Prostate Cancer

Overview

A university medical center urology group was interested in the association between prostate-specific antigen (PSA) and a number of prognostic clinical measurements in men with advanced prostate cancer. Data were collected on 97 men who were about to undergo radical prostectomies (Stamey et al., 1989).

Variables

Variables from left to right on the prostate.txt file are:

- Patient ID

- PSA level: Serum prostate-specific antigen level (mg/ml)

- Cancer volume: Estimate of prostate cancer volume (cc)

- Weight: Prostate weight (gm)

- Age: Age of patient (years)

- Benign prostatic hyperplasia: Amount of benign prostatic hyperplasia (cm^2)

- Seminal vesicle invasion: Presence or absence of seminal vesicle invasion: 1 if presence; 0 if absence

- Capsular penetration: Degree of capsular penetration (cm)

- Gleason score: Pathologically determined grade of disease using total score of two patterns (summed scores were either 6,7,or 8 with higher scores indicating worse prognosis)

These variables were measured on 97 men.

References

- Stamey, T., Kabalin, J., McNeal, J., Johnstone, I., Freiha, F., Redwine, E. and Yang, N. (1989). Prostate specific antigen in the diagnosis and treatment of adenocarcinoma of the prostate II radical prostatectomy treated patients, Journal of Urology 16: 1076 - 1083.

Data Source

Applied linear statistical methods by Kutner, Nachtsheim, Neter and Li.