

# First insight of a tailoring Chemotherapy Intensity regimen in a Real life Cohort of Elderly patients with ovarian cancer: The CIRCE study

Bortot L<sup>1,2</sup>, Bartoletti M<sup>1,2</sup>, Basile D<sup>1,2</sup>, Gerrata L<sup>1,2</sup>, Corvaja C<sup>1,2</sup>, Lisanti C<sup>1,2</sup>, Pelizzari G<sup>1,2</sup>, Garattini SK<sup>1,2</sup>, Garutti M<sup>2,3</sup>, Buriolla S<sup>1,2</sup>, Da Ros L<sup>2</sup>, Bolzonello S<sup>2</sup>, Di Nardo P<sup>2</sup>, Spazzapan S<sup>2</sup>, Nicoloso MS<sup>2,4</sup>, Scalone S<sup>2</sup>, Lombardi D<sup>2</sup>, Giorda G<sup>5</sup>, Sorio R<sup>2</sup>, Puglisi F<sup>1,2</sup>

1 Department of Medicine (DAME), University of Udine, 33100 Udine, Italy 2 Department of Medical Oncology, Centro di Riferimento Oncologico di Aviano (CRO), IRCCS, 33081 Aviano, Italy 3 U.O.C Oncologia, Fondazione Policlinico Universitario Agostino Gemelli IRCCS, 00168 Roma, Italy 4 Division of Molecular Oncology, Department of Translational Research, Centro di Riferimento Oncologico di Aviano (CRO), IRCCS, 33081 Aviano, Italy 5 Department of Gynecologic Oncology, Centro di Riferimento Oncologico di Aviano (CRO), IRCCS, 33081 Aviano, Italy

## Background

- Women aged  $\geq 65$  represent nearly 50% of ovarian cancer (OC) patients (pts); however they are significantly under-represented in clinical trials
- Elderly OC pts are less likely to receive the optimal treatment. Furthermore, multidimensional geriatric assessment is still underused.
- The present study aimed to provide an overview of real-life treatment strategies for elderly advanced-OC pts and to investigate clinico-pathological features that potentially drive choice of first-line treatment

## Methodology

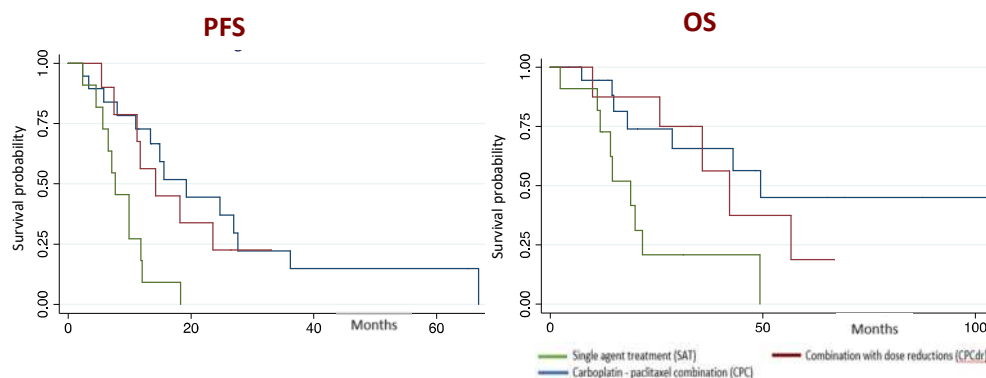
- A retrospective analysis was conducted on a consecutive series of 45 OC pts  $\geq 69$  years old, FIGO stage IIb-IV, treated with first-line chemotherapy (CT) from 2011 to 2018 at CRO Aviano National Cancer Institute (Italy)
- Factors associated with treatment choice and rate of adverse events were investigated through Fisher-exact test and Pearson's Chi-squared test; differences in progression free survival (PFS) and overall survival (OS) were tested by log-rank test.

## Results

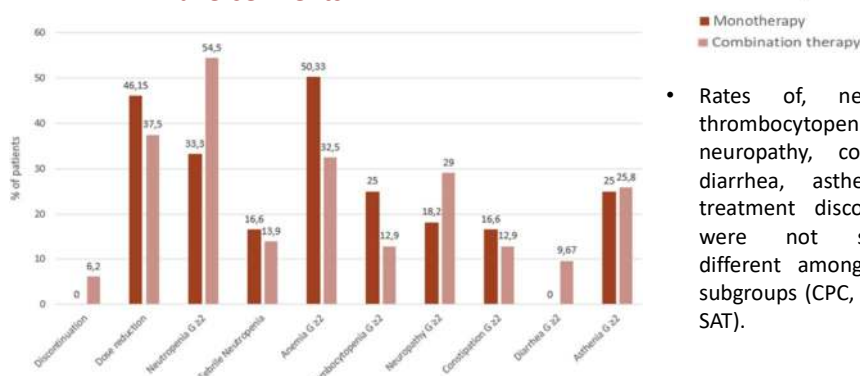
- Overall, 67% of pts received first-line CT with a standard carboplatin-paclitaxel combination (CPC). Conversely, 33% received single-agent treatment (SAT) 31% with carboplatin, 2% with paclitaxel.

- No differences were observed between CPC and CPC with dose reductions (CPCdr), either in PFS (HR=1.29 P=0.59) nor in OS (HR=1.40 P=0.56). On the other hand, SAT was associated with shorter PFS (HR=4.35 P=0.001) and OS (HR=4.48 P=0.005).

	Nr of patients	%
<b>Age</b>		
$\leq 75$	25	55.6
$>75$	20	44.4
<b>Stage</b>		
III	31	72.1
IV	12	27.9
<b>PS</b>		
0	24	54.6
1-2	20	45.4
<b>BMI</b>		
$< 18.5$	2	6.6
18.5 - 25	20	44.4
$\geq 25$	22	48.9
<b>Nr of medications</b>		
$< 3$	22	48.9
$\geq 3$	23	51.1
<b>Neoadjuvant CT</b>		
YES	11	24.4
NO	34	75.6
<b>RO</b>		
YES	15	55.6
NO	12	44.4
<b>First Line CT</b>		
Carboplatin+Paclitaxel	24	53.3
Carboplatin+Paclitaxel+Bevacizumab	6	13.3
Carboplatin	14	31.1
Paclitaxel	1	2.2



## Adverse Events



- Rates of, neutropenia, thrombocytopenia, anemia neuropathy, constipation, diarrhea, asthenia, and treatment discontinuation were not statistically different among different subgroups (CPC, CPCdr and SAT).

## Conclusions

- CPC represents the first-line standard therapy in advanced OC, the present study suggests that, in elderly patients, a dose reduction could be considered rather than a single agent regimen.
- Of note, clinical decision-making was mainly driven by PS ECOG, emphasizing the value of multidimensional geriatric assessment
- Notwithstanding the limitations due to the small sample size, the evaluated regimens showed a comparable toxicity profile with a numerical difference with respect to neurotoxicity in patients treated with the doublet.
- Further prospective studies are needed to investigate biomarkers, aiming to tailor treatment strategies and to improve clinical outcomes.