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

CODOXM+RITU Regimen

Cyclophosphamide-Cytarabine-Vincristine-Methotrexate-Leucovorin-Doxorubicin-Rituximab

Disease Site

Hematologic - Lymphoma - Non-Hodgkin's High Grade (Burkitt's Lymphoma)

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.

Supplementary Public Funding

riTUXimab
New Drug Funding Program (Rituximab (Biosimilar IV) and Rituximab SC - Aggressive Histology Lymphoma)

riTUXimab
New Drug Funding Program (Rituximab (Biosimilar IV) and Rituximab SC -

HIV-Related Aggressive Histology B-cell Lymphoma)

riTUXimab (subcut)
New Drug Funding Program (Rituximab (Biosimilar IV) and Rituximab SC - Aggressive Histology Lymphoma)

riTUXimab (subcut)
New Drug Funding Program (Rituximab (Biosimilar IV) and Rituximab SC - HIV-Related Aggressive Histology B-cell Lymphoma)

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B - Drug Regimen

Note: Different rituximab products are NOT INTERCHANGEABLE.

Adapted for **outpatient** administration:

Cycle 1: All patients must receive their first dose of rituximab by IV infusion.

riTUXimab[1]	375 mg /m²	IV	Day 1
cyclophosphamide	800 mg /m²	IV	Day 1
vinCRIStine	1.5 mg /m²	IV (maximum 2 mg)	Days 1 and 8
DOXOrubicin	40 mg /m²	IV	Day 1
cytarabine	70 mg	IT	Days 1 and 3
cyclophosphamide	200 mg /m²	IV	Days 2 to 5
methotrexate	12 mg	IT	Day 15

Subsequent cycles of CODOX-M:

Rituximab IV:

riTUXimab[1]	375 mg /m²	IV	Day 1

OR

Rituximab (subcut):
The subcutaneous formulation must only be given at the second or subsequent cycles, if the patient has previously received at least one full rituximab IV dose.

riTUXimab (subcut)[1]	1400 mg	Subcut	Day 1

Plus CODOX-M Chemotherapy:

cyclophosphamide	800 mg /m²	IV	Day 1
vinCRIStine	1.5 mg /m²	IV (maximum 2 mg)	Days 1 and 8

DOXOrubicin	40 mg /m²	IV	Day 1
cytarabine	70 mg	IT	Days 1 and 3
cyclophosphamide	200 mg /m²	IV	Days 2 to 5
methotrexate	12 mg	IT `	Day 15

[1] dose may be postponed to later in the cycle if clinically indicated

Note: High-dose methotrexate (day 10) and leucovorin (start day 11) are given as **inpatient**.

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C - Cycle Frequency

REPEAT EVERY 21 DAYS

The MAGRATH regimen comprises of CODOX-M ± IVAC*.
Three cycles of CODOX-M are used for low-risk patients.
Four cycles of alternating CODOX-M and IVAC (total of 2 cycles of CODOX-M and 2 cycles of IVAC) are used for high-risk patients.

(*IVAC is given as inpatient.)

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D - Premedication and Supportive Measures

Antiemetic Regimen: Moderate (D1-5)
Minimal (D8, 15)

Other Supportive Care:

Also refer to CCO Antiemetic Recommendations.

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J - Administrative Information

Approximate Patient Visit	1.5 hour (Subcut rituximab); 3-6 hours (IV rituximab); (with additional time for intrathecal days)

Pharmacy Workload (average time per visit)	50.499 minutes
Nursing Workload (average time per visit)	89.833 minutes

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K - References

Barnes JA, Lacasce AS, Feng Y, et al. Evaluation of the addition of rituximab to CODOX-M/IVAC for Burkitt's lymphoma: a retrospective analysis. Ann Oncol 2011;22(8):1859-64.

Lacasce A, Li HS, Fisher D, et al. Modified Magrath regimens for adults with Burkitt and Burkitt-like lymphomas: preserved efficacy with decreased toxicity. Leukemia & Lymphoma 2004;45(4):761–7.

Magrath IT, Adde M, Shad A et al. Adults and children with small non-cleaved-cell lymphoma have a similar excellent outcome when treated with the same chemotherapy regimen. J Clin Oncol 1996;14:925-34.

Magrath IT, Janus C, Edwards BK, et al. An effective therapy for both undifferentiated (including Burkitt's) lymphomas and lymphoblastic lymphomas in children and young adults. Blood 1984;63:1102-11.

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Mead GM, Sydes MR, Walewski J, et al. An international evaluation of CODOX-M and CODOX-M alternating with IVAC in adult Burkitt's lymphoma: results of United Kingdom Lymphoma Group LY06 study. Ann Oncol 2002;13(8):1264-74.

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Mohamedbhai SG, Sibson K, Marafioti T, et al. Rituximab in combination with CODOX-M/IVAC: a retrospective analysis of 23 cases of non-HIV related B-cell non-Hodgkin lymphoma with proliferation index >95%. Br J Haematol 2011;152(2):175-81.

Noy A, Lee JY, Cesarman E, et al. AMC 048: modified CODOX-M/IVAC-rituximab is safe and effective for HIV-associated Burkitt lymphoma. Blood. 2015 Jul 9;126(2):160-6.

Lugtenburg P, Avivi I, Berenschot H et al. Efficacy and safety of subcutaneous and intravenous rituximab plus cyclophosphamide, doxorubicin, vincristine, and prednisone in first-line diffuse large B-cell lymphoma: the randomized MabEase study. Haematologica. 2017;102(11):1913-1922.

Rummel M, Kim TM, Aversa F et al. Preference for subcutaneous or intravenous administration of rituximab among patients with untreated CD20+ diffuse large B-cell lymphoma or follicular lymphoma: results from a prospective, randomized, open-label, crossover study (PrefMab). Ann Oncol. 2017;28(4):836-842.

PEBC Advice Documents or Guidelines

- Rituximab in Lymphoma and Chronic Lymphocytic Leukemia

August 2020 Updated NDFP forms and interchangeability information in Drug Regimen section

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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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