

Regimen Monograph

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A - Regimen Name

HYPERCVAD+PEG Regimen

Cyclophosphamide-vinCRISTine-DOXOrubicin-Dexamethasone-Pegaspargase-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](#))

[pegaspargase](#)

New Drug Funding Program (Pegaspargase (Outpatient) - Adult Acute Lymphoblastic Leukemia (ALL) Lymphoblastic Lymphoma Mixed or 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, pegaspargase) 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/m²)

[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

[pegaspargase](#)[^] 1000 units /m² IV / IM Day 5

[^] Maximum dose: 3750 units for patients < 60 years of age, and 1875 units for patients ≥60 years of age

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

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.

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..

April 2022 new ST-QBP regimen

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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,

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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.

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