

Regimen Monograph

[Regimen Name](#) | [Drug Regimen](#) | [Cycle Frequency](#) | [Premedication and Supportive Measures](#) | [Dose Modifications](#) | [Adverse Effects](#) | [Interactions](#) | [Drug Administration and Special Precautions](#) | [Recommended Clinical Monitoring](#) | [Administrative Information](#) | [References](#) | [Other Notes](#) | [Disclaimer](#)

A - Regimen Name

CLAD Regimen

Cladribine

Disease Site Hematologic - Rare Diseases

Intent Palliative

Regimen Category **Evidence-Informed :**

Regimen is considered appropriate as part of the standard care of patients; meaningfully improves outcomes (survival, quality of life), tolerability or costs compared to alternatives (recommended by the Disease Site Team and national consensus body e.g. pan-Canadian Oncology Drug Review, pCODR). Recommendation is based on an appropriately conducted phase III clinical trial relevant to the Canadian context OR (where phase III trials are not feasible) an appropriately sized phase II trial. Regimens where one or more drugs are not approved by Health Canada for any indication will be identified under Rationale and Use.

Rationale and Uses Treatment of aggressive systemic mastocytosis

[back to top](#)

B - Drug Regimen[cladribine](#)

0.14 mg /kg/day

IV over 2 hours

Days 1 to 5

[back to top](#)**C - Cycle Frequency****REPEAT EVERY 28 DAYS**

Up to 9 cycles

[back to top](#)**D - Premedication and Supportive Measures****Antiemetic Regimen:** Minimal[back to top](#)

E - Dose Modifications

Doses should be modified according to the protocol by which the patient is being treated.

Dosage with toxicity

Toxicity	Cladribine dose
Myelosuppression	No adjustment required. Consider delay until recovery to baseline counts.
Neurotoxicity	Delay or discontinue, depending on severity
Nephrotoxicity	Delay or discontinue, depending on severity. See dosage with renal impairment table.

Hepatic Impairment

Exercise caution. No formal recommendations found.

Renal Impairment

Creatinine clearance	Cladribine (% dose)
≥ 50	100%
10-50	75%
≤ 10	50%

[back to top](#)

F - Adverse Effects

Refer to [cladribine](#) drug monograph(s) for additional details of adverse effects

Most Common Side Effects	Less Common Side Effects, but may be Severe or Life-Threatening
<ul style="list-style-type: none"> • Myelosuppression ± infection (including opportunistic), bleeding (may be severe) • Fever • Fatigue • Nausea, vomiting • Rash (may be severe) • Headache • Injection site reaction • Abdominal pain • Anorexia • Constipation • Diarrhea • Dizziness, insomnia 	<ul style="list-style-type: none"> • Venous thromboembolism • Hypersensitivity • Hemolysis • Nephrotoxicity • Neurotoxicity (more common with high doses) • Pneumonitis • Tumour lysis syndrome • Secondary malignancy

[back to top](#)

G - Interactions

Refer to [cladribine](#) drug monograph(s) for additional details

[back to top](#)

H - Drug Administration and Special Precautions

Refer to [cladribine](#) drug monograph(s) for additional details

[back to top](#)

I - Recommended Clinical Monitoring

Treating physicians may decide to monitor more or less frequently for individual patients but should always consider recommendations from the product monograph.

Recommended Clinical Monitoring

- CBC; Baseline, at each cycle and as clinically indicated, especially during the first 4 to 8 weeks after treatment
- Renal and liver function tests; Baseline, at each visit and as clinically indicated, especially with underlying renal or hepatic impairment
- Uric acid; Baseline and as clinically indicated, especially when treatment is initiated and in patients at risk of tumour lysis syndrome
- Clinical toxicity assessment for fever, infection, bleeding, rash, neurotoxicity, fatigue and GI toxicity; At each visit
- Grade toxicity using the current [NCI-CTCAE \(Common Terminology Criteria for Adverse Events\) version](#)

[back to top](#)

J - Administrative Information

Approximate Patient Visit	Cladribine CIV: 0.5 hour; daily infusion: 2 hours
Pharmacy Workload (average time per visit)	14.184 minutes
Nursing Workload (average time per visit)	35 minutes

[back to top](#)

K - References

Cladribine drug monograph, Cancer Care Ontario.

Barete S, Lortholary O, Damaj G, et al. Long-term efficacy and safety of cladribine (2-CdA) in adult patients with mastocytosis. *Blood*. 2015 Aug 20;126(8):1009-16.

Lim KH, Pardanani A, Butterfield JH, et al. Cytoreductive therapy in 108 adults with systemic mastocytosis: Outcome analysis and response prediction during treatment with interferon-alpha, hydroxyurea, imatinib mesylate or 2-chlorodeoxyadenosine. *Am J Hematol* 2009;84(12):790-4.

Marlies EHM, Van Hoef. Cladribine in the Treatment of Systemic Mastocytosis, a Review of the Literature. *Int J Rare Dis Disord* 2019;2:007. *Am J Hematol* .

July 2021 new ST-QBP regimen

[back to top](#)

M - Disclaimer

Regimen Abstracts

A Regimen Abstract is an abbreviated version of a Regimen Monograph and contains only top level information on usage, dosing, schedule, cycle length and special notes (if available). It is intended for healthcare providers and is to be used for informational purposes only. It is not intended to constitute or be a substitute for medical advice, and all uses of the Regimen Abstract are subject to clinical judgment. Such information is provided on an "as-is" basis, without any representation, warranty, or condition, whether express, or implied, statutory or otherwise, as to the information's quality, accuracy, currency, completeness, or reliability, and Cancer Care Ontario disclaims all liability for the use of this information, and for any claims, actions, demands or suits that arise from such use.

Information in regimen abstracts is accurate to the extent of the ST-QBP regimen master listings, and has not undergone the full review process of a regimen monograph. Full regimen monographs will be published for each ST-QBP regimen as they are developed.

Regimen Monographs

Refer to the [New Drug Funding Program](#) or [Ontario Public Drug Programs](#) websites for the most up-to-date public funding information.

The information set out in the drug monographs, regimen monographs, appendices and symptom management information (for health professionals) contained in the Drug Formulary (the "Formulary") is intended for healthcare providers and is to be used for informational purposes only. The information is not intended to cover all possible uses, directions, precautions, drug interactions or adverse effects of a particular drug, nor should it be construed to indicate that use of a particular drug is safe, appropriate or effective for a given condition. The information in the Formulary is not intended to constitute or be a substitute for medical advice and should not be relied upon in any such regard. All uses of the Formulary are subject to clinical judgment and actual prescribing patterns may not follow the information provided in the Formulary.

The format and content of the drug monographs, regimen monographs, appendices and symptom management information contained in the Formulary will change as they are reviewed and revised on a periodic basis. The date of last revision will be visible on each page of the monograph and regimen. Since standards of usage are constantly evolving, it is advised that the Formulary not be used as the sole source of information. It is strongly recommended that original references or product monograph be consulted prior to using a chemotherapy regimen for the first time.

Some Formulary documents, such as the medication information sheets, regimen information sheets and symptom management information (for patients), are intended for patients. Patients should always consult with their healthcare provider if they have questions regarding any information set out in the Formulary documents.

While care has been taken in the preparation of the information contained in the Formulary, such information is provided on an "as-is" basis, without any representation, warranty, or condition, whether express, or implied, statutory or otherwise, as to the information's quality, accuracy, currency, completeness, or reliability.

CCO and the Formulary's content providers shall have no liability, whether direct, indirect, consequential, contingent, special, or incidental, related to or arising from the information in the Formulary or its use thereof, whether based on breach of contract or tort (including negligence), and even if advised of the possibility thereof. Anyone using the information in the Formulary does so at his or her own risk, and by using such information, agrees to indemnify CCO and its content providers from any and all liability, loss, damages, costs and expenses (including legal fees and expenses) arising from such person's use of the information in the Formulary.

[back to top](#)