

## Antigen-specific active immunotherapy for ovarian cancer

NICE has developed the Cochrane Quality and Productivity topics to help the NHS identify practices that could be significantly reduced or stopped completely, releasing cash and/or resources without negatively affecting the quality of NHS care. Each topic has been derived from a Cochrane systematic review that has concluded that the evidence shows that the practice is harmful or ineffective and should not be used, or that there is insufficient evidence to support widespread use of the practice.

### **NICE summary of Cochrane review conclusions**

Antigen-specific active immunotherapy for ovarian cancer is not supported by sufficient good quality evidence. Consideration could be given to using it only within the context of a research or audit project.

Reducing or stopping antigen-specific active immunotherapy for ovarian cancer is likely to improve the quality of patient care by reducing exposure to unproven therapies and result in productivity savings

### **The 'Implications for practice' section of the Cochrane review stated:**

'At this point in time, there is no evidence of effective immunotherapy for ovarian cancer. Although promising immunological responses have been observed for most strategies evaluated, these do not coincide with clinical benefits for women with ovarian cancer. Furthermore, there are currently no immunological surrogate markers that correlate with clinical outcomes. Until evidence of true clinical effectiveness is available, immunotherapy should therefore not be offered as an alternative to standard therapy for primary or recurrent ovarian cancer.'

### **Details of Cochrane review**

#### Cochrane review title

**Antigen-specific active immunotherapy for ovarian cancer (Review)**

#### Citation

[Leffers N, Daemen T, Helfrich W, Boezen HM, Cohlen BJ, Melief CJM, Nijman HW. Antigen-specific active immunotherapy for ovarian cancer. Cochrane Database of Systematic Reviews 2014, Issue 9. Art. No.: CD007287. DOI:10.1002/14651858.CD007287.pub3](#)

#### When the review content was assessed as up to date

6 October 2013

#### QIPP category

Medicines management

#### Relevant codes

OPCS

ICD10

HRG

# Cochrane Quality and Productivity topics

X353

D391

MB05,  
02BX,  
In children  
PA36

**Programme budget:**  
Cancers and tumours

## Evidence

### Relevance to the NHS

A Cochrane review found no high-quality evidence that immunotherapy improves patients' survival. Response definitions showed substantial variation between trials, which makes comparison of trial results unreliable. Information on adverse events was frequently limited. The review looked at 55 studies (representing 3051 women with epithelial ovarian cancer); 43 were uncontrolled phase I or II studies. The most commonly tested approach was antibodies to the tumour antigen CA-125. Four large randomised controlled trials compared survival between women treated with the antibody, and women given placebo, but no difference was seen.

### Relevant NICE guidance and products

[Ovarian cancer: The recognition and initial management of ovarian cancer – NICE Clinical Guideline 122](#)

(Published April 2011)

No recommendations on the use of immunotherapy for ovarian cancer

[Bevacizumab in combination with paclitaxel and carboplatin for first-line treatment of advanced ovarian cancer – NICE technology appraisals TA284](#)

(Published May 2013)

No recommendations on the use of immunotherapy for ovarian cancer

[Quality standard for ovarian cancer – NICE quality standards QS18](#)

Published May 2012

## Potential productivity savings

### Estimate of current NHS use

There is no information available on the current use of antigen-specific active immunotherapy for ovarian cancer

### Level of productivity savings anticipated

Cannot be quantified.

# Cochrane Quality and Productivity topics

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In 2012 5582 new malignant neoplasms of the ovary were registered in England.

Any productivity savings depend on the current NHS use of immunotherapy and how much it costs compared to standard therapy – either first line or at relapse.

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## Type of saving

A mixture of cash savings and improved productivity is expected. Not using immunotherapy as an alternative to standard therapy is likely to reduce overall treatment costs

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## Any costs needed to achieve the savings

Change can be achieved with minimal additional resources

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## Other information

This saving is likely to benefit NHS provider trusts

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## Potential impact on quality of NHS care

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### Impact on clinical quality

Clinical quality will be improved by reducing the use of unproven therapies

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### Impact on patient safety

Improved patient safety due reducing the risk of adverse events is anticipated

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### Impact on patient and carer experience

Not anticipated to have any impact on patient and carer experience

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## Likely ease of implementation

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### Time taken to implement

Can be achieved quickly: 0–3 months

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### Healthcare sectors affected

Affects one department or team

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### Stakeholder support

Likely to achieve good buy-in from key influencers

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