

Something About Prostate Cancer

Andrew Bates

November 15, 2018

Executive Summary

This is the executive summary. Unfortunately, it has to be typed in the .yaml header. The only other thing i can think of is to have a separate file for the abstract. I'm not sure I want to do this. But actually, this may not be so bad. Each section could have a different file. this might make things a bit easier to edit. because then i would only have to look at say, the conclusion file instead of having to scroll all the way down, passing it, scrolling up, passing it, etc.

1 Introduction

In this paper, we investigate the relationship between the results of various prostate related exams and whether tumor penetration of the prostatic capsule has occurred. We examine a subset of data collected by the Ohio State University Comprehensive Cancer Center as part of a study to determine the potential of standard exam results to predict whether a tumor will penetrate the prostatic capsule. Out of 380 patients 153 have experienced capsule penetration and 227 have not. The data set contains six explanatory variables: the patients age and race (Black or White), results of a digital rectal exam, whether capsular involvement was detected, Prostatic Specific Antigen value, and total Gleason score.

Table 1 contains a detailed description of the variables in this data set.

2 Analysis

blah blah blah blah blah blah blah blah

Table 1: Description of variables in the data set.

Name	Description	Details
capsule	Tumor penetration of prostatic capsule?	Yes, no
age	Patient age	Years
race	Patient race	Black, White
dre	Results of digital rectal exam	No nodule, unilobar left, unilobar right, bilobar
caps	Detection of capsular involvement?	Yes, no
psa	Prostatic Specific Antigen value	mg/ml
gleason	Total Gleason score	0-10

2.1 Exploratory Analysis

2.2 Modeling and Diagnostics

blah blah blah blah blah blah blah blah

3 Conclusion

Appendix

A Supplementary Figures and Model Stuff

A.1 Figures

A.2 Model Stuff

B R Code