

Tesis

**NILAI DIAGNOSTIK *RISK OF MALIGNANCY INDEX 2*
SEBAGAI PENANDA KEGANASAN PADA
TUMOR OVARIUM**



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ABSTRAK

NILAI DIAGNOSTIK *RISK OF MALIGNANCY INDEX 2* SEBAGAI PENANDA KEGANASAN PADA TUMOR OVARIUM

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Latar Belakang: Tumor ovarium sebagian besar terdeteksi pada stadium lanjut dan tidak ditemukan gejala klinis spesifik pada stadium awal. Penanda keganasan ovarium yang umum digunakan adalah CA-125 serum. *Risk of Malignancy Index 2* merupakan metode sederhana dan praktis dengan menggabungkan kadar CA-125 serum, skor USG, dan status menopause. Penelitian ini bertujuan untuk mengetahui nilai diagnostik *Risk of Malignancy Index 2* sebagai penanda keganasan pada tumor ovarium.

Metode: Penelitian analitik dengan rancangan potong lintang dilakukan terhadap 52 pasien dengan tumor ovarium di RSUP Dr. M. Djamil pada bulan Maret 2022 sampai Agustus 2023. Pemeriksaan meliputi, CA-125 serum, USG, dan pemeriksaan histopatologi. Pemeriksaan parameter laboratorium (Ca-125 serum) menggunakan metode *Enzyme linked fluorescent assay* (ELFA) dengan alat *immunology analyzer*. Analisis statistik dilakukan untuk mendapatkan nilai *Risk of Malignancy index 2* meliputi sensitivitas, spesifisitas, *Positive Predictive Value* (PPV), dan *Negative Predictive Value* (NPV)

Hasil: Median umur subjek penelitian adalah 54 (49-57) tahun. Rerata *Risk of Malignancy 2* pada kelompok keganasan (2.263,9) lebih tinggi dari pada kelompok non keganasan (47,53). Analisis nilai diagnostik *Risk of Malignancy Index 2* penelitian ini dengan nilai *cut off 200* ditemukan sensitivitas 80,00%, spesifisitas 77,78%, PPV 76,92%, dan NPV 80,77%. Nilai *Positive Likelihood Ratio* (LR+) 3,6, dan nilai *Negative Likelihood Ratio* (LR-) 0,26.

Simpulan: *Risk of Malignancy Index 2* mempunyai nilai diagnostik yang sangat baik dan dapat digunakan sebagai penanda keganasan pada tumor ovarium.

Kata Kunci: Penanda Keganasan, Tumor Ovarium, *Risk of Malignancy Index 2*

**DIAGNOSTIC VALUE OF RISK OF MALIGNANCY INDEX 2 AS A
MARKER OF MALIGNANCY IN
OVARIAN TUMOR**

By:

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Background: Ovarian tumors are mostly detected at an advanced stage and no specific clinical symptoms are found in the early stages. A commonly used marker of ovarian malignancy is serum CA-125. Risk of Malignancy Index 2 is a simple and practical method by combining serum CA-125 levels, ultrasound scores, and menopausal status. This study aims to determine the diagnostic value of Risk of Malignancy Index 2 as a marker of malignancy in ovarian tumors.

Methods: Analytical research with cross-sectional design was conducted on 52 patients with ovarian tumors at Dr. M. Djamil Hospital from March 2022 to August 2023. The examination includes, serum CA-125, ultrasound, and histopathological examination. Examination of laboratory parameters (Ca-125 serum) using the Enzyme linked fluorescent assay (ELFA) method with an immunology analyzer. Statistical analysis was conducted to obtain the Risk of Malignancy index 2 value including sensitivity, specificity, Positive Predictive Value (PPV), and Negative Predictive Value (NPV).

Results: The age of the study subjects was 54 (49-57) years. The average Risk of Malignancy 2 score in the malignancy group (2,263,9s) was higher than in the non-malignancy group (47.53). Analysis of the diagnostic value of Risk of Malignancy Index 2 of this study with a cut off value of 200 found sensitivity 80.00%, specificity 77.78%, and PPV 76.92%, NPV 80.77%.. Likelihood Ratio (LR+) 3,6, dan Negative Likelihood Ratio (LR-) 0,26.

Conclusion: Risk of Malignancy Index 2 has very good diagnostic value and it can be used as a marker of malignancy in ovarian tumor.

Keywords: Markers of Malignancy, Ovarian Tumor, Risk of Malignancy Index 2