelet counts  $<50 \times 10^9/L$ . Following treatment initiation, platelet counts must be performed every 2 weeks for the first 8 weeks. After 8 weeks of treatment, monitor platelet counts every 2 weeks or as clinically indicated based on platelet counts. Manage platelet counts of  $<50 \times 10^9/L$  by treatment interruption or dose reduction.

**Cognitive Effects**—Cognitive adverse reactions can occur in patients receiving AYVAKIT and occurred in 33% of 995 patients overall in patients who received AYVAKIT in clinical trials including 28% of 148 AdvSM patients (3% were Grade  $\geq 3$ ). Depending on the severity and indication, withhold AYVAKIT and then resume at same dose or at a reduced dose upon improvement, or permanently discontinue.

**Photosensitivity**—AYVAKIT may cause photosensitivity reactions. In all patients treated with AYVAKIT in clinical trials (n=1049), photosensitivity reactions occurred in 2.5% of patients. Advise patients to limit direct ultraviolet exposure during treatment with AYVAKIT and for one week after discontinuation of treatment.

**Embryo-Fetal Toxicity**—AYVAKIT can cause fetal harm when administered to a pregnant woman. Advise pregnant women of the potential risk to a fetus. Advise females and males of reproductive potential to use an effective contraception during treatment with AYVAKIT and for 6 weeks after the final dose of AYVAKIT. Advise women not to breastfeed during treatment with AYVAKIT and for 2 weeks following the final dose.

**Adverse Reactions**—The most common adverse reactions ( $\geq 20\%$ ) were edema, diarrhea, nausea, and fatigue/asthenia.

**Drug Interactions**—Avoid coadministration of AYVAKIT with strong or moderate CYP3A inhibitors. If coadministration with a moderate CYP3A inhibitor cannot be avoided, reduce dose of AYVAKIT. Avoid coadministration of AYVAKIT with strong or moderate CYP3A inducers. If contraception requires estrogen, limit ethinyl estradiol to  $\leq 20$  mcg unless a higher dose is necessary.

To report suspected adverse reactions, contact Blueprint Medicines Corporation at 1-888-258-7768 or the FDA at 1-800-FDA-1088 or [www.fda.gov/medwatch](http://www.fda.gov/medwatch).

AYVAKIT is available in 25-mg, 50-mg, 100-mg and 200-mg tablets.

**Please click here to see the full [Prescribing Information](#) for AYVAKIT.**

Explore AYVAKIT case studies on next page >

## Patient Case Studies

The following case studies are fictional portrayals based on actual clinical trial experiences with AYVAKIT. Healthcare providers should make all treatment decisions based on the prescribing information, individual patient profile, and their clinical judgment.



### 65-year-old female diagnosed with SM-AHN

#### PATIENT HISTORY AND INTRODUCTION OF AYVAKIT

- Patient was diagnosed with SM-AHN 3 months ago and was previously treated with midostaurin for 2 months before discontinuation due to tolerability
- Prior to therapy initiation with AYVAKIT, the patient's baseline platelet count was  $65 \times 10^9/L$
- Patient was started on AYVAKIT 200 mg once daily. Per dosing guidelines, platelets were monitored every 2 weeks for the first 8 weeks<sup>2</sup>

#### ADVERSE EVENTS

- After 4 weeks of treatment, patient's platelet count decreased to  $45 \times 10^9/L$
- Per dosing guidelines, due to increased risk of intracranial hemorrhage, patient was dose interrupted until counts recovered to  $>50 \times 10^9/L^2$

#### CONTINUED TREATMENT

- After 2 weeks, platelet counts did not improve and the physician ordered a transfusion. Platelet counts improved to over  $50 \times 10^9/L$  and therapy was resumed at a reduced dose of 100 mg once daily<sup>2</sup>
- The patient proceeded treatment with continued platelet monitoring every 2 weeks<sup>2</sup>



### 58-year-old male diagnosed with ASM

#### INITIAL DIAGNOSIS

- Patient presented with hepatosplenomegaly, rash, itching, and fatigue
- Serum tryptase was 56 ng/mL and peripheral blood high-sensitivity PCR assay confirmed KIT D816V mutation at 10% allele fraction
- Bone marrow biopsy confirmed presence of spindle shaped neoplastic mast cell aggregates, positive for CD25 and tryptase
- Diagnosis of ASM, with a C-finding of ascites, which was being treated with diuretics (furosemide)

#### INTRODUCTION OF AYVAKIT

- Patient and caregiver reported no history of cognitive issues or risks for intracranial bleeding
- Patient was prescribed AYVAKIT 200 mg once daily.<sup>2</sup> Platelet count at therapy initiation was  $188 \times 10^9/L$
- Within a week mild (grade 1) facial edema and peripheral edema occurred but were tolerable for the patient. At the 2-week CBC check, the platelets were  $140 \times 10^9/L$ , with no other cytopenias
- At the 1 month follow up visit, the caregiver noticed that patient had mild (grade 1) memory impairment, such as forgetting where he placed the keys. After discussing it with the physician, the patient and physician decided to continue at the same dose of 200 mg

#### CONTINUED TREATMENT

- After 2 months of therapy at 200 mg daily, the caregiver reported that the patient yesterday had an episode of confusion and feeling lost for several hours, which had not occurred before. The patient was assessed as having Grade 2 cognitive effects and advised not to drive or operate heavy machinery during any episodes of confusion
- In discussion with the patient and caregiver, the dose is interrupted, per dosing guidelines for cognitive effects. During the interruption, the cognitive effects improved<sup>2</sup>
- Per dosing guidelines, dosage was interrupted until resolution to baseline. After a 2-week break, patient resumed AYVAKIT therapy at 100 mg once daily; monitoring continued<sup>2</sup>
- After 1 year of treatment, patient continued to be maintained on therapy at 100 mg daily and was tolerating it well

Please see Important Safety Information on pages 16-17 and the full [Prescribing Information](#) for AYVAKIT.

# Managing your patients with Advanced SM taking AYVAKIT



## INITIATE<sup>2</sup>

The recommended starting dose of AYVAKIT is 200 mg orally once daily on an empty stomach. AYVAKIT is also available in 100 mg, 50 mg, and 25 mg dose strengths for dose modifications based on adverse events or drug interactions.

A platelet count must be performed prior to initiating therapy. Do not initiate AYVAKIT in patients with platelet counts  $<50 \times 10^9/L$ .



## MONITOR<sup>2</sup>

Observe your patients for signs of adverse reactions and inform them of the potential side effects. The signs you identify or information they share can help you decide whether dose modifications may be appropriate.

Platelet counts should be monitored throughout AYVAKIT treatment. Please see page 12 for more details on platelet monitoring.



## OPTIMIZE<sup>2</sup>

Modifying dosage for your individual patients based on adverse reactions may be necessary. See the detailed dose modification information within this guide and the AYVAKIT prescribing information.

**TO LEARN MORE ABOUT AYVAKIT, VISIT [AYVAKITHCP.COM/ADVSM](https://ayvakithcp.com/advsm)**

**Please see Important Safety Information on pages 16-17 and the full [Prescribing Information](#) for AYVAKIT.**

**References:** **1.** Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology [NCCN Guidelines<sup>®</sup>] for Systemic Mastocytosis V.3.2024. © National Comprehensive Cancer Network, Inc. 2024. All rights reserved. Accessed May 29, 2024. To view the most recent and complete version of the guideline, go online to NCCN.org. NCCN makes no warranties of any kind whatsoever regarding their content, use or application and disclaims any responsibility for their application or use in any way. **2.** AYVAKIT [prescribing information]. Cambridge, MA: Blueprint Medicines Corporation; November 2024. **3.** Data on file. Blueprint Medicines Corporation, Cambridge, MA. 2021. **4.** Jennings SV et al. *Immunol Allergy Clin North Am.* 2018;38(3):505-525.



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