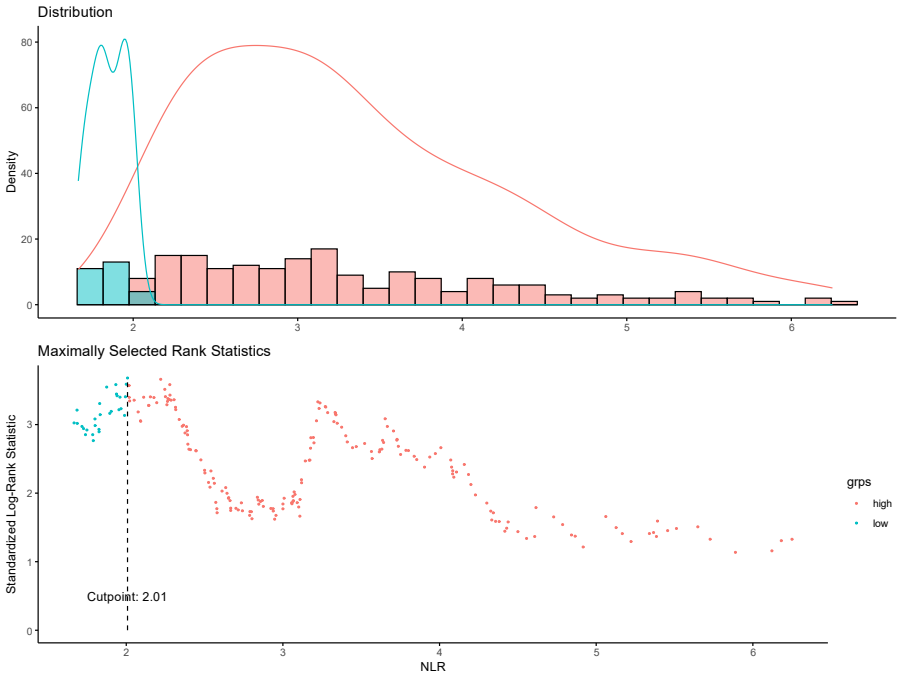
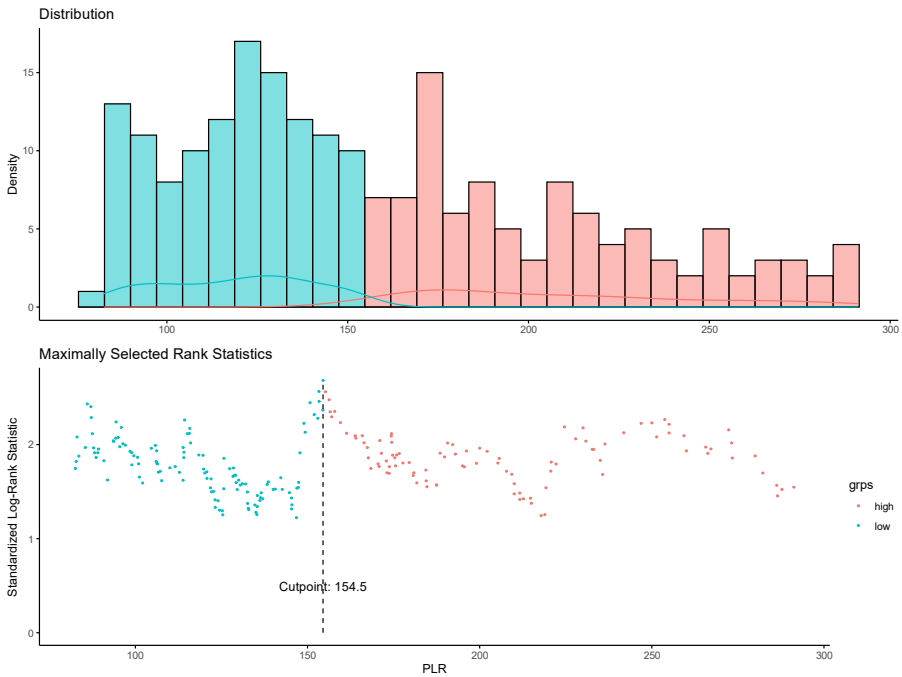
Supplemental Figure 1 Schematic of the method used to determine the optimal cut-off points of (a)NLR, (b)PLR, (c)LCR, (d)LMR, (e)CAR, (f)NAR, (g)MAR, (h)PAR, (i)N×M, (j)N×P, (k)N×C, (l)M×P, (m)M×C, (n)P×C, (o)L×A, (p)ALR, (q)AAR using R version for survival prediction.

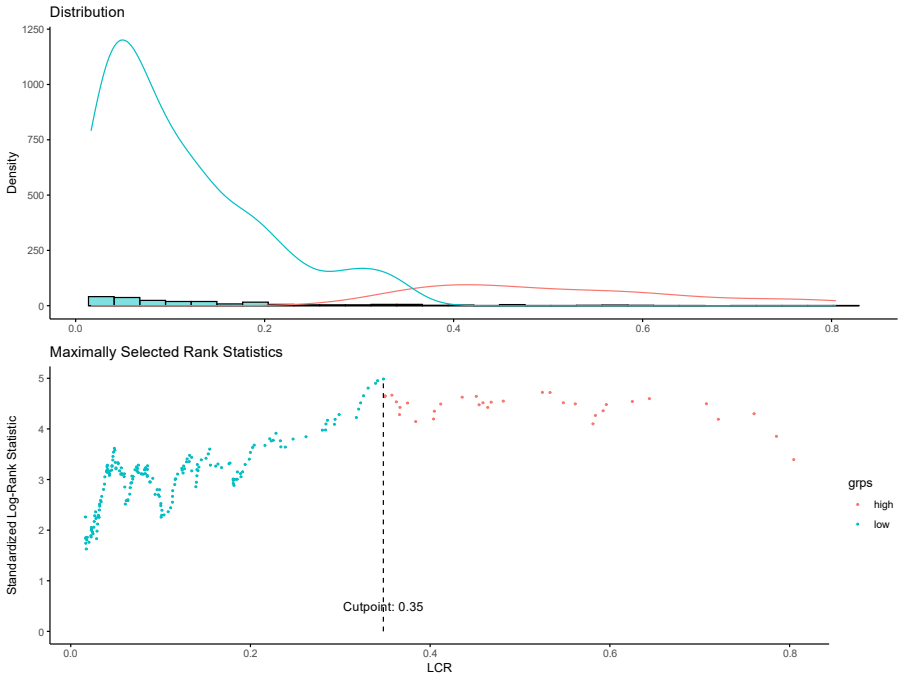
a



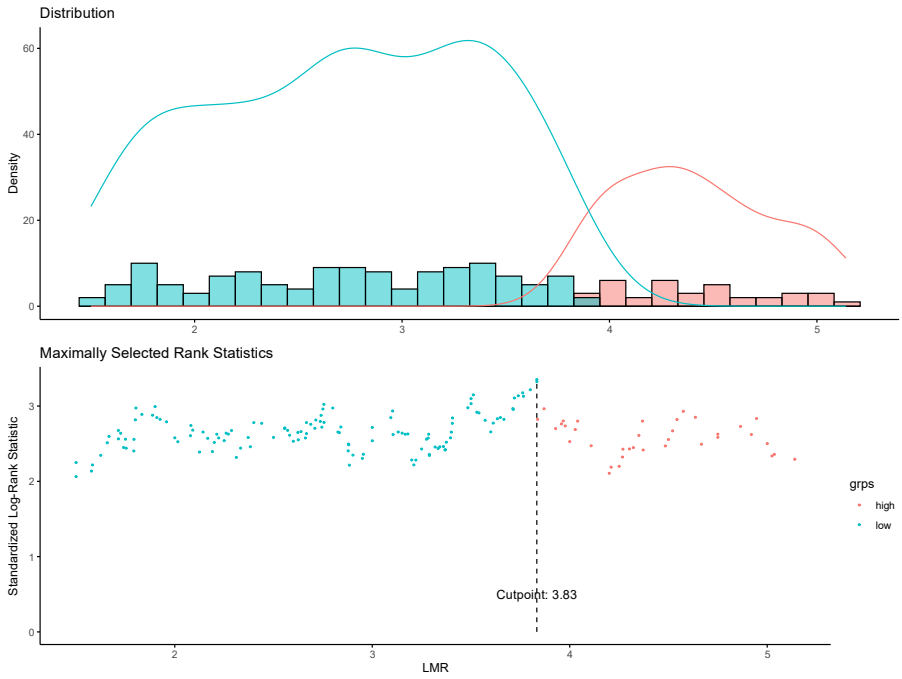
b



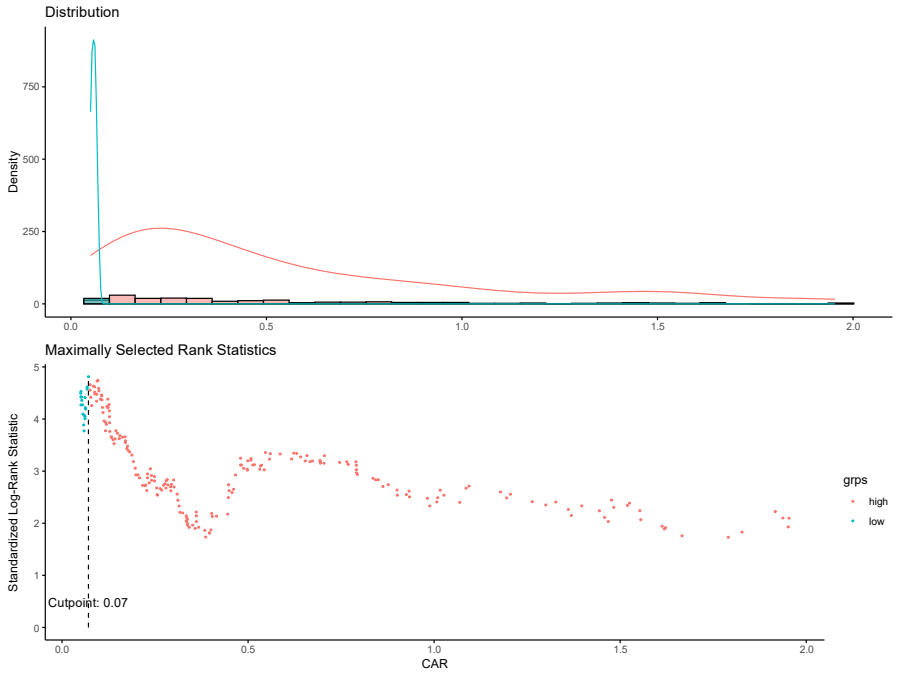
c


Distribution
Density
1250
1000
750
500
250
0
0.0
0.2
0.4
0.6
0.8
Maximally Selected Rank Statistics
Standardized Log-Rank Statistic
5
4
3
2
1
0
Cutpoint: 0.35
LCR
grps
high
low

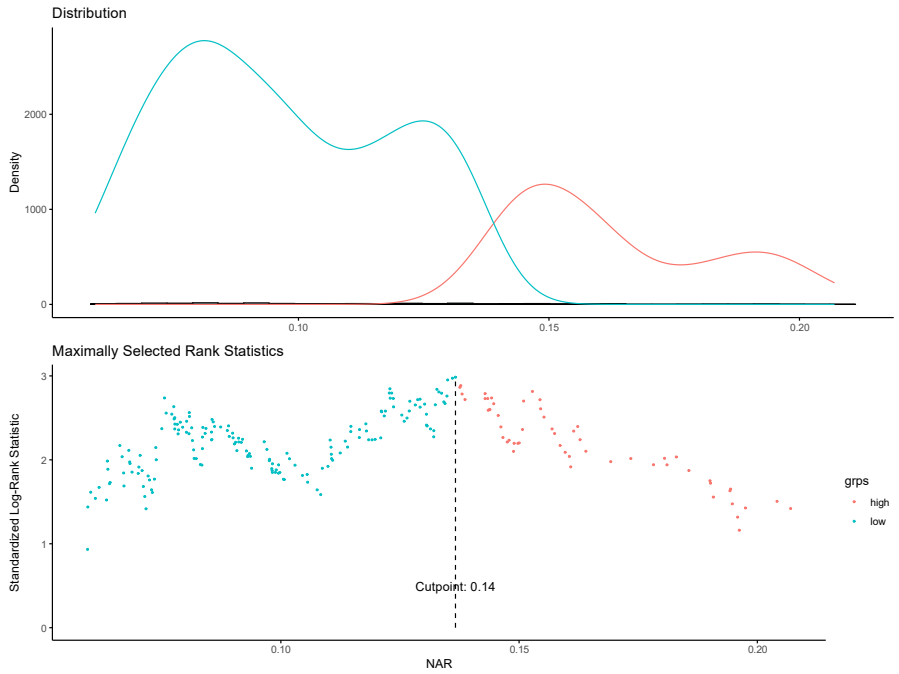
d


Distribution
Density
60
40
20
0
2
3
4
5
Maximally Selected Rank Statistics
Standardized Log-Rank Statistic
3
2
1
0
Cutpoint: 3.83
LMR
grps
high
low

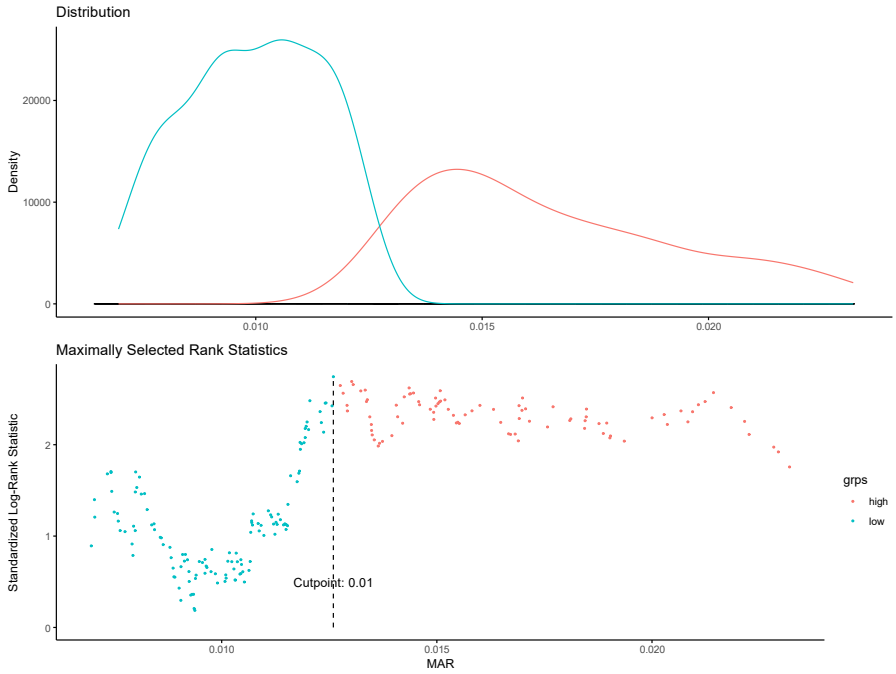
e


Distribution
Density
750
500
250
0
0.0
0.5
1.0
1.5
2.0
Maximally Selected Rank Statistics
Standardized Log-Rank Statistic
5
4
3
2
1
0
Cutpoint: 0.07
CAR
grps
high
low

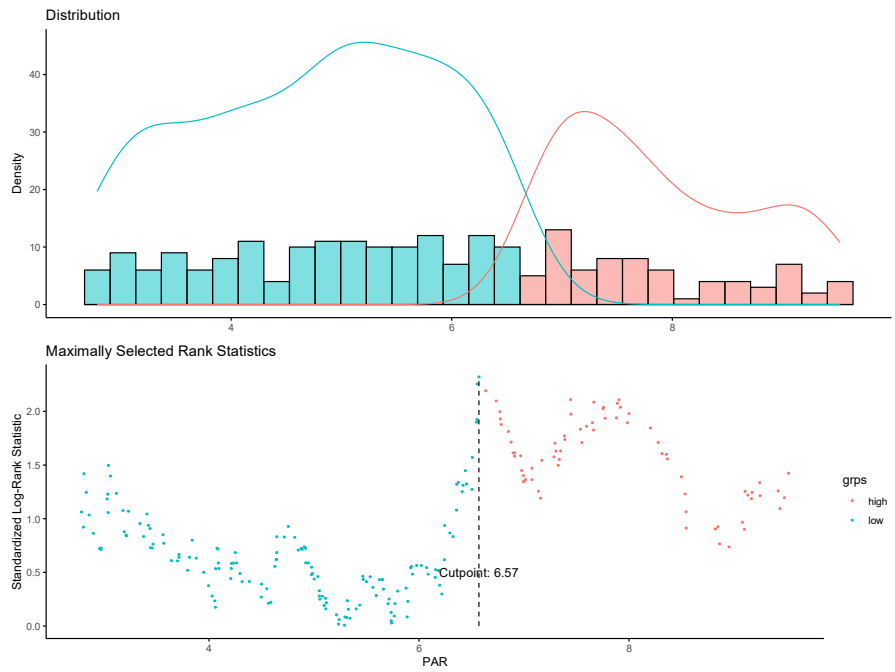
f


Distribution
Density
2000
1000
0
0.10
0.15
0.20
Maximally Selected Rank Statistics
Standardized Log-Rank Statistic
3
2
1
0
Cutpoint: 0.14
NAR
grps
high
low

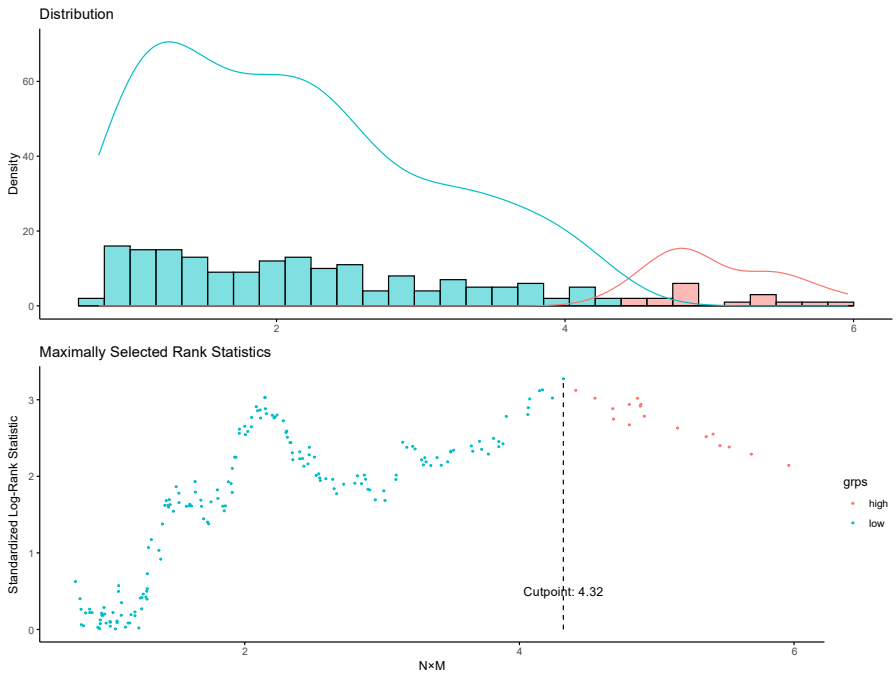
g


Distribution
Density
20000
10000
0
0.010
0.015
0.020
Maximally Selected Rank Statistics
Standardized Log-Rank Statistic
2
1
0
Cutpoint: 0.01
0.010
0.015
0.020
MAR
grps
high
low

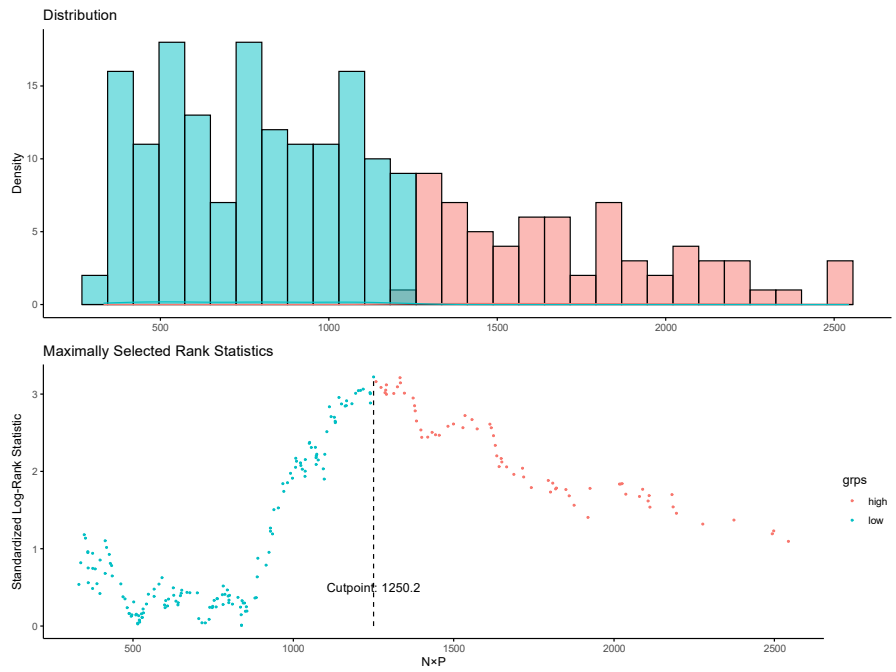
h


Distribution
Density
40
30
20
10
0
4
6
8
Maximally Selected Rank Statistics
Standardized Log-Rank Statistic
2.0
1.5
1.0
0.5
0.0
Cutpoint: 6.57
4
6
8
PAR
grps
high
low

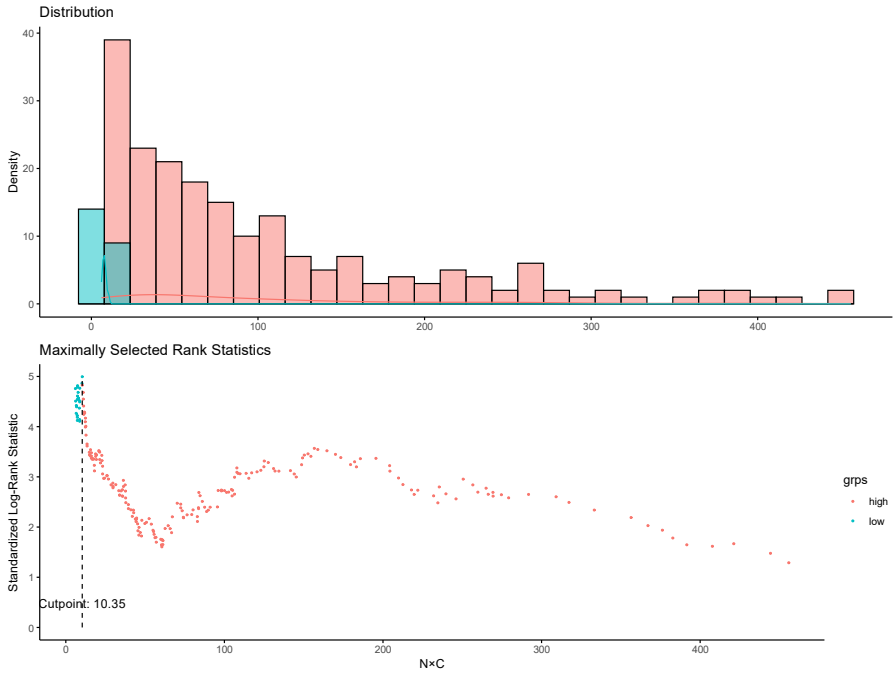
i


Distribution
Density
60
40
20
0
2
4
6
Maximally Selected Rank Statistics
Standardized Log-Rank Statistic
3
2
1
0
Cutpoint: 4.32
N×M
grps
high
low

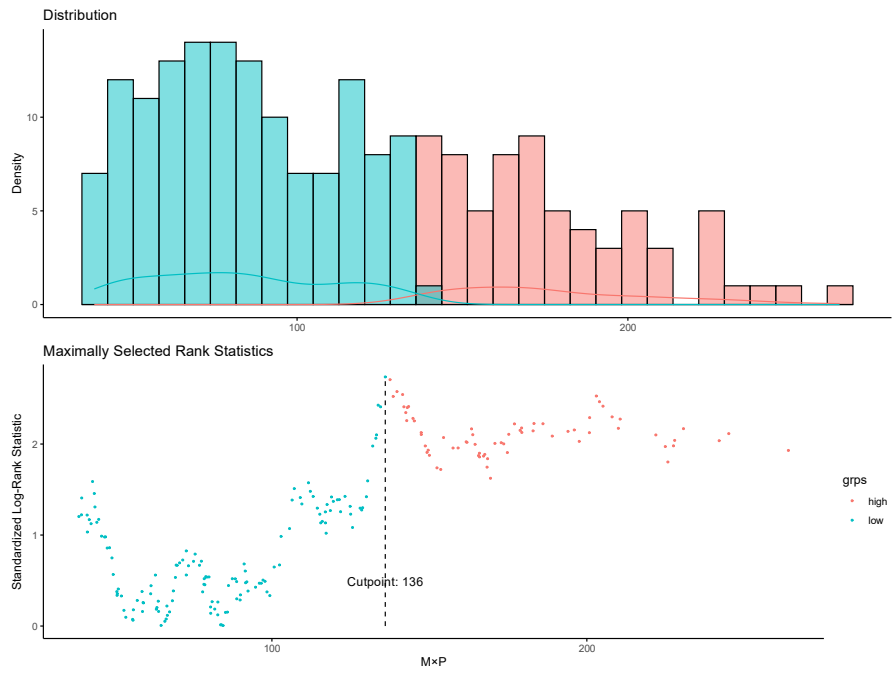
j


Distribution
Density
15
10
5
0
500
1000
1500
2000
2500
Maximally Selected Rank Statistics
Standardized Log-Rank Statistic
3
2
1
0
Cutpoint: 1250.2
N×P
grps
high
low

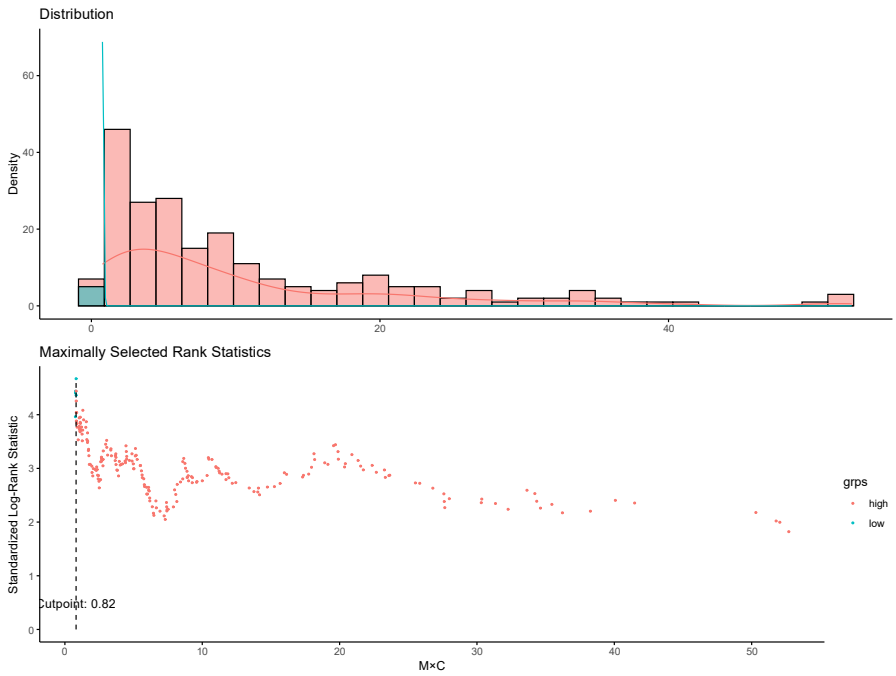
k


Distribution
Density
0
10
20
30
40
0
100
200
300
400
Maximally Selected Rank Statistics
Standardized Log-Rank Statistic
0
1
2
3
4
5
Cutpoint: 10.35
0
100
200
300
400
N×C
grps
high
low

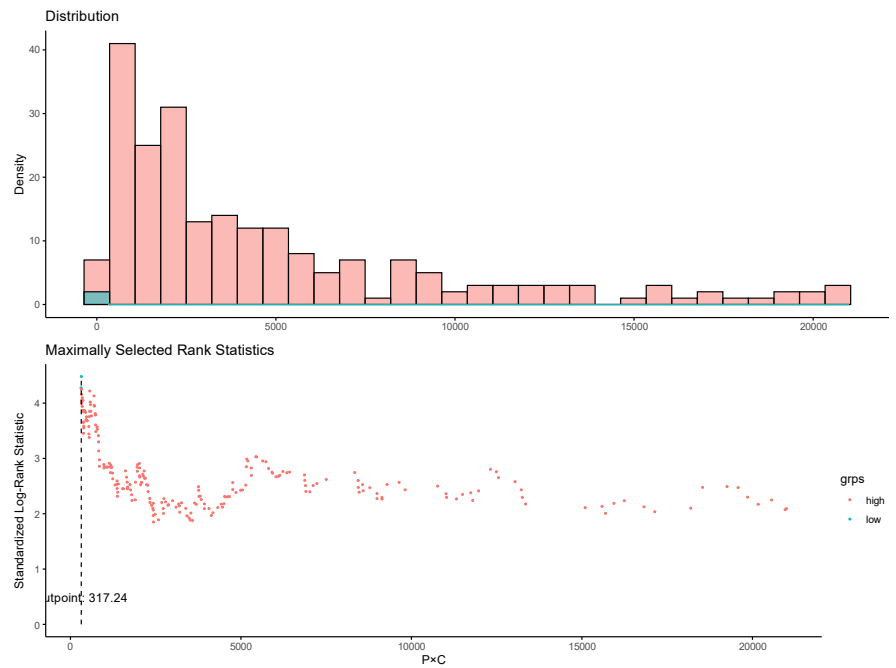
l


Distribution
Density
0
5
10
100
200
Maximally Selected Rank Statistics
Standardized Log-Rank Statistic
0
1
2
Cutpoint: 136
100
200
M×P
grps
high
low

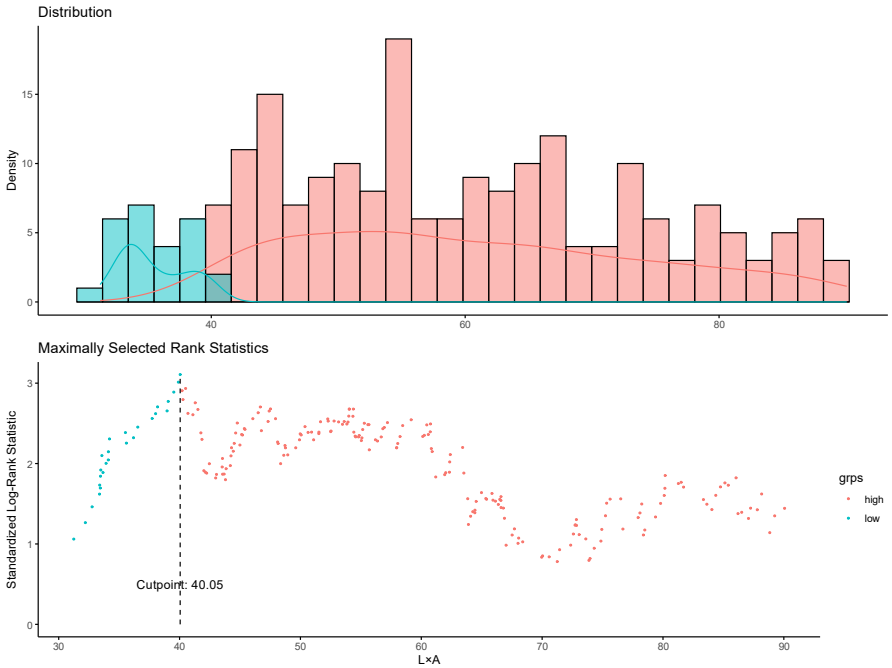
m


Distribution
Density
0
20
40
60
0
20
40
Maximally Selected Rank Statistics
Standardized Log-Rank Statistic
0
1
2
3
4
Cutpoint: 0.82
0
10
20
30
40
50
M×C
grps
high
low

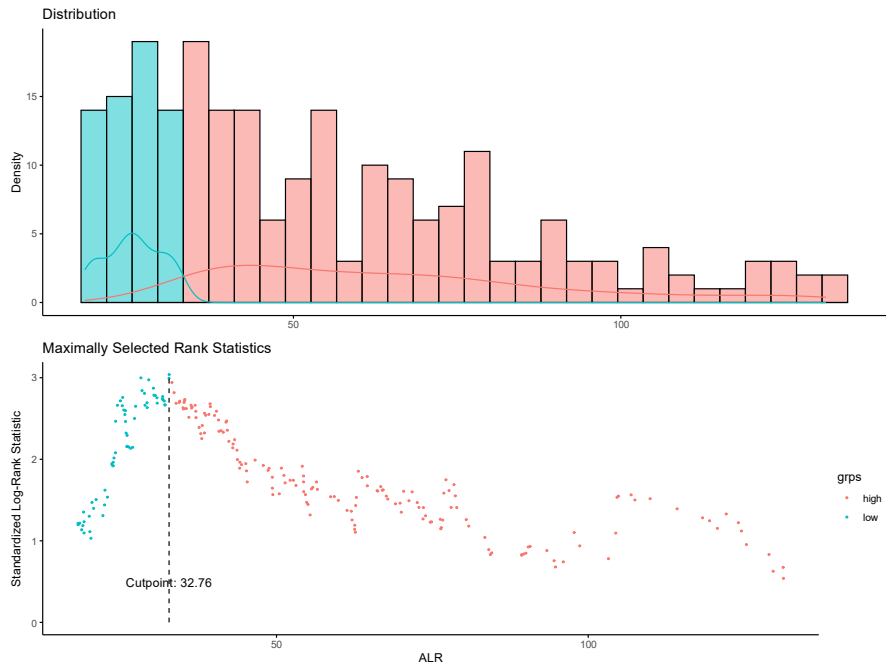
n


Distribution
Density
0
10
20
30
40
0
5000
10000
15000
20000
Maximally Selected Rank Statistics
Standardized Log-Rank Statistic
0
1
2
3
4
utpoint: 317.24
0
5000
10000
15000
20000
P×C
grps
high
low

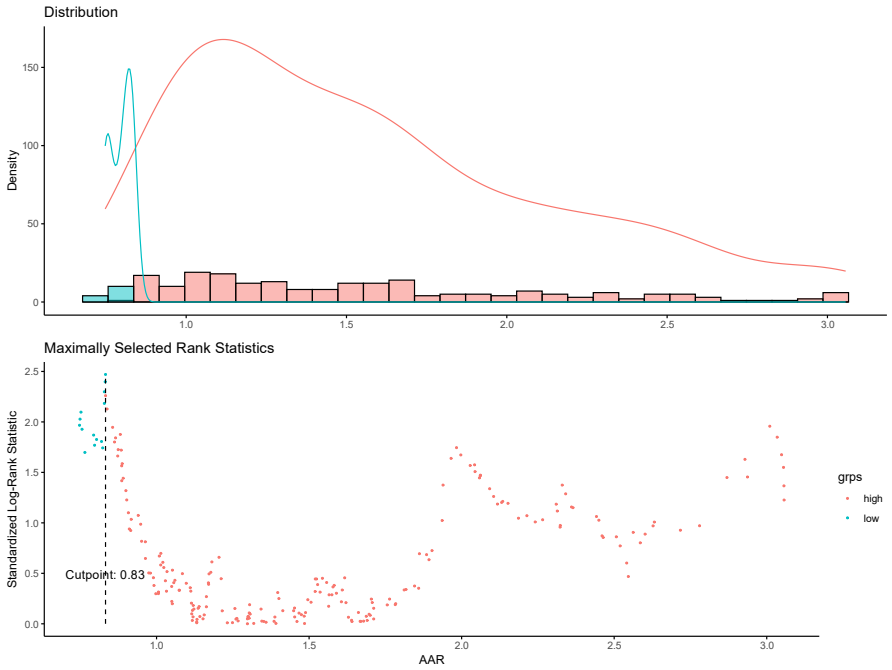
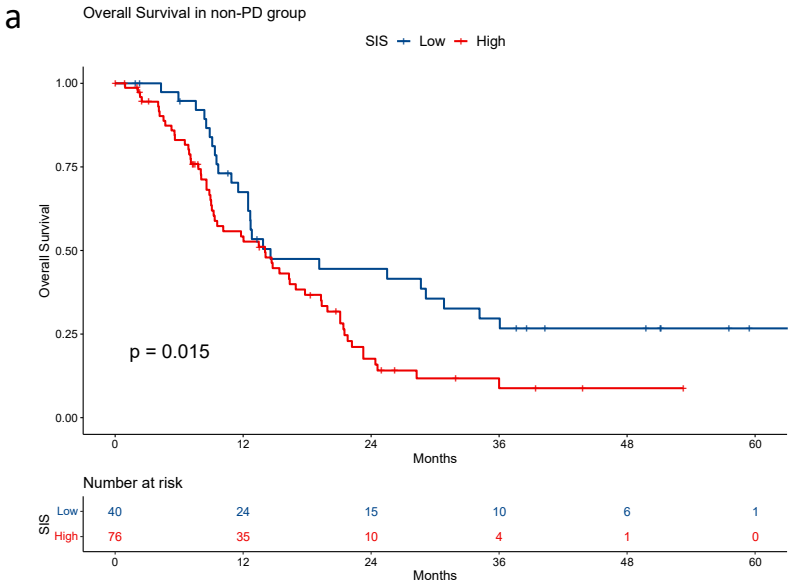
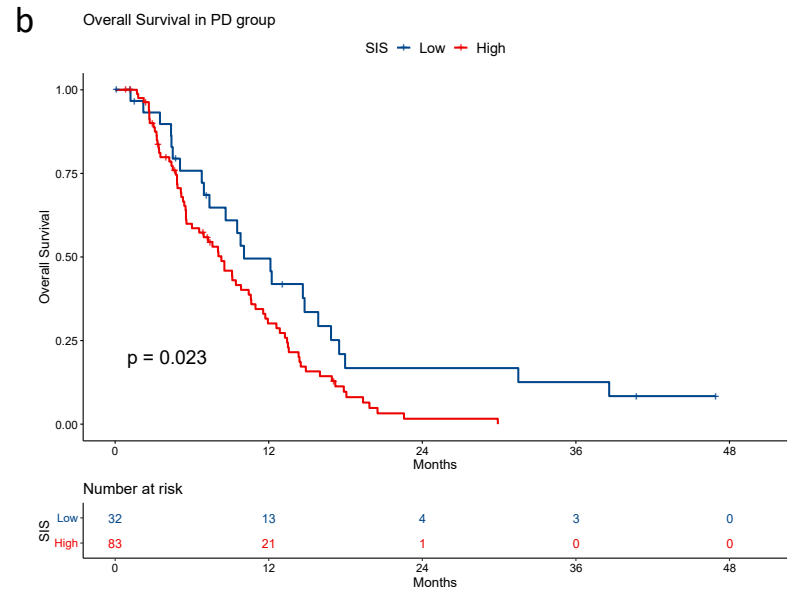
o


Distribution
Density
0
5
10
15
40
60
80
Maximally Selected Rank Statistics
Standardized Log-Rank Statistic
0
1
2
3
Cutpoint: 40.05
30
40
50
60
70
80
90
L×A
grps
high
low

p


Distribution
Density
0
5
10
15
50
100
Maximally Selected Rank Statistics
Standardized Log-Rank Statistic
0
1
2
3
Cutpoint: 32.76
50
100
ALR
grps
high
low

q


Distribution
Density
150
100
50
0
1.0
1.5
2.0
2.5
3.0
Maximally Selected Rank Statistics
Standardized Log-Rank Statistic
2.5
2.0
1.5
1.0
0.5
0.0
Cutpoint: 0.83
AAR
grps
high
low

Supplemental Figure 2 SIS is associated with OS in HCC patients with different response to HAIC. Kaplan–Meier estimates of overall survival in the non-PD group (a) and the PD group (b) of patients in the low- and high- SIS groups.