



## Complete Summary

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### GUIDELINE TITLE

Epithelial ovarian cancer. A national clinical guideline.

### BIBLIOGRAPHIC SOURCE(S)

Scottish Intercollegiate Guidelines Network (SIGN). Epithelial ovarian cancer. A national clinical guideline. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network (SIGN); 2003 Oct. 36 p. (SIGN publication; no. 75). [182 references]

### GUIDELINE STATUS

This is the current release of the guideline.

Any amendments to the guideline in the interim period will be noted on [Scottish Intercollegiate Guidelines Network \(SIGN\) Web site](#).

**\*\* REGULATORY ALERT \*\***

### FDA WARNING/REGULATORY ALERT

**Note from the National Guideline Clearinghouse:** This guideline references a drug(s) for which important revised regulatory and/or warning information has been released.

- [July 31, 2008, Erythropoiesis Stimulating Agents \(ESAs\)](#): Amgen and the U.S. Food and Drug Administration (FDA) informed healthcare professionals of modifications to certain sections of the Boxed Warnings, Indications and Usage, and Dosage and Administration sections of prescribing information for Erythropoiesis Stimulating Agents (ESAs). The changes clarify the FDA-approved conditions for use of ESAs in patients with cancer and revise directions for dosing to state the hemoglobin level at which treatment with an ESA should be initiated.
- [February 28, 2008, Heparin Sodium Injection](#): The U.S. Food and Drug Administration (FDA) informed the public that Baxter Healthcare Corporation has voluntarily recalled all of their multi-dose and single-use vials of heparin sodium for injection and their heparin lock flush solutions. Alternate heparin manufacturers are expected to be able to increase heparin production sufficiently to supply the U.S. market. There have been reports of serious adverse events including allergic or hypersensitivity-type reactions, with symptoms of oral swelling, nausea, vomiting, sweating, shortness of breath, and cases of severe hypotension.
- [November 8, 2007 and January 3, 2008 Update, Erythropoiesis Stimulating Agents \(ESAs\)](#): The U.S. Food and Drug Administration (FDA) notified

healthcare professionals of revised boxed warnings and other safety-related product labeling changes for erythropoiesis-stimulating agents (ESAs) stating serious adverse events, such as tumor growth and shortened survival in patients with advanced cancer and chronic kidney failure.

## COMPLETE SUMMARY CONTENT

\*\* REGULATORY ALERT \*\*

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## SCOPE

### DISEASE/CONDITION(S)

Epithelial ovarian cancer

**Note:** The management of borderline tumours is not included within these recommendations.

### GUIDELINE CATEGORY

Diagnosis

Evaluation

Management

Screening

Treatment

### CLINICAL SPECIALTY

Colon and Rectal Surgery

Family Practice

Internal Medicine

Medical Genetics

Obstetrics and Gynecology

Oncology

Pathology

Radiology

Surgery

### INTENDED USERS

Advanced Practice Nurses  
Allied Health Personnel  
Clinical Laboratory Personnel  
Nurses  
Pharmacists  
Physician Assistants  
Physicians

## **GUIDELINE OBJECTIVE(S)**

To provide evidence-based recommendations for the screening, diagnosis and management of patients with epithelial ovarian cancer

## **TARGET POPULATION**

Women with epithelial ovarian cancer

## **INTERVENTIONS AND PRACTICES CONSIDERED**

### **Screening**

1. Family history
2. Genetic testing
3. Prophylactic oophorectomy
4. Counselling and support services

### **Diagnosis**

#### *Primary care*

1. Evaluation of signs and symptoms
2. Serum CA125

#### *Secondary care*

1. Ultrasound
2. Risk of malignancy index (RMI)
3. Computed tomography (CT) after ultrasound

### **Management**

#### *Surgical*

1. Colonic surgery
  - Preoperative bowel preparation
  - Stoma counseling and marking
2. Venous thromboembolic (VTE) prophylaxis with unfractionated heparin (UFH) or low molecular weight heparin (LMWH)
3. Preoperative serum CA125 levels, alpha fetoprotein (AFP), and human chorionic gonadotropin (hCG)

- Assessment of carcinoembryonic antigen (CEA) is considered but not recommended
4. Intraoperative frozen section assessment
  5. Comprehensive staging
  6. Fertility conserving surgery (unilateral salpingo-oophorectomy)
  7. Aggressive surgical cytoreduction
  8. Optimal cytoreduction
  9. Interval debulking surgery (IDS)
  10. Specialist nursing involvement

### *Chemotherapy*

1. Adjuvant chemotherapy in early stage disease (carboplatin)
2. Neoadjuvant chemotherapy
3. Platinum agents (cisplatin & carboplatin)
4. Taxanes (paclitaxel)
5. Cyclophosphamide
6. Anthracyclines (doxorubicin)
7. Topoisomerase inhibitors (topotecan)
8. Tamoxifen
9. Erythropoietin for chemotherapy-related anemia
10. Intraperitoneal chemotherapy
11. Patient education on adverse effects of chemotherapy
12. Administration of chemotherapy

### *Management of malignant bowel obstruction in relapsed disease*

1. Surgery
2. Non-surgical management
  - Pharmacological
    - Corticosteroids
    - Antiemetics
    - Antisecretory
    - Analgesics

### *Patient management*

1. Specialist palliative care
2. Patient education
3. Referral for counselling

## **MAJOR OUTCOMES CONSIDERED**

- Accuracy of diagnostic tests
- Overall survival rates
- Response rates
- Progression-free survival rates
- Disease-free survival rates
- Quality of life
- Adverse effects of treatment (e.g., toxicity)

## METHODOLOGY

### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Literature searches were initially conducted in Medline, Embase, Cinahl, Cancerlit, and the Cochrane Library using the year range 1993 to 2001. The literature search was updated with new material during the course of the guideline development process. Key Web sites on the Internet were also used, such as the National Guidelines Clearinghouse. These searches were supplemented by the reference lists of relevant papers and group members' own files. The Medline version of the main search strategies can be found on the [Scottish Intercollegiate Guidelines Network \(SIGN\) Web site](#).

### NUMBER OF SOURCE DOCUMENTS

Not stated

### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

#### Levels of Evidence

**1++:** High quality meta-analyses, systematic reviews of randomised controlled trials (RCTs), or RCTs with a very low risk of bias

**1+:** Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias

**1-:** Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias

**2++:** High quality systematic reviews of case control or cohort studies; high quality case control or cohort studies with a very low risk of confounding or bias and a high probability that the relationship is causal

**2+:** Well conducted case control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal

**2-:** Case control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal

**3:** Non-analytic studies, e.g. case reports, case series

#### 4: Expert opinion

### **METHODS USED TO ANALYZE THE EVIDENCE**

Review of Published Meta-Analyses  
Systematic Review

### **DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE**

The Scottish Intercollegiate Guidelines Network (SIGN) carries out comprehensive systematic reviews of the literature using customized search strategies applied to a number of electronic databases and the Internet. This is often an iterative process whereby the guideline development group will carry out a search for existing guidelines and systematic reviews in the first instance and, after the results of this search have been evaluated, the questions driving the search may be redefined and focused before proceeding to identify lower levels of evidence.

Once papers have been selected as potential sources of evidence, the methodology used in each study is assessed to ensure its validity. Scottish Intercollegiate Guidelines Network has developed checklists to aid guideline developers to critically evaluate the methodology of different types of study design. The result of this assessment will affect the level of evidence allocated to the paper, which in turn will influence the grade of recommendation it supports.

Additional details can be found in the companion document titled "An Introduction to the SIGN Methodology for the Development of Evidence-based Clinical Guidelines" (Edinburgh [UK]: Scottish Intercollegiate Guidelines Network. [SIGN publication; no. 50]). Available from the [SIGN Web site](#).

### **METHODS USED TO FORMULATE THE RECOMMENDATIONS**

Expert Consensus

### **DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS**

The process for synthesising the evidence base to form graded guideline recommendations is illustrated in the companion document titled "An Introduction to the SIGN Methodology for the Development of Evidence-based Clinical Guidelines." (Edinburgh [UK]: Scottish Intercollegiate Guidelines Network. [SIGN publication; no. 50], available from the [SIGN Web site](#).

Evidence tables should be compiled, summarizing all the validated studies identified from the systematic literature review relating to each key question. These evidence tables form an important part of the guideline development record and ensure that the basis of the guideline development group's recommendations is transparent.

In order to address how the guideline developer was able to arrive at their recommendations given the evidence they had to base them on, SIGN has introduced the concept of considered judgement.

Under the heading of considered judgement, guideline development groups are expected to summarise their view of the total body of evidence covered by each evidence table. This summary view is expected to cover the following aspects:

- Quantity, quality, and consistency of evidence
- Generalisability of study findings
- Applicability to the target population of the guideline
- Clinical impact (i.e., the extent of the impact on the target patient population, and the resources need to treat them.)

Guideline development groups are provided with a pro forma in which to record the main points from their considered judgement. Once they have considered these issues, the groups are asked to summarise their view of the evidence and assign a level of evidence to it, before going on to derive a graded recommendation.

The assignment of a level of evidence should involve all those on a particular guideline development group or subgroup involved with reviewing the evidence in relation to each specific question. The allocation of the associated grade of recommendation should involve participation of all members of the guideline development group. Where the guideline development group is unable to agree on a unanimous recommendation, the difference of opinion should be formally recorded and the reason for dissent noted.

The recommendation grading system is intended to place greater weight on the quality of the evidence supporting each recommendation, and to emphasise that the body of evidence should be considered as a whole, and not rely on a single study to support each recommendation. It is also intended to allow more weight to be given to recommendations supported by good quality observational studies where randomised controlled trials (RCTs) are not available for practical or ethical reasons. Through the considered judgement process guideline developers are also able to downgrade a recommendation where they think the evidence is not generalisable, not directly applicable to the target population, or for other reasons is perceived as being weaker than a simple evaluation of the methodology would suggest.

On occasion, there is an important practical point that the guideline developer may wish to emphasise but for which there is not, nor is their likely to be, any research evidence. This will typically be where some aspect of treatment is regarded as such sound clinical practice that nobody is likely to question it. These are marked in the guideline as "good practice points." It must be emphasized that these are not an alternative to evidence-based recommendations, and should only be used where there is no alternative means of highlighting the issue.

## **RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS**

The grade of recommendation relates to the strength of the evidence on which the recommendation is based. It does not reflect the clinical importance of the recommendation.

**A:** At least one meta-analysis, systematic review of randomised controlled trials (RCTs), or RCT rated as 1++ and directly applicable to the target population; *or*

A body of evidence consisting principally of studies rated as 1+, directly applicable to the target population, and demonstrating overall consistency of results

**B:** A body of evidence including studies rated as 2++, directly applicable to the target population, and demonstrating overall consistency of results; *or*

Extrapolated evidence from studies rated as 1++ or 1+

**C:** A body of evidence including studies rated as 2+, directly applicable to the target population and demonstrating overall consistency of results; *or*

Extrapolated evidence from studies rated as 2++

**D:** Evidence level 3 or 4; *or*

Extrapolated evidence from studies rated as 2+

### **COST ANALYSIS**

A formal cost analysis was not performed and published cost analyses were not reviewed.

### **METHOD OF GUIDELINE VALIDATION**

External Peer Review  
Internal Peer Review

### **DESCRIPTION OF METHOD OF GUIDELINE VALIDATION**

The national open meeting is the main consultative phase of Scottish Intercollegiate Guidelines Network (SIGN) guideline development, at which the guideline development group presents their draft recommendations for the first time. The national open meeting for this guideline was held in June 2002 and was attended by representatives of all key specialties relevant to the guideline. The draft guideline was also available on the SIGN website for a limited period at this stage to allow those unable to attend the meeting to contribute to the development of the guideline.

Four general practitioners were also invited to review the draft guideline but did not submit any comments.

As a final quality control check, the guideline is reviewed by an Editorial Group comprising the relevant specialty representatives on SIGN Council to ensure that the peer reviewers' comments have been addressed adequately and that any risk of bias in the guideline development process as a whole has been minimised.

## **RECOMMENDATIONS**

### **MAJOR RECOMMENDATIONS**

*Note from the Scottish Intercollegiate Guidelines Network (SIGN) and National Guideline Clearinghouse (NGC): In addition to these evidence-based recommendations, the guideline development group also identifies points of best clinical practice in the original guideline document.*

The strength of recommendation grading (A-D) and level of evidence (1++, 1+, 1-, 2++, 2+, 2-, 3, 4) are defined at the end of the "Major Recommendations" field.

## **Screening**

**D** - Screening for ovarian cancer in high risk groups should only be offered in the context of a research study designed to gather data on:

- sensitivity and specificity of the screening tool
- The International Federation of Gynaecology and Obstetrics (FIGO) stages of cancers detected through screening
- residual risk of primary peritoneal cancer following prophylactic oophorectomy

**D** - Screening programmes for women at increased risk of ovarian cancer should include mechanisms for providing emotional and psychological support.

**C** - Women with genetic mutations of BRCA1 or BRCA2 genes should be counselled regarding prophylactic oophorectomy and removal of Fallopian tubes at a relevant time of their life.

## **Diagnosis**

**D** - Women with a pelvic mass should be referred to gynaecology irrespective of the CA125 test result.

**C** - The risk of malignancy index (RMI) scoring system is the method of choice for predicting whether or not an ovarian mass is likely to be malignant.

**C** - Women with a risk of malignancy index score >200 should be referred to a centre with experience in ovarian cancer surgery.

## **Surgery**

**C** - Preoperative bowel preparation in ovarian cancer patients should be undertaken where clinical findings and imaging reveal that advanced disease with bowel involvement is present.

**B** - Patients for whom preoperative bowel preparation is indicated should see a trained stoma nurse for counselling and potential stoma site marking.

**D** - Serum CA125 levels are useful in predicting disease bulk and should be assayed preoperatively in women with pelvic masses.

**D** - Routine preoperative carcinoembryonic antigen (CEA) estimation should not be performed in patients with ovarian cancer.

**D** - To minimise the need for a second operative staging procedure, intraoperative frozen section assessment can be used to diagnose malignancy and to exclude metastatic disease.

*In Advanced Disease*

**C** - If aggressive cytoreduction is not possible then optimal cytoreduction is the recommended surgical procedure if performance status allows this to take place.

**D** - Patients with stage III disease should be operated on by a gynaecological oncologist rather than a general gynaecologist or general surgeon.

**C** - Interval debulking surgery is recommended, if performance status allows, where there is evidence of response to chemotherapy as determined by CA125 and imaging.

**Chemotherapy**

**B** - Carboplatin can be offered to all early stage epithelial ovarian cancer patients.

*In Advanced Disease*

**A** - First line chemotherapy treatment of epithelial ovarian cancer should include a platinum agent either in combination or as a single agent, unless specifically contraindicated.

**A** - Carboplatin is the platinum drug of choice in both single and combination therapy.

**A** - Paclitaxel is recommended in combination therapy with platinum in the first line postsurgery treatment of epithelial ovarian cancer where the potential benefits justify the toxicity of the therapy.

**A** - Patients who choose less toxic therapy or who are unfit for taxanes should be offered single agent carboplatin.

**A** - Cyclophosphamide is not recommended in the first line chemotherapy treatment of epithelial ovarian cancer.

**A** - The use of anthracyclines in first line chemotherapy treatment of epithelial ovarian cancer is not recommended outside randomised controlled trials (RCTs).

*In Relapsed Disease*

**B** - Chemotherapy for recurrent ovarian cancer should be regarded as palliative in intent and should be reserved for symptomatic recurrence of disease.

**B** - Symptomatic platinum-sensitive cancer recurrence can be treated with further platinum and paclitaxel.

**C** - Tamoxifen should be considered in patients for whom chemotherapy is not appropriate.

**B** - If erythropoietin is used to treat anaemia it should only be when the haemoglobin concentration is  $\leq 10$  g/dL and the dose should not exceed 450 units/kg/week.

**D** - Staff should be experienced, trained in the safe administration of chemotherapy, and involved in ongoing continuing professional development (CPD) and reappraisal.

**D** - Hospital-based administration of chemotherapy should take place during the working day in designated areas equipped to deal with any medical emergencies.

**D** - Women should be given accurate information on their likely response to chemotherapy, including adverse effects, so that they can make an informed decision about whether or not to proceed with treatment.

**D** - The impact of chemotherapy toxicities on patients' quality of life must be balanced against their anticipated response to treatment.

**C** - Clinical trials should have appropriate inclusion criteria and should incorporate recognised standard treatment.

### **Management of Malignant Bowel Obstruction**

**C** - Surgery for malignant bowel obstruction in patients with advanced ovarian cancer must be justified on the basis of achieving a significant benefit.

**C** - Symptoms of bowel obstruction can be relieved by using the following drug categories either alone or in combination:

- antiemetic
- antisecretory
- analgesic
- corticosteroids

### **Specialist Palliative Care**

**B** - Patients with advanced ovarian cancer require a coordinated, multiprofessional approach with access to a specialist palliative care team.

**D** - Patients with persistent poorly controlled symptoms should be referred to specialist palliative care.

### **Information for Patients**

**C** - Patients should be offered verbal and written information throughout their journey of care and should be made aware of the support mechanisms that are in place and how to access them.

**C** - Structured emotional support should be available to all patients and carers.

**Definitions:**

**Grades of Recommendation**

**A:** At least one meta-analysis, systematic review of randomised controlled trials (RCTs), or RCT rated as 1++ and directly applicable to the target population; *or*

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Extrapolated evidence from studies rated as 2++

**D:** Evidence level 3 or 4; *or*

Extrapolated evidence from studies rated as 2+

**Levels of Evidence**

**1++:** High quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias

**1+:** Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias

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**3:** Non-analytic studies, e.g. case reports, case series

**4:** Expert opinion

## CLINICAL ALGORITHM(S)

None provided

## EVIDENCE SUPPORTING THE RECOMMENDATIONS

### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

## BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

### POTENTIAL BENEFITS

- Improved screening, diagnosis and management of epithelial ovarian cancer
- Reduced surgical complications
- Improved response to treatment
- Improved survival (overall, progression-free, and disease-free)
- Improved patient quality of life including:
  - Better symptom control
  - Structured emotional support

### POTENTIAL HARMS

- False positive results from screening
- Surgical complications
- Side effects associated with chemotherapy including:
  - Anaemia
  - Deterioration in quality of life

## CONTRAINDICATIONS

### CONTRAINDICATIONS

#### **Contraindications to surgery for malignant bowel obstruction in patients with advanced ovarian cancer**

Absolute contraindications:

- Patient refusal
- Previous abdominal surgery which showed diffuse metastatic cancer
- Involvement of proximal stomach
- Intra-abdominal carcinomatosis demonstrated radiologically with a contrast study revealing a severe motility problem
- Diffuse palpable intra-abdominal masses (having excluded faecal masses)
- Massive ascites which rapidly recurs after drainage

Relative contraindications:

- Non-symptomatic extensive extra-abdominal malignant disease (e.g., widespread metastases and pleural effusion)
- Poor general performance status
- Poor nutritional status (e.g., marked weight loss/cachexia, marked hypoalbuminaemia, and low lymphocyte count)
- Severe cachexia
- Small bowel obstruction
- Previous radiotherapy of the abdomen or pelvis

## QUALIFYING STATEMENTS

### QUALIFYING STATEMENTS

This guideline is not intended to be construed or to serve as a standard of medical care. Standards of care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge and technology advance and patterns of care evolve. These parameters of practice should be considered guidelines only. Adherence to them will not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care aimed at the same results. The ultimate judgement regarding a particular clinical procedure or treatment plan must be made by the doctor, following discussion of the options with the patient, in light of the diagnostic and treatment choices available. It is advised however that significant departures from the national guideline or any local guidelines derived from it should be fully documented in the patient's case notes at the time the relevant decision is taken.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

Implementation of national clinical guidelines is the responsibility of local National Health System (NHS) organizations and is an essential part of clinical governance. It is acknowledged that not every guideline can be implemented immediately on publication, but mechanisms should be in place to ensure that the care provided is reviewed against the guideline recommendations and the reasons for any differences assessed and, where appropriate, addressed. These discussions should involve both clinical staff and management. Local arrangements may then be made to implement the national guideline in individual hospitals, units and practices, and to monitor compliance. This may be done by a variety of means including patient-specific reminders, continuing education and training, and clinical audit.

### IMPLEMENTATION TOOLS

Patient Resources  
Quick Reference Guides/Physician Guides

For information about [availability](#), see the "Availability of Companion Documents" and "Patient Resources" fields below.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Living with Illness

### IOM DOMAIN

Effectiveness  
Patient-centeredness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

Scottish Intercollegiate Guidelines Network (SIGN). Epithelial ovarian cancer. A national clinical guideline. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network (SIGN); 2003 Oct. 36 p. (SIGN publication; no. 75). [182 references]

### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

2003 Oct

### GUIDELINE DEVELOPER(S)

Scottish Intercollegiate Guidelines Network - National Government Agency [Non-U.S.]

### SOURCE(S) OF FUNDING

Scottish Executive Health Department

### GUIDELINE COMMITTEE

Not stated

### COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

*Guideline Development Group:* Dr Nadeem Siddiqui (*Chairman*), Consultant Gynaecologist and Oncologist, Stobhill Hospital, Glasgow; Dr Chris Hardwick (*Secretary*), Specialist Registrar in Obstetrics and Gynaecology, North Glasgow Hospitals National Health System (NHS) Trust; Dr Ian Aitken, General Practitioner, Glasgow; Mr Andrew Anderson, National Coordinator, Maggie's

Centres, Western General Hospital, Edinburgh; Mr Roger Black, Head, Scottish Cancer Intelligence Unit, Information and Statistics Division (ISD), Common Services Agency, Edinburgh; Ms Sandra Bredin, Clinical Nurse Specialist, Stobhill Hospital, Glasgow; Mrs Anne Coote, Patient Helpline Coordinator, Argyll and Clyde Health Council, Paisley; Mrs Inez Crow, District Nurse, Falkirk; Ms Linda Davidson, Staff Nurse, Crosshouse Hospital, Kilmarnock; Dr Heather Deans, Consultant Radiologist, Aberdeen Royal Infirmary; Dr Sonia Devereux, General Practitioner, Forfar; Mr Craig Eriksen, Consultant Colorectal Surgeon, Perth Royal Infirmary; Dr Marie Fallon, Senior Lecturer in Palliative Medicine, Western General Hospital, Edinburgh; Dr Hani Gabra, Consultant in Medical Oncology, Western General Hospital, Edinburgh; Professor David Hole, Professor of Epidemiology and biostatistics, West of Scotland Cancer Surveillance Unit, Department of Public Health, University of Glasgow; Dr Brian Magowan, Consultant Gynaecologist, Borders General Hospital, Melrose; Mrs Jean McAllister, Principal Biochemist, North Glasgow University Hospitals NHS Trust; Dr David W. M. Millan, Consultant in Pathology, Western Infirmary, Glasgow; Miss Kath Nattress, Macmillan Clinical Nurse Specialist, Western General Hospital, Edinburgh; Dr David Parkin, Consultant Gynaecological Oncologist, Aberdeen Royal Infirmary; Mr Mark Parsons, Principal Clinical Pharmacist, Ninewells Hospital, Dundee; Dr Denny Phillips, Consultant Gynaecologist, Perth Royal Infirmary; Dr Nicholas Reed, Clinical Director, Beatson Oncology Centre, Glasgow; Mr Duncan Service, Information Services, Scottish Intercollegiate Guidelines Network; Dr Sally Stearns, Health Economist, Health Economics Research Unit, University of Aberdeen; Professor Michael Steele, Professor in Medical Science, University of St. Andrews; Mrs Diane Stirling, Macmillan Clinical Nurse Specialist, Western General Hospital, Edinburgh; Ms Joanne Topalian, Programme Manager, SIGN; Dr Sara Twaddle, Health Economist, North Glasgow Hospital NHS Trust

## **FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST**

All members of the Scottish Intercollegiate Guidelines Network (SIGN) guideline development groups are required to complete a declaration of interests, both personal and non-personal. A personal interest involves payment to the individual concerned (e.g., consultancies or other fee-paid work commissioned by or shareholdings in the pharmaceutical industry); a non-personal interest involves payment which benefits any group, unit or department for which the individual is responsible (e.g., endowed fellowships or other pharmaceutical industry support). Details of the declarations of interest of any guideline development group member(s) are available from the Scottish Intercollegiate Guidelines Network executive.

## **GUIDELINE STATUS**

This is the current release of the guideline.

Any amendments to the guideline in the interim period will be noted on [Scottish Intercollegiate Guidelines Network \(SIGN\) Web site](#).

## **GUIDELINE AVAILABILITY**

Electronic copies: Available in Portable Document Format (PDF) from the [Scottish Intercollegiate Guidelines Network \(SIGN\) Web site](#).

## AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Quick reference guide: (insert title), Scottish Intercollegiate Guidelines Network, 2003. 2 p. Available in Portable Document Format (PDF) from the [Scottish Intercollegiate Guidelines Network \(SIGN\) Web site](#).
- SIGN 50: A guideline developer's handbook. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network. (SIGN publication; no. 50). Available from the [SIGN Web site](#).
- Appraising the quality of clinical guidelines. The SIGN guide to the AGREE (Appraisal of Guidelines Research & Evaluation) guideline appraisal instrument. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network, 2001. Available from the [SIGN Web site](#).

## PATIENT RESOURCES

The following is available:

- Information for patients. In: Epithelial ovarian cancer. A national clinical guideline. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network (SIGN); 2003 Oct. 36 p. (SIGN publication; no. 75).

Electronic copies: Available in Portable Document Format (PDF) from the [Scottish Intercollegiate Guidelines Network \(SIGN\) Web site](#).

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

## NGC STATUS

This NGC summary was completed by ECRI on May 3, 2004. The information was verified by the guideline developer on July 15, 2004. This summary was updated by ECRI on January 29, 2007, following the U.S. Food and Drug Administration advisory on erythropoiesis stimulating agents. This summary was updated by ECRI Institute on June 22, 2007 following the U.S. Food and Drug Administration (FDA) advisory on heparin sodium injection. This summary was updated by ECRI Institute on July 9, 2007, following the FDA advisory on erythropoiesis stimulating agents. This summary was updated by ECRI Institute on March 13, 2008 following the updated FDA advisory on heparin sodium injection. This summary was updated by ECRI Institute on March 21, 2008 following the FDA advisory on Erythropoiesis Stimulating Agents. This summary was updated by ECRI Institute on August 15, 2008 following the U.S. Food and Drug Administration advisory on Erythropoiesis Stimulating Agents (ESAs).

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