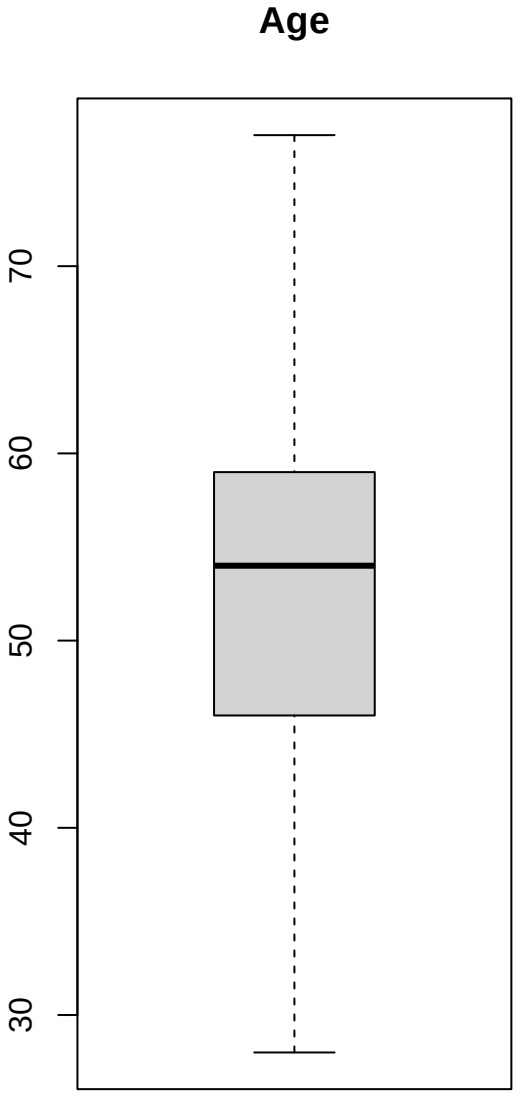
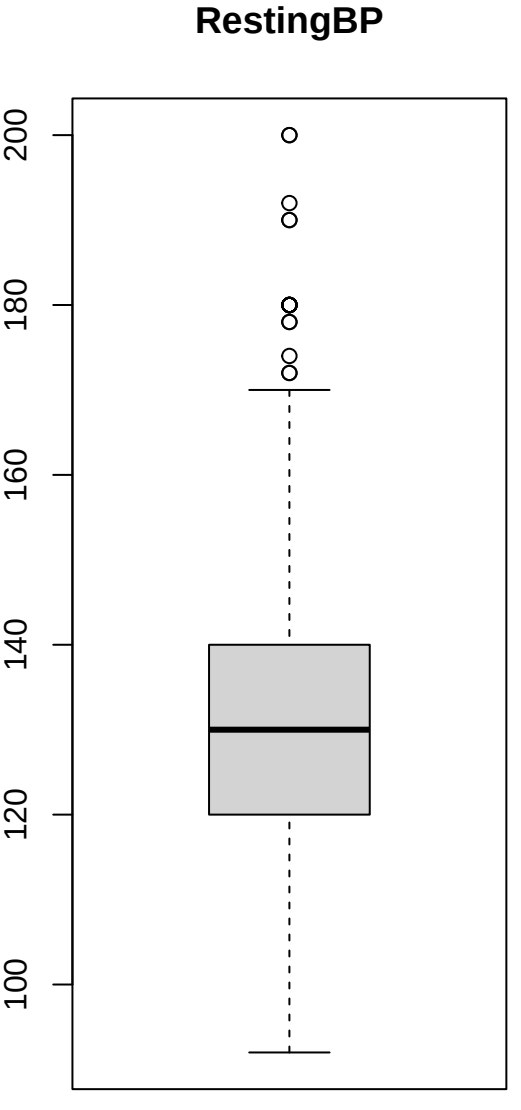
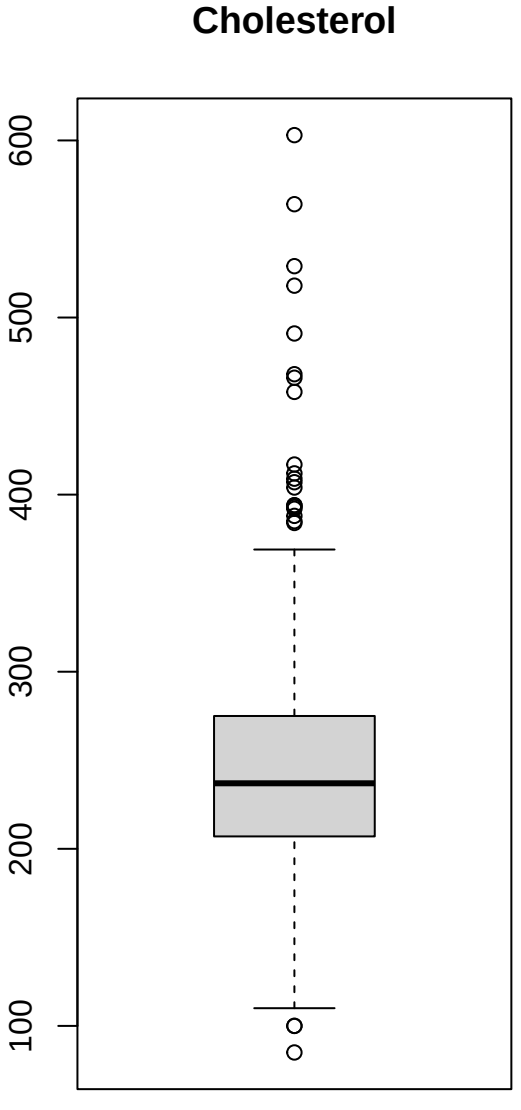
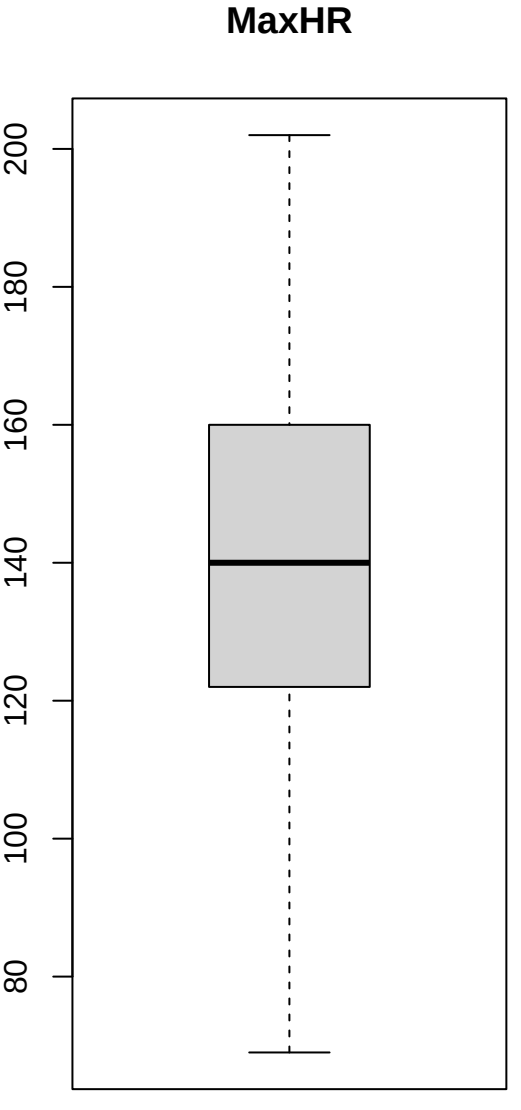
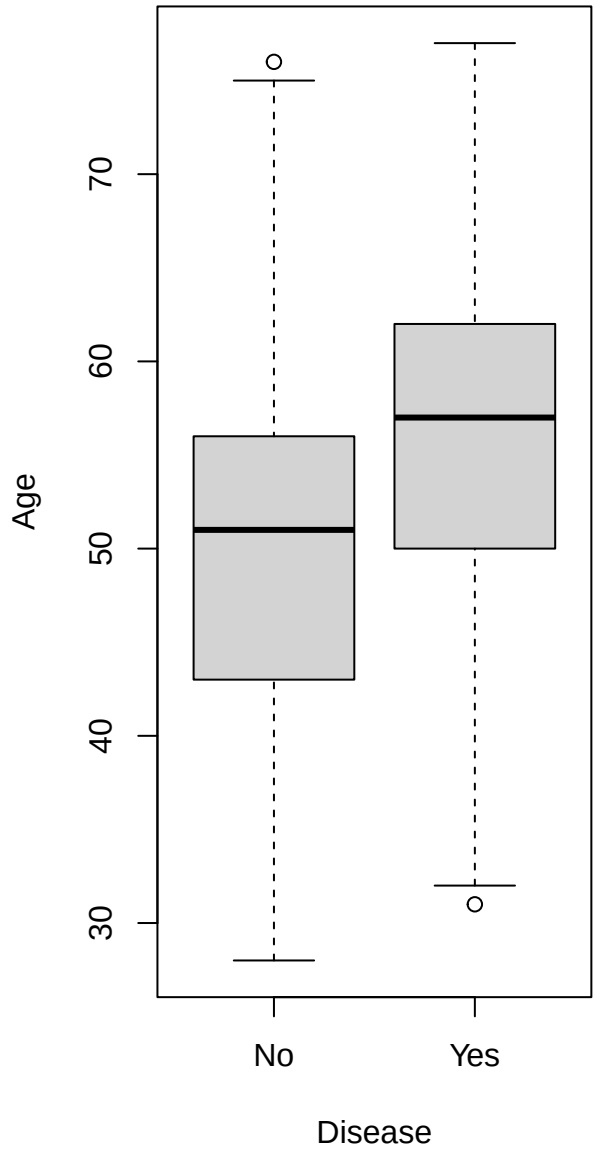
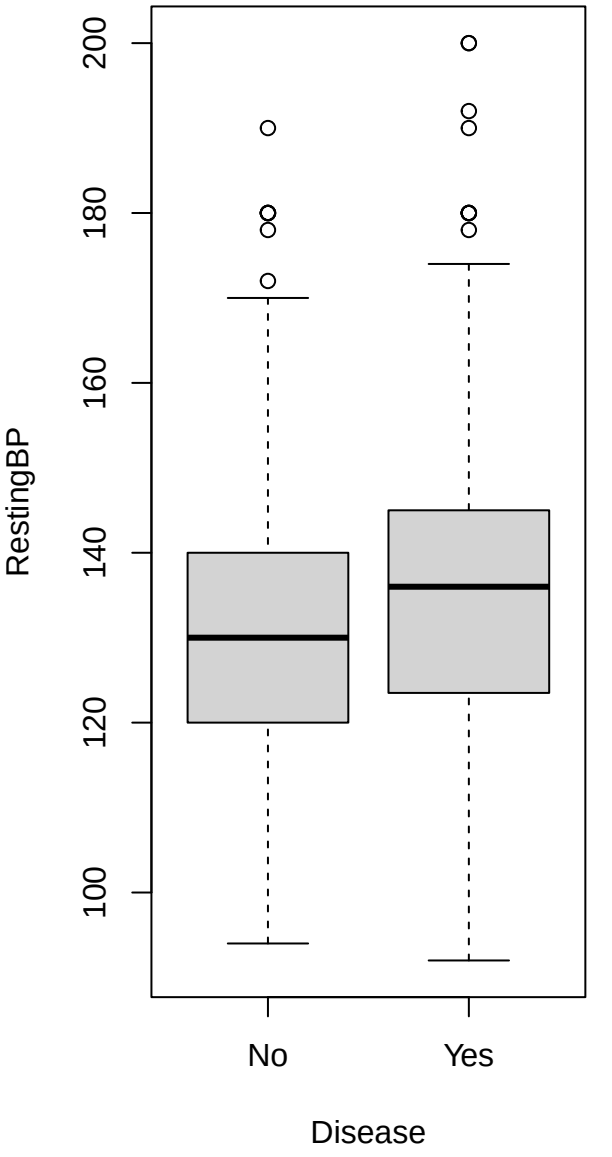

Age
30
40
50
60
70

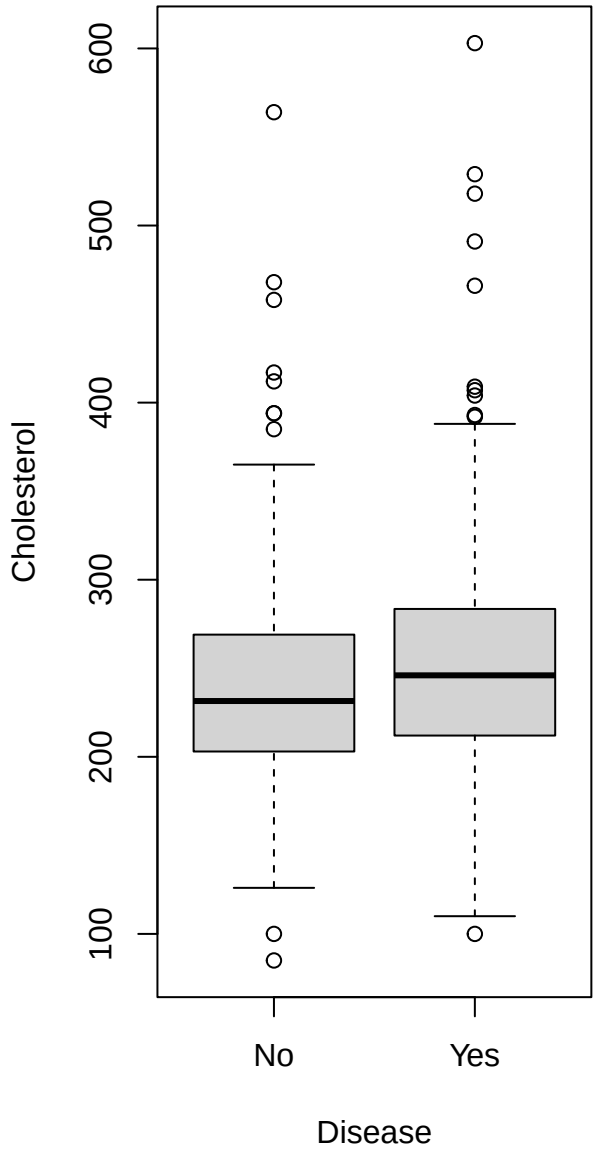

RestingBP
100
120
140
160
180
200

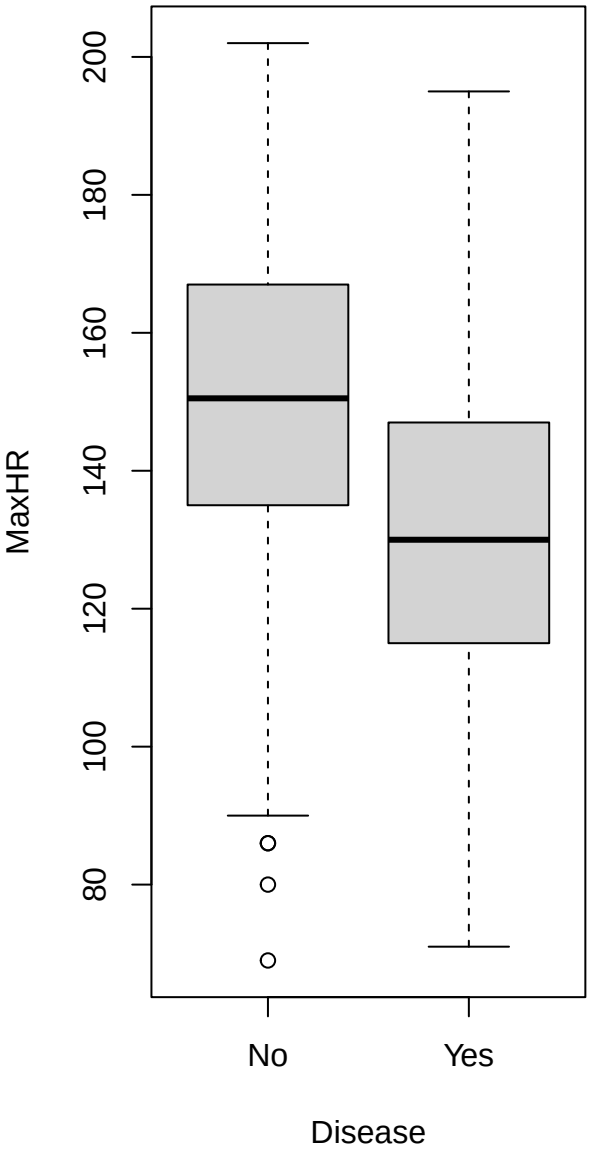

Cholesterol
100
200
300
400
500
600

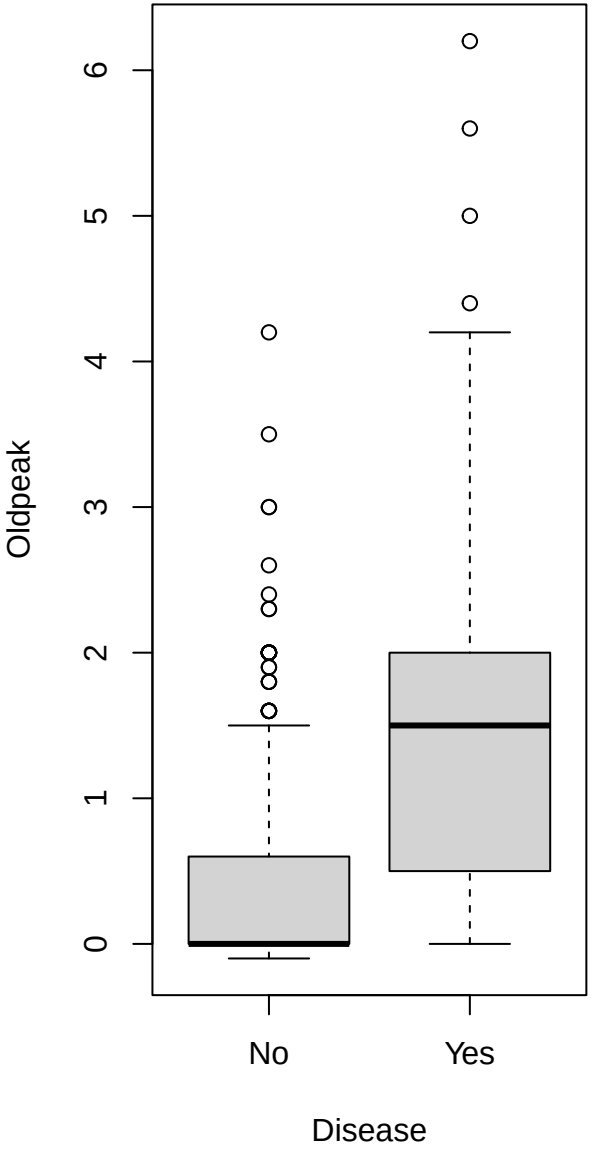

MaxHR
80
100
120
140
160
180
200

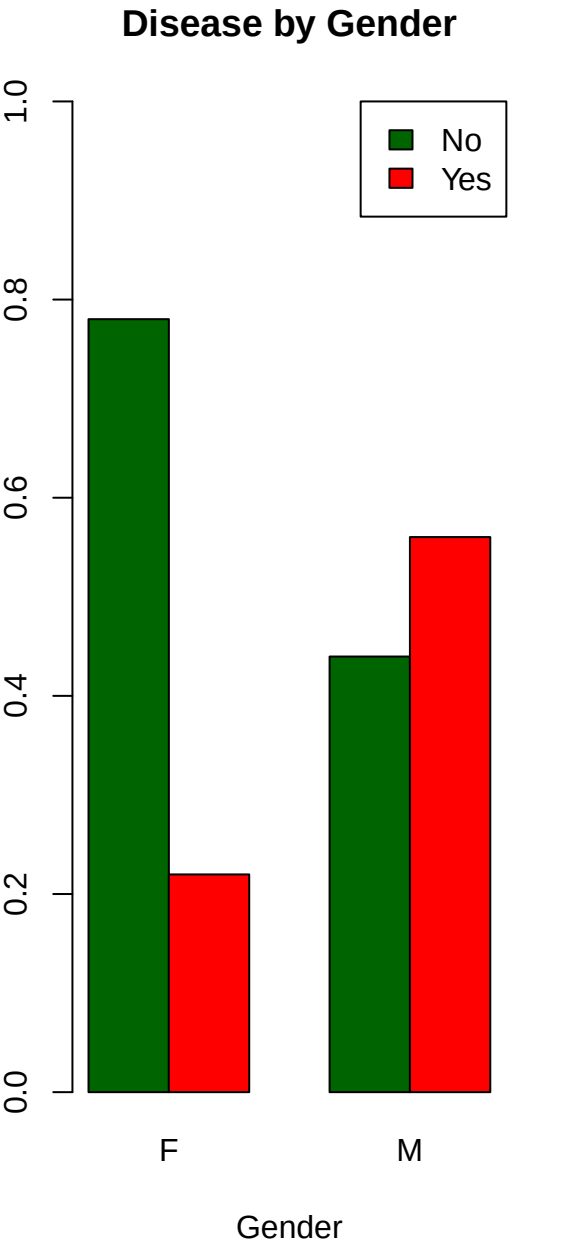

Age
30
40
50
60
70
No
Yes
Disease

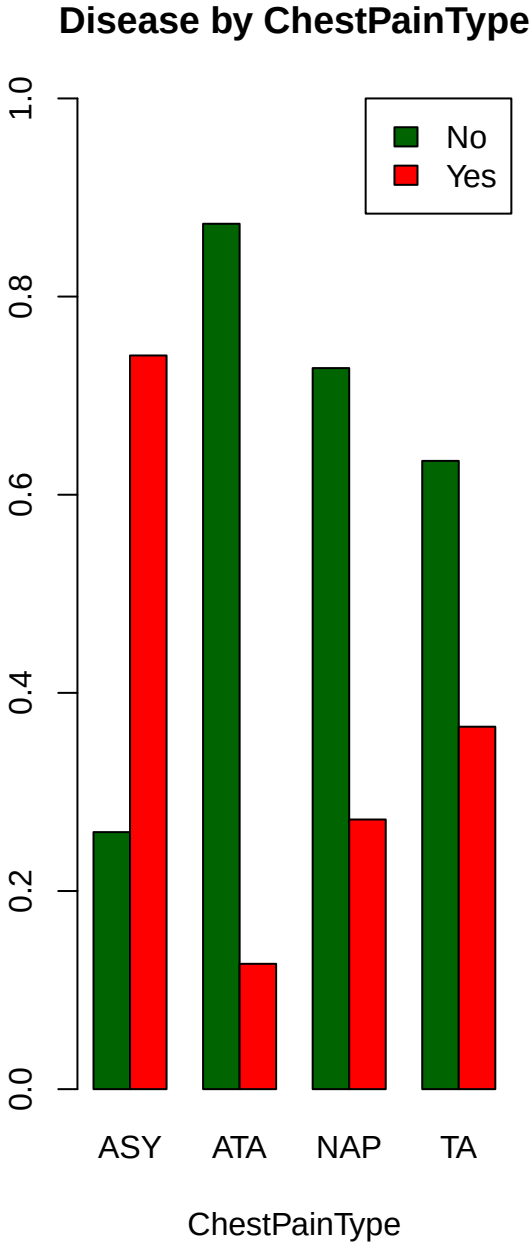

RestingBP
100
120
140
160
180
200
No
Yes
Disease

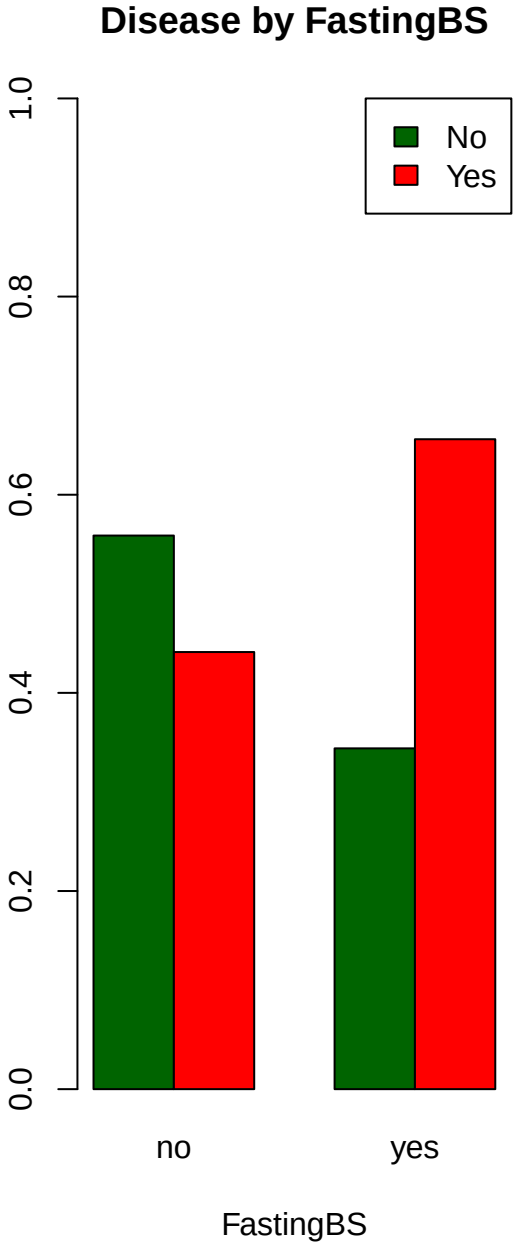

Cholesterol
100
200
300
400
500
600
No
Yes
Disease

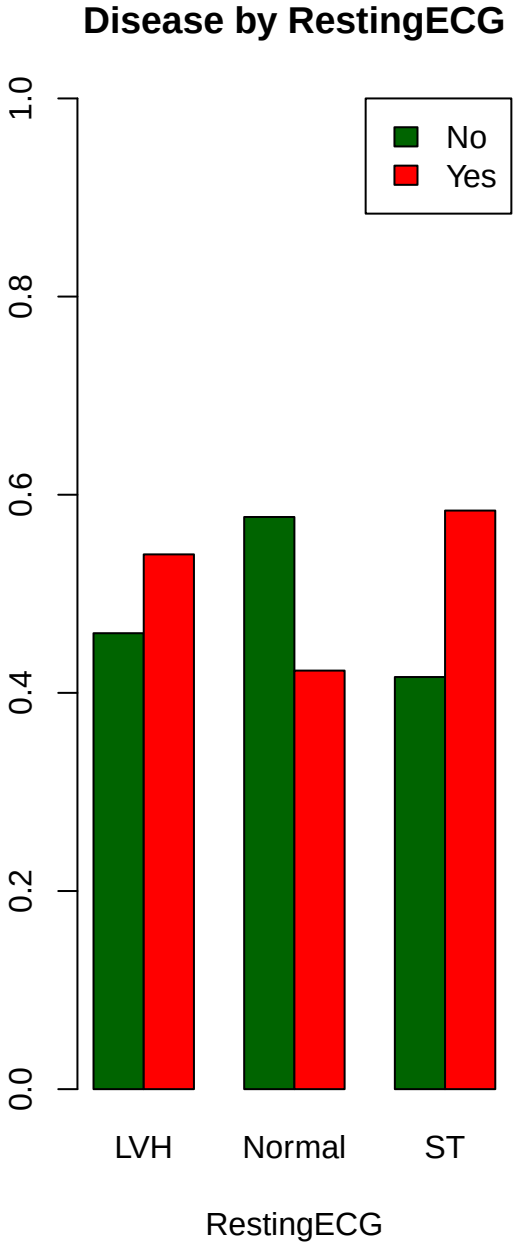

MaxHR
80
100
120
140
160
180
200
No
Yes
Disease

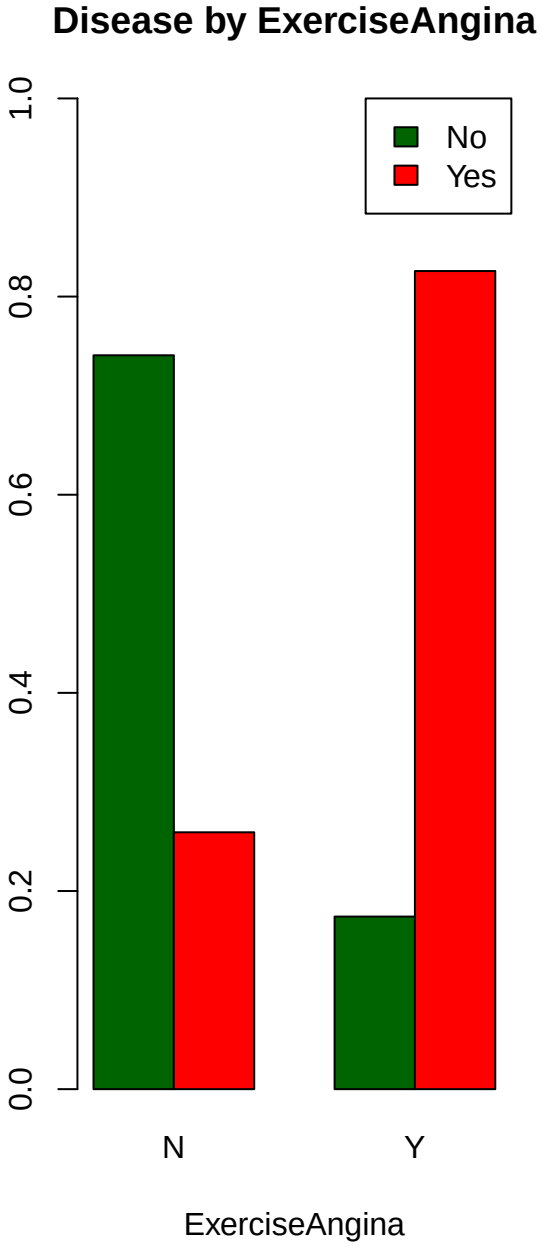

Oldpeak
0
1
2
3
4
5
6
No
Yes
Disease

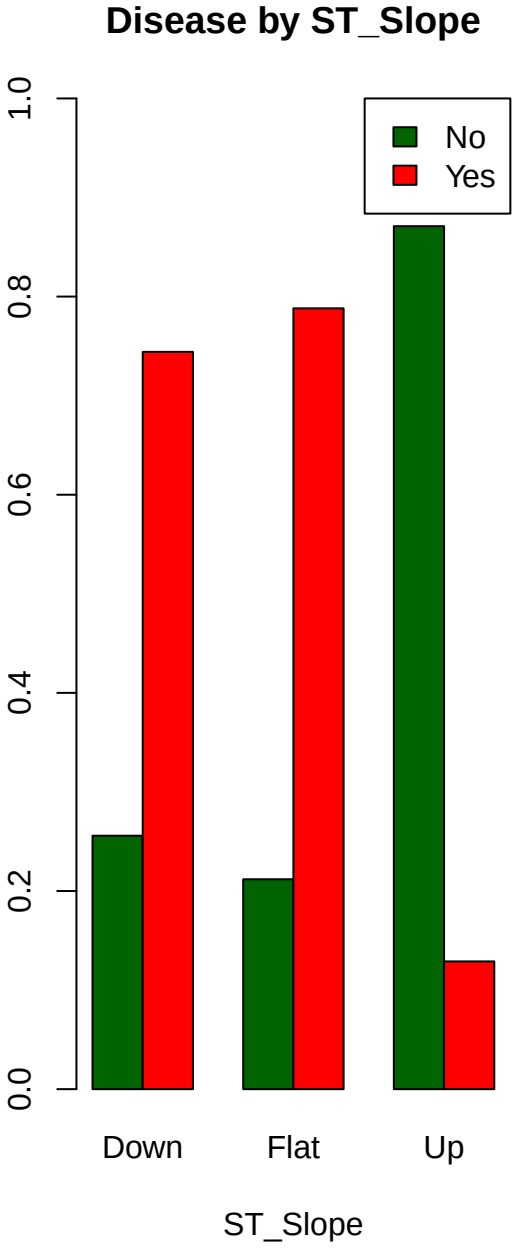

Disease by Gender
1.0
0.8
0.6
0.4
0.2
0.0
No
Yes
F
M
Gender

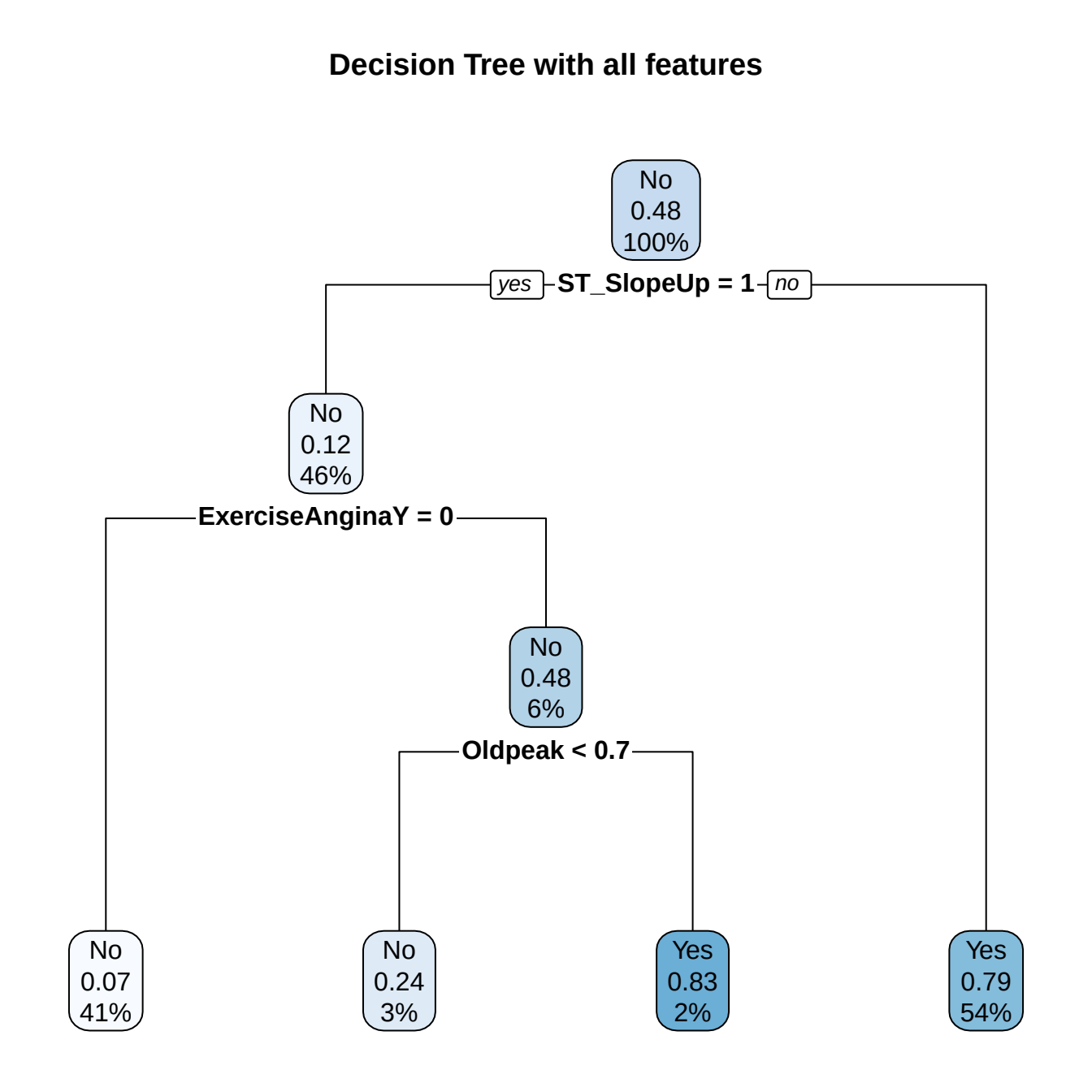

Disease by ChestPainType
1.0
0.8
0.6
0.4
0.2
0.0
No
Yes
ASY
ATA
NAP
TA
ChestPainType

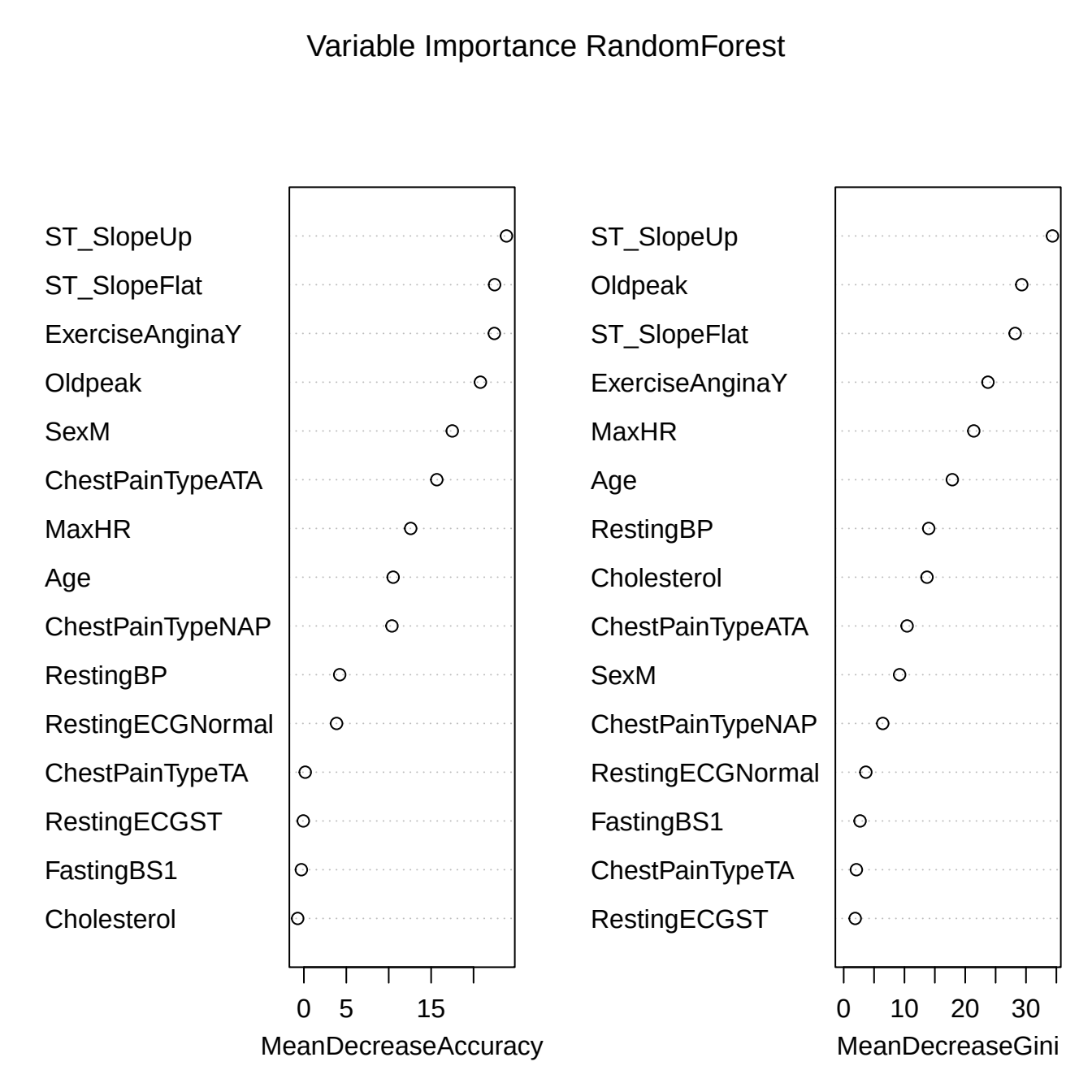

Disease by FastingBS
1.0
0.8
0.6
0.4
0.2
0.0
No
Yes
no
yes
FastingBS


Disease by RestingECG
1.0
0.8
0.6
0.4
0.2
0.0
No
Yes
LVH
Normal
ST
RestingECG


Disease by ExerciseAngina
1.0
0.8
0.6
0.4
0.2
0.0
No
Yes
N
Y
ExerciseAngina


Disease by ST_Slope
No
Yes
1.0
0.8
0.6
0.4
0.2
0.0
Down
Flat
Up
ST_Slope


Decision Tree with all features
No
0.48
100%
yes
ST_SlopeUp = 1
no
No
0.12
46%
ExerciseAnginaY = 0
No
0.48
6%
Oldpeak < 0.7
No
0.07
41%
No
0.24
3%
Yes
0.83
2%
Yes
0.79
54%


Variable Importance RandomForest
ST_SlopeUp
ST_SlopeFlat
ExerciseAnginaY
Oldpeak
SexM
ChestPainTypeATA
MaxHR
Age
ChestPainTypeNAP
RestingBP
RestingECGNormal
ChestPainTypeTA
RestingECGST
FastingBS1
Cholesterol
0
5
15
MeanDecreaseAccuracy
ST_SlopeUp
Oldpeak
ST_SlopeFlat
ExerciseAnginaY
MaxHR
Age
RestingBP
Cholesterol
ChestPainTypeATA
SexM
ChestPainTypeNAP
RestingECGNormal
FastingBS1
ChestPainTypeTA
RestingECGST
0
10
20
30
MeanDecreaseGini