

# 4<sup>a</sup> Jornada de Actualización en Cáncer Ginecológico

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## Cirugía en el cáncer de endometrio avanzado – metastásico. ¿Cuál es su evidencia?

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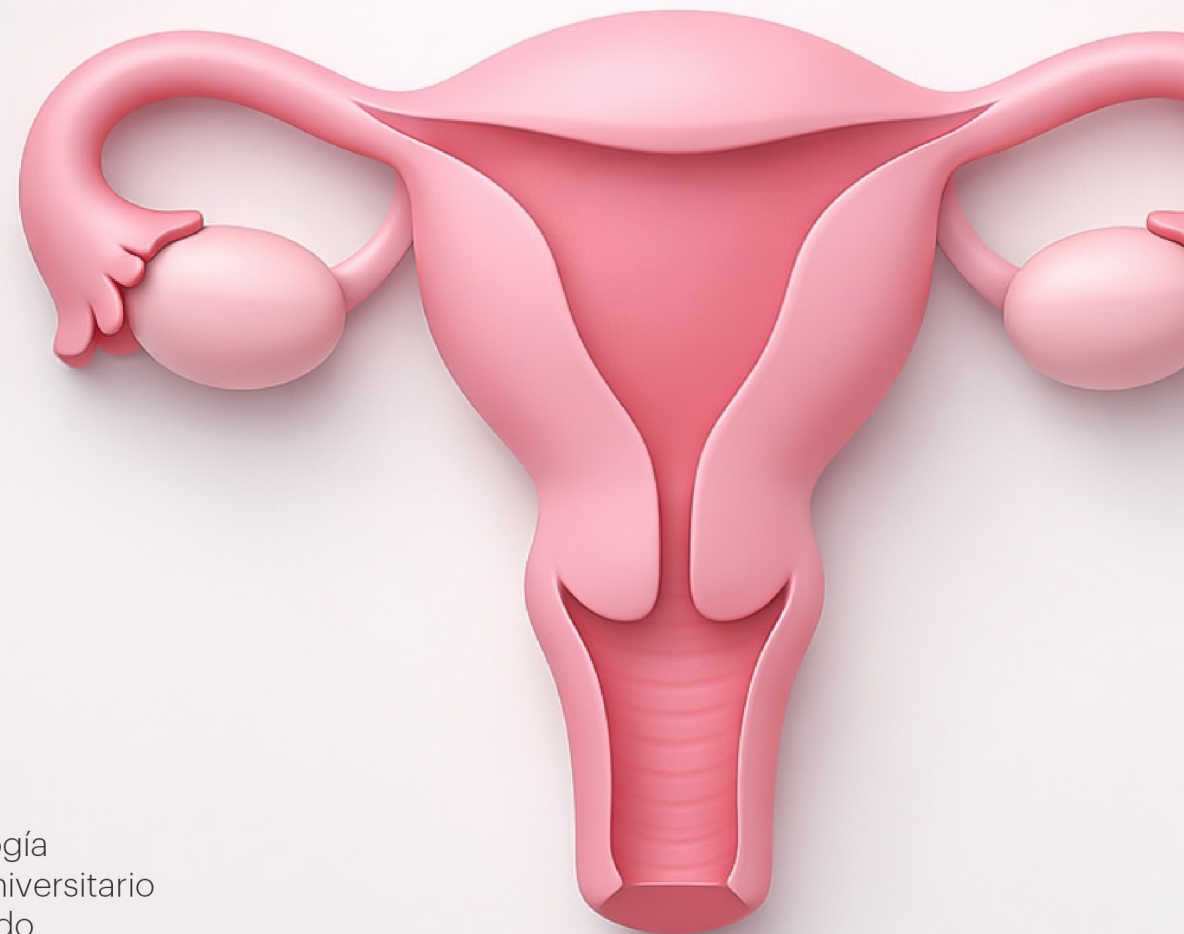
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## ESQUEMA

- Cirugía en cáncer de endometrio inicial
  - ¿Cáncer de endometrio inicial?
  - Recomendación
    - Estudio ganglionar
      - Linfadenectomía
      - Ganglio centinela
- Cirugía en cáncer de endometrio avanzado
- Cirugía en recidiva de cáncer de endometrio
- Cirugía en cáncer de endometrio metastásico
- Comentarios finales
- Guías clínicas 2025
  - SEOM
  - ESGO-ESTRO-ESP
  - SGO

# **Cirugía en cáncer de endometrio inicial**



| FIGO 2023 | Description   |
|-----------|---|
| IA        | Disease limited to the endometrium OR non-aggressive histological type, i.e. low-grade endometrioid, with invasion of less than half of myometrium with no or focal lymphovascular space involvement (LVSI) OR good prognosis disease |
| IA1       | Non-aggressive histological type limited to an endometrial polyp OR confined to the endometrium   |
| IA2       | Non-aggressive histological types involving less than half of the myometrium with no or focal LVSI  |
| IA3       | Low-grade endometrioid carcinomas limited to the uterus and ovary   |
| IB        | Non-aggressive histological types with invasion of half or more of the myometrium, and with no or focal LVSI  |
| IC        | Aggressive histological types limited to a polyp or confined to the endometrium   |
| IIA       | Invasion of the cervical stroma of non-aggressive histological types  |
| IIB       | Substantial LVSI of non-aggressive histological types   |
| IIC       | Aggressive histological types with any myometrial involvement   |
| IIIA      | Invasion of uterine serosa, adnexa, or both by direct extension or metastasis   |
| IIIA1     | Spread to ovary or fallopian tube (except when meeting stage IA3 criteria)  |
| IIIA2     | Involvement of uterine subserosa or spread through the uterine serosa   |
| IIIB      | Metastasis or direct spread to the vagina and/or to the parametria or pelvic peritoneum   |
| IIIB1     | Metastasis or direct spread to the vagina and/or the parametria   |
| IIIB2     | Metastasis to the pelvic peritoneum   |
| IIIC      | Metastasis to the pelvic or para-aortic lymph nodes or both   |
| IIIC1     | Metastasis to the pelvic lymph nodes  |
| IIIC1i    | Micrometastasis   |
| IIIC1ii   | Macrometastasis   |
| IIIC2     | Metastasis to para-aortic lymph nodes up to the renal vessels, with or without metastasis to the pelvic lymph nodes   |
| IIIC2i    | Micrometastasis   |
| IIIC2ii   | Macrometastasis   |
| IVA       | Invasion of the bladder mucosa and/or the intestinal/bowel mucosa   |
| IVB       | Abdominal peritoneal metastasis beyond the pelvis   |
| IVC       | Distant metastasis, including metastasis to any extra- or intra-abdominal lymph nodes above the renal vessels, lungs, liver, brain, or bone   |

# Cáncer de endometrio inicial

- La cirugía es crucial en el cáncer de endometrio inicial.
- Objetivo: Resección de la enfermedad
  - Necesidad de tratamientos adyuvantes.
- Histerectomía total y doble anexectomía.
- Evaluación linfática
- Omentectomía en carcinoma seroso, carcinosarcoma o tumores desdiferenciados.

# Estudio ganglionar en cáncer de endometrio inicial

- Biopsia selectiva de ganglio centinela en todos los casos iniciales.
  - Mayor detección de ganglios metastásicos.
- ¿Es necesaria la linfadenectomía para-aórtica en caso de ganglios pélvicos metastásicos?
- Beneficio dudoso de linfadenectomía sistemática.
  - ECLAT: Beneficio de linfadenectomía pélvica y para-aórtica sistemática.
  - SEPAL-3: Diferencia entre linfadenectomía pélvica o pélvica y para-aórtica.

# **Cirugía en cáncer de endometrio avanzado**



# Cirugía en estadios III-IV

- Citoreducción sólo si resección completa.
- Meta-análisis 2021
  - 34 estudios
  - Estadio III-IV
    - Resecabilidad
      - R2 (n=3), R 1 (n=27), R0 (n=4+14)
  - Impacto en supervivencia

## Primary cytoreductive surgery for advanced stage endometrial cancer: a systematic review and meta-analysis



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### Introduction

Endometrial cancer is the fourth most common cancer among women in the United States with more than 60,000 new diagnoses annually.<sup>1</sup> About 80% to 90% of cases are diagnosed during the early stages for which the prognosis,

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**OBJECTIVE:** Endometrial cancer uncommonly presents at an advanced stage and little prospective evidence exists to guide the management thereof. We aimed to summarize the evidence about primary cytoreductive surgery in the treatment of advanced stage endometrial cancer.

**DATA SOURCES:** MEDLINE, Embase, and Scopus databases were searched from inception to September 11, 2020, using search terms representing the themes "endometrial cancer," "advanced stage," and "primary cytoreductive surgery."

**STUDY ELIGIBILITY CRITERIA:** We included full-text, English reports that included  $\geq 10$  patients undergoing primary cytoreductive surgery for advanced stage endometrial cancer and that reported on the outcomes of primary cytoreductive surgery and survival rates based on the residual disease burden.

**METHODS:** Two reviewers independently screened the studies and with disagreements between the reviewers resolved by a third reviewer. Data were extracted using a standardized form. The percentage of cases reaching maximal (no gross residual disease) and optimal ( $< 1$  cm or  $< 2$  cm residual disease) cytoreduction were assessed by summing binomial proportions, and the association with survival was assessed using an inverse variance-weighted meta-analysis of logarithmic hazard ratios.

**RESULTS:** From 1219 unique records identified, 34 studies were selected for inclusion. Studies consisted of single or multi-institutional cohorts of patients collected over a period of 6 to 24 years and included various mixes of histologies (endometrioid, serous, clear cell, and carcinosarcoma) and disease stages (III or IV). In a meta-analysis of the extent of residual disease after primary cytoreductive surgery, we found that 52.1% of cases reached no gross residual disease status ( $n=18$  studies; 1329 patients) and 75% reached  $< 1$  cm residual disease status ( $n=27$  studies; 2343 patients). The proportion of cytoreduction for both thresholds was lower for studies of stage IV vs stage III to IV disease (41.4% vs 69.8% for no gross residual disease; 63.2% vs 82.2% for  $< 1$  cm residual disease) but did not vary notably by histology. In a meta-analysis of the reported hazard ratios, submaximal (any gross residual disease vs no gross residual disease) and suboptimal ( $\geq 1$  cm vs  $< 1$  cm) cytoreduction thresholds were associated with worse progression-free survival (submaximal hazard ratio, 2.16; 95% confidence interval, 1.45–3.21;  $I^2=68\%$ ; suboptimal hazard ratio, 2.55; 95% confidence interval, 1.93–3.37;  $I^2=63\%$ ) and overall survival rates (submaximal hazard ratio, 2.57; 95% confidence interval, 2.13–3.10;  $I^2=1\%$ ; suboptimal hazard ratio, 2.62; 95% confidence interval, 2.20–3.11;  $I^2=15\%$ ). Sensitivity analyses limited to high-quality studies demonstrated consistent results.

**CONCLUSION:** Among cases of advanced stage endometrial cancer undergoing primary cytoreductive surgery, a significant proportion of patients are left with residual disease, which is associated with worse survival outcomes. Further investigations about the roles of neoadjuvant chemotherapy and primary cytoreductive surgery in prospective trials is warranted in this population.

**Key words:** advanced stage, endometrial cancer, primary cytoreductive surgery, stage IV, survival, uterine cancer

# Resecabilidad

**TABLE 3**  
**Meta-analysis of reported proportions of maximal and optimal cytoreduction in primary cytoreductive surgery for advanced stage endometrial cancer**

| Group                             | No gross residual disease |         |           | Optimal to <1 cm |         |           |
|-----------------------------------|---------------------------|---------|-----------|------------------|---------|-----------|
|                                   | Number of studies         | N cases | % optimal | No. Of studies   | N cases | % optimal |
| Overall                           | 18                        | 1329    | 52.1      | 27               | 2343    | 75.0      |
| Included Stages                   |                           |         |           |                  |         |           |
| Stage III–IV                      | 4                         | 464     | 69.8      | 9                | 1352    | 82.2      |
| Stage IIIC–IV                     | 4                         | 228     | 46.1      | 3                | 193     | 64.2      |
| Stage IV                          | 10                        | 637     | 41.4      | 18               | 894     | 63.2      |
| Included histology                |                           |         |           |                  |         |           |
| Endometrial <sup>a</sup> incl. CS | 2                         | 416     | 49.5      | 2                | 306     | 67.0      |
| Endometrial <sup>a</sup> excl. CS | 5                         | 274     | 55.5      | 11               | 815     | 80.4      |
| Serous or clear cell              | 9                         | 582     | 56.0      | 13               | 710     | 72.0      |
| Carcinosarcoma                    | 1                         | 44      | 56.8      | 2                | 266     | 76.7      |
| Study location                    |                           |         |           |                  |         |           |
| United States                     | 14                        | 917     | 51.9      | 17               | 1302    | 75.7      |
| International                     | 4                         | 412     | 52.7      | 10               | 1041    | 74.3      |
| Sensitivity analyses              |                           |         |           |                  |         |           |
| No overlap <sup>b</sup>           | 15                        | 1208    | 54.2      | 23               | 2204    | 73.7      |
| High-quality studies <sup>c</sup> | 7                         | 737     | 53.2      | 12               | 1590    | 75.2      |

CS, carcinosarcoma; *excl.*, excluding; *incl.*, including.

<sup>a</sup> Includes studies reporting collectively on endometrioid, serous, and clear cell carcinomas, with or without carcinosarcoma; <sup>b</sup> Excludes studies with potentially overlapping patient cohorts that were included (detailed in [Supplementary Table 1](#)); <sup>c</sup> Excludes studies labeled scoring <8/8 on Newcastle-Ottawa scale, as shown in [Supplemental Figure 1](#).

Albright. Primary cytoreductive surgery for advanced stage endometrial cancer. *Am J Obstet Gynecol* 2021.

# Impacto en la supervivencia

**TABLE 4**  
**Meta-analysis summary estimates for association of suboptimal ( $\geq 1$  cm) primary cytoreduction with increased hazard of progression or death in studies of advanced stage endometrial cancer**

| Group                                       | Progression-free survival |                  |           | Overall survival  |                  |           |
|---|---------------------------|------------------|-----------|-------------------|------------------|-----------|
|   | Number of studies         | HR (95% CI)      | $I^2$ (%) | Number of studies | HR (95% CI)      | $I^2$ (%) |
| Overall                                     | 12                        | 2.55 (1.93–3.37) | 63        | 18                | 2.62 (2.20–3.11) | 15        |
| Included stages                             |                           |                  |           |                   |                  |           |
| Stage III–IV                                | 8                         | 2.82 (2.03–3.92) | 60        | 7                 | 2.43 (1.79–3.29) | 33        |
| Stage IIIC–IV                               | 2                         | 1.72 (1.24–2.38) | 28        | 2                 | 2.47 (1.51–4.05) | 14        |
| Stage IV                                    | 3                         | 1.98 (0.74–5.30) | 67        | 10                | 2.83 (2.26–3.55) | 0         |
| Included histology                          |                           |                  |           |                   |                  |           |
| Endometrial with or without CS <sup>a</sup> | 4                         | 4.07 (2.29–7.24) | 49        | 8                 | 2.81 (2.25–3.51) | 0         |
| Serous                                      | 6                         | 2.09 (1.59–2.73) | 46        | 8                 | 2.70 (1.93–3.79) | 46        |
| Study location                              |                           |                  |           |                   |                  |           |
| United States                               | 6                         | 2.86 (1.90–4.32) | 74        | 10                | 3.07 (2.29–4.12) | 44        |
| International                               | 6                         | 2.24 (1.49–3.35) | 49        | 8                 | 2.28 (1.81–2.89) | 0         |
| Sensitivity analyses                        |                           |                  |           |                   |                  |           |
| Adjusted HRs only                           | 8                         | 2.74 (1.85–4.08) | 64        | 7                 | 2.68 (1.98–3.63) | 14        |
| No overlap <sup>b</sup>                     | 10                        | 2.27 (1.75–2.95) | 57        | 15                | 2.41 (2.06–2.83) | 0         |
| High-quality studies <sup>c</sup>           | 10                        | 2.61 (1.85–3.68) | 70        | 11                | 2.79 (2.24–3.48) | 5         |

CI, confidence interval; CS, carcinosarcoma; HR, hazard ratio;  $I^2$ , Higgins measure of study heterogeneity.

<sup>a</sup> Includes studies reporting collectively on endometrioid, serous, and clear cell carcinomas, with or without carcinosarcoma; <sup>b</sup> Excludes studies with potentially overlapping patient cohorts (Supplemental Table 1); <sup>c</sup> Excludes studies scoring  $< 8/8$  points on Newcastle-Ottawa scale (Supplemental Figure 1).

Albright. Primary cytoreductive surgery for advanced stage endometrial cancer. *Am J Obstet Gynecol* 2021.

## Cirugía en estadios III-IV

- No evidencia de beneficio en linfadenectomía sistemática
- Resecar adenopatías voluminosas.
- Linfadenectomía Pa-Ao no mejoría estadísticamente significativa en supervivencia hasta la progresión ni global.



### Impact of paraaortic lymphadenectomy for endometrial cancer with positive pelvic lymph nodes: A Korean Radiation Oncology Group study (KROG 13-17)

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#### Abstract

**Aim:** We investigated the role of paraaortic lymph node dissection (PALND) in patients with stage IIIc1 endometrial carcinoma after surgery followed by adjuvant radiotherapy (RT) alone or chemoradiotherapy (CRT).

**Methods:** We performed a subgroup analysis in 151 patients treated with adjuvant pelvic RT. Paraaortic-recurrence free survival, disease-free survival (DFS) and overall survival (OS) were analyzed.

**Results:** In adjuvant RT alone, PALND was significantly related to reduced risk of paraaortic recurrence (0% vs. 17.1%) and distant metastasis (4.5% vs. 19.5%) compared with the no PALND group. PALND affected 5-year DFS (90.2% vs. 58.9%,  $p = 0.016$ ) and OS (100% vs.

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## SURGERY FOR CLINICALLY OVERT STAGE III & IV DISEASE

Full pre-operative staging and discussion  
by specialist multidisciplinary team

Complete macroscopic  
resection feasible with  
acceptable morbidity and  
quality of life?

Yes

Upfront surgery in a specialized centre [IV, B]:

- Complete macroscopic resection
- No systematic lymphadenectomy indicated, only removal of suspicious lymph nodes

No

Due to local extent  
of the disease

Refer to algorithm #7

Due to unresectable  
disseminated stage III, IV disease

Refer to algorithm #8

## Enfermedad irresecable

- Radioterapia definitiva o quimioterapia primaria
  - Cirugía si buena respuesta a Qt.

# **Cirugía en la recidiva de cáncer de endometrio**

# Recidiva loco regional en pacientes sin Rt previa

- Rt externa con o sin braquiterapia de elección.
- Recidiva de cúpula vaginal aislada posibilidad de resección vaginal previa a la braquiterapia.

## • PORTEC

- Impacto de la recidiva
  - Tratamiento previo
  - Localización
  - Tratamiento de la recidiva

## Survival after relapse in patients with endometrial cancer: results from a randomized trial☆

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## Abstract

**Objective.** The aim of this study was to determine the rates of local control and survival after relapse in patients with stage I endometrial cancer treated in the multicenter randomized PORTEC trial.

**Methods.** The PORTEC trial included 715 patients with stage 1 endometrial cancer, either grade 1 or 2 with deep (>50%) myometrial invasion or grade 2 or 3 with <50% invasion. In all cases an abdominal hysterectomy was performed, without lymphadenectomy. After surgery, patients were randomized to receive pelvic RT (46 Gy) or no further treatment.

**Results.** The analysis was done by intention-to-treat. A total of 714 patients were evaluated. At a median follow-up of 73 months, 8-year actuarial locoregional recurrence rates were 4% in the RT group and 15% in the control group ( $P < 0.0001$ ). The 8-year actuarial overall survival rates were 71 (RT group) and 77% (control group,  $P = 0.18$ ). Eight-year rates of distant metastases were 10 and 6% ( $P = 0.20$ ). The majority of the locoregional relapses were located in the vagina, mainly in the vaginal vault. Of the 39 patients with isolated vaginal relapse, 35 (87%) were treated with curative intent, usually with external RT and brachytherapy, and surgery in some. A complete remission (CR) was obtained in 31 of the 35 patients (89%), and 24 patients (77%) were still in CR after further follow-up. Five patients subsequently developed distant metastases, and 2 had a second vaginal recurrence. The 3-year survival after first relapse was 51% for patients in the control group and 19% in the RT group ( $P = 0.004$ ). The 3-year survival after vaginal relapse was 73%, in contrast to 8 and 14% after pelvic and distant relapse ( $P < 0.001$ ). At 5 years, the survival after vaginal relapse was 65% in the control group compared to 43% in the RT group.

**Conclusion.** Survival after relapse was significantly better in the patient group without previous RT. Treatment for vaginal relapse was effective, with 89% CR and 65% 5-year survival in the control group, while there was no difference in survival between patients with pelvic

☆ Presented in part at the 7th Biennial European Cancer Conference (ECCO), Lisbon, Portugal, October 21–25, 2001.

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## Recidiva loco regional en pacientes sin Rt previa

- Localización más frecuente cúpula vaginal
  - Supervivencia tras tratamiento con Rt 73% 3 años
- Recidiva pélvica
  - Supervivencia 8%
- Recidiva a distancia
  - Supervivencia 14%

Survival after relapse in patients with endometrial cancer:  
results from a randomized trial☆

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Received 18 October 2002

### Abstract

**Objective.** The aim of this study was to determine the rates of local control and survival after relapse in patients with stage I endometrial cancer treated in the multicenter randomized PORTEC trial.

**Methods.** The PORTEC trial included 715 patients with stage 1 endometrial cancer, either grade 1 or 2 with deep (>50%) myometrial invasion or grade 2 or 3 with <50% invasion. In all cases an abdominal hysterectomy was performed, without lymphadenectomy. After surgery, patients were randomized to receive pelvic RT (46 Gy) or no further treatment.

**Results.** The analysis was done by intention-to-treat. A total of 714 patients were evaluated. At a median follow-up of 73 months, 8-year actuarial locoregional recurrence rates were 4% in the RT group and 15% in the control group ( $P < 0.0001$ ). The 8-year actuarial overall survival rates were 71 (RT group) and 77% (control group,  $P = 0.18$ ). Eight-year rates of distant metastases were 10 and 6% ( $P = 0.20$ ). The majority of the locoregional relapses were located in the vagina, mainly in the vaginal vault. Of the 39 patients with isolated vaginal relapse, 35 (87%) were treated with curative intent, usually with external RT and brachytherapy, and surgery in some. A complete remission (CR) was obtained in 31 of the 35 patients (89%), and 24 patients (77%) were still in CR after further follow-up. Five patients subsequently developed distant metastases, and 2 had a second vaginal recurrence. The 3-year survival after first relapse was 51% for patients in the control group and 19% in the RT group ( $P = 0.004$ ). The 3-year survival after vaginal relapse was 73%, in contrast to 8 and 14% after pelvic and distant relapse ( $P < 0.001$ ). At 5 years, the survival after vaginal relapse was 65% in the control group compared to 43% in the RT group.

**Conclusion.** Survival after relapse was significantly better in the patient group without previous RT. Treatment for vaginal relapse was effective, with 89% CR and 65% 5-year survival in the control group, while there was no difference in survival between patients with pelvic

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## Pelvic Exenterations for Advanced and Recurrent Endometrial Cancer: Clinical Outcomes of 40 Patients

Ana-Maria Schmidt, MD,\*† Patrick Imesch, MD,\* Daniel Fink, MD,\* and Herwig Egger, MD†

# Recidiva loco regional en pacientes con Rt previa

- Si braquiterapia
  - Rt externa y refuerzo de braquiterapia
- Si Rt externa
  - Exenteración sólo si recidiva única central
  - Supervivencia 61% a 5 años y 51% 10 años.

**Objective:** The aim of this study was to analyze the clinical experience and outcome of patients who have undergone pelvic exenteration for primary advanced or recurrent endometrial cancer.

**Methods:** We analyzed the medical records of 40 women who underwent pelvic exenteration to treat primary advanced or recurrent endometrial cancer.

**Results:** Pelvic exenteration was performed in 40 patients with primary advanced or recurrent endometrial cancer. Three patients (8%) underwent a primary exenteration, and 37 patients (92%) underwent a secondary exenteration. A total exenteration, anterior exenteration, and posterior exenteration was performed in 85%, 5%, and 10% of patients, respectively.

In 31 cases, exenteration was performed with a curative aim, and in 9 cases, exenteration was performed with a palliative aim. The overall survival rates were 61.4% at 5 years and 51.1% at 10 years. For the 31 patients who underwent pelvic exenteration with a curative aim, the overall survival rates were higher than those for the entire study population and were 72.6% at 5 years and 59.4% at 10 years. For the 9 patients who underwent a palliative exenteration, the overall survival rates were 19.1% at 5 years and 0% at 10 years. This is to the best of our knowledge the biggest study of pelvic exenteration in patients with endometrial cancer.

**Conclusions:** Our data show that pelvic exenterations are a valid therapeutic option with long-term survival in select patients.

**Key Words:** pelvic exenteration, endometrial cancer, survival, radical surgery

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Pelvic exenteration has been performed since December 1946 and describes a surgical procedure that involves the en bloc removal of reproductive organs, the bladder with the urethra, the pelvic ureter, the rectum, and the sigmoid colon, including the anus and perineum. Alexander Brunschwig

characterized the procedure in his article as “the most radical surgical attack so far described for pelvic cancer.” The perioperative mortality rate at the time that article was published was 23%, and long-term survival rates were low.<sup>1</sup>

Because of substantial improvements in operative and reconstructive techniques, the mortality and morbidity rates of pelvic exenteration have decreased and its survival rate is continuously increasing. The improvements to this technique have enhanced patient quality of life. Thus, the role of pelvic exenteration has been reconsidered in recent years.

Currently, pelvic exenteration is absolutely considered as a treatment option for select patients with advanced gynecologic malignancies. These patients have often suffered a recurrence after operation, irradiation, or both. The cancer that is most frequently treated with pelvic exenteration is cervical cancer, and all other gynecologic malignancies are less commonly treated by this radical operation.

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The authors declare no conflicts of interest.

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# Recidiva loco regional en pacientes con Rt previa

- Perfil molecular
  - Dado beneficio de Inmunoterapia sinergia con Qt y de mantenimiento en tumores MMMRd, opción de tratamiento en este tipo de tumores sin inmunoterapia previa
  - Si respuesta, cirugía secundaria.

# Dostarlimab for Primary Advanced or Recurrent Endometrial Cancer

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## ABSTRACT

## BACKGROUND

Dostarlimab is an immune-checkpoint inhibitor that targets the programmed cell death 1 receptor. The combination of chemotherapy and immunotherapy may have synergistic effects in the treatment of endometrial cancer.

## METHODS

We conducted a phase 3, global, double-blind, randomized, placebo-controlled trial. Eligible patients with primary advanced stage III or IV or first recurrent endometrial cancer were randomly assigned in a 1:1 ratio to receive either dostarlimab (500 mg) or placebo, plus carboplatin (area under the concentration–time curve, 5 mg per milliliter per minute) and paclitaxel (175 mg per square meter of body-surface area), every 3 weeks (six cycles), followed by dostarlimab (1000 mg) or placebo every 6 weeks for up to 3 years. The primary end points were progression-free survival as assessed by the investigator according to Response Evaluation Criteria in Solid Tumors (RECIST), version 1.1, and overall survival. Safety was also assessed.

## RESULTS

Of the 494 patients who underwent randomization, 118 (23.9%) had mismatch repair–deficient (dMMR), microsatellite instability–high (MSI-H) tumors. In the dMMR–MSI-H population, estimated progression-free survival at 24 months was 61.4% (95% confidence interval [CI], 46.3 to 73.4) in the dostarlimab group and 15.7% (95% CI, 7.2 to 27.0) in the placebo group (hazard ratio for progression or death, 0.28; 95% CI, 0.16 to 0.50;  $P < 0.001$ ). In the overall population, progression-free survival at 24 months was 36.1% (95% CI, 29.3 to 42.9) in the dostarlimab group and 18.1% (95% CI, 13.0 to 23.9) in the placebo group (hazard ratio, 0.64; 95% CI, 0.51 to 0.80;  $P < 0.001$ ). Overall survival at 24 months was 71.3% (95% CI, 64.5 to 77.1) with dostarlimab and 56.0% (95% CI, 48.9 to 62.5) with placebo (hazard ratio for death, 0.64; 95% CI, 0.46 to 0.87). The most common adverse events that occurred or worsened during treatment were nausea (53.9% of the patients in the dostarlimab group and 45.9% of those in the placebo group), alopecia (53.5% and 50.0%), and fatigue (51.9% and 54.5%). Severe and serious adverse events were more frequent in the dostarlimab group than in the placebo group.

## CONCLUSIONS

Dostarlimab plus carboplatin–paclitaxel significantly increased progression-free survival among patients with primary advanced or recurrent endometrial cancer, with a substantial benefit in the dMMR–MSI-H population. (Funded by GSK; RUBY ClinicalTrials.gov number, NCT03981796.)

The authors' full names, academic degrees, and affiliations are listed in the Appendix. Dr. Mirza can be contacted at [mansoor@rh.regionh.dk](mailto:mansoor@rh.regionh.dk) or at the Department of Oncology, Rigshospitalet, Copenhagen University Hospital, Department of Cancer Treatment–5073, Blegdamsvej 9, 2100 Copenhagen, Denmark.

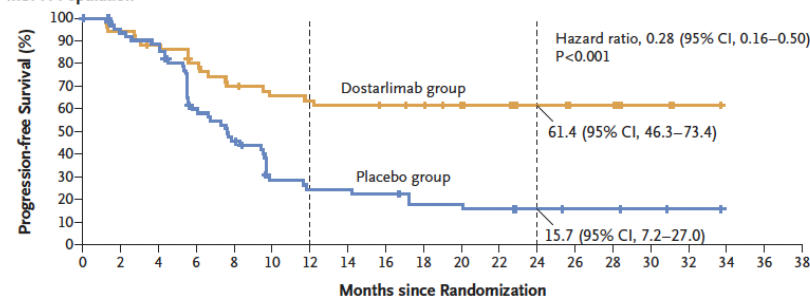
\*A list of the RUBY investigators is provided in the Supplementary Appendix, available at [NEJM.org](https://www.nejm.org).

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CME  
at [NEJM.org](https://www.nejm.org)

## A dMMR–MSI-H Population



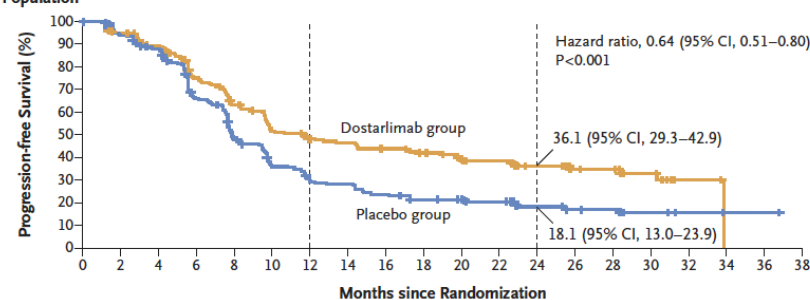
## No. at Risk

|                   |    |    |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |
|-------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|---|---|---|---|---|
| Dostarlimab group | 53 | 48 | 44 | 39 | 34 | 31 | 30 | 29 | 28 | 27 | 25 | 19 | 13 | 9 | 9 | 4 | 1 | 0 |
| Placebo group     | 65 | 57 | 54 | 34 | 26 | 14 | 12 | 12 | 11 | 8  | 8  | 7  | 4  | 3 | 3 | 2 | 1 | 0 |

## No. of Events

|                   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-------------------|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Dostarlimab group | 0 | 3 | 6 | 10 | 15 | 17 | 18 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| Placebo group     | 0 | 4 | 7 | 24 | 32 | 41 | 43 | 43 | 44 | 46 | 46 | 47 | 47 | 47 | 47 | 47 | 47 | 47 |

## B Overall Population



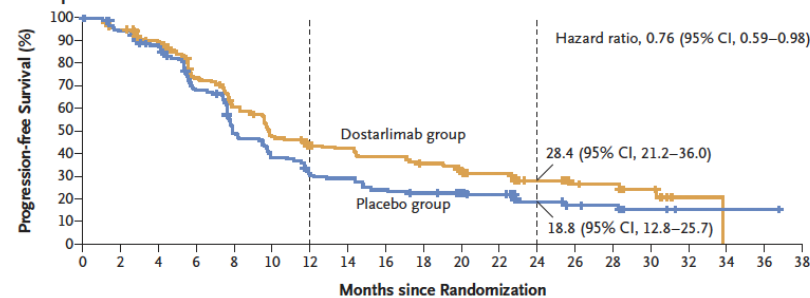
## No. at Risk

|                   |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |   |   |
|-------------------|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|---|---|
| Dostarlimab group | 245 | 220 | 197 | 157 | 130 | 105 | 94 | 90 | 84 | 78 | 66 | 52 | 34 | 23 | 22 | 12 | 2 | 0 |
| Placebo group     | 249 | 219 | 200 | 144 | 103 | 74  | 59 | 57 | 48 | 42 | 39 | 32 | 20 | 14 | 13 | 5  | 2 | 1 |

## No. of Events

|                   |   |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------------------|---|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Dostarlimab group | 0 | 12 | 25 | 55 | 80  | 103 | 110 | 113 | 118 | 122 | 127 | 128 | 131 | 132 | 132 | 133 | 134 | 135 |
| Placebo group     | 0 | 14 | 29 | 77 | 115 | 141 | 155 | 157 | 166 | 170 | 170 | 172 | 175 | 176 | 176 | 177 | 177 | 177 |

## C pMMR–MSS Population



## No. at Risk

|                   |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |   |   |   |
|-------------------|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|---|---|---|
| Dostarlimab group | 192 | 172 | 153 | 118 | 96 | 74 | 64 | 61 | 56 | 51 | 41 | 33 | 21 | 14 | 13 | 8 | 1 | 0 |
| Placebo group     | 184 | 162 | 146 | 110 | 77 | 60 | 47 | 45 | 37 | 34 | 31 | 25 | 16 | 11 | 10 | 3 | 1 | 1 |

## No. of Events

|                   |   |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------------------|---|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Dostarlimab group | 0 | 9  | 19 | 45 | 65 | 86  | 92  | 94  | 99  | 103 | 108 | 109 | 112 | 113 | 113 | 114 | 115 | 116 |
| Placebo group     | 0 | 10 | 22 | 53 | 83 | 100 | 112 | 114 | 122 | 124 | 124 | 125 | 128 | 129 | 129 | 130 | 130 | 130 |

ORIGINAL ARTICLE

# Pembrolizumab plus Chemotherapy in Advanced Endometrial Cancer

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ABSTRACT

BACKGROUND

Standard first-line chemotherapy for endometrial cancer is paclitaxel plus carboplatin. The benefit of adding pembrolizumab to chemotherapy remains unclear.

METHODS

In this double-blind, placebo-controlled, randomized, phase 3 trial, we assigned 816 patients with measurable disease (stage III or IVA) or stage IVB or recurrent endometrial cancer in a 1:1 ratio to receive pembrolizumab or placebo along with combination therapy with paclitaxel plus carboplatin. The administration of pembrolizumab or placebo was planned in 6 cycles every 3 weeks, followed by up to 14 maintenance cycles every 6 weeks. The patients were stratified into two cohorts according to whether they had mismatch repair-deficient (dMMR) or mismatch repair-proficient (pMMR) disease. Previous adjuvant chemotherapy was permitted if the treatment-free interval was at least 12 months. The primary outcome was progression-free survival in the two cohorts. Interim analyses were scheduled to be triggered after the occurrence of at least 84 events of death or progression in the dMMR cohort and at least 196 events in the pMMR cohort.

RESULTS

In the 12-month analysis, Kaplan–Meier estimates of progression-free survival in the dMMR cohort were 74% in the pembrolizumab group and 38% in the placebo group (hazard ratio for progression or death, 0.30; 95% confidence interval [CI], 0.19 to 0.48;  $P < 0.001$ ), a 70% difference in relative risk. In the pMMR cohort, median progression-free survival was 13.1 months with pembrolizumab and 8.7 months with placebo (hazard ratio, 0.54; 95% CI, 0.41 to 0.71;  $P < 0.001$ ). Adverse events were as expected for pembrolizumab and combination chemotherapy.

CONCLUSIONS

In patients with advanced or recurrent endometrial cancer, the addition of pembrolizumab to standard chemotherapy resulted in significantly longer progression-free survival than with chemotherapy alone. (Funded by the National Cancer Institute and others; NRG-GY018 ClinicalTrials.gov number, NCT03914612.)

The authors’ affiliations are listed in the Appendix. Dr. Eskander can be contacted at [reskander@health.ucsd.edu](mailto:reskander@health.ucsd.edu) or at the University of California, San Diego, Rebecca and John Moores Comprehensive Cancer Center, 3855 Health Sciences Dr., La Jolla, CA 92093.

Drs. Powell and Aghajanian contributed equally to this article.

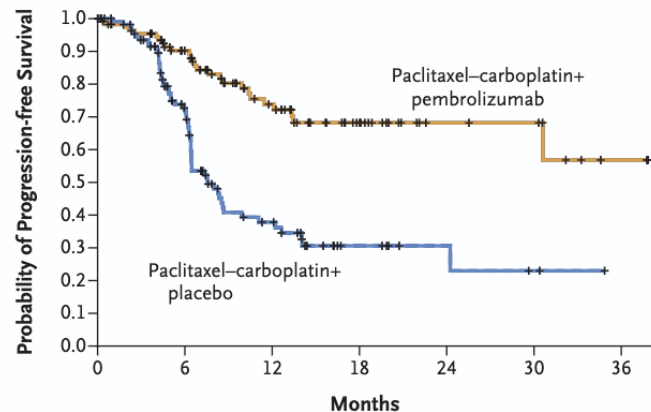
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A dMMR Cohort



No. at Risk

|                                       |     |    |    |    |   |   |   |
|---------------------------------------|-----|----|----|----|---|---|---|
| Paclitaxel-carboplatin+ pembrolizumab | 112 | 80 | 44 | 22 | 9 | 8 | 2 |
| Paclitaxel-carboplatin+ placebo       | 113 | 62 | 24 | 8  | 4 | 2 | 0 |

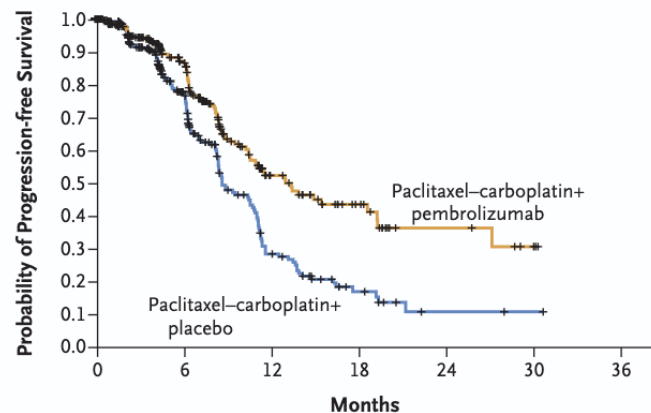
| No. of Events | No. of Patients | Median Progression-free Survival (95% CI) mo |
|---------------|-----------------|--|
|---------------|-----------------|--|

Paclitaxel-Carboplatin+ Pembrolizumab: 26, 112, NR (30.6–NR)

Paclitaxel-Carboplatin+ Placebo: 59, 113, 7.6 (6.4–9.9)

Hazard ratio for disease progression or death, 0.30 (95% CI, 0.19–0.48)

B pMMR Cohort



No. at Risk

|                                       |     |     |    |    |   |   |   |
|---------------------------------------|-----|-----|----|----|---|---|---|
| Paclitaxel-carboplatin+ pembrolizumab | 290 | 150 | 45 | 20 | 7 | 3 | 0 |
| Paclitaxel-carboplatin+ placebo       | 292 | 129 | 33 | 10 | 2 | 1 | 0 |

| No. of Events | No. of Patients | Median Progression-free Survival (95% CI) mo |
|---------------|-----------------|--|
|---------------|-----------------|--|

Paclitaxel-Carboplatin+ Pembrolizumab: 89, 290, 13.1 (10.5–18.8)

Paclitaxel-Carboplatin+ Placebo: 133, 292, 8.7 (8.4–10.7)

Stratified hazard ratio for disease progression or death, 0.54 (95% CI, 0.41–0.71)

Figure 2. Progression-free Survival in the Two Cohorts.

Shown are Kaplan–Meier estimates of progression-free survival in the population of patients with advanced or recurrent endometrial cancer with mismatch repair-deficient (dMMR) disease (Panel A) or mismatch repair-proficient (pMMR) disease (Panel B). Tick marks in both panels indicate censoring of data. Patients in both the pembrolizumab and the placebo groups received combination chemotherapy with paclitaxel and carboplatin. NR denotes not reached.

# Atezolizumab and chemotherapy for advanced or recurrent endometrial cancer (AtTend): a randomised, double-blind, placebo-controlled, phase 3 trial



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## Summary

**Background** At the time of AtTend trial design, standard treatment for advanced or recurrent endometrial cancer included carboplatin and paclitaxel chemotherapy. This trial assessed whether combining atezolizumab with chemotherapy might improve outcomes in this population.

**Methods** AtTend was a multicentre, double-blind, randomised, placebo-controlled, phase 3 trial done in 89 hospitals in 11 countries across Europe, Australia, New Zealand, and Asia. Enrolled patients were aged 18 years or older, and had advanced or recurrent endometrial carcinoma or carcinosarcoma, an Eastern Cooperative Oncology Group performance status of 0–2, and received no previous systemic chemotherapy for recurrence. Patients were randomly assigned (2:1) using an interactive web response system (block size of six) to either atezolizumab 1200 mg or placebo given intravenously with chemotherapy (carboplatin at area under the curve of 5 or 6 and paclitaxel 175 mg/m<sup>2</sup> intravenously on day 1 every 21 days) for 6–8 cycles, then continued until progression. Stratification factors were country, histological subtype, advanced or recurrent status, and mismatch repair (MMR) status. Participants and treating clinicians were masked to group allocation. The hierarchically tested co-primary endpoints were progression-free survival (in patients with MMR-deficient [dMMR] tumours, and in the overall population) and overall survival (in the overall population). Primary analyses were done in the intention-to-treat population, defined as all randomly assigned patients who gave their full consent to participation in the study and data processing. Safety was assessed in all patients included in the intention-to-treat population who received at least one dose of study treatment. Here, we report the primary progression-free survival and the interim overall survival results. This study is ongoing and is registered with ClinicalTrials.gov, NCT03603184.

**Findings** Between Oct 3, 2018, and Jan 7, 2022, 551 patients were randomly assigned to atezolizumab (n=362) or placebo (n=189). Two patients in the atezolizumab group were excluded from all analyses due to lack of consent. Median follow-up was 28.3 months (IQR 21.2–37.6). 81 (23%) patients in the atezolizumab group and 44 (23%) patients in the placebo group had dMMR disease by central assessment. In the dMMR population, median progression-free survival was not estimable (95% CI 12.4 months–not estimable [NE]) in the atezolizumab group and 6.9 months (6.3–10.1) in the placebo group (hazard ratio [HR] 0.36, 95% CI 0.23–0.57; p=0.0005). In the overall population, median progression-free survival was 10.1 months (95% CI 9.5–12.3) in the atezolizumab group and 8.9 months (8.1–9.6) in the placebo group (HR 0.74, 95% CI 0.61–0.91; p=0.022). Median overall survival was 38.7 months (95% CI 30.6–NE) in the atezolizumab group and 30.2 months (25.0–37.2) in the placebo group (HR 0.82, 95% CI 0.63–1.07; log-rank p=0.048). The p value for the interim analysis of overall survival did not cross the stopping boundary; therefore, the trial will continue until the required number of events are recorded. The most common grade 3–4 adverse events were neutropenia (97 [27%] of 356 patients in the atezolizumab group vs 51 [28%] of 185 in the placebo group) and anaemia (49 [14%] vs 24 [13%]). Treatment-related serious adverse events occurred in 46 (13%) patients in the atezolizumab group and six (3%) patients in the placebo group. Treatment-related deaths occurred in two patients (pneumonia in one patient in each group).

**Interpretation** Atezolizumab plus chemotherapy increased progression-free survival in patients with advanced or recurrent endometrial carcinoma, particularly in those with dMMR carcinomas, suggesting the addition of atezolizumab to standard chemotherapy as first-line treatment in this specific subgroup.

**Funding** F Hoffmann-La Roche.

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S1470-2045(24)00334-6

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the appendix (pp 2–6)

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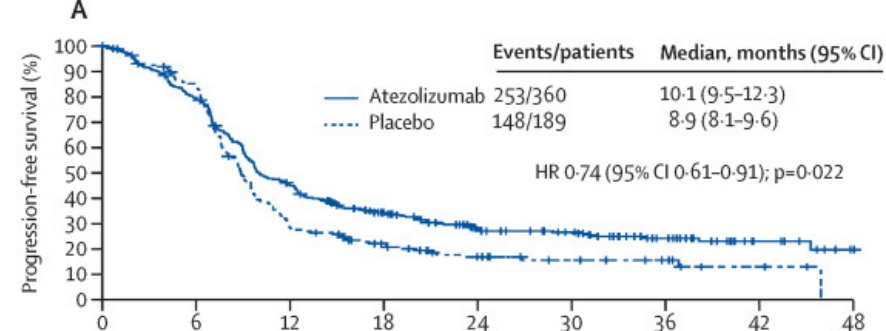
Gynecology, Kurume University

School of Medicine, Kurume,

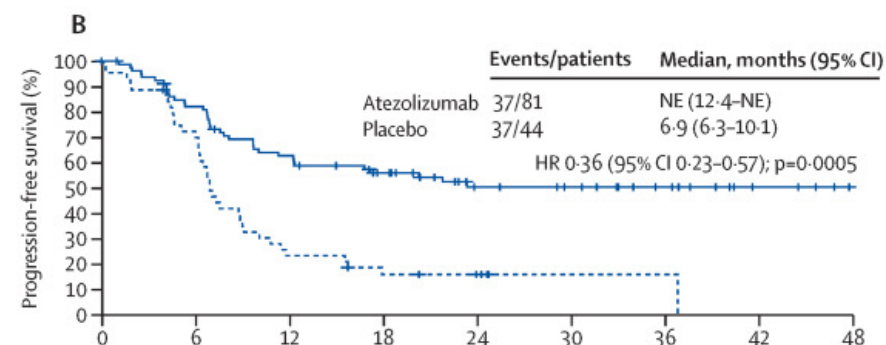
Japan (S Nishio MD); Glasgow

Oncology Clinical Trials Unit,

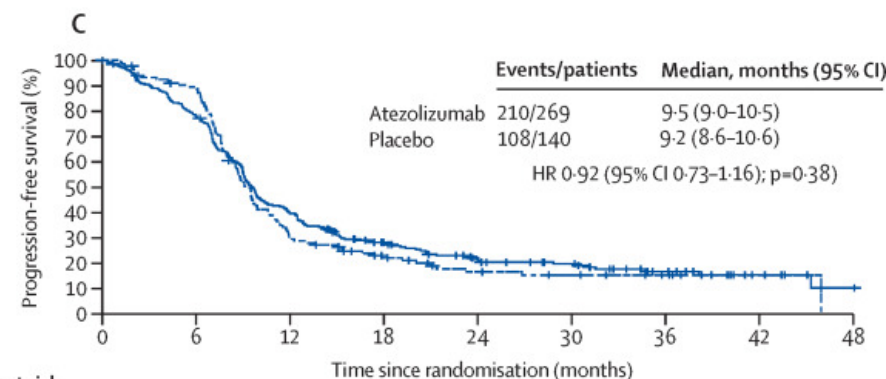
University of Glasgow.



| Number at risk (number censored) | 0       | 6        | 12       | 18       | 24      | 30      | 36      | 42      | 48      |
|----------------------------------|---------|----------|----------|----------|---------|---------|---------|---------|---------|
| Atezolizumab                     | 360 (0) | 278 (10) | 155 (13) | 101 (32) | 65 (51) | 53 (60) | 31 (78) | 10 (98) | 2 (105) |
| Placebo                          | 189 (0) | 152 (10) | 51 (11)  | 32 (18)  | 19 (25) | 12 (31) | 8 (35)  | 3 (39)  | 0 (41)  |



| Number at risk (number censored) | 0      | 6      | 12     | 18      | 24      | 30      | 36      | 42     | 48     |
|----------------------------------|--------|--------|--------|---------|---------|---------|---------|--------|--------|
| Atezolizumab                     | 81 (0) | 64 (3) | 48 (4) | 37 (10) | 23 (21) | 20 (24) | 13 (31) | 4 (40) | 0 (44) |
| Placebo                          | 44 (0) | 31 (1) | 10 (1) | 6 (2)   | 4 (4)   | 1 (7)   | 1 (7)   | 0 (7)  | -- (-) |



| Number at risk (number censored) | 0       | 6       | 12      | 18      | 24      | 30      | 36      | 42     | 48     |
|----------------------------------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| Atezolizumab                     | 269 (0) | 205 (7) | 103 (8) | 62 (20) | 40 (28) | 31 (34) | 16 (45) | 5 (55) | 2 (57) |
| Placebo                          | 140 (0) | 117 (9) | 39 (10) | 24 (16) | 14 (20) | 11 (22) | 7 (26)  | 3 (30) | 0 (32) |

# **Cirugía en cáncer de endometrio metastásico**

## Neoadyuvancia o cirugía inicial

- Análisis retrospectivo 18000 pacientes.
- Inicialmente supervivencia mejor para grupo NACT
- Posteriormente tendencia a mejor supervivencia en cirugía primaria.
  - Morbi-mortalidad asociada a cirugía.
  - Posibilidad de conseguir R0

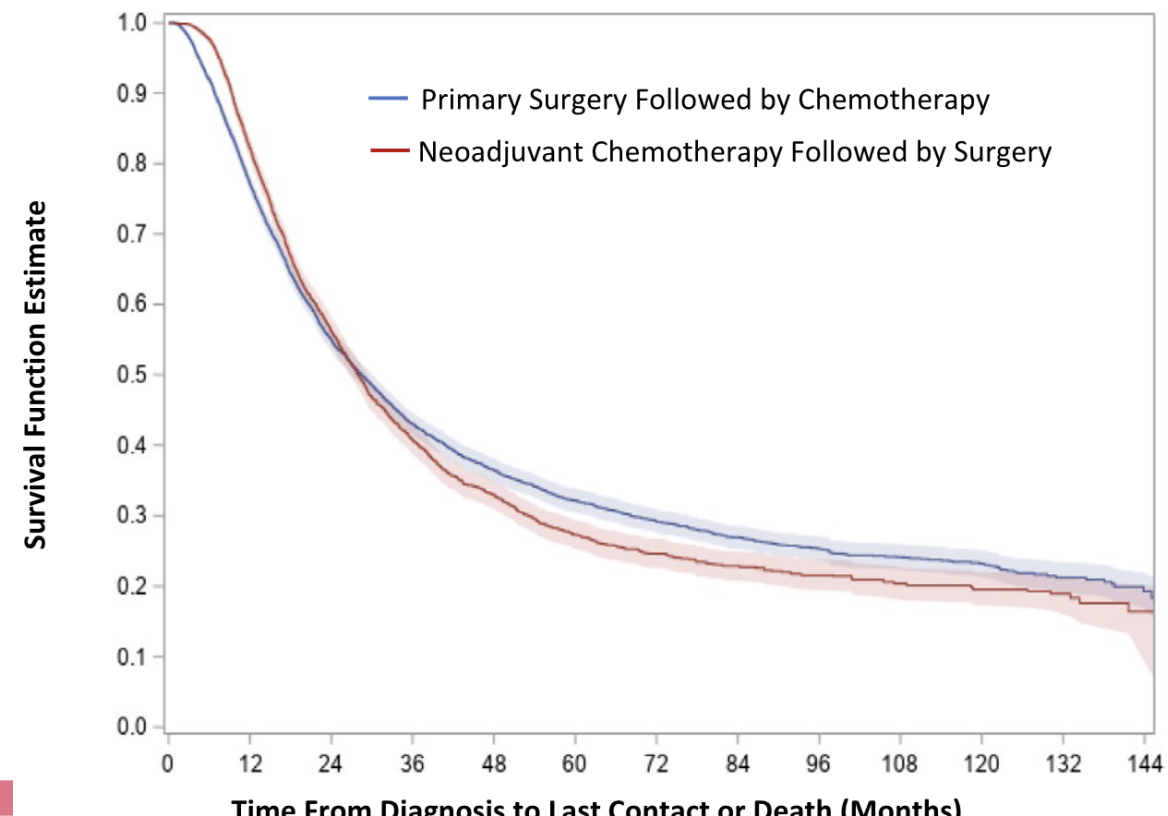
RESEARCH ARTICLE OPEN ACCESS

### Neoadjuvant Chemotherapy Versus Primary Cytoreductive Surgery for Metastatic Endometrial Cancer

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B.



## Long-term Outcome of Surgery or Stereotactic Radiotherapy for Lung Oligometastases

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### ABSTRACT

Local treatment for pulmonary oligometastases (one to five lesions) using metastasectomy or stereotactic ablative radiotherapy (SABR) was investigated in a cohort that received multidisciplinary tumor board-based treatment decisions. The first choice of treatment was surgery; SABR was recommended in cases of adverse clinical factors. Propensity score-adjusted and unadjusted overall survival was the primary end point; local control and time to failure of a local-only treatment strategy were also analyzed. With a minimum follow-up time of 5.8 years, the 5-year overall survival rate was 41% for surgery (n = 68) and 45% for SABR (n = 42). Again not different for the two modalities, 40% of patients were free from failure of a local-only treatment strategy, and 20% were free from any progression at 5 years. The 5-year local control rate was 83% for SABR and 81% for surgery. Despite treatment selection clearly disadvantaging SABR against surgery, even unadjusted outcome was not better when pulmonary oligometastases were surgically removed rather than irradiated.

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**Keywords:** Pulmonary metastasectomy; Surgery; Stereotactic ablative radiotherapy; Lung metastases; Oligometastases

### Introduction

Intuition suggests that pulmonary metastasectomy (PME) with clear margins would entail the best odds of cure for patients with limited pulmonary metastases (oligometastases) from solid tumors and is recommended for various malignancies in guidelines. Stereotactic ablative radiotherapy (SABR) is frequently regarded as the second-best option in cases with any

arguments against surgery: higher age, compromised physical condition, unfavorable central location of a nodule in the lungs, or higher number of previous metastasis-directed (local) treatments or shorter metastasis-free interval (MFI). Randomized or population-based studies comparing PME with SABR for pulmonary oligometastases are unavailable, as are evidence-increasing comparisons between any local metastasis-directed treatments and systemic approaches or cohorts with long-term follow-up.<sup>1-3</sup>

We present long-term results from our previously published consecutive cohort treated with PME or SABR for pulmonary oligometastases from various cancers.<sup>4</sup> The primary purpose of the present study was to assess long-term overall survival (OS), local recurrence (LR) of treated metastases, progression-free-survival, and time to failure of local-only treatment strategy. In addition, the influence of lesion size of index metastases on survival and local control (LC) was explored in an attempt to gain exploratory information concerning choice of the optimal point in time for local treatment of metastases.

### Methods

All consecutive patients who received a recommendation at our institution's multidisciplinary thoracic tumor board for a local metastasis-directed treatment with

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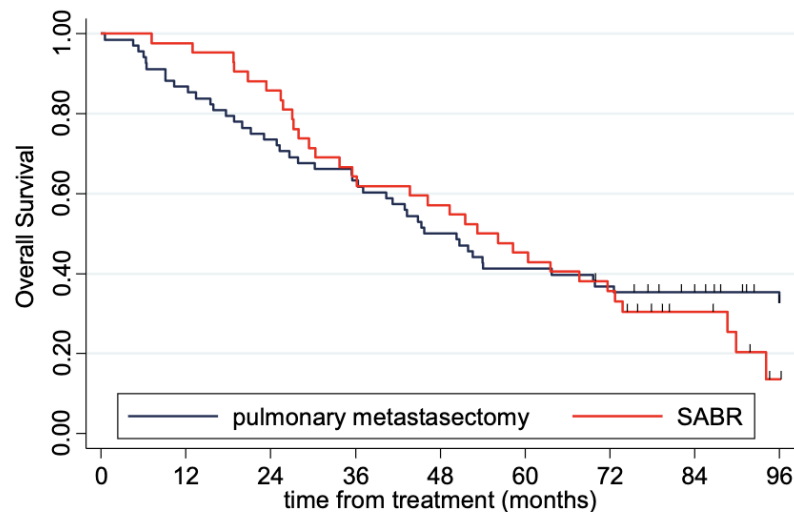
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# Recidiva oligometastásica

- Cirugía, radiocirugía o técnicas ablativas.



| Number at risk |    | 0  | 12 | 24 | 36 | 48 | 60 | 72 | 84 | 96 |
|----------------|----|----|----|----|----|----|----|----|----|----|
| PME            | 68 | 59 | 50 | 43 | 34 | 28 | 25 | 19 | 13 |    |
| SABR           | 42 | 41 | 36 | 27 | 24 | 19 | 14 | 7  | 1  |    |

# **Comentarios finales**



# Comentarios finales

- La cirugía es crucial en el cáncer de endometrio inicial y ésta debe incluir una estadificación ganglionar con biopsia selectiva de ganglio centinela.
- En estadios avanzados, la citorreducción completa impacta positivamente en la supervivencia libre de progresión y la supervivencia global.
- En estos casos, la linfadenectomía completa sistemática no mejora la supervivencia frente a la resección de las adenopatías voluminosas.
- En el caso de recidiva en pacientes previamente radiadas cabe plantear una exoneración siempre y cuando sea pélvica única y central.
- El perfil molecular del tumor puede influir en la decisión de hacer o no una cirugía radical por la buena respuesta de los tumores MMRd a la inmunoterapia.
- En cánceres metastásicos la decisión de terapia de inicio dependerá de la resecabilidad con tendencia cada vez mayor a optar por quimioterapia neoadyuvante.

**MUCHAS GRACIAS**

**4<sup>a</sup> Jornada  
de Actualización en  
Cáncer Ginecológico**  
Bilbao · 20 – 21 de mayo 2026