

**HUBUNGAN POLA EKSPRESI HER-2 DENGAN DERAJAT
DIFERENSIASI KARSINOMA PAYUDARA DI
RSUD PROF. DR. MARGONO SOEKARJO
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ABSTRAK

Latar Belakang. Onkogen Her-2 berhubungan dengan keagresifan tumor dan meningkatnya amplifikasi dari gen tersebut berperan dalam peningkatan *grade* karsinoma payudara. Overekspresi Her-2 dan amplifikasi gen Her-2 memiliki nilai prognostik pada karsinoma payudara dan dapat digunakan sebagai penanda target terapi.

Tujuan. Mengetahui hubungan antara pola ekspresi Her-2 dengan derajat diferensiasi karsinoma payudara di RSUD Prof. Dr. Margono Soekarjo Purwokerto (RSMS).

Metode. Penelitian observasional analitik dengan studi potong lintang pada pasien karsinoma payudara di RSUD Prof. Dr. Margono Soekarjo Purwokerto periode 1 Januari 2017 – 31 Desember 2021. *Total sampling* dilakukan terhadap pasien yang memenuhi kriteria penelitian yakni memiliki data yang lengkap pada rekam medik. Sebanyak 460 pasien karsinoma payudara dilibatkan dalam penelitian ini. *Grade* karsinoma payudara ditentukan berdasarkan kriteria *Nottingham Histologic Score* dan pola ekspresi Her-2 berdasarkan metode pemeriksaan yang digunakan Laboratorium Patologi Anatomi RSMS. Data disajikan dalam bentuk distribusi frekuensi relatif. Analisis bivariat menggunakan uji nonparametrik Spearman dengan taraf signifikansi 0,05 untuk mengetahui korelasi antar variabel.

Hasil. Jenis histologi karsinoma payudara paling banyak dilaporkan adalah *invasive ductal carcinoma* (89,8%). Karsinoma payudara *grade* I dilaporkan sebanyak 49 (10,7%), *grade* II sebanyak 219 (47,6%), dan *grade* III sebanyak 192 (41,7%). Tingkat ekspresi Her-2 positif kuat (+3) dilaporkan paling banyak (47,2%). Didapatkan korelasi positif yang sangat lemah antara ekspresi Her-2 dan derajat diferensiasi karsinoma payudara ($r=0,099$; $p=0,033$).

Kesimpulan. Terdapat hubungan positif antara pola ekspresi Her-2 dengan derajat diferensiasi karsinoma payudara di RSUD Prof. Dr. Margono Soekarjo Purwokerto.

Kata kunci: pola ekspresi Her-2, derajat diferensiasi karsinoma payudara

**THE RELATIONSHIP OF HER-2 EXPRESSION AND GRADE OF BREAST
CANCER IN RSUD PROF. DR.
MARGONO SOEKARJO
2017-2021**

ABSTRACT

Backgrounds. The Her-2 oncogene is associated with tumor aggressiveness and increased amplification of the gene, which plays a role in increasing the grade of breast cancer. Her-2 gene amplification have prognostic value in breast cancer and can be used as markers of therapeutic targets.

Objective. Identify the relationship between Her-2 expression pattern and the degree of differentiation of breast cancer in RSUD Prof. Dr. Margono Soekarjo (RSMS)

Method. This analytical observational study with a cross-sectional study on breast cancer patients at RSMS Purwokerto for the period January 1, 2017 – December 31, 2021. Total sampling was carried out on patients who met the research criteria, patients have a complete data in the medical record. A total of 460 breast cancer patients were included in this study. The grade of breast cancer was determined based on the Nottingham Histologic Score criteria and Her-2 expression pattern based on the examination method used by the RSMS Pathology Department. The data is presented in the form of a relative frequency distribution. Bivariate analysis used Spearman's nonparametric test with a significance level of 0.05 to determine the correlation between variables

Results. The most common histological type of breast cancer reported was invasive ductal carcinoma (89,8%). Grade I breast cancer were reported in 49 (10.7%), grade II in 219 (47.6%), and grade III in 192 (41.7%). Expression level of strong positive (+3) Her-2 was reported the most (47.2%). A very weak positive correlation was found between Her-2 expression and the degree of differentiation of breast cancer ($r=0.099$; $p=0.033$).

Conclusion. There was a positive relationship between Her-2 expression pattern and the degree of differentiation of breast cancer in RSMS.

Keywords : grade of breast cancer, Her-2 expression