LASSO REGRESSION:

**ONLY CLINICAL DATA :**

Good

**ONLY ALL GENES :**

Not good

**SELECTED 250+ GENES:**

Not that good

**SELECTED 250 GENES AND CLINICAL:**

Good

Highest score at alpha=0.01 (without cv)

Cv scores are lesser than this score(it’s not higher than the score at 0.01). It never gets higher than the scores that we got without cv

**SELECTED 2K GENES :**

Not good

Worse than the scores of 250 genes only.

**SELECTED 2K GENES AND CLINICAL DATA:**

Very good.

Without cv : score highest at : alpha=0 .01(0 Better than scores of 250 genes + clinical data)

The scores are reducing if we further reduce the alpha value like alpha=0.05 . it has a score lesser than alpha=0.01 . the train data is highest is 0.01; but test at 0.1

With CV: