

## INTISARI

### HUBUNGAN PARAMETER ANTROPOMETRI TERHADAP KESINTASAN BEBAS PENYAKIT DAN KESINTASAN HIDUP PASIEN KANKER PAYUDARA SUBTIPE ER+

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**Latar Belakang :** Kanker payudara merupakan kanker yang paling sering terjadi pada wanita. Hampir 70% diataranya mengekspresikan reseptor estrogen positif (ER+) dengan terapi endokrin merupakan terapi standar. Sindrom metabolik dan obesitas akan meningkatkan kadar estrogen. Parameter antropometri yaitu indeks masa tubuh (IMT), lingkaran pinggang dan tebal lipatan kulit perut (TLKP) berhubungan dengan sindrom metabolik. Namun beberapa penelitian tentang hubungan parameter antropometri tersebut terhadap prognosis kanker payudara subtype ER+ melaporkan hasil yang saling bertentangan.

**Tujuan Penelitian :** Untuk mengetahui hubungan parameter antropometri terhadap tingkat kesintasan bebas penyakit dan kesintasan hidup pasien kanker payudara subtype ER+.

**Metode Penelitian :** Penelitian ini adalah penelitian potong lintang-kohort retrospektif. Data diambil dari catatan medis pasien yang terdiagnosis kanker payudara subtype ER+ pada Januari 2010-Juli 2019 di Poli Tulip RSUP Dr. Sardjito. Kemudian dilakukan pemeriksaan lingkaran pinggang dan TLKP pada pasien yang memenuhi persyaratan. Variabel bebas adalah IMT, lingkaran pinggang dan TLKP. Variabel terikat adalah kesintasan bebas penyakit dan kesintasan hidup.

**Hasil Penelitian :** Subyek penelitian berjumlah 160 pasien kanker payudara subtype ER+. Sejumlah 86 (54%) memiliki IMT < 25 kg/m<sup>2</sup>, 74 (46%) dengan IMT ≥ 25 kg/m<sup>2</sup>, 50 (31%) memiliki lingkaran pinggang rendah, 110 (69%) dengan lingkaran pinggang tinggi, 34 (22%) dengan TLKP rendah, 118(78%) dengan TLKP tinggi dan 8 (5%) tidak diketahui tingkat TLKP nya. Hasil analisis *cox-regression* dan *log-rank* untuk menilai hubungan antara IMT, lingkaran pinggang dan TLKP terhadap kesintasan bebas penyakit dan kesintasan hidup kesemuanya didapatkan p > 0,05 (tidak bermakna).

**Kesimpulan :** Parameter antropometri tidak berhubungan dengan kesintasan bebas penyakit dan kesintasan hidup pasien kanker payudara subtype ER+.

*Kata Kunci : estrogen reseptor positif, indeks masa tubuh, kanker payudara, lingkaran pinggang, tebal lipatan kulit perut.*

## ABSTRACT

### RELATIONSHIP OF ANTHROPOMETRIC PARAMETERS TO THE DISEASE FREE SURVIVAL AND OVERALL SURVIVAL OF ER+ BREAST CANCER

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**Background:** Breast cancer was the most common cancer in women. Nearly 70% of them expressed estrogen receptors-positive (ER+) and endocrine therapies were standard of care. Metabolic syndrome and obesity would increase estrogen levels. Anthropometric parameters such as body mass index (BMI), waist circumference, and abdominal skinfold thickness (AST) were associated with metabolic syndrome. However, several studies about the relationship between anthropometric parameters and prognosis of ER+ breast cancer reported conflicting results.

**Objective:** To find out the relationship of anthropometric parameters to the disease-free survival and overall survival of ER+ breast cancer.

**Method:** This study was a cross-sectional-retrospective cohort study. Data was taken from medical records of patients diagnosed with ER+ breast cancer in January 2010-July 2019 at the Tulip Cancer Center, Dr. Sardjito General Hospital. Then the waist circumference and TASF were examined for eligible patients. The independent variables were BMI, waist circumference, and AST. The dependent variables were disease-free survival and overall survival.

**Results:** We studied 160 ER+ breast cancer patients. A total of 86 (54%) had a BMI <25 kg/m<sup>2</sup>, 74 (46%) had BMI ≥ 25 kg/m<sup>2</sup>, 50 (31%) had a low waist circumference, 110 (69%) had a high waist circumference, 34 (22%) had low TASF, 118 (78%) had high TASF and 8 (5%) had unknown AST. The results of the cox-regression and log-rank test to assess the relationship of BMI, waist circumference, and TASF to the disease-free survival and overall survival of ER+ breast cancer all of them shown  $p > 0.05$  (not significant).

**Conclusion:** Anthropometric parameters had no relationship with disease-free survival and overall survival of ER+ breast cancer patients.

*Keyword: abdominal skin fold, body mass index, breast cancer, estrogen receptor-positive, waist circumference*