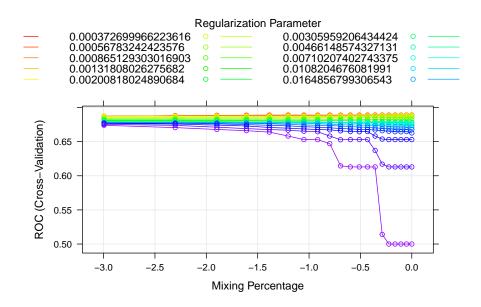
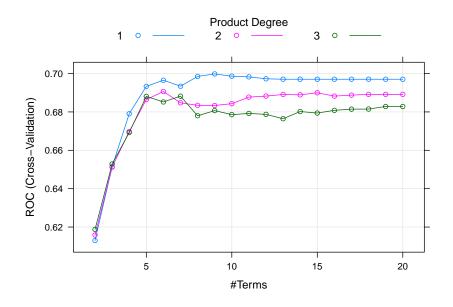
# Covid Recovery Analysis - Secondary Analysis

#### Penalized logistic regression

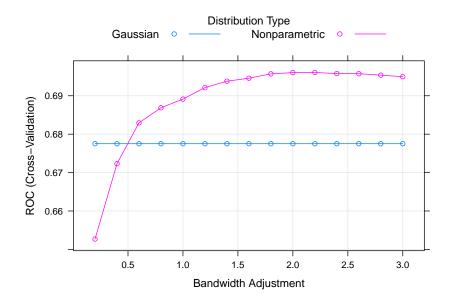


#### Multivariate adaptive regression splines classifier (MARS)

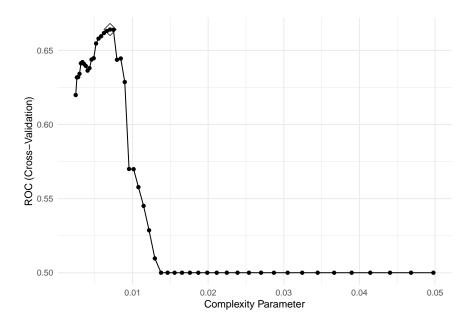


### Quadratic discriminant analysis (QDA)

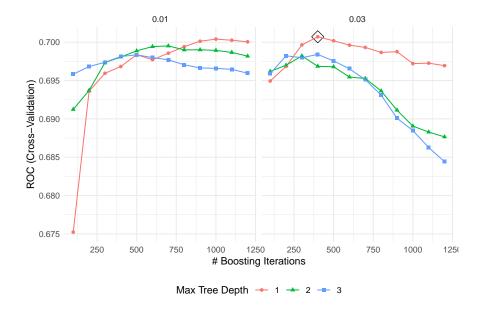
### Naive Bayes Classifer



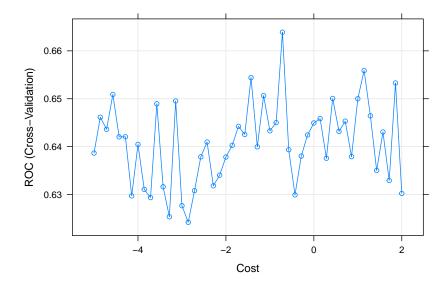
#### Classification Tree



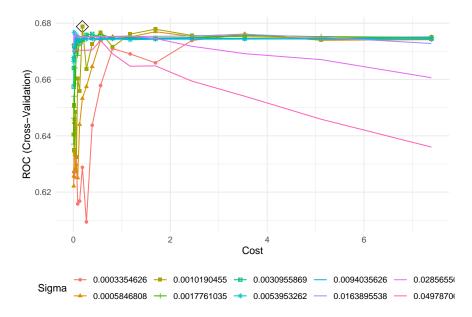
### Adaptive boosting classfier



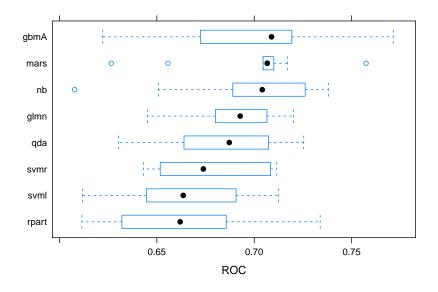
### Support vector classifier with linear kernel



#### Support vector classifier with radial kernel



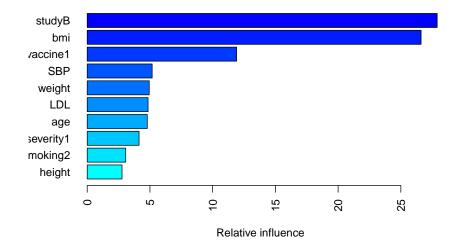
# Models Comparsion based on Area Under Curves



Final model performance on test dataset

	>
Accuracy	0.7218359
Kappa	0.1815036

# Variable importance plots of the final model



	rel.inf
studyB	27.8958031
bmi	26.6131604
vaccine1	11.9080853
SBP	5.1783551
weight	4.9451667
LDL	4.8495707
age	4.7895698
severity1	4.1331856
smoking2	3.0702806
height	2.7755020
gender1	1.1978980
smoking1	1.0717996
race4	1.0470291
race2	0.2303987
race3	0.1567322
studyC	0.1374633
hypertension1	0.0000000
diabetes1	0.0000000

### Final Model intepretation

