ECONOMIC BURDEN IN PLATINUM-RESISTANT OVARIAN CANCER

Nikhila Indukuri*, 1Mhaela Musat, 1Gordon Chavez, 1Christina Preuschoft, 1Novocure Limited, Global Value, New York City, USA; 2Cytel Inc., Value Communications, Cambridge, USA

10.1136/ijgc-2022-igcs.317

Objectives Introduction Platinum-resistant ovarian cancer (PROC) is associated with a substantial economic burden. An economic SLR was conducted to evaluate the economic burden and cost-effectiveness analyses (CEA) of therapies used in advanced ovarian cancer resistant or refractory to platinum-based chemotherapy.

Methods The scope of the SLR was defined using the Patient, Population, Intervention, Comparators, Outcomes measures and Study design (PICOS) statement, and performed in accordance with PRISMA guidelines. Medical Literature Analysis and Retrieval System Online [MEDLINE®] and Excerpta Medica Database [Embase®], EconLit and Cochrane were searched for records dated up to the search date of July 6, 2021. Relevant congresses (2017–2021), previous HTA submissions, and bibliographies of previously conducted SLRs were searched to capture all relevant data.

Results Seventeen publications out of 1,092 records from the Ovid search were deemed relevant for the analysis. Of 17 included studies, 12 were CEs and 5 were observational studies evaluating cost and healthcare resource use in US, Iran, Canada, Belgium, Spain, Thailand, Portugal, and Australia. Healthcare costs for ovarian cancer increase with disease progression to more advanced stages of disease and by increased lines of chemotherapy treatment. The average annual per patient cost was €24,111, increasing from €8,641 in stage I to €42,547 in stage IV. Advanced chemotherapy, hospitalizations, and surgery accounted for 87.2% of direct healthcare costs (Delgado-Ortega et al. 2019). Indirect costs were estimated at €1,002 per patient annually.

Conclusions Conclusion There is a need for more affordable and tolerable treatment options for patients with ovarian cancer resistant or refractory to platinum-based chemotherapy.

PROGNOSTIC ROLE OF PATHOLOGICAL CHEMOTHERAPY RESPONSE SCORE IN PATIENTS RECEIVING NEOADJUVANT CHEMOTHERAPY FOR EPITHELIAL OVARIAN CANCER

Ariela Jakobson Setton*, 1Gabriel Levin, 1Oded Raban, 1Daliah Tsoref, 4Anat From, 2Tamar Peri, 2Ram Eltan, 1Rabin Medical Center, Petah Tikva, affiliated with the Sackler Faculty of Medicine, Tel Aviv University, Obstetrics and Gynecology, Tel Aviv, Israel; 2Hadassah University Hospital, Obstetrics and Gynecology, Jerusalem, Israel; 2Rabin Medical Center Petah Tikva, affiliated with Sackler Faculty of Medicine, Tel Aviv University, Israel; 3Department of Oncology, TEL AVIV, Israel; 4Rabin Medical Center Petah Tikva, affiliated with Sackler Faculty of medicine, Tel Aviv University, Department of Obstetrics and Gynecology, TEL AVIV, Israel

10.1136/ijgc-2022-igcs.319

Objectives Following neo-adjuvant chemotherapy, patients with advanced Epithelial Ovarian Cancer (EOC) undergo interval cytoreduction. Response to treatment varies widely. Our objective was to study the prognostic role of the pathologic chemotheraphy response score (CRS) on final pathology in this group of patients.

Methods A retrospective study was conducted of patients with advanced high-grade EOC diagnosed between 2005–2017, and treated with neoadjuvant chemotherapy. After interval cytoreductive surgery (ICS), pathological tumor regression was determined in the omentum, according to the 3-tier CRS, while CRS 1+2 were defined as poor response and CRS3 was defined as good response. Results were compared with standard clinicopathological variables (demographical data, tumor characteristics, CA-125, surgical outcome), and progression free survival (PFS). Standard statistics were used as required.

Results Fifty eight patients were eligible for analysis, CRS 1–2 was found in 33(56.9%) and CRS 3 in 25 (43.1%) patients. In the CRS 3 group, more patients achieved no macroscopic disease at ICS than in the CRS 1–2 group (22 (91.7%) vs. 15 (46.9%), p<0.001). Bowel resection rates were lower in the

THROMBOCYTOSIS CONTRIBUTE TO INCREASED EX-VIVO AGONIST-INDUCED PLATELET AGGREGATION IN OVARIAN CANCER PATIENTS

Zitha Redempta Isingizwe*, 2Doris Berbrouk. 1University of Oklahoma Health Sciences Center, Pharmaceutical Sciences, Oklahoma City, USA; 2University of Oklahoma Health Sciences Center, Gynecologic Oncology, Stephenson Cancer Center, Oklahoma City, USA

10.1136/ijgc-2022-igcs.318

Objectives Thrombocytosis in ovarian cancer patients directly correlates with disease burden and increased risk of thrombosis and death caused by thrombosis. The objective of the current study was to test the hypothesis that agonist-induced platelet aggregation differs between healthy controls compared to ovarian cancer patients based on platelet count or cancer-altered platelet biology.

Methods Venous blood was collected from healthy controls or ovarian cancer patients (N>25 each) in acid citrate dextrose anticoagulant. Complete blood counts (CBCs) in whole blood samples were determined using a HemaVet HMS and compared between cancer and controls using Sika’s multiple comparisons test. Platelet rich plasma (PRP) was separated from the whole blood and used to measure agonist-induced platelet aggregation using a Platelet Aggregation Profiler (PAP-8E) and t-tests. Agonists used were: arachidonic acid (AA: 0.5 mg/ml), adenosine diphosphate (ADP: 2 μM and 20 μM) and collagen (0.19 mg/ml).

Results The only CBC parameter that significantly differed between the two groups was a higher platelet count in ovarian cancer patients compared to controls. Platelet aggregation rates and maximum aggregation positively correlated with platelet count. The rate and maximum degree of platelet aggregation were higher in ovarian cancer patients compared to healthy controls for whether the same number of platelets or volume of PRP was used.

Conclusions Both platelet count and cancer-associated platelet biology contribute to platelet hypercoagulability in ovarian cancer patients, consistent with their increased thrombosis risk. This finding supports studies repurposing antiplatelet agents for prevention of thrombosis in ovarian cancer patients.