



## Guideline 6-8 Version 3

### A Quality Initiative of the Program in Evidence-based Care (PEBC), Cancer Care Ontario (CCO)

# Rituximab in Lymphoma and Chronic Lymphocytic Leukemia: A Clinical Practice Guideline, Version 3

*A. Prica, F. Baldassarre, L.K. Hicks, K. Imrie, T. C. Kouroukis, M. Cheung,  
and the Hematology Disease Site Group*

Report Date: March 31, 2015

An assessment conducted in November 2016 deferred the review of Evidence-based Series (EBS) 6-8 Version 3, which means that the document remains current until it is assessed again next year. The PEBC has a formal and standardized process to ensure the currency of each document ([PEBC Assessment & Review Protocol](#))

The Complete Guideline 6-8 Version 3 comprises four sections:

|            |  |     |
|------------|--|-----|
| Section 1: | Recommendations Summary .....                          | 1   |
| Section 2: | Guideline .....  | 4   |
| Section 3: | Evidence Review .....                                  | 13  |
| Section 4: | EBS Development Methods and External Review Process... | 100 |

For information about this document, please contact Dr. Tom Kouroukis or Dr. Matthew Cheung through the PEBC via:

Phone: 905-527-4322 ext. 42822 Fax: 905-526-6775 E-mail: [ccopgi@mcmaster.ca](mailto:ccopgi@mcmaster.ca):

For information about the PEBC and the most current version of all reports, please visit the CCO website at <http://www.cancercare.on.ca/> or contact the PEBC office at:

Phone: 905-527-4322 ext. 42822 Fax: 905-526-6775 E-mail: [ccopgi@mcmaster.ca](mailto:ccopgi@mcmaster.ca)

**PEBC Report Citation (Vancouver Style):** Prica A, Baldassarre F, Hicks LK, Imrie K, Kouroukis T, Cheung M. Rituximab in lymphoma and chronic lymphocytic leukemia: a clinical practice guideline,

version 3. Toronto (ON): Cancer Care Ontario; 2015 March 31. Program in Evidence-based Care Guideline No.: 6-8, Version 3.

**Journal Citations (Vancouver Style):** Cheung MC, Haynes AE, Meyer RM, Stevens A, Imrie KR; Members of the Hematology Disease Site Group of the Cancer Care Ontario Program in Evidence-based Care. Rituximab in lymphoma: a systematic review and consensus practice guideline from Cancer Care Ontario. *Cancer Treat Rev.* 2007;33(2):161-76.

Imrie K, Esmail R, Buckstein R, Berinstein N, Meyer R, Zahra HA, et al. Use of rituximab in the treatment of lymphoma: an evidence summary. *Curr Oncol.* 1999;6(4):228-35.

*Copyright*

This report is copyrighted by Cancer Care Ontario; the report and the illustrations herein may not be reproduced without the express written permission of Cancer Care Ontario. Cancer Care Ontario reserves the right at any time, and at its sole discretion, to change or revoke this authorization.

## Guideline 6-8 Version 3: Section 1

### A Quality Initiative of the Program in Evidence-Based Care (PEBC), Cancer Care Ontario (CCO)

## Rituximab in Lymphoma and Chronic Lymphocytic Leukemia: Recommendations Summary

*A. Prica, F. Baldassarre, L.K. Hicks, K. Imrie, T. C. Kouroukis, M. Cheung,  
and the Hematology Disease Site Group*

#### GUIDELINE OBJECTIVES

To provide an updated guideline on the use of rituximab in lymphoma and chronic lymphocytic leukemia (CLL).

#### TARGET POPULATIONS

##### Lymphoma

Adult patients with lymphoma of any type, at any stage, and with any histology.

##### Chronic Lymphocytic Leukemia

Adult patients with CLL at any stage.

#### INTENDED USERS

Intended users of this updated guideline include hematologists and oncologists treating patients with lymphoma or CLL.

#### RECOMMENDATIONS

##### Recommendation 1

***Aggressive histology B-cell lymphomas, including Burkitt lymphoma: first-line, second-line and maintenance treatment and patients with human immunodeficiency virus (HIV)-associated lymphomas.***

##### ***Previously Untreated Patients***

a. Previously untreated patients with aggressive histology CD20-positive B-cell lymphomas who are candidates for treatment with curative intent and will receive combination chemotherapy with curative intent (including cyclophosphamide, doxorubicin, vincristine, and prednisone [CHOP], CHOP-like, or similar dose-intense regimens) should receive this therapy in combination with rituximab.

##### ***Patients with Relapsed/Refractory Disease***

b. For previously treated patients with aggressive histology CD20-positive B-cell lymphomas:  
i. There is insufficient evidence at this time to support treatment with a rituximab-containing chemotherapy regimen in patients who have been previously treated with a

- rituximab-containing chemotherapy regimen.
- ii. If patients have not previously received rituximab as part of their treatment regimen, the addition of rituximab to chemotherapy is reasonable.

***Rituximab Maintenance Treatment***

- c. There is insufficient evidence at this time to support the use of maintenance rituximab in aggressive histology B-cell lymphomas.

***Patients with HIV-Associated Lymphomas***

- d. Previously untreated patients with HIV-related lymphoma with a CD4 count  $\geq 50/\text{mm}^3$  who are candidates for treatment with curative intent and will receive combination chemotherapy with curative intent (including CHOP, CHOP-like, or similar dose-intense regimens), should receive this therapy in combination with rituximab. The addition of rituximab to chemotherapy in patients with CD4  $< 50/\text{mm}^3$  is not recommended.

**Recommendation 2**

***Indolent histology B-cell lymphomas: first-line, second-line, and maintenance treatment and patients with asymptomatic CD20-positive B-cell lymphomas***

***Previously Untreated Patients***

- a. Previously untreated patients with indolent histology CD20-positive B-cell lymphomas, excluding small lymphocytic lymphoma (SLL), who are appropriate candidates for chemotherapy, should receive their chemotherapy in combination with rituximab.
- b. For patients with indolent histology CD20-positive B-cell-histology lymphomas, excluding SLL, who are candidates for therapy, but not combination chemotherapy, rituximab monotherapy is a reasonable option.

***Patients with Relapsed/Refractory Disease***

- c. For previously treated patients with indolent histology CD20-positive B-cell lymphomas, excluding SLL:
  - i. Patients who have not previously received rituximab and who are appropriate candidates for chemotherapy should receive this chemotherapy in combination with rituximab or as rituximab monotherapy.
  - ii. Patients who have previously received rituximab (including combination rituximab chemotherapy, rituximab monotherapy, or maintenance rituximab) and who have achieved a response of at least one year's duration from the last rituximab administration and who are appropriate candidates for therapy should receive this therapy in combination with rituximab or as rituximab monotherapy.

***Rituximab Maintenance Treatment***

- d. For patients with indolent histology CD20-positive B-cell lymphomas, excluding SLL, who respond to treatment with combination chemotherapy and/or rituximab, this treatment should be followed by the use of maintenance rituximab.

***Patients with Asymptomatic CD20-Positive B-Cell Lymphomas***

- e. There is insufficient evidence at this time to support or refute upfront treatment with rituximab monotherapy for asymptomatic indolent histology CD20-positive B-cell lymphomas.

**Recommendation 3**

***Chronic lymphocytic leukemia/small lymphocytic lymphoma***

***Previously Untreated Patients***

- a. Patients with previously untreated CLL/SLL, who are appropriate candidates for fludarabine-based chemotherapy, should receive this treatment in combination with rituximab.
- b. In patients with previously untreated CLL/SLL who are appropriate candidates for chlorambucil chemotherapy, the addition of rituximab can be considered.

***Patients with Relapsed/Refractory Disease***

- c. Patients with relapsed or refractory CLL/SLL, who are appropriate candidates for fludarabine-based chemotherapy, should receive this treatment in combination with rituximab.

**Recommendation 4**

***Hepatitis B virus reactivation in all patients treated with rituximab***

The Hematology Disease Site Group recommends that all patients be screened for surface antigen for hepatitis B (HBsAg) and for hepatitis B core antibody (HBcAb) prior to treatment with rituximab. Consultation with an expert in hepatitis B virus (HBV) should be considered for all patients who test positively for HBV. Patients who are HBsAg positive should receive prophylactic antiviral therapy during and after rituximab. Patients who are HbsAg negative/HBcAb positive should be considered for either prophylactic antiviral therapy, close monitoring for viral reactivation, and/or should be followed by an expert in HBV. In the absence of active hepatitis (elevated transaminases), it is not usually necessary to delay rituximab. In most cases, HBV screening and management can occur in parallel with non-Hodgkin lymphoma/CLL treatment.