Conclusion High vagal nerve activity, indexed by HRV, is significantly and independently associated with better OS. These results support previous studies on the prognostic role of HRV in cancer and if confirmed in longitudinal studies, call for testing effects of vagal nerve activation among OC patients.

REAL-WORLD ASSESSMENT OF PATIENTS WITH OVARIAN CANCER WHO RECEIVED NIRAPARIB AS SECOND-LINE MAINTENANCE THERAPY IN THE UNITED STATES: DID FIRST-LINE MAINTENANCE APPROVAL CHANGE THE PATIENT PROFILE FOR SECOND-LINE MAINTENANCE THERAPY?

Introduction/Background Niraparib, a poly(ADP-ribose) polymerase inhibitor (PARPi), was first approved in the US on 27 Mar 2017 for maintenance treatment of recurrent epithelial ovarian cancer (EOC). To evaluate whether approval of niraparib first-line maintenance (1LM) affected the clinical profile of patients receiving niraparib second-line maintenance (2LM), this study described the characteristics of real-world patients with EOC who initiated 2LM with niraparib before and after niraparib 1LM approval, using a real-world database.

Methodology This retrospective cohort study from the nationwide electronic health record-derived de-identified Flatiron Health database and included patients who were diagnosed with EOC between 01Jan2011 and 30Nov2021, were ≥18 years old at diagnosis, and received 1L platinum-based therapy. The index date was defined as the initiation date of niraparib 2LM monotherapy, on or after 01Jan2017. Demographic and clinical characteristics were assessed from EOC diagnosis to index date. Patients were stratified by index date: before 29Apr2020 (niraparib 1LM preapproval cohort) and after 29Apr2020 (niraparib 1LM postapproval cohort).

Results 231 2LM niraparib monotherapy patients were included, with all receiving 2L platinum-based therapy. The median age was 68 years, and patients were primarily treated in a community setting (90.0%; table 1). The majority of patients had stage III/IV disease at diagnosis (78.4%) and had BRCA wild-type (BRCAwt, 74.0%). Homologous recombination deficiency status was unknown for most patients (92.2%). Median time from initial EOC diagnosis to 2L maintenance therapy was 803 days. Patient characteristics were broadly similar across the stratified cohorts, with a higher proportion of patients with BRCAwt in the niraparib 1LM postapproval cohort than in the preapproval cohort (85.3% vs 68.6%).

Conclusion This real-world analysis found that niraparib remained an important treatment option for 2LM in patients...
with recurrent EOC following niraparib 1LM approval, and that 1LM approval did not markedly change the profile of patients receiving niraparib maintenance therapy in a 2L setting.

**Introduction/Background** AL3818 is a novel, orally administered, small molecule tyrosine kinase inhibitor. The primary objective of this phase 2 study is to evaluate the efficacy of AL3818 in combination with chemotherapies in patients with platinum resistant ovarian carcinoma.

**Methodology** Patients with a diagnosis of platinum resistant ovarian carcinoma requiring second line or further treatment with chemotherapy were eligible for enrollment. The regimen was a 21-day cycle with oral AL3818 at 8 mg administered on days 8–21, with days 1–7 off. Chemotherapy options included weekly paclitaxel, pegylated liposomal doxorubicin (PLD), and topotecan. Maintenance monotherapy with AL3818 was an option if chemotherapy was tolerated, small molecule tyrosine kinase inhibitor. The primary objective of this phase 2 study is to evaluate the efficacy of AL3818 in combination with chemotherapies in patients with platinum resistant ovarian carcinoma.

**Results** Most patients were heavily pre-treated with median prior 4 (1–11) lines. At the cut-off date April 8, 2021, n=51 patients with platinum resistant ovarian cancer were enrolled and n=46 were evaluable, 29 of n=46 were treated with weekly paclitaxel. The objective response rate (ORR) and disease control rate (DCR) in intention to treat patient population were 43% (20/46) and 91% (42/46) for n=46 patients, and 55% (16/29) and 90% (26/29) for weekly paclitaxel patients. Median duration of response (DOR) was 5.94 months for n=46 patients and 6.43 months for weekly paclitaxel patients. Median progression free survival (PFS) was 6.27 months for n=46 patients and 6.67 months for weekly paclitaxel patients. Common treatment emergent adverse events (TEAE) included: abdominal pain (14%), alopecia (16%), constipation (10%), cough (12%), diarrhea (50%), dizziness (10%), dry skin (10%), epistaxis (18%), dyspnea (16%) fatigue (64%), fever (10%), headache (20%), hypertension (10%), anorexia (10%), oral mucositis (12%), nausea (52%), neutropenia (12%), vomiting (26%).

**Conclusion** AL3818 has demonstrated positive combined synergic efficacy with chemotherapies in platinum resistant ovarian cancer patients. These combination regimens are well tolerated in a heavily pre-treated population and a phase 3 registration study is ongoing (NCT02584478).