



Evidence-based Series 7-16 Version 4

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

The Role of High Dose Rate Brachytherapy in the Palliation of Symptoms in Patients with Non-Small Cell Lung Cancer

Members of the Lung Cancer Disease Site Group

An assessment conducted in November 2025 deferred the review of Evidence-Based Series (EBS) 7-16 Version 4. This 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
[\(PEBC Assessment & Review Protocol\)](#)

EBS 7-16 Version 4 consists of 4 sections. You can access the summary and full report here:
<https://www.cancercareontario.ca/en/guidelines-advice/types-of-cancer/791>

- Section 1: Clinical Practice Guideline (ENDORSED)
- Section 2: Systematic Review
- Section 3: Guideline Development and External Review
- Section 4: Document Assessment and Review

December 16, 2022

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Evidence-based Series #7-16: Section 1

The Role of High Dose Rate Brachytherapy in the Palliation of Symptoms in Patients with Non-Small Cell Lung Cancer: A Clinical Practice Guideline

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These guideline recommendations have been ENDORSED, which means that the recommendations are still current and relevant for decision making. Please see Section 4 and Appendix A and B for a summary of updated evidence published between 2005 and 2022, and for details on how this Clinical Practice Guideline was ENDORSED.

Report Date: October 25, 2005

Guideline Question

1. Is there a role for high dose rate endobronchial brachytherapy (HDREB) in the palliation of respiratory symptoms in patients with non-small cell lung cancer?
2. If so, what is the optimal dose of HDREB in this setting?

Target Population

The recommendations apply to adult patients with symptomatic endobronchial disease in non-small cell lung cancer.

Recommendations

- For patients with previously untreated, symptomatic, endobronchial non-small cell lung cancer:
 - External beam radiation therapy (EBRT) alone is more effective for palliation of respiratory symptoms than HDREB alone.

June 2018: "Respiratory symptoms" is indicated in the research question and systematic review, and has been added here for clarification.

- The evidence does not provide conclusive results to suggest that routine use of HDREB and EBRT would provide improved symptom relief over EBRT alone.
June 2018: It is the opinion of the Lung Cancer Disease Site Group that HDREB and EBRT might be suitable in selected patients.
- *December 2022: the recommendation “For patients with complete collapse of the lung due to endobronchial obstruction, a surgical core out procedure may be needed before EBRT or EBRT with HDREB” is no longer endorsed because the updated evidence does not show a benefit of this procedure (See [Section 4](#) for details).*
- For patients previously treated by EBRT who are symptomatic with endobronchial obstruction due to recurrent disease, HDREB is recommended, providing that endobronchial brachytherapy is technically feasible.

Related Evidence Summary

- Evidence Summary Report #7-15: *The Role of Photodynamic Therapy (PDT) in Patients with Non-small Cell Lung Cancer.*

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