

Treatment patterns in epithelial ovarian cancer (EOC) with a focus on recurrent EOC and PARPi progressors: a targeted literature review across selected countries

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CONCLUSION



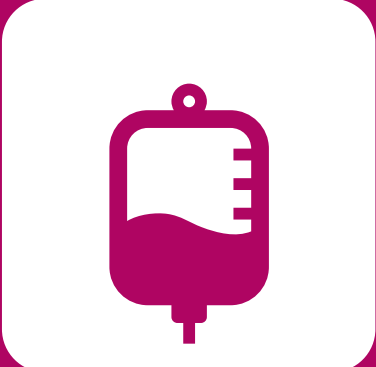
Treatment patterns in clinical practice remain largely consistent with guidelines

- Surgery and chemotherapy continue to be the cornerstones of epithelial ovarian cancer (EOC) management
- In recent years, however, surgery rates have modestly declined while chemotherapy use has increased



Recurrent EOC is primarily treated with platinum-based chemotherapy

Supportive care and radiotherapy are often used as adjuncts

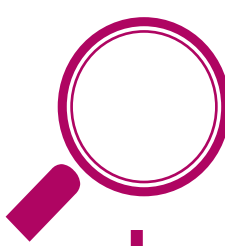


For patients with advanced stage EOC progressing while on maintenance therapy with poly (ADP-ribose) polymerase inhibitor (PARPi), platinum-based chemotherapy is the preferred next-line treatment



INTRODUCTION

- EOC remains the most lethal gynecologic malignancy, with most cases diagnosed at advanced stages^{1,2}
- Understanding real-world treatment patterns is critical for optimizing disease management



OBJECTIVE

To describe treatment patterns of patients with EOC (all stages) in the United States (US), Europe, China and Japan, with a focus on recurrent EOC and patients progressing on PARPi



METHODS

- A targeted literature review (January 1, 2014–June 18, 2024) was conducted using the following PICOTS (Population, Intervention, Comparator, Outcomes, Timing, Setting) framework (**Figure 1**)

Figure 1. PICOTS framework for the targeted review

- P Population** = Patients with EOC (all histological subtypes and stages)
- I Intervention** = All interventions, as defined in studies
- C Comparator** = As defined in studies or no comparator
- O Outcomes** = Treatments received including line of therapy, name and dosing regimen
- T Timing** = None specified a priori (estimates reported according to follow-up periods used in the studies)
- S Setting** = Non-interventional (observational)

- A structured literature search in Ovid® MEDLINE and Embase was supplemented by pragmatic searches and citation snowballing
- Eligibility criteria used for publication selection are listed in **Table 1**

Table 1. Eligibility criteria for the targeted review

Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none">Studies conducted in humansPatients diagnosed with EOCReported data from regions/countries of interestReported outcomes listed in PICOTSFull-text articlesObservational (non-interventional) studiesReviews or meta-analyses (for snowballing)Studies published since 01 January 2014English-language publicationsFor studies with multiple publications, only the most recent was retained for each outcome	<ul style="list-style-type: none">Case studies, editorials, notes, comments and letters to the editorsCase reportsPhase I-II trialsNon-clinical studies



RESULTS

Search results

- Out of 1,209 unique sources screened, 313 full-text articles were retained for in-depth eligibility assessment
- Upon full-text review of these sources and pragmatic searches, **16 sources** reporting on treatment patterns were included
- Of these, 6 included data from Europe (Denmark, France, Greece, the Netherlands, the United Kingdom), 6 from North America (all US) and 5 from Asia (Japan and China)

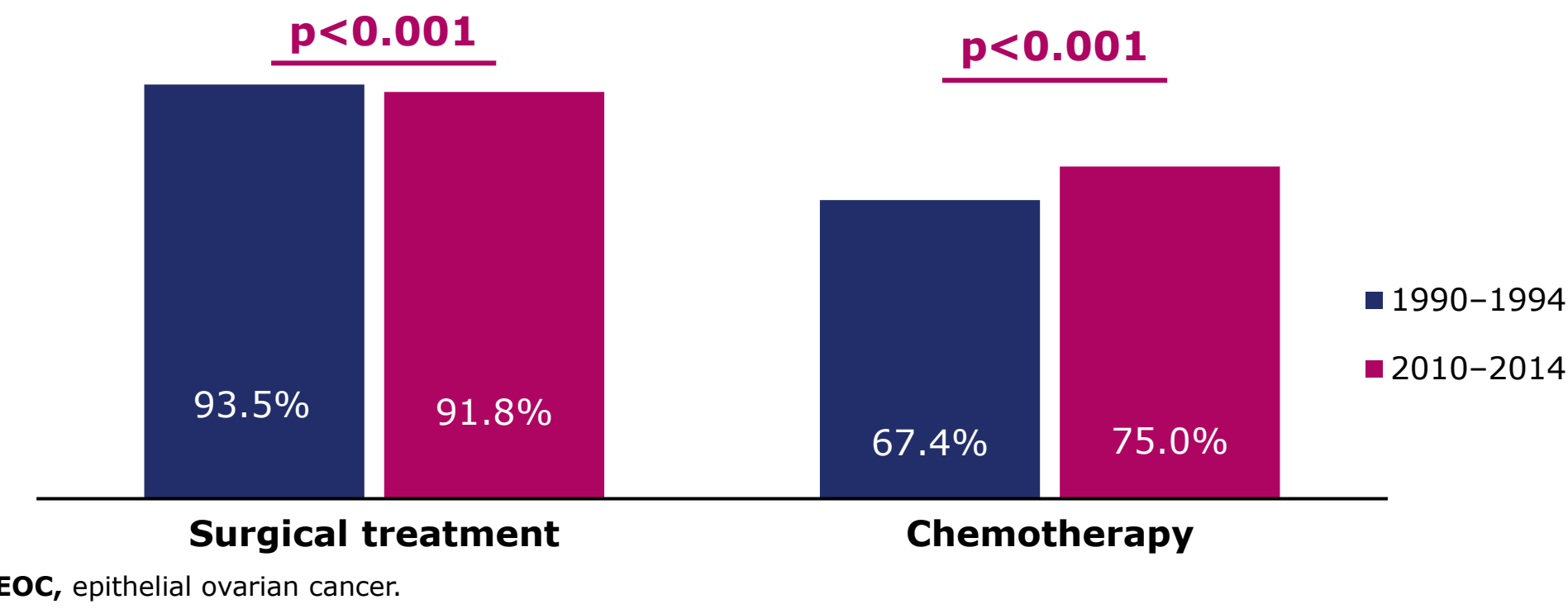
Treatment patterns

- Surgery and chemotherapy were the most frequently reported treatment modalities for patients with EOC (all stages)
- Surgery rates ranged from 73.5% in the US³ to 100% in Japan⁴ (**Table 2**)
- Chemotherapy was widely used, especially among patients with advanced-stage EOC

Trends over time

- In the US, a Surveillance, Epidemiology and End Results (SEER) 18 study showed a modest decline in surgery rates and increased chemotherapy use between 1990–1994 to 2010–2014⁵ (**Figure 2**)
- In the Netherlands, treatment shifted from primary debulking surgery with adjuvant chemotherapy to neoadjuvant chemotherapy (NACT) followed by interval debulking surgery⁷

Figure 2. Proportion of EOC patients treated with surgery and chemotherapy, by time period



Management of recurrent EOC

- Most patients with recurrent EOC received alternative platinum-based chemotherapy, often combined with best supportive care or radiotherapy:
 - 66.1% in Greece⁸
 - 79.4% in France⁹
 - 90.9% in Japan⁴

Management following PARPi progression

- Real-world data on patients who experienced disease progression while receiving treatment with PARPi are scarce
- A single-center study from China reported chemotherapy as the predominant treatment, followed by a second PARPi combined with antiangiogenic therapy¹⁰ (**Figure 3**)

Figure 3. Treatments received following PARPi progression

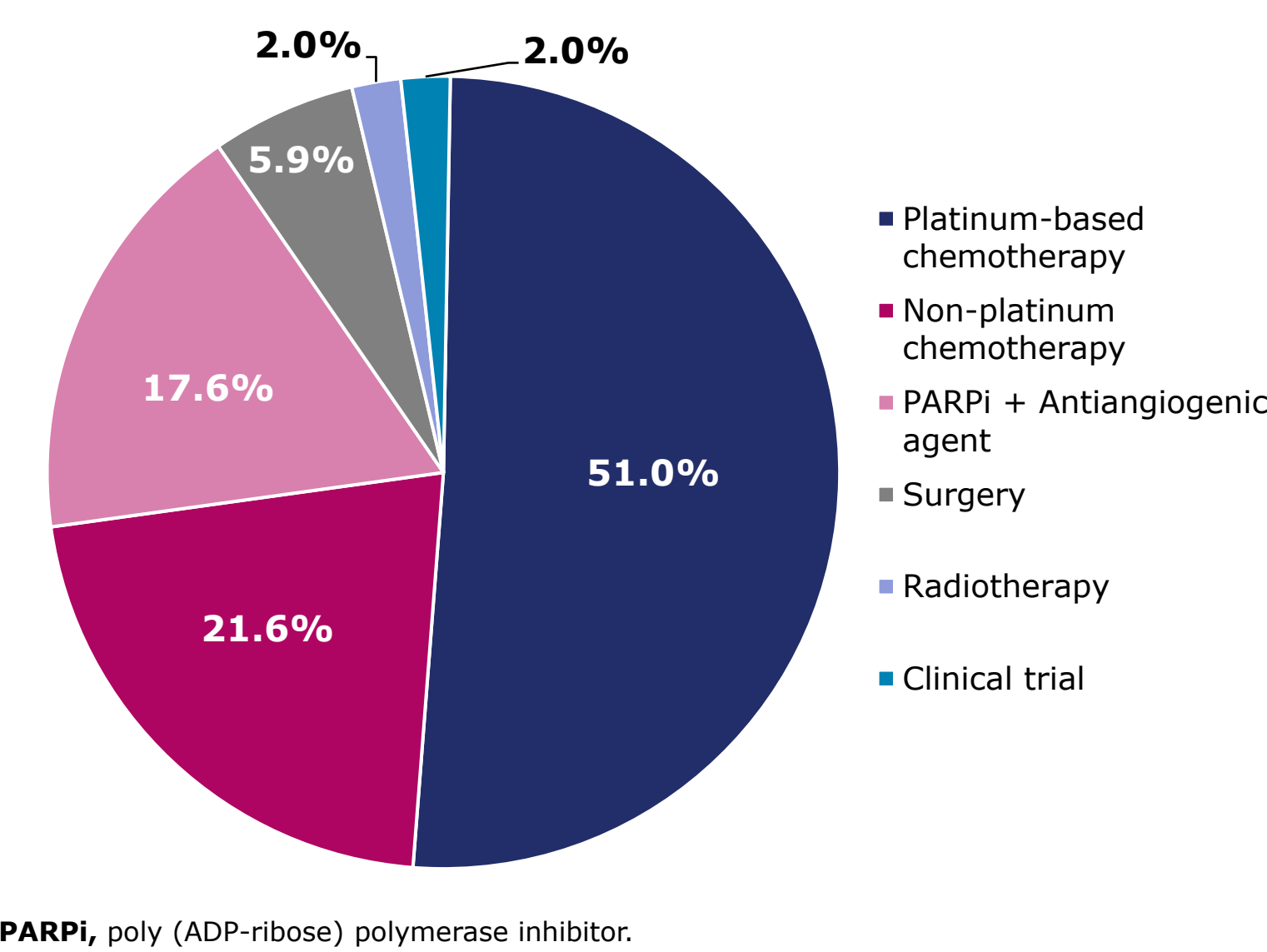


Table 2. Summary of studies on therapeutic management of EOC (all stages)

Reference - Country Data source (Study period)	No. of EOC patients	Treatment Distribution			
		Surgery	Chemotherapy	Surgery + Chemotherapy	Others
Westrick, 2020 ³ - US Florida Cancer Database System (2001–2015)	21,721	73.5%	57.1%	48.3%	-
Wu, 2019 ⁵ - US SEER 18 registries (1990–2014)	59,763	93.0%	70.0%	-	-
Strom Kahr, 2021 ⁶ - Denmark Danish registries (2005–2018)	4,991	92.6%	- All types: 81.1% - NACT: 8.5%	-	VEGF inhibitor: 11.8%
Abe, 2022 ⁴ - Japan Single-center medical chart review (2010–2016)	123	-	-	All patients (100%) - PDS ± CT: 72.4% - NACT + IDS: 27.6%	-

CT, chemotherapy; EOC, epithelial ovarian cancer; IDS, interval debulking surgery; NACT, neoadjuvant chemotherapy; PDS, primary debulking surgery; SEER, Surveillance, Epidemiology and End Results; US, United States; VEGF, vascular endothelial growth factor.

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¹⁰Zhang N, et al. A real-world study of treatment patterns following disease progression in epithelial ovarian cancer patients undergoing poly-ADP-ribose polymerase inhibitor maintenance therapy. J Ovarian Res. 2024A, Vol. 17, 1, p. 5
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