significantly reduced after third recurrence (p=0.558). Patients who received more lines of chemotherapy had better OS (p=0.018). In the multivariate analysis adjusted for clinicopathologic factors, platinum-sensitivity > 12 months and the administration of ≥ three lines of treatment were independent prognostic factors for OS (p<0.0001 and p=0.002, respectively), while ECOG and rechallenge with platinum for PFS (p=0.02 and p=0.0009, respectively). In the multivariate analysis according to single line of therapy, platinum-sensitivity (p=0.013), platinum rechallenge (p=0.016) and maintenance treatment (p=0.005) resulted associated with better PFS at the second recurrence and maintenance therapy preserved its prognostic value up to fourth line (p=0.015).

Conclusion Platinum-sensitivity and receiving ≥ three lines of treatment are independent prognostic factors for OS. Platinum-sensitivity, platinum rechallenge and maintenance therapy are associated with improved PFS in third line; maintenance therapy remains an independent prognostic factor even in subsequent treatments.

Disclosures The authors declare that there are no conflicts of interest.

#646 GENE EXPRESSION OF MEMBRANE TRANSPORTERS: IMPORTANCE FOR PROGNOSIS AND PROGRESSION OF OVARIAN CARCINOMA

[1,2]Martin Hruda*, [3,2,4]Katerina Elsnerová, [3,5]Beatrice Mohelníková Duchonová, [3,6]Ela Cerovská, [3,4]Marie Ehrlichová, [3]Ivan Gut, [1,2]Lukáš Rob, [7]Petr škapa, [8]Alena Bartáková, [8]Jirí Bouda, [4,9]Pavel Vodicka, [3,4]Pavel Soucek, [3]Radka Václavíková. *[1]University Hospital Královské Vinohrady, Prague, Czech Republic; [2]Third Faculty of Medicine, Charles University, Prague, Czech Republic; [3]Toxicogenomics Unit, National Institute of Public Health, Prague, Czech Republic; [4]Biomedical Center, Faculty of Medicine in Pilsen, Charles University, Pilsen, Czech Republic; [5]Palacký University and University Hospital Olomouc, Olomouc, Czech Republic; [6]Faculty of Science, Charles University, Prague, Czech Republic; [7]University Hospital Motol, Prague, Czech Republic; [8]Faculty of Medicine and University Hospital in Pilsen, Pilsen, Czech Republic; [9]Department of the Molecular Biology of Cancer, Institute of Experimental Medicine, Academy of Science, Prague, Czech Republic*

10.1136/ijgc-2023-ESGO.623

Introduction/Background Membrane transporter proteins (for example ABC, SLC and ATPases) take part in oncogenesis and the formation of chemoresistance, however the interpretation of their importance in ovarian cancer prognosis is still limited.

Methodology Gene expression profiling was performed on 39 ABC and 12 SLC transporters and 3 ATPases in epithelial ovarian cancer (EOC) tissues and the results were assessed with respect to prognosis and clinical presentation of EOC patients. In a cohort of tissues with primary EOC (n = 57) and control tissues (n = 14) we assessed relative expression of genes and compared it with the clinical and survival information. The data was verified on a separate cohort (n = 60).

Results 6 ABC genes and the SLC22A18 gene were considerably over–expressed in the cancer tissues in comparison with control tissues and the expression of 12 ABC genes, 5 SLC genes, ATP7A, ATP11B was reduced. The expression of ABCA12, ABCC3, ABCC6, ABCD3, ABCG1, SLC22A5 genes was greater in HGSC in comparison with other types. Expression of ABCA2 was considerably related to tumour grade in both cohorts. Particularly, the expression levels of ABCA9, ABCA10, ABCC9 and SLC16A14 were considerably related to PFS in both pilot and verification groups. ABCG2 level was related to PFS in the grouped patient cohort.

Conclusion The genes ABCA2, ABCA9, ABCA10, ABCC9, ABCG2 and SLC16A14 represent new potential markers of epithelial ovarian cancer progression and collectively with the discovered association between the expression of ABCA12, ABCC3, ABCC6, ABCD3, ABCG1, SLC22A5 and HGSC they should be investigated more extensively in future studies.

Disclosures This study was supported by running projects of the Czech Health Research Council grant no. NU22–08-00186 and Cooperatio program no. 207035, 'Maternal and Childhood Care' by 3rd Faculty Medicine, Charles University.

#676 PROGNOSTIC VALUE OF IMMUNE INFILTRATE IN HIGH-GRADE SEROUS OVARIAN CARCINOMA ACCORDING TO PLATINUM-SENSITIVITY/RESISTANCE STATUS

[1]Marie Gabrielle Courtès*, [2]Isabelle Treilleux, [1]José Sandoval, [3]Laura Salabert, [2]Pierre Meeus, [2]Nicolas Chopin, [3]Camille Chakiba, [4]Nathalie Bendriss-Vermare, [2]Isabelle Ray-Coquard, [3]Sabrina Croce, [1]Sana Intidhar Labidi Galy, [2]Olivier Tredan. *[1]HUG, Genève, Switzerland; [2]Centre Léon Bérard, Lyon, France; [3]Institut Bergonié, Bordeaux, France; [4]INSERM, Bordeaux, France*

10.1136/ijgc-2023-ESGO.624

Introduction/Background Although the prognostic value of immune infiltrate has been extensively explored in HGSOC, very few studies explored it according to platinum-sensitivity/resistance status, an important factor for stratifying subsequent therapy.

Methodology Here, we questioned the prognostic value of 5 immune cell subsets (CD3+ and CD8+ T cells, FoxP3+ regulatory T cells, CD68+ and CD163+ tumor-associated macrophages) identified by immunohistochemistry in high-grade serous ovarian carcinoma using a clinically annotated tissue-microarray of 134 tumor samples.

Results We found that high intra-epithelial CD3+ T cell in tumor core was significantly associated with prolonged OS in all patients (HR=0.53; 95% CI [0.3–0.88]; p=0.03), and those who had platinum-sensitive disease (HR=0.51; 95% CI [0.27–0.94]; p=0.03). Similarly, a high density of CD68+ TAMs in tumor core was significantly associated with better OS in all patients (HR=0.49; 95% CI [0.27–0.91]; p=0.02), and those who had platinum-sensitive disease (HR=0.46; 95% CI [0.24–0.89]; p=0.02). Unexpectedly, there was a trend toward better survival in platinum-resistant patients who had stromal accumulation of FoxP3+ Treg (HR=0.27; 95% CI [0.06–1.15]; p=0.08).

Conclusion A deeper spatial and phenotypical characterization of tumor immune microenvironment in HGSOC according to platinum-sensitivity/resistance status is warranted for tailoring precision immunotherapy in this deadly disease.

Disclosures Together, our findings suggest that the prognostic value of immune infiltrate in HGSOC differs according to platinum-sensitivity/resistance status.