IGCS19-0321

59 NATURAL KILLER CELLS AND TREATMENT EFFECT IN RECURRENT OVARIAN CANCER

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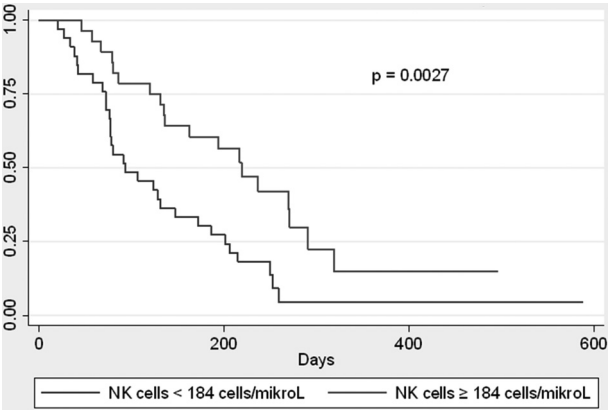
Objectives Treatment of ovarian cancer (OC) is challenged by advanced stage at diagnosis, development of resistance to chemotherapy resulting in low response rates. Natural killer (NK) cells are a subset of lymphocytes with antitumor capabilities however, the clinical significance remains unclear. The study aimed to investigate if blood NK cells could predict treatment effect in patients with recurrent ovarian cancer.

Methods Patients receiving chemotherapy for recurrent OC at Vejle Hospital were included (N=72). Blood samples were drawn before treatment cycles. Lymphocytes, NK cells and neutrophils were investigated through flowcytometry and NK cell activity was measured by the NK Vue® assay with interferon gamma as a marker. Progression free survival (PFS) was the primary endpoint.

Results Patients with high vs low NK cell count at 2nd treatment cycle (cut off: 184 cells/µL) had a median PFS of 7.3 months vs 3.1 months (p=0.0027) (figure 1). No significant correlation was found regarding NK cell activity and PFS. Patients with low vs high neutrophil lymphocyte ratio at 2nd treatment cycle (Cut off: 3.8) had a median PFS of 6.5 months vs 2.7 months (p= 0.0078). In multivariate Cox regression analysis NK cell count at 2nd treatment cycle remained an independent marker of favorable PFS with an adjusted hazard ratio (HR) of 0.39 (p=0.008).



Abstract 59 Figure 1 PFS NK cell count at 2nd treatment cycle

Conclusions A significant correlation between NK cells and treatment outcome in OC was found. This could influence future chemotherapy strategy and support research regarding NK cell based treatment.

IGCS19-0355

60 HISTOLOGICAL SUBTYPES OF OVARIAN CANCER: WORLDWIDE DISTRIBUTION AND COMPARISON OF SURVIVAL (CONCORD-3)

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Objectives Ovarian cancer comprises several histologically distinct subtypes. The distribution of these subtypes varies worldwide. Survival differs between the subtypes.

The CONCORD programme is the largest population-based study of global trends in cancer survival.

We aimed to explore international variation in survival for each subtype, to help interpret international differences in survival from all ovarian cancers combined.

Methods The third cycle of the CONCORD programme (CONCORD-3) includes data on 812,783 adult (15–99 years) women diagnosed with ovarian cancer during 2000–2014 in 61 countries.

We defined six histological groups: type I epithelial, type II epithelial, germ cell, sex cord-stromal, other specific non-epithelial and non-specific morphology. Only microscopically verified tumours were included. Borderline tumours were excluded. We estimated age-standardised 5-year net survival for each country by histological group.

Results Type II tumours were the commonest histological group worldwide (70%), followed by type I tumours (22%). Non-specific, other specific non-epithelial, germ cell and sex cord-stromal tumours were rare (8% of all tumours). Survival for each histologic subtype varied widely between countries. Survival from sex-cord stromal tumours was highest (80–90%). Survival ranged from 40% to 70% for type I tumours, but was much lower for type II (20–40%). Survival from germ cell tumours was generally 70–80%.

Conclusions Type I, germ cell and sex cord-stromal tumours generally showed higher survival than type II tumours. The proportion of these tumours may influence survival estimates for all ovarian cancers combined. International comparisons of survival should focus on survival for each histological subtype rather than for all ovarian cancers combined.

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61 CERVICAL DYSPLASIA AMONG LONG-TERM SCREENING NON-ATTENDEES – A SWEDISH POPULATION

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Objectives The efficacy of cervical screening programs is dependent on the participation rate which in Sweden is 83%. To increase participation among women not attending to cervical screening, self-collected samples for detection of high-risk human papillomavirus is an option.