

**HUBUNGAN ANTARA MICROVESSEL DENSITY TERHADAP
UKURAN TUMOR PADA PASIEN KANKER PAYUDARA
DI LABORATORIUM PATOLOGI ANATOMI
RSUD DR. SOEDARSO PONTIANAK**

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INTI SARI

Latar Belakang: Kanker payudara menempati urutan pertama kanker terbanyak di dunia dan Indonesia. Salah satu faktor penanda prognostik yang dikenal baik yaitu *Microvessel Density* (MVD) yang merupakan nilai numerik dari angiogenesis. Dalam beberapa tahun terakhir, diketahui bahwa pertumbuhan tumor sangat bergantung pada angiogenesis. Oleh karena itu, penelitian ini terfokus pada hubungan antara MVD terhadap ukuran tumor payudara yang belum pernah diteliti sebelumnya di Provinsi Kalimantan Barat. **Tujuan:** Mengetahui hubungan antara MVD terhadap ukuran tumor pasien kanker payudara di Lab PA RSUD Dr. Soedarso Pontianak. **Metode:** Penelitian ini merupakan studi analitik observasional dengan pendekatan *cross-sectional*. Penelitian dilakukan dengan melakukan pengamatan pada slide *Hematoxylin-Eosin* (HE) pasien kanker payudara. Sampel diambil menggunakan teknik *total sampling* dan diamati oleh dua pengamat. Didapatkan 51 sediaan jaringan yang memenuhi kriteria inklusi dan eksklusi. Analisis nilai *median* digunakan untuk menentukan *cut off point* MVD. Analisis penelitian menggunakan uji korelasi *spearman's rho* dengan bantuan aplikasi SPSS 24. **Hasil:** Seluruh sampel penelitian ini adalah perempuan dan memiliki jenis histopatologi *invasive ductal carcinoma*. Kanker payudara pada penelitian ini paling banyak didiagnosis pada pasien berusia 48-53 tahun dan memiliki stadium III. Pasien memiliki tingkat MVD yang rendah, tetapi memiliki ukuran tumor T4. Hasil uji korelasi *spearman's rho* menunjukkan bahwa tidak terdapat hubungan antara MVD dengan ukuran tumor ($\text{sig} > 0,05$; $r = 0,035$). **Kesimpulan:** Tidak terdapat hubungan signifikan secara statistik antara MVD terhadap ukuran tumor pasien kanker payudara di Lab PA RSUD Dr. Soedarso Pontianak.

Kata Kunci: *Microvessel density*, ukuran tumor, kanker payudara.

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**CORRELATION BETWEEN MICROVESSEL DENSITY AND TUMOR SIZE
OF PATIENT WITH BREAST CANCER IN ANATOMICAL PATHOLOGY
LABORATORY AT THE DR. SOEDARSO PONTIANAK HOSPITAL**

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ABSTRACT

Background: Breast cancer is the most common malignant tumor in the world and Indonesia. One well-known prognostic marker is Microvessel Density (MVD) which is the numerical value of angiogenesis. In recent years, it has been recognized that tumor growth depend on angiogenesis. Therefore, this study focuses on the relationship between MVD and breast tumor size which has never been studied in West Kalimantan Province. **Objective:** To determine the relationship between MVD and tumor size in breast cancer patients in the anatomical pathology laboratory at Dr. Soedarso General Hospital Pontianak. **Method:** This research was an observational analytic study with a cross-sectional approach. The study was conducted by observing the slides of Hematoxylin-Eosin (HE) in breast cancer patients. Samples were taken using total sampling technique. The samples were observed by two observers. There were 51 tissue preparations that met the inclusions and exclusions criteria. MVD cut-off points are taken by calculating the median. Research analysis using spearman's rho correlation test in SPSS version 24. **Result:** All samples of this study were women and had invasive ductal carcinoma. Breast cancer tends to occur in patients aged 48-53 years and has stage III. The patient's have a low MVD rate, but have a large tumor size (T4). Spearman's rho correlation test showed that there was no relationship between MVD and tumor size ($\text{sig} > 0,05$; $r = 0,035$). **Conclusion:** There is no statistically significant correlation between MVD and tumor size in breast cancer patients in the anatomical pathology laboratory at Dr. Soedarso General Hospital Pontianak.

Keywords: Microvessel density, tumor size, breast cancer

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