

## Regimen Monograph

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## A - Regimen Name

## ABFM+NELA(DELAYEDINT) Regimen

Augmented Berlin-Frankfurt-Münster regimen (Delayed Intensification) - Nelarabine

**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** Treatment of adult patients (up to 30 years) with newly diagnosed intermediate- or high-risk T-cell acute lymphoblastic leukemia (T-ALL)

**Supplementary Public Funding** [thioguanine](#)  
 ODB - General Benefit (thioguanine) ([ODB Formulary](#) )

[pegaspargase](#)  
 New Drug Funding Program (Pegaspargase (Outpatient) - Adult Acute Lymphoblastic Leukemia (ALL) Lymphoblastic Lymphoma Mixed or Biphenotypic Leukemia) ([NDFP Website](#) )

[nelarabine](#)  
 New Drug Funding Program (Nelarabine - Newly Diagnosed T-cell Acute Lymphoblastic Leukemia) ([NDFP Website](#) )

**dexamethasone**  
 ODB - General Benefit (dexamethasone) ([ODB Formulary](#) )

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**B - Drug Regimen**

**Based on the AALL0434 protocol:**

<b>dexamethasone</b>	5 mg /m <sup>2</sup>	IV / PO	BID on Days 1-7, 15-21
<a href="#">vinCRISTine</a>	1.5 mg /m <sup>2</sup>	IV	Days 1, 8, 15, 50
(maximum 2 mg per dose)			
<a href="#">DOXOrubicin</a>	25 mg /m <sup>2</sup>	IV	Day 1, 8, 15
<a href="#">methotrexate</a>	15 mg	IT	Days 1, 36, 43
<a href="#">pegaspargase</a>	2500 units /m <sup>2</sup>	IV / IM	Day 4 or 5 or 6 AND Day 50
<a href="#">nelarabine</a>	650 mg /m <sup>2</sup>	IV	Days 29-33
<a href="#">cyclophosphamide</a>	1000 mg /m <sup>2</sup>	IV	Day 36
<a href="#">cytarabine</a>	75 mg /m <sup>2</sup>	IV / Subcut	Days 36-39, 43-46
<a href="#">thioguanine</a>	60 mg /m <sup>2</sup>	PO	Days 36-49*

\*Omit thioguanine doses in patients receiving cranial radiotherapy during delayed intensification.

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## C - Cycle Frequency

One 9-week cycle, followed by ABFM+NELA(MNT)

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## D - Premedication and Supportive Measures

**Antiemetic Regimen:** Moderate (Days 1, 8, 15, 36)  
Low (Days 37-39, 43-46)  
Minimal (Other treatment days)

### Other Supportive Care:

- Also refer to [CCO Antiemetic Recommendations](#).
- Antiemetics should be given as per institutional guidelines.
- Consider PJP and other prophylaxis for infection based on institutional guidelines.

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## J - Administrative Information

Pharmacy Workload (average time per visit) 31.424 minutes

Nursing Workload (average time per visit) 52.806 minutes

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## K - References

CADTH reimbursement recommendation: Nelarabine (for addition to front-line multiagent therapy of pediatric, adolescent, and young adult patients (aged 1 year to 30 years at diagnosis) with intermediate- or high-risk T-cell acute lymphoblastic leukemia). October 2023.

Dunsmore KP, Winter SS, Devidas M, et al. Children's Oncology Group AALL0434: A phase III randomized clinical trial testing nelarabine in newly diagnosed T-cell acute lymphoblastic leukemia. J Clin Oncol. 2020 Oct 1;38(28):3282-93. doi: 10.1200/JCO.20.00256.

**May 2024** new ST-QBP regimen

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## M - Disclaimer

### **Regimen Abstracts**

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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.*

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