Liver Cirrhosis Stage Detection

Objective

Build a system that can output the level of liver damage (liver cirrhosis) given patient data.

Dataset

The data provided is sourced from a Mayo Clinic study on primary biliary cirrhosis (PBC) of the liver carried out from 1974 to 1984.

Description of columns:

- N_Days: Number of days between registration and the earlier of death, transplantation, or study analysis time in 1986
- Status: status of the patient C (censored), CL (censored due to liver tx), or D (death)
- <u>Drug</u>: type of drug D-penicillamine or placebo
- Age: age in days
- Sex: M (male) or F (female)
- Ascites: presence of ascites N (No) or Y (Yes)
- Hepatomegaly: presence of hepatomegaly N (No) or Y (Yes)
- Spiders: presence of spiders N (No) or Y (Yes)
- <u>Edema</u>: presence of edema N (no edema and no diuretic therapy for edema), S (edema present without diuretics, or edema resolved by diuretics), or Y (edema despite diuretic therapy)
- Bilirubin: serum bilirubin in [mg/dl]
- Cholesterol: serum cholesterol in [mg/dl]
- Albumin: albumin in [gm/dl]
- Copper: urine copper in [ug/day]
- Alk Phos: alkaline phosphatase in [U/liter]
- SGOT: SGOT in [U/ml] (a liver enzyme)
- <u>Tryglicerides</u>: triglicerides in [mg/dl]
- Platelets: platelets per cubic [ml/1000]
- Prothrombin: prothrombin time in seconds [s]
- Stage: histologic stage of disease (1, 2, or 3)