

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

J. Montonen¹, M. Chourasia², A. Bergamasco³, T. Arredondo Bisonó³, V. Munoz Goyette⁴, **Y. Moride**^{3,4,5*}

¹Merck Healthcare KGaA, Darmstadt, Germany

²Merck Specialties Pvt Ltd, Bangalore, India, an affiliate of Merck KGaA

³YolaRx Consultants, Paris, France

⁴YolaRx Consultants, Montreal, Canada

⁵Center for Pharmacoepidemiology and Treatment Science, Rutgers University, New Brunswick, NJ, USA

*Presenting author: Yola Moride, yola.moride@yolarx.com



GET POSTER PDF

Copies of this poster, obtained through QR (Quick Response) and/or text key codes are for personal use only and may not be reproduced without permission of the authors.

CONCLUSION

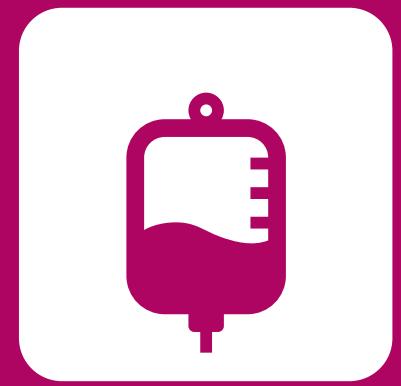
Treatment patterns in clinical practice remain largely consistent with guidelines



- 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 humans Patients diagnosed with EOC Reported data from regions/countries of interest Reported outcomes listed in PICOTS Full-text articles Observational (non-interventional) studies Reviews or meta-analyses (for snowballing) Studies published since 01 January 2014 English-language publications For 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 editors Case reports Phase I-II trials Non-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

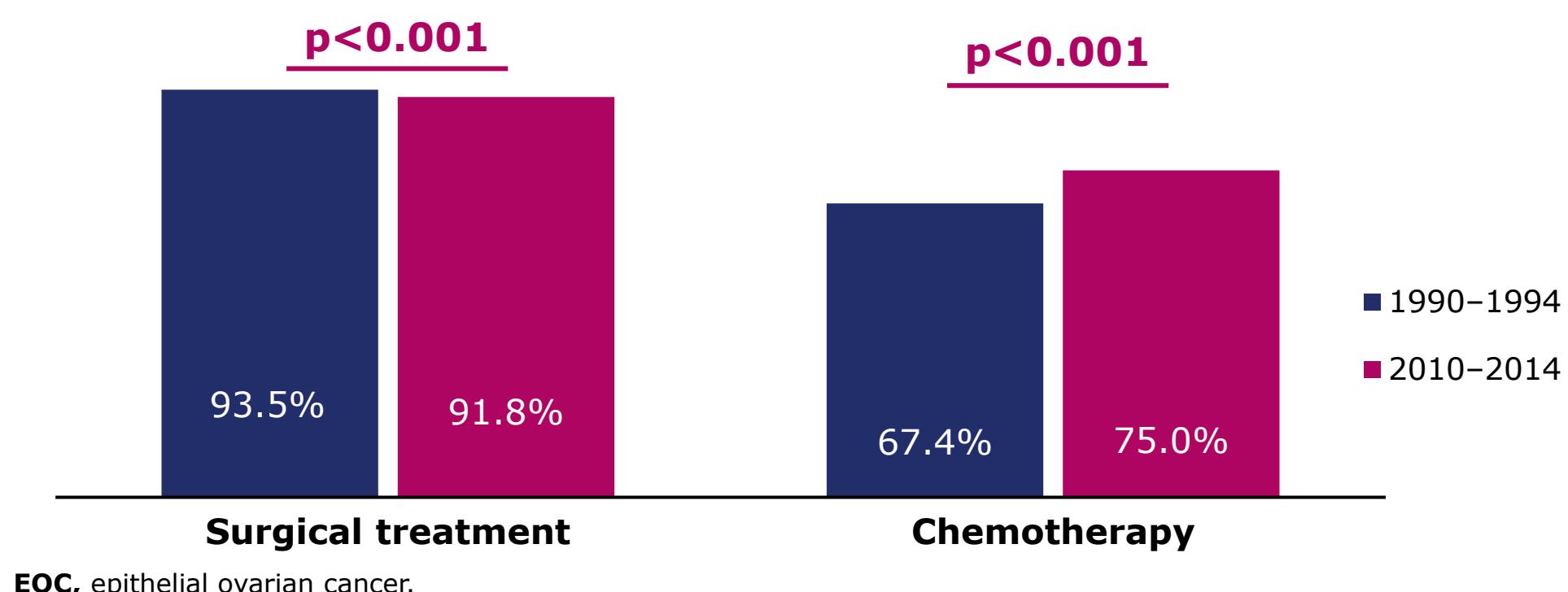


Table 2. Summary of studies on therapeutic management of EOC (all stages)

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.

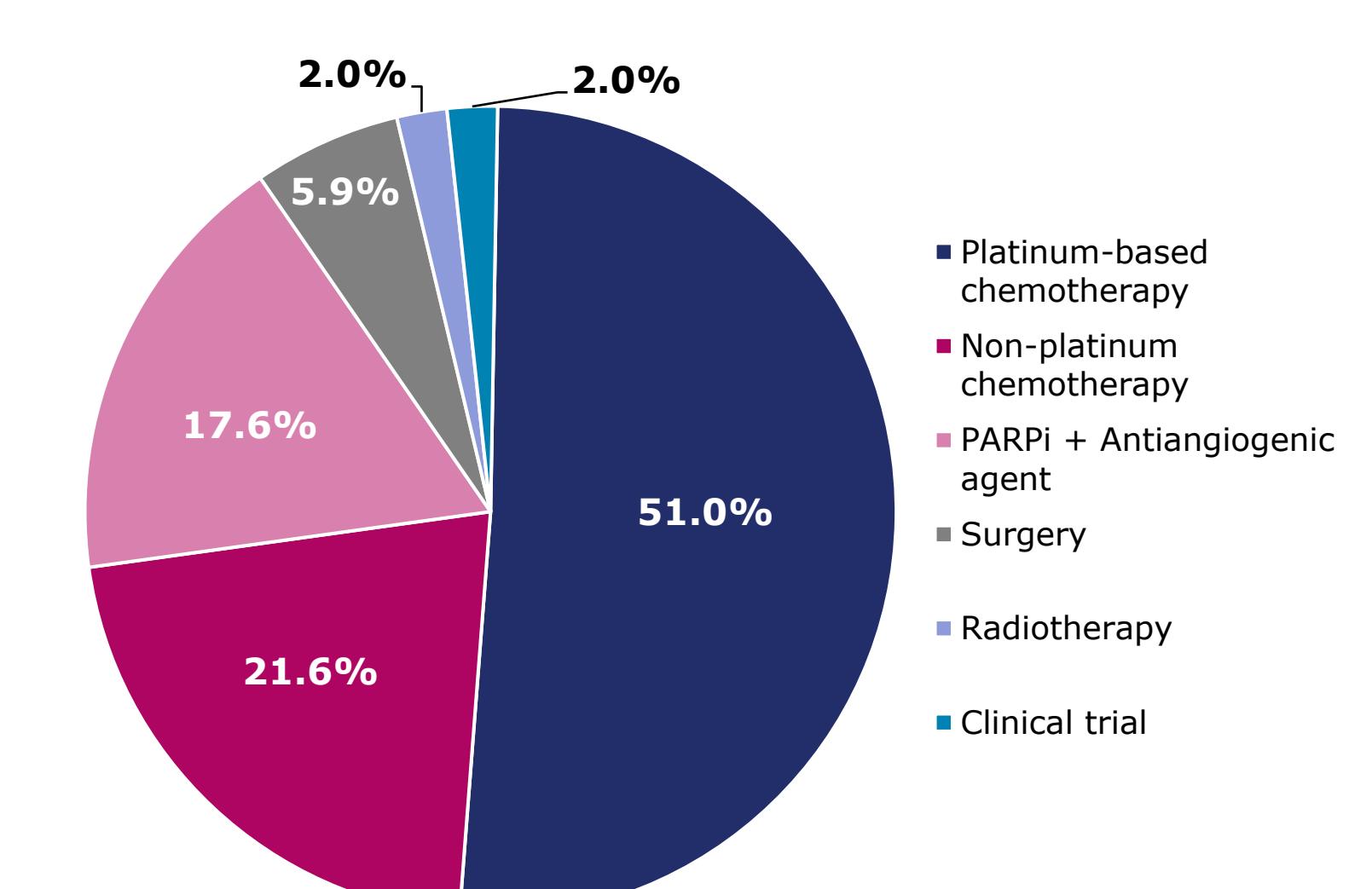
Management of recurrent EOC

- 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



References:

- Flaum N, Crosbie EJ, Edmondson RJ, Smith MJ, Evans DG. Epithelial ovarian cancer risk: A review of the current genetic landscape. *Clin Genet.* 97, 2020, Vol. 1, pp. 54-63
- Zhou J, et al. The Effect of Histological Subtypes on Outcomes of Stage IV Epithelial Ovarian Cancer. *Front Oncol.* 2018, Vol. 8, p. 577
- Westrick A, et al. Racial and ethnic disparities in the overall survival of women with epithelial ovarian cancer in Florida, 2001–2015. *Cancer Causes Control.* 2020, Vol. 31, 4, pp. 333-40.
- Abe A, et al. Prevalence of pathogenic BRCA1/2 variants and their association with clinical characteristics in patients with epithelial ovarian cancer in a rural area of Japan. *Genes (Basel).* 2022, Vol. 13, 6, p. 18.
- Wu SG, et al. Real-world impact of survival by period of diagnosis in epithelial ovarian cancer in Greece (The EPOCa study). *Frontiers in oncology.* 2019, Vol. 9, p. 639.
- Strom Kahr, et al. The timing of venous thromboembolism in ovarian cancer patients: A nationwide Danish cohort study. *J Thromb Haemost.* 2021, Vol. 19, 4, pp. 992-1000.
- Schurman MS, et al. Treatment and outcome of elderly patients with advanced stage ovarian cancer: A nationwide analysis. *Gynecol Oncol.* 2018, Vol. 149, 2, pp. 270-4.
- Lontos M, et al. Real-world data on treatment management and outcomes of patients with newly diagnosed advanced epithelial ovarian cancer in Greece (The EPOCa study). *Current Oncology.* 2021, Vol. 28, 6, pp. 5266-77.
- Le Saux O, et al. Cross-sectional study on comorbidities and adverse events in patients with advanced and recurrent ovarian cancer in France. *Clinical Epidemiology.* 2015, Vol. 7, pp. 431-40.
- Zhang 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

Disclosures: This study was sponsored by Merck (CrossRef Funder ID: 10.13039/100009945). JM and MC are employees of Merck, AB, TAB and VMG are employees of YOLARX Consultants which received funding from Merck for the conduct of this work.

Presented at the ISPOR Europe | 09 – 12 November 2025 | Glasgow, Scotland, United Kingdom