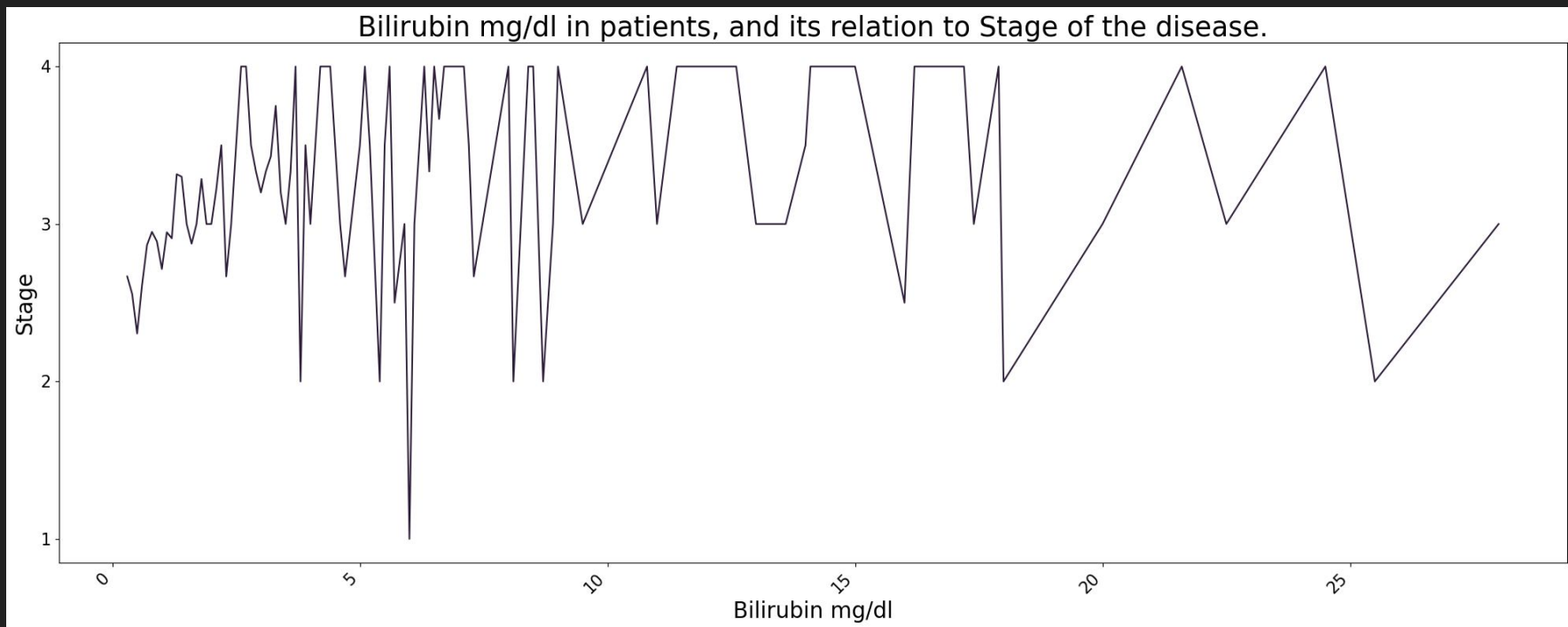# Cirrhosis

# Stakeholders + Data Description
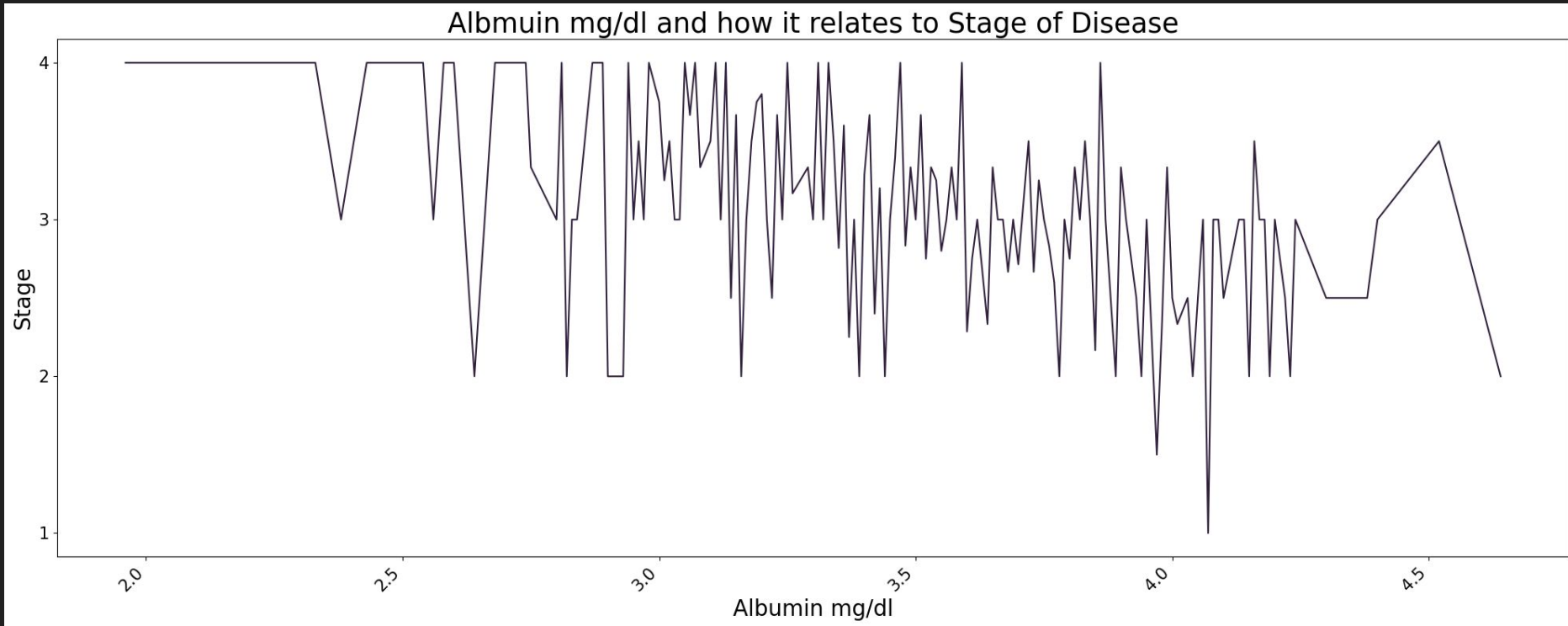
Stakeholders

- Doctors
- Medical Researchers
- Pharmaceutical Companies

Data Description

- Several different variables related to the disease that can be used to help predict if someone is suffering from cirrhosis

Bilirubin mg/dl in patients, and its relation to Stage of the disease.

This line plot shows us that when Bilirubin is above 7~mg/dl patients are at stage 2 or above of the disease

Albmuin mg/dl and how it relates to Stage of Disease

In this line plot we can see that after 2.5 mg/dl or lower is found in the blood of Albumin we see many if not all patients at stage 3-4 of the disease.

# Strengths and Limitations

Strengths

- High Precision and Recall Scores
- High Accuracy

Limitations

- Test data is not close enough to the train data to reliably predict for this data set. We need more data.
- There is overfitting. This could be tuned better with a subject matter expert, but more data would be good first as well.

# Final Recommendations

- Explore gathering more data, this would allow the data to perform better with models and allow for better more accurate predictions.
- Provide a subject matter expert to help with feature engineering to further the accuracy of the predictions