

Shifting incidence and survival of epithelial ovarian cancer in seven countries (1995-2014)

Monday, 22 March 2021 15:30 (12 minutes)

In 2020, approximately 314,000 women were diagnosed with ovarian cancer and 207,000 deaths. The aim of the study is to provide a comprehensive assessment of the incidence of epithelial ovarian cancer (EOC) by histological subtypes and compare EOC survival across seven high income countries involved in the ICBP-SurvMark-2 project, (Australia, Canada, Denmark, Ireland, New Zealand, Norway, and the United Kingdom).

Incidence and survival analyses were limited to women diagnosed with ovarian cancer aged 15 years and older. Age standardized incidence rates (ASR) by subtype were calculated for all ages (15-99 years) and for two age groups (15-64 and 65+ years) by calendar year from 1995 to 2014. Net survival (NS) was estimated by subtypes, age groups, and 5-year study period (1995-2014) for all seven countries using the Pohar-Perme estimator.

Our findings showed serous carcinoma was the most common subtype across all age groups with ASR ranging between 8.3 per 100,000 women in Australia and 15.3 per 100,000 women in Norway for the 2010-2014 period. Substantial increase in serous carcinoma was observed between 2000-2014, particularly among women aged 65-99 years with statistically significant estimated annual percent change (EAPC) in Norway (EAPC=2.5%, 95% CI=0.8, 4.3), Australia (EAPC=2.6%, 95% CI=0.5, 4.7), and the United Kingdom (EAPC=5.8%, 95% CI=3.6, 8.0). In contrast, marked decrease in non-specific adenocarcinoma, NOS rate was observed in women aged 65-99 years with highest decrease observed in Australia (EAPC=-3.9%, 95% CI=-7.5, -0.2). Increase in cancer survival were also observed in the past 20 years for almost all EOC, except for adenocarcinoma, NOS where survival decreased. The highest survival increase was observed among women aged 65-99 years diagnosed with endometrioid carcinoma with median percentage point difference of 19.3% for 5-year NS across the seven countries.

In conclusion, this study highlights the rising incidence of serous carcinoma accompanied with a marked decrease in incidence of adenocarcinoma, NOS. Additionally, increase in survival was observed for almost all EOC subtypes across all seven countries. Progress in ovarian cancer staging, clinical management, and treatment over the past decades potentially plays a key role in the observed improvements in EOC survival.

Primary authors: CABASAG, Citadel (IARC); ARNOLD, Melina (IARC); RUTHERFORD, Mark; FERLAY, Jacques (IARC); BARBOT, Aude (IARC); BRAY, Freddie (IARC); SOERJOMATARAM, Isabelle (IARC)

Presenter: CABASAG, Citadel (IARC)

Session Classification: Oral presentation