Real World Data Analysis of Ovarian Cancer (OC) Maintenance Utilization Among Maintenance Eligible Patients

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BACKGROUND

- Approximately 1% of US women will be diagnosed with epithelial ovarian cancer (OC) during their lifetime
- The survival rate of women diagnosed with OC is less than 50%
- As standard treatments with platinum and taxane-based chemotherapy have reached a benefits plateau, novel therapeutic agents and maintenance therapy have attracted increased interest¹
- A better understanding of germline and somatic BRCA mutations, homologous recombination deficiency (HRD) status and platinum-sensitivity of the tumor have also aided in improved treatment selection for OC patients
- Studies show OC patients who achieve a response to platinum-based chemotherapy may benefit from maintenance therapy, to induce a lasting remission or extend the time interval before progression without any deleterious impact on quality of life^{1,2}
- Maintenance therapy options for OC patients include chemotherapy,
 anti-angiogenic agents, and poly(ADP-ribose) polymerase inhibitors (PARPi)
- While somewhat better response rates have been observed in OC patients carrying BRCA mutations, maintenance therapy with PARPi (niraparib, olaparib, and rucaparib) shows improved PFS in all patients irrespective of BRCA status compared to placebo¹

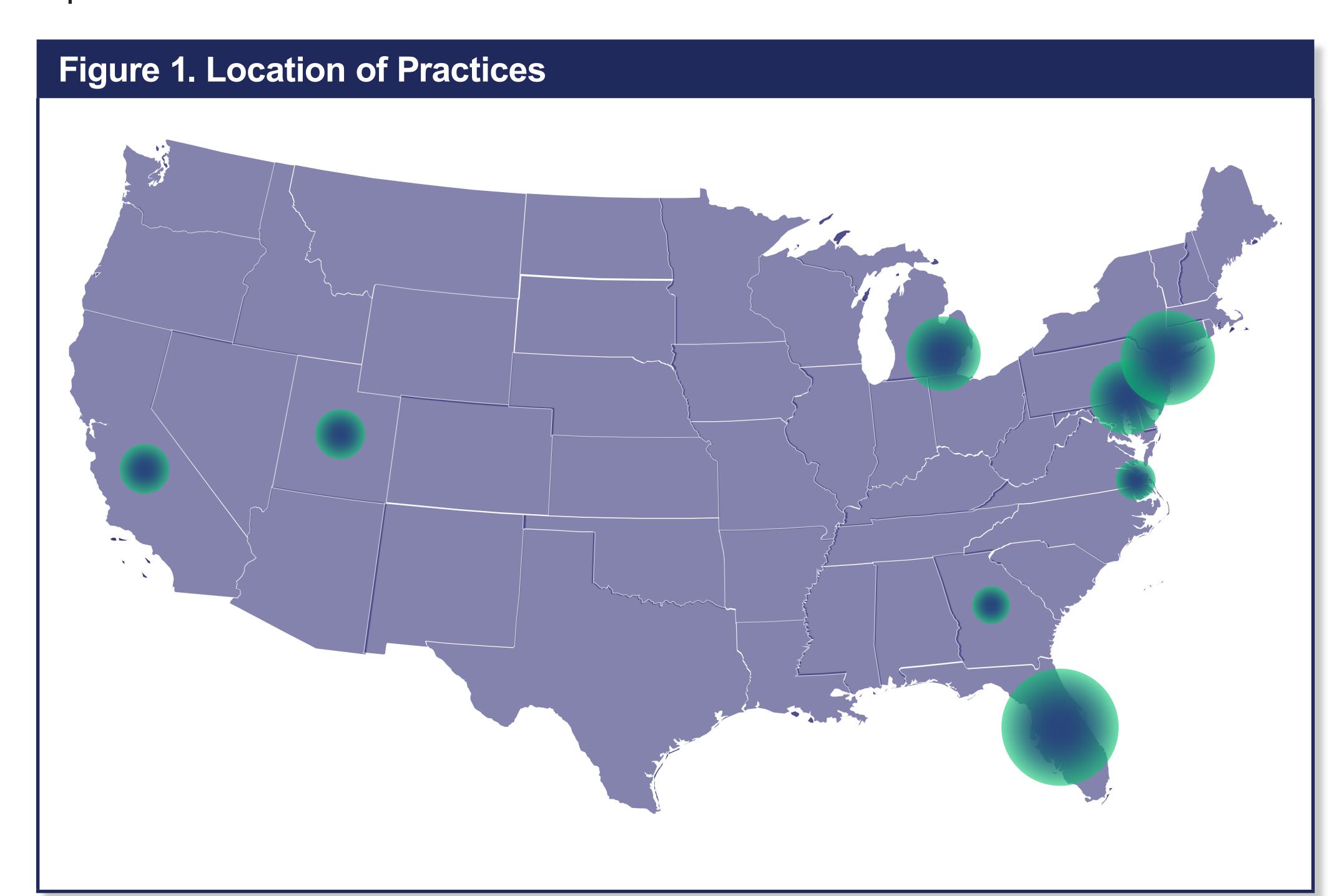
OBJECTIVE

 This study was designed to assess the current utilization of maintenance therapy in second and later lines among maintenance-eligible patients in the US community oncology practices

METHODS

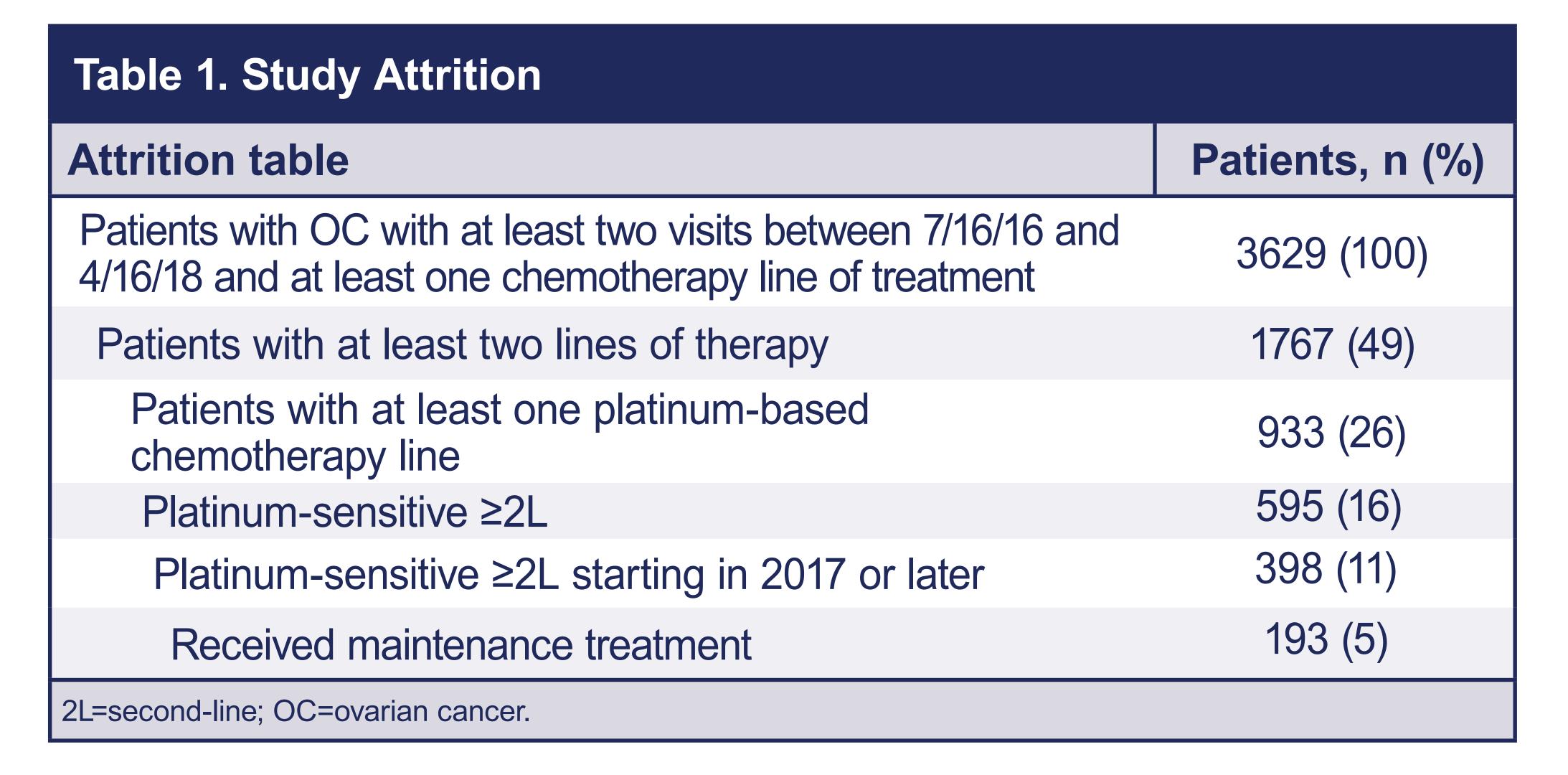
- This real-world data analysis utilized the Integra Data Exchange (DTX)
 database, a deidentified data source from community oncology practice
 systems (electronic medical records [EMR], practice management, and
 paid claims)
- Data were collected from eight practice groups (Figure 1) varying in size and geographic representation from across the United States
- This retrospective study included 3629 patients with OC with at least two visits between July 16, 2016, and April 16, 2018
- Data were abstracted from pre-populated fields and through manual abstraction
- Line of therapy is defined by applying business rules on EMR
- Data were checked for accuracy, quality, integrity, and completeness using internal manual and automated quality check procedures

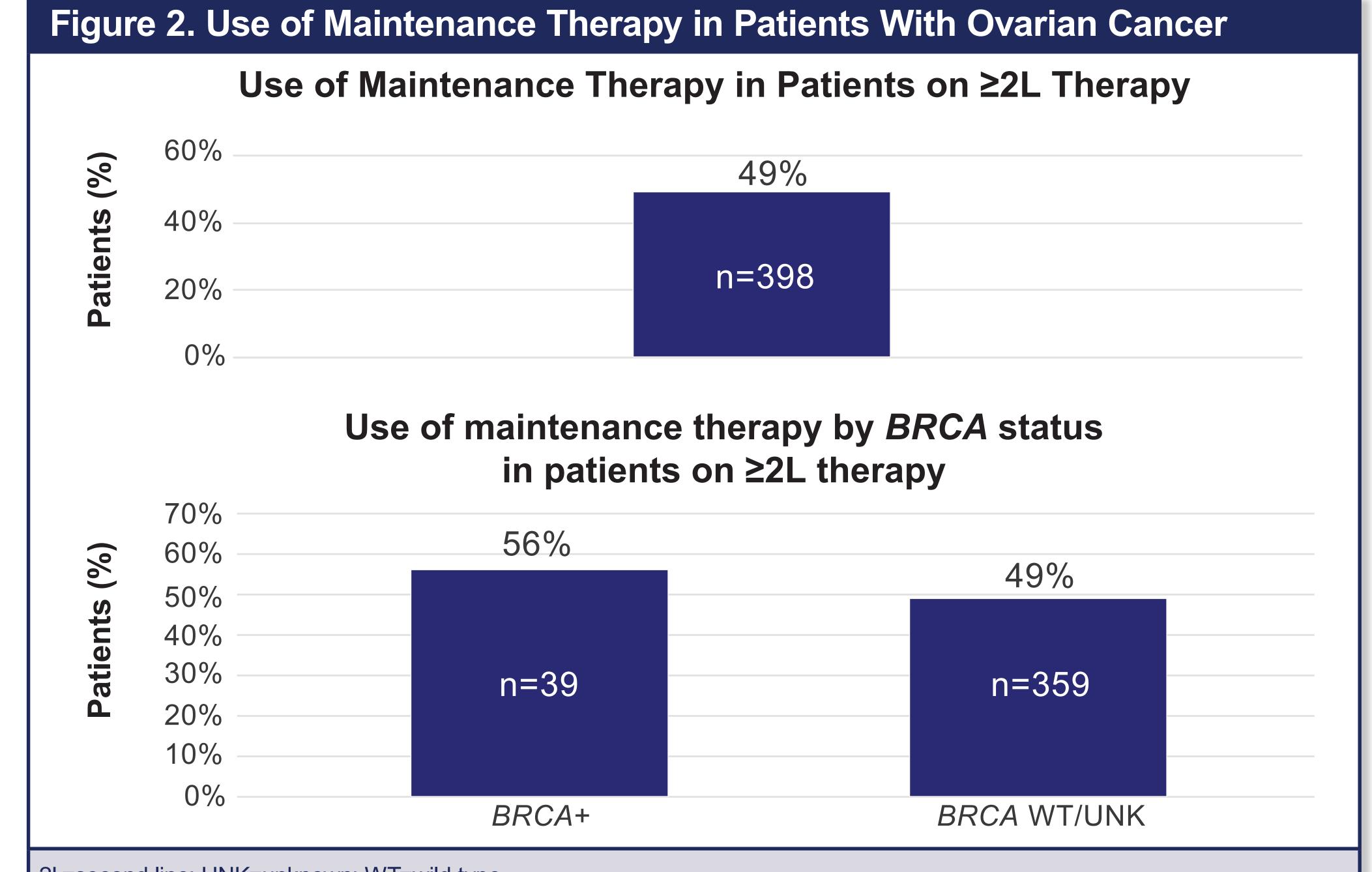
- A total of 398 patients with OC recurred and received second-line or later platinum-based chemotherapy for 4–9 cycles or had a complete/partial response between January 1, 2017, and July 31, 2018
- Patients receiving several cycles of platinum-based chemotherapy was a proxy for response or platinum-sensitivity
- Potential maintenance therapy options were PARPi, bevacizumab, and non-platinum-chemotherapy agents. Rate of maintenance therapy after platinum-based treatment was assessed

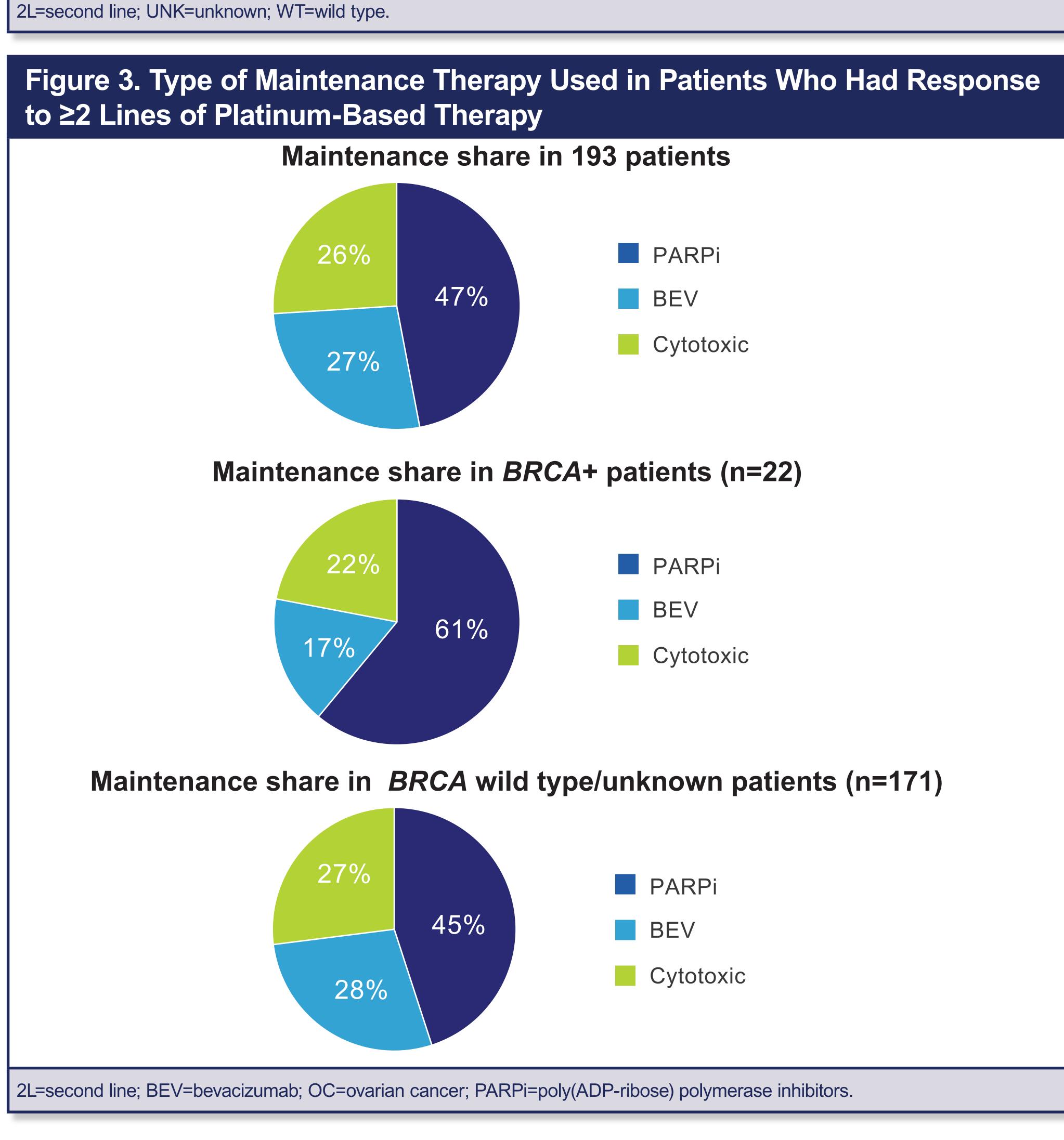


RESULTS

• Table 1 shows a step-by-step selection of patients with OC who were included in the study and had maintenance therapy data







- According to our real-world data analysis, maintenance therapy was utilized in 49% of 398 maintenance-eligible patients at least once following response to second-line or later lines of platinum chemotherapy (Figure 2)
- Use of maintenance therapy is higher in patients with BRCA mutations (56%) than in those with BRCA wild-type/unknown (49%) in second and subsequent lines (Figure 2)
- Among patients who received maintenance therapy in second and subsequent lines, 47% received PARPi, 27% bevacizumab, and 26% non-platinum chemotherapy. Use of PARPi maintenance therapy was higher in *BRCA* mutated patients than in those with *BRCA* wild type/ unknown (61% vs 45%), whereas the use of cytotoxic chemotherapy and bevacizumab maintenance therapies were slightly higher in *BRCA* wild type/ unknown patients (Figure 3)

CONCLUSIONS

- This real-world data analysis of 8 community oncology practices of varying sizes shows that though there are several maintenance therapy options available, 51% of women with OC who could potentially benefit from maintenance treatment did not receive maintenance therapy
- Only 56% of patients carrying a BRCA mutation were targeted for maintenance therapy in the community oncology setting
- Among patients who received maintenance therapy following second-line or later platinum chemotherapy, 47% received a PARPi based regime
- There are several study limitations
- Not all data could be abstracted from all patients, BRCA status was not known for a subgroup of patients, and the rate of capture of oral therapies was variable
- In addition, this study captures limited (approximately one year) data on PARPi maintenance therapy use
- Future studies that examine maintenance therapy use over longer periods are needed to better understand the adoption of maintenance therapy in patients with OC

REFERENCES

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- 2. Oza AM, et al. *Lancet Oncol*. 2018;19:1117–1125.

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