predicted by a kNN model that included age and CCI (figure 1).

Conclusion The k-NN algorithm is a versatile and promising tool for R0 resection in HGSOC patients, which outperforms logistic regression. The model, which is very much reflective of previous clinical experience can be directly available to clinicians and is expected to improve accuracy with data expansion.

Disclosures No disclosures.

Introduction/Background Clarity and precision about the anatomical extent of disease in cancer is essential for prognostication, research, and cancer-control activities. To select effective therapeutic approaches for advanced high-grade serous ovarian cancer (HGSOC), yet the most prevalent and lethal form, it is important to identify stratification factors that could accurately predict prognosis before initial intervention. We hypothesized that women with different tumor dissemination patterns at pre-treatment imaging would have different prognosis.

Methodology This was a retrospective analysis of 209 FIGO stage III-IV HGSOC women, who were scheduled for cytoreductive surgery in SJUH Leeds between Jan 2015 to Dec 2018 with curative or life-prolonging intent. CT scans were reported by an MDT radiologist. Three pre-treatment imaging dissemination patterns were identified and verified by final histology. A Cox proportional hazard analysis was used to test the effect of imaging dissemination patterns, age, performance status (PS), timing of surgery (upfront vs delayed cytoreduction), surgical complexity score (SCS), residual disease (RD), disease score, and type of chemotherapy on survival. Kaplan-Meier survival curves were produced using SPSS.26

Results There were no statistical differences in the cytoreduction rates amongst the three groups (figure 1). The mean progression free survival (PFS) for patients grouped as intraperitoneal (n=137), intraperitoneal and lymphatic (n=56), and intraperitoneal and haematogenous (n=16) was 26.5 (95% CI 23.4–29.6), 21.3 (95% CI 18.3–24.4) and 19.1 months (95% CI 15.1–22.9), respectively. The mean overall survival (OS) was 45.8 (95% CI 41.5–50.2), 34.8 (95% CI 29.2–40.3) and 30.7 months (95% CI 24.5–36.9), respectively (p=0.05) (figure 2). The mean PFS and OS for the entire cohort was 25 months (95% CI 22.6–27.3) and 41.8 (95% CI 38.3–45.2), respectively. For PFS, Cox regression analysis identified PS (HR 1.23, 95% CI 1.1–1.5, p=0.04), RD (HR 0.69, 95% CI 0.46–0.98, p=0.05) as statistically significant. For OS, Cox regression analysis identified PS (HR 1.47, 95% CI 1.14–1.89, p=0.03), dissemination pattern (HR 1.36, 95% CI 1.02–1.86, p=0.05) as statistically significant.

Conclusion For HGSOC prognosis, one should consider not only the patient’s disease burden but also their overall medical status and ability to undergo extensive surgery. Prolonged survival rates were found predominantly in those patients with intraperitoneal only pre-treatment imaging dissemination pattern. Baseline tumor dissemination pattern can be a prognostic factor for overall survival. Classification of such patterns can help counsel patients initially on their prognosis and identify those who might benefit from intraperitoneal chemotherapy.

Disclosures No disclosures.

Introduction/Background Epithelial ovarian cancer (EOC) is often associated with diagnosis at an advanced stage, poor prognosis and high mortality. Limited data exist on the clinical management of ovarian cancer (OC) patients in the Asia-Pacific region. We evaluated secondary databases from Australia, South Korea and Taiwan to review the current standard of care in a real world setting prior to the introduction of poly-(adenosine diphosphate-ribose) polymerase inhibitor (PARPi) maintenance after first-line chemotherapy.

Methodology Data from medical records of nearly 1,000 women diagnosed with advanced-stage EOC in a 5 year period, between January 2014 and December 2018 were obtained from clinic- (Taiwan, South Korea) and cohort-based
(Australia) OC registries. Patients on first-line maintenance with PARPis were excluded. Treatment characteristics including the use of neoadjuvant therapy, outcomes of cytoreductive surgery and the use of bevacizumab as maintenance were summarised with descriptive statistics. Duration of treatment, time to real world progression and any other time-to-event outcomes (e.g. overall survival, platinum based chemotherapy-free interval and time to first subsequent treatment and surgery) will be analysed using Kaplan Meier methodology.

Results Table 1 describes the demographic characteristics and treatment patterns of the study population. Overall, patients received a median of 6 cycles of primary platinum chemotherapy; complete or partial remission was the most common outcome. For patients with data on progression, the median time to first progression in months (two sided 95% confidence interval) was 16.2 (14.6–18.1), 17.9 (16.2–19.3) and 17.2 (14.7–19.7) in Australian, South Korean and Taiwanese patients, respectively. From the currently available dataset of patients with high grade serous type investigated for germline BRCA1/2 mutations: 30/169, 17.8% (Australia), 80/354, 22.6% (South Korea) and 7/21, 33.3% (Taiwan) of patients tested positive for germline BRCA1/2 mutations.

Conclusion Although there were differences in demographics and treatment patterns, advanced-stage EOC had poor prognosis and relatively short progression-free intervals across Asia-Pacific countries with well developed healthcare systems, highlighting the need to develop novel approaches to improve patient outcomes. Variation in the germline BRCA1/2 mutation rates across three datasets is probably due to differences in the composition of the contributing registries (clinical or cohort-based).

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