

# HUBUNGAN KADAR LAKTAT DEHIDROGENASE A (LDHA) URINE DENGAN SKOR GLEASON PADA PASIEN KANKER PROSTAT DI RSUD PROF. DR. MARGONO SOEKARJO

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## ABSTRAK

**Latar Belakang:** Kanker prostat merupakan masalah keganasan pada pria. Laktat Dehidrogenase A (LDHA) merupakan protein yang dihasilkan pada sel kanker akibat Efek Warburg. Skor Gleason merupakan prediktor prognosis kanker prostat terkuat tetapi bersifat invasif. Sampel urine dapat digunakan untuk menentukan prognosis kanker prostat yang non-invasif. Kadar LDHA urine diduga memiliki hubungan dengan prognosis kanker prostat. Penelitian ini dilakukan untuk mengetahui hubungan antara LDHA Urine dengan Skor Gleason.

**Tujuan:** Untuk mengetahui hubungan LDHA urine dengan Skor Gleason pada pasien kanker prostat serta mengetahui kadar LDHA Urine dan Skor Gleason pada pasien kanker prostat di RSUD Prof. Dr. Margono Soekarjo.

**Metode:** Merupakan penelitian analitik observasional dengan metode *cross sectional study* pada pasien kanker prostat di RSUD Prof. Dr. Margono Soekarjo. Sebanyak 30 pasien kanker prostat dipilih menggunakan *purposive sampling*. Kadar LDHA urine didapatkan dari data primer yang dianalisis menggunakan metode *sandwich ELISA* dan skor Gleason didapatkan dari data sekunder berupa rekam medis lalu dianalisis menggunakan uji korelasi *Spearman*.

**Hasil:** Hasil penelitian ini adalah tidak terdapat hubungan yang signifikan dan korelasi yang lemah antara LDHA Urine dengan skor Gleason dengan nilai  $p=0,141$  ( $p>0,05$ ) dan nilai  $r=0,275$  ( $r<1$ ).

**Kesimpulan :** Tidak terdapat hubungan antara kadar LDHA urine dengan skor Gleason pada Pasien Kanker Prostat di RSUD Prof. Dr. Margono Soekarjo Purwokerto.

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**Kata Kunci :** Kadar LDHA urine, skor Gleason, kanker prostat

**THE CORRELATION BETWEEN URINE LACTATE DEHYDROGENASE A (LDHA) LEVELS AND GLEASON SCORES IN PROSTATE CANCER PATIENTS AT PROF. DR. MARGONO SOEKARJO**

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**ABSTRACT**

**Background:** Prostate cancer is a malignant problem in men. Lactate Dehydrogenase A is a protein in cancer cells due to Warburg Effect. The Gleason score is the strongest predictor of prostate cancer prognosis but is invasive. Urine samples used to determine the prognosis of prostate cancer non-invasively. Urinary LDHA levels are thought to have a relationship with prostate cancer prognosis. This research was conducted to determine the relationship between urinary LDHA and Gleason Score.

**Objective:** To determine the relationship between urine LDHA and Gleason Score in prostate cancer patients

**Method:** This is an observational analytical study with a cross sectional study method on prostate cancer patients at Prof. Hospital. Dr. Margono Soekarjo. A total of 30 prostate cancer patients were selected using purposive sampling. Urine LDHA levels were obtained from primary data which were analyzed using the sandwich ELISA method and Gleason scores were obtained from secondary data in the form of medical records and then analyzed using the Spearman correlation test.

**Results:** There is no significant relationship and a weak correlation between Urine LDHA and Gleason score with  $p= 0.141$  and  $r= 0.275$ .

**Conclusion:** There is no relationship between urine LDHA levels and Gleason scores in Prostate Cancer Patients at RSMS.

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**Keywords:** LDHA urine level, Gleason score, prostate cancer