

## INTISARI

**Latar Belakang:** Kanker ovarium merupakan kanker dengan prevalensi yang tinggi dan menduduki posisi ke-8 untuk kasus kanker pada wanita. Kanker ovarium juga merupakan kanker dengan angka kelangsungan hidup terendah pada bidang ginekologi yakni sekitar 47%. Hal ini dikarenakan alat screening maupun diagnosis seperti tumor marker CA-125 dan USG belum sempurna sehingga pasien biasanya ditemukan pada stadium lanjut. Terapi pada kanker ovarium juga belum adekuat dalam mengatasi kasus rekurensi. Kasus rekurensi pada kanker ovarium sekitar 60-80%. Maka dari itu, dibutuhkan sebuah pengembangan metode terapi dan prognosis terhadap kanker ovarium. Saat ini, dalam penentuan prognosis pada kanker ovarium terdapat faktor prognosis independen seperti stadium, tingkat keganasan tumor dan siklus kemoterapi. Selain itu, terdapat juga faktor prognosis yang masih dikembangkan yakni Tumor Infiltrating Lymphocytes (TIL). TIL dinilai dapat menggambarkan status imun tubuh terhadap kanker sehingga TIL menjadi penting untuk dipertimbangkan sebagai faktor prognosis pada kanker ovarium. Maka dari itu, dilakukan penelitian mengenai hubungan TIL terhadap stadium pada kanker ovarium tipe epitel untuk melihat kemungkinan TIL dipakai sebagai faktor prognosis independen pada kanker ovarium.

**Tujuan:** Mengetahui apakah terdapat hubungan antara jumlah Stromal TIL dan Intratumoral TIL terhadap stadium pada kanker ovarium tipe epitel

**Metode:** Penelitian ini merupakan penelitian observasional dengan desain studi belah lintang. Penelitian ini merupakan anak dari penelitian payung berjudul Kadar VEGF, Interleukin-6, Interleukin-10 dan TNF- $\alpha$  pada Cairan Peritoneum, Tumor Infiltrating Lymphocyte (TIL) dan Lymphovascular Space Invasion (LVSI) pada Jaringan Tumor Sebagai Biomarker Prognosis Karsinoma Ovarium. Sebanyak 40 pasien diikutsertakan dalam penelitian ini, data pasien diperoleh dari data penelitian payung sebanyak 36 data dan data pasien diperoleh dari Instalasi Catatan Medik dan Laboratorium Patologi Anatomi RSUP Dr Sardjito Yogyakarta sebanyak 4 data. Analisis dilakukan dengan uji Fisher's Exact test pada variabel Intratumoral TIL dengan stadium dan Spearman rank test pada variabel Stromal TIL dengan stadium.

**Hasil:** Tidak ditemukan adanya hubungan antara jumlah Stromal TIL terhadap stadium pada kanker ovarium tipe epitel ( $p = 0,282$ ). Tidak ditemukan adanya hubungan intratumoral TIL terhadap stadium ( $p = 0,233$ ).

**Kesimpulan:** Tidak terdapat hubungan antara jumlah Stromal TIL dan Intratumoral TIL terhadap stadium pada kanker ovarium tipe epitel.

**Kata Kunci:** kanker ovarium tipe epitel, *Tumor Infiltrating Lymphocyte* (TIL), *Stromal TIL*, *Intratumoral TIL*.

## ABSTRACT

**Background:** Ovarian cancer is a cancer with a high prevalence and its the eight most founded case of cancer in women. Ovarian cancer is also the cancer with the lowest survival rate in gynecology at around 47%. This is because screening and diagnostic tools such as the tumor marker CA-125 and ultrasound are not perfect yet, patients are usually found at an advanced stage. Therapy for ovarian cancer is also not adequate in dealing with recurrence cases. The recurrency of ovarian cancer is about 60-80%. Therefore, it is necessary to develop a therapeutic method and prognosis for ovarian cancer. Currently, in determining the prognosis in ovarian cancer, there are independent prognostic factors such as stage, tumor malignancy level and chemotherapy cycle. In addition, there is also a prognostic factor that is still being developed, it called Tumor Infiltrating Lymphocytes (TIL). TIL is considered to describe the body's immune status against cancer which make TIL would be important to be include as a prognostic factor in ovarian cancer. Therefore, a study was conducted on the relationship of TIL to stage in epithelial ovarian cancer to see the possibility of TIL being used as an independent prognostic factor in ovarian cancer.

**Objective:** To find out whether there is a relationship between the number of Stromal TIL and Intratumoral TIL on the stage of epithelial ovarian cancer

**Methods:** This research is an observational study with a cross-sectional design. This research is a subsidiary of an umbrella research entitled Levels of VEGF, Interleukin-6, Interleukin-10 and TNF- in Peritoneal Fluid, Tumor Infiltrating Lymphocyte (TIL) and Lymphovascular Space Invasion (LVSI) in Tumor Tissue as Biomarkers of Ovarian Carcinoma Prognosis. A total of 40 patients were included in this study, patient data obtained from umbrella research data as many as 36 data and patient data obtained from the Medical Records Installation and Anatomical Pathology Laboratory of Dr. Sardjito Hospital Yogyakarta as many as 4 data. The analysis was carried out with the Fisher's Exact test on the Intratumoral TIL variable with stage and Spearman rank test on the Stromal TIL variable with stage.

**Results:** There was no relationship between the number of stromal TIL and the stage of epithelial ovarian cancer ( $p = 0.282$ ). There was no association of intratumoral TIL with stage of epithelial ovarian cancer ( $p = 0.233$ ).

**Conclusion:** There is no relationship between the amount of Stromal TIL and Intratumoral TIL on the stage of epithelial ovarian cancer

**Keywords:** Epithelial ovarian cancer, Tumor Infiltrating Lymphocyte (TIL), Stromal TIL, Intratumoral TIL