

## INTISARI

Kanker serviks merupakan salah satu masalah kesehatan pada perempuan yang menempati angka kejadian dan angka kematian tertinggi ke 4 di dunia dengan angka kematian lebih dari 288.000 wanita tiap tahunnya. Terdapat 2 jenis kanker serviks yang terbanyak yaitu, *Squamous Cell Carcinoma* (SCC) dan *adenocarcinoma*. Sekitar 80% - 90% dari kanker servik adalah jenis SCC. Penelitian ini bertujuan untuk mengetahui *biological behavior* sel-sel kanker serviks jenis *Squamous Cell Carcinoma* berkaitan dengan *cell death*, vaskularisasi, dan reaksi limfosit. Desain penelitian ini adalah non-eksperimental dengan pendekatan *cross sectional*. Sampel yang digunakan adalah preparat Patologi Anatomi penderita kanker serviks jenis SCC berjumlah 39 sampel. Didapatkan hasil jenis SCC 39 buah (72%) dan jenis Adenokarsinoma 15 buah (28%). Pada SCC diferensiasi sedang dengan usia <60 sebanyak 24 buah (100%) dan  $\geq 60$  sebanyak 0 buah (0%), pada SCC diferensiasi buruk dengan usia <60 sebanyak 9 buah (60%) dan  $\geq 60$  sebanyak 6 buah (40%). Rata-rata nekrosis = 9,4, rata-rata limfosit = 37,69, rata-rata vaskularisasi = 1230. Data dianalisis menggunakan uji *pearson*, dengan nilai signifikan  $p < 0,05$ . Hasil penelitian menunjukkan hubungan antara *cell death* dengan vaskularisasi ( $p = 0,003$ ) yang signifikan, sedangkan hubungan antara *cell death* dengan limfosit ( $p = 0,095$ ) tidak signifikan. Kesimpulan pada penelitian ini terdapat hubungan yang signifikan antara *cell death* dengan vaskularisasi pada kanker serviks jenis SCC. Tidak terdapat hubungan yang signifikan antara *cell death* dengan reaksi limfosit pada kanker serviks jenis SCC.

**Kata Kunci :** HIF1- $\alpha$ , *Cervical cancer*, SCC, Limfosit, Nekrosis

## **ABSTRACT**

*Cervical cancer is one of the world health problems that kills women more than 288.000 annually. Currently it ranks 4th in frequency that cause death in women. There are two main type of cervical cancer. The most common (80-90%) is Squamous Cell Carcinoma (SCC). The other type is called adenocarcinoma. The purpose of this study is to know biological behaviour of cervical cancer cells type Squamous cell carcinoma such as cell death, vascularization, and lymphocyte reaction. This study use non-experimental cross sectional design. The samples are cervical cancer SCC type patients' histopathology specimen in Laboratorium Patologi Anatomi Fakultas Kedokteran Universitas Muhammadiyah Yogyakarta. The sample used was a preparation Pathology cervical cancer patients are 39 types of SCC samples. Result of SCC types were 39 (72%) and the type of adenocarcinoma were 15 (28%). In moderately differentiated SCC with age <60 were 24 (100%) and ≥60 were 0 (0%), the poorly differentiated SCC with age <60 were 9 (60%) and ≥60 were 6 (40%). On average necrosis = 9.4, the average lymphocyte = 37.69, the average vascularization = 1230. The data has been analyzed using pearson test with significant value  $p<0,05$ . The result shows there is significant relationship between cell death and vascularization ( $p=0,003$ ), and there is no relationship between cell death and lymphocyte reaction. This study conclude there is no significant relationship between cell death and vascularization in cervical cancer type SCC, and there is no relationship between cell death and lymphocyte reaction in cervical cancer type SCC.*

**Keywords :** HIF1- $\alpha$ , Cervical cancer, SCC. Lymphocyte, Necrosis.