



## Evidence-Based Series 4-5

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

### **Primary Treatment for Locally Advanced Cervical Cancer: Concurrent Platinum-based Chemotherapy and Radiation**

*H. Lukka, H. Hirte, A. Fyles, G. Thomas, M. Fung Kee Fung, M. Johnston,  
and members of the Gynecology Cancer Disease Site Group*

An assessment conducted in November 2023 indicated that Evidence-Based Series (EBS) 4-5 **REQUIRES UPDATING**. It is still appropriate for this document to be available while this updating process unfolds. The PEBC has a formal and standardized process to ensure the currency of each document ([PEBC Assessment & Review Protocol](#))

(See Section 3: Document Review Summary and Tool for details.)

This Evidence-based Series (EBS) consists of 3 sections. You can access the summary and full report here:

<https://www.cancercareontario.ca/en/guidelines-advice/types-of-cancer/746>

Section 1: Summary

Section 2: Full Report

Section 3: Document Review Summary and Review Tool

**Report Date: June 7, 2016**

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## Guideline Report History

GUIDELINE VERSION	SYSTEMATIC REVIEW		PUBLICATIONS	NOTES and KEY CHANGES
	Search Dates	Data		
Original June 2004	1966 through June 2004	Full Report	Peer review publication Web publication	NA
Current June, 2016	June 2004 - January 2016	New data found in Section 3: Document Review Summary and Review Tool	Updated web publication	2004 recommendations <b>TO BE UPDATED</b>



## Evidence-Based Series 4-5: Section 1

# Primary Treatment for Locally Advanced Cervical Cancer: Concurrent Platinum-based Chemotherapy and Radiation

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**Original Report Date: June 2004**

*The 2004 guideline recommendations*

***REQUIRE AN UPDATE***

*This means that the recommendations require additional evidence but are relevant for decision making.*

ORIGINAL GUIDELINE: August 26, 2002

MOST RECENT LITERATURE SEARCH: June 2004

NEW EVIDENCE ADDED TO GUIDELINE REPORT: June 2004

New evidence found by update searches since completion of the original guideline is consistent with the original recommendations.

### **Guideline Question**

For women with cervical cancer in whom radiotherapy is considered appropriate, does the addition of concurrent platinum-based chemotherapy improve survival and quality of life with acceptable toxicity?

### **Target Population**

These recommendations apply to women with cervical cancer for whom primary treatment with radiotherapy is being considered:

- those with locally advanced cervical cancer,

- those with bulky clinical stage IB (>4 cm) cervical cancer, who are treated with radiotherapy,
- those with high-risk early-stage cervical cancer (node-positive or margin-positive), who will be treated with radiotherapy following hysterectomy.

### **Recommendations**

- Women with cervical cancer for whom treatment with radiotherapy is being considered (described above) should be offered concurrent cisplatin with their course of radiotherapy.
- There are no direct comparisons of different cisplatin regimens. Based on the review of the available toxicity data from the randomized controlled trials, the Disease Site Group felt that cisplatin should be given weekly (40 mg/m<sup>2</sup>).

### **Qualifying Statements**

- Despite this recommendation, other schedules and doses have been used; thus, there is no conclusive evidence that one dose and schedule is better than the other.
- There is insufficient evidence available to make recommendations on the addition of 5-fluorouracil to cisplatin during radiotherapy

### **Methods**

Entries to MEDLINE (1966 through June 2004), EMBASE (1980 through week 25, 2004), CANCELIT (1975 through October 2002), and Cochrane Library (2004, Issue 2) databases and abstracts published in the proceedings of the annual meetings of the American Society of Clinical Oncology from 1999 to 2004 were systematically searched for evidence relevant to this practice guideline report.

Evidence was selected and reviewed by members of the Practice Guidelines Initiative's Gynecology Cancer Disease Site Group and methodologists. This practice guideline report has been reviewed and approved by the Gynecology Cancer Disease Site Group, comprised of medical oncologists, radiation oncologists, a pathologist, an oncology nurse and patient representatives.

External review by Ontario practitioners is obtained for all practice guideline reports through a mailed survey. Final approval of the practice guideline report is obtained from the Practice Guidelines Coordinating Committee.

The Practice Guidelines Initiative has a formal standardized process to ensure the currency of each guideline report. This process consists of the periodic review and evaluation of the scientific literature and, where appropriate, integration of this literature with the original guideline information.

### **Key Evidence**

- Eight randomized controlled trials were eligible for the evidence review: six compared cisplatin-based chemotherapy plus radiotherapy to radiotherapy alone (in one of those trials, para-aortic radiotherapy was added to pelvic radiotherapy in the control arm) and two compared cisplatin-based chemotherapy plus radiotherapy to radiotherapy plus hydroxyurea.
- The guideline authors pooled survival data from published reports. Pooled survival rates detected a statistically significant effect in favour of cisplatin-based chemotherapy plus radiotherapy compared with radiotherapy alone or with hydroxyurea (relative risk of death, 0.74; 95% confidence interval, 0.64 to 0.86).

- The pooled relative risk of death among the six trials that enrolled only women with locally advanced cervical cancer was 0.78 (95% confidence interval, 0.67 to 0.90) in favour of cisplatin-based chemotherapy and radiotherapy.
- The pooled relative risk for the two trials in high-risk early-stage disease also demonstrated a significant benefit for the addition of cisplatin-based chemotherapy to radiotherapy (relative risk, 0.56; 95% confidence interval, 0.41 to 0.77).
- Rates of serious hematologic, gastrointestinal and genitourinary acute adverse effects are higher with cisplatin-based chemotherapy plus radiotherapy than with radiotherapy alone.

*For further information about this practice guideline, please contact the authors through the PEBC via:*

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