Regimen Monograph

Regimen Name | Drug Regimen | Cycle Frequency | Administrative Information | References | Other Notes | Disclaimer

A - Regimen Name

HYPERCVAD+CALA Regimen

Cyclophosphamide-vinCRIStine-DOXOrubicin-Dexamethasone-Calaspargase Pegol-Methotrexate-Leucovorin-Cytarabine

Disease Site

Hematologic
Leukemia - Acute Lymphoblastic (ALL)

Intent

Curative

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.

This **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). 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.

The information provided in this document is intended for use only in the management of adults with leukemia, and for cancer centres with expertise in treating acute leukemia.

Rationale and Uses

For treatment of acute lymphoblastic leukemia (ALL)

Supplementary Public Funding	**dexamethasone** ODB - General Benefit (dexamethasone) (ODB Formulary)
	calaspargase pegol New Drug Funding Program (Calaspargase Pegol (Outpatient) - Newly Diagnosed Acute Lymphoblastic Leukemia, Lymphoblastic Lymphoma or Mixed_Biphenotypic Leukemia) (NDFP Website)

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B - Drug Regimen

This regimen consists of 8 alternating courses of Course A (cyclophosphamide, vincristine, doxorubicin, dexamethasone, calaspargase pegol) and Course B (methotrexate, cytarabine), given every 21 to 28 days (A-B-A-B-A-B-A-B).

The following includes regimen details for Course A, adapted for outpatient administration.

cyclophosphamide†	300 mg /m²	IV	q12h, on Days 1 to 3
(Total dose per cycle = 1800 mg/m^2)			
DOXOrubicin	50 mg /m²	IV	Day 4*
vinCRIStine	1.4 mg /m²	IV (max 2 mg)	Days 4* and 11
dexamethasone	40 mg	PO	Days 1, 2, 3, 4, 11, 12, 13, 14
calaspargase pegol^	Refer to local protocols for dosing information.		

Consider CNS prophylaxis with IT methotrexate and cytarabine, which was given in clinical trials.

†Consider mesna, as per local protocols.

*Some centres may administer on day 3

^Different asparaginase products are **not interchangeable** and dosing schedules are different. For example, giving calaspargase pegol at the same dose and frequency as pegaspargase may result in higher asparaginase activity exposures, which may increase toxicities. Refer to local protocols for dosing information.

For **Course B (inpatient)**, refer to local protocols.

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C - Cycle Frequency

REPEAT EVERY 21 TO 28 DAYS (alternating with Course B) for a usual total of 8 cycles (4 of each) unless disease progression or unacceptable toxicity.

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J - Administrative Information

Approximate Patient Visit	0.5 to 3 hours (depending on day of cycle)

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K - References

ALL regimen: HYPERCVAD A <60 with pegaspargase. Princess Margaret Cancer Centre. Dec 2021.

CADTH reimbursement recommendation: Calaspargase Pegol (Asparlas; acute lymphoblastic leukemia). Canadian Journal of Health Technologies 2024 January;4(1).

CADTH reimbursement review. Calaspargase Pegol (Asparlas; acute lymphoblastic leukemia). Canadian Journal of Health Technologies 2024 April;4(4).

Clinical practice guidelines: Acute lymphoblastic leukemia. Princess Margaret Cancer Centre. October 2011.

Kantarjian H, Thomas D, O'Brien S, et al. Long-term follow-up results of hyperfractionated cyclophosphamide, vincristine, doxorubicin, and dexamethasone (Hyper-CVAD), a dose-intensive regimen, in adult acute lymphocytic leukemia. Cancer 2004;101(12):2788-801.

Thomas DA, Cortes J, O'Brien S, et al. Hyper-CVAD program in Burkitt's-type adult acute lymphoblastic leukemia. J Clin Oncol 1999;17(8):2461-70.

November 2024 Updated asparaginase non-interchangeability statement in section B

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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.

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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.

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