### Something About Prostate Cancer

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November 15, 2018

### **Executive Summary**

this is my summary

#### 1 Introduction

In this paper, we investigate the relationship between the results of various prostae related exams and whether tumor penetration of the prostatic capsule has occured. 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 Specif 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

#### 2.1 Exploratory Analysis

#### 2.2 Modeling and Diagnostics

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

## 3 Conclusion

# Appendix

- A Supplementary Figures and Model Stuff
- A.1 Figures
- A.2 Model Stuff
- B R Code