# **Untitled Report**

#### Method

Same for all classes

Prior probabilities Node splitting Optimal tree

Gini Within 1 standard error of minimum misclassification

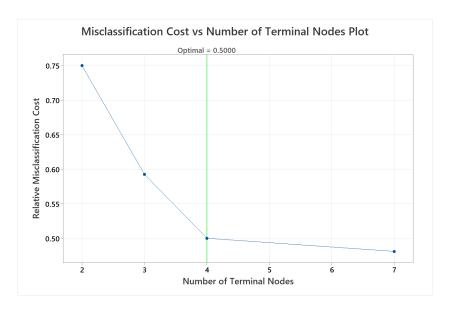
cost

Model validation 10-fold cross-validation

Rows used 200

#### **Multinomial Response Information**

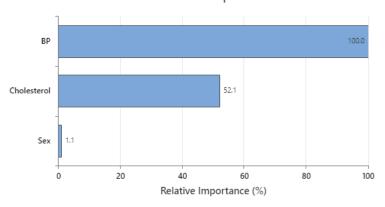
Variable	Class	Count	%
Drug	drugA	23	11.50
	drugB	16	8.00
	drugC	16	8.00
	drugX	54	27.00
	drugY	91	45.50
	All	200	100.00



# **Model Summary**

Total predictors	3
Important predictors	3
Number of terminal nodes	4
Minimum terminal node size	31
Misclassification cost	0.5000
(Training)	
Misclassification cost (Test)	0.5000
Area under ROC curve	
Drug = drugA vs not	0.8475
Drug = drugB vs not	0.8342
Drug = drugC vs not	0.9592
Drug = drugX vs not	0.8779
Drug = drugY vs not	0.5464

# Relative Variable Importance



Variable importance measures model improvement when splits are made on a predictor. Relative importance is defined as % improvement with respect to the top predictor.

#### **Confusion Matrix**

#### Predicted Class (Training)

Actual Class	Count	drugA	drugB	drugC	drugX	drugY	% Correct	
drugA	23	23	0	0	0	0	100.0	
drugB	16	16	0	0	0	0	0.0	
drugC	16	0	0	16	0	0	100.0	
drugX	54	0	0	0	54	0	100.0	
drugY	91	38	0	15	38	0	0.0	
All	200	77	0	31	92	0	46.5	
	Predicted Class (Test)							

		Predicted Class (Test)					
Actual Class	Count	drugA	drugB	drugC	drugX	drugY	% Correct
drugA	23	23	0	0	0	0	100.0
drugB	16	16	0	0	0	0	0.0
drugC	16	0	0	16	0	0	100.0
drugX	54	0	0	0	54	0	100.0
drugY	91	38	0	15	38	0	0.0
All	200	77	0	31	92	0	46.5

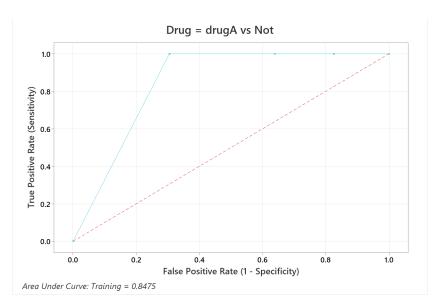
#### Misclassification

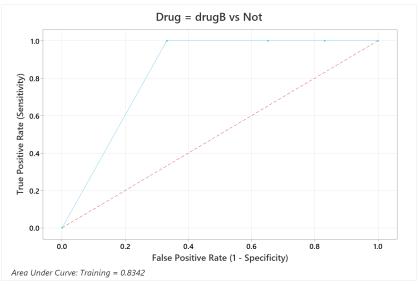
Input

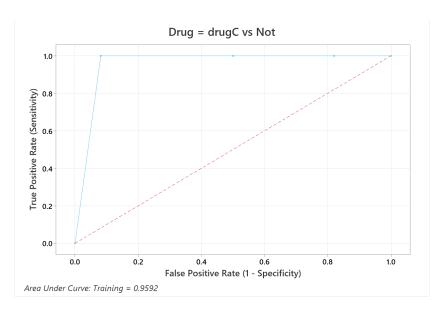
Misclassification	
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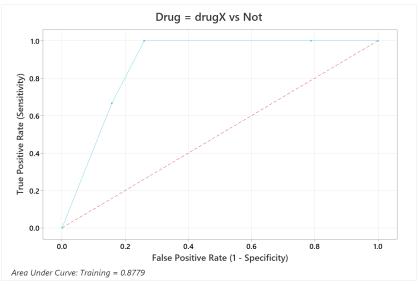
Cost	Predicted Class							
Actual Class	drugA	drugB	drugC	drugX	drugY			
drugA		1.00	1.00	1.00	1.00			
drugB	1.00		1.00	1.00	1.00			
drugC	1.00	1.00		1.00	1.00			
drugX	1.00	1.00	1.00		1.00			
drugY	1.00	1.00	1.00	1.00				

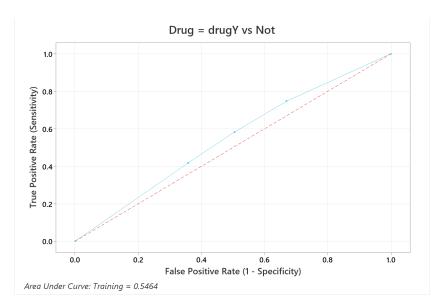
		Training			Test			
Actual Class	Count	Misclassed	% Error	Cost	Misclassed	% Error	Cost	
drugA	23	0	0.0	0.0000	0	0.0	0.0000	
drugB	16	16	100.0	1.0000	16	100.0	1.0000	
drugC	16	0	0.0	0.0000	0	0.0	0.0000	
drugX	54	0	0.0	0.0000	0	0.0	0.0000	
drugY	91	91	100.0	1.0000	91	100.0	1.0000	
All	200	107	53.5	0.4000	107	53.5	0.4000	

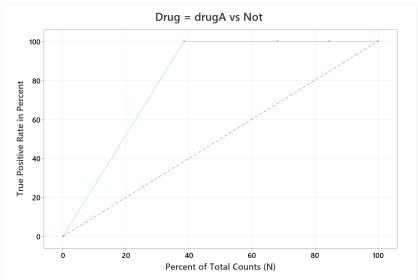


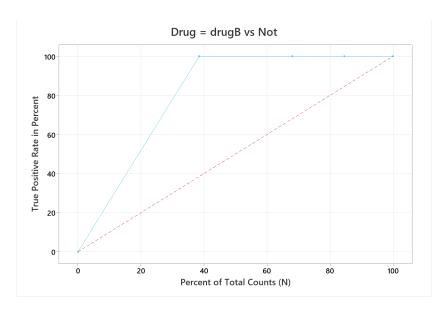


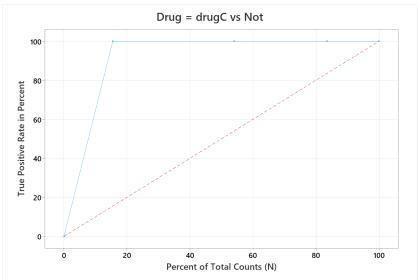


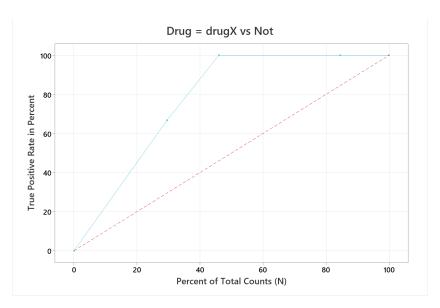


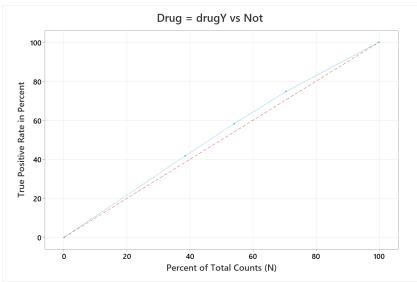


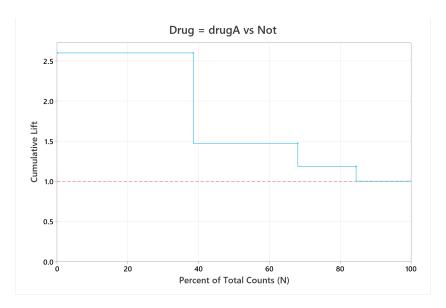


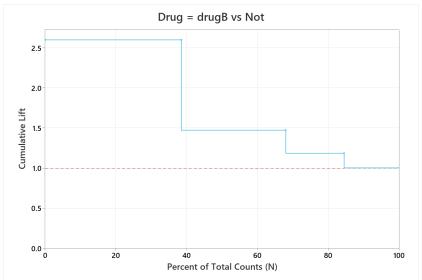


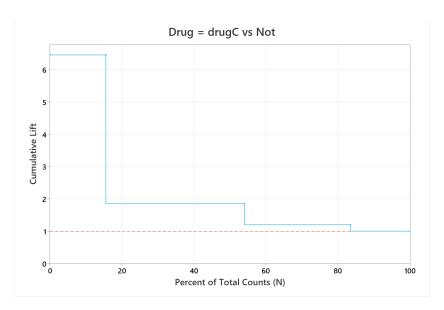


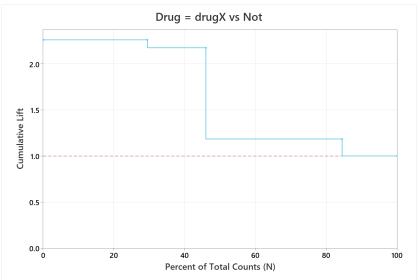


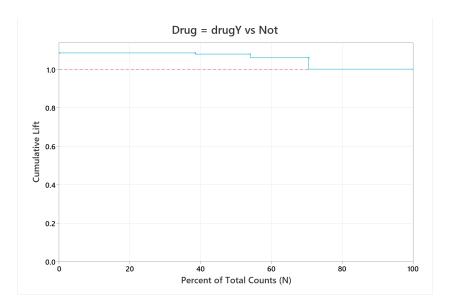












#### Settings

Sex = F, BP = HIGH, Cholesterol = NORMAL

# Prediction

					Prob	Prob	
	Terminal		Prob (Class	Prob (Class	(Class =	(Class =	Prob (Class
Obs	Node ID	Class	= drugA)	= drugB)	drugC)	drugX)	= drugY)
1	4	druaA	0.298701	0.207792	0	0	0.493506

# Settings

Sex = M, BP = NORMAL, Cholesterol = HIGH

#### Prediction

			Prob	Prob	Prob		
	Terminal		(Class =	(Class =	(Class =	Prob (Class	Prob (Class
Obs	Node ID	Class	drugA)	drugB)	drugC)	= drugX)	= drugY)
2	1	drugX	0	0	0	0.610169	0.389831

#### Settings

Sex = M, BP = NORMAL, Cholesterol = NORMAL

# Prediction

			Prob	Prob	Prob		
	Terminal		(Class =	(Class =	(Class =	Prob (Class	Prob (Class
Obs	Node ID	Class	drugA)	drugB)	drugC)	= drugX)	= drugY)
3	1	drugX	٥	٥	0	0.610169	0.389831