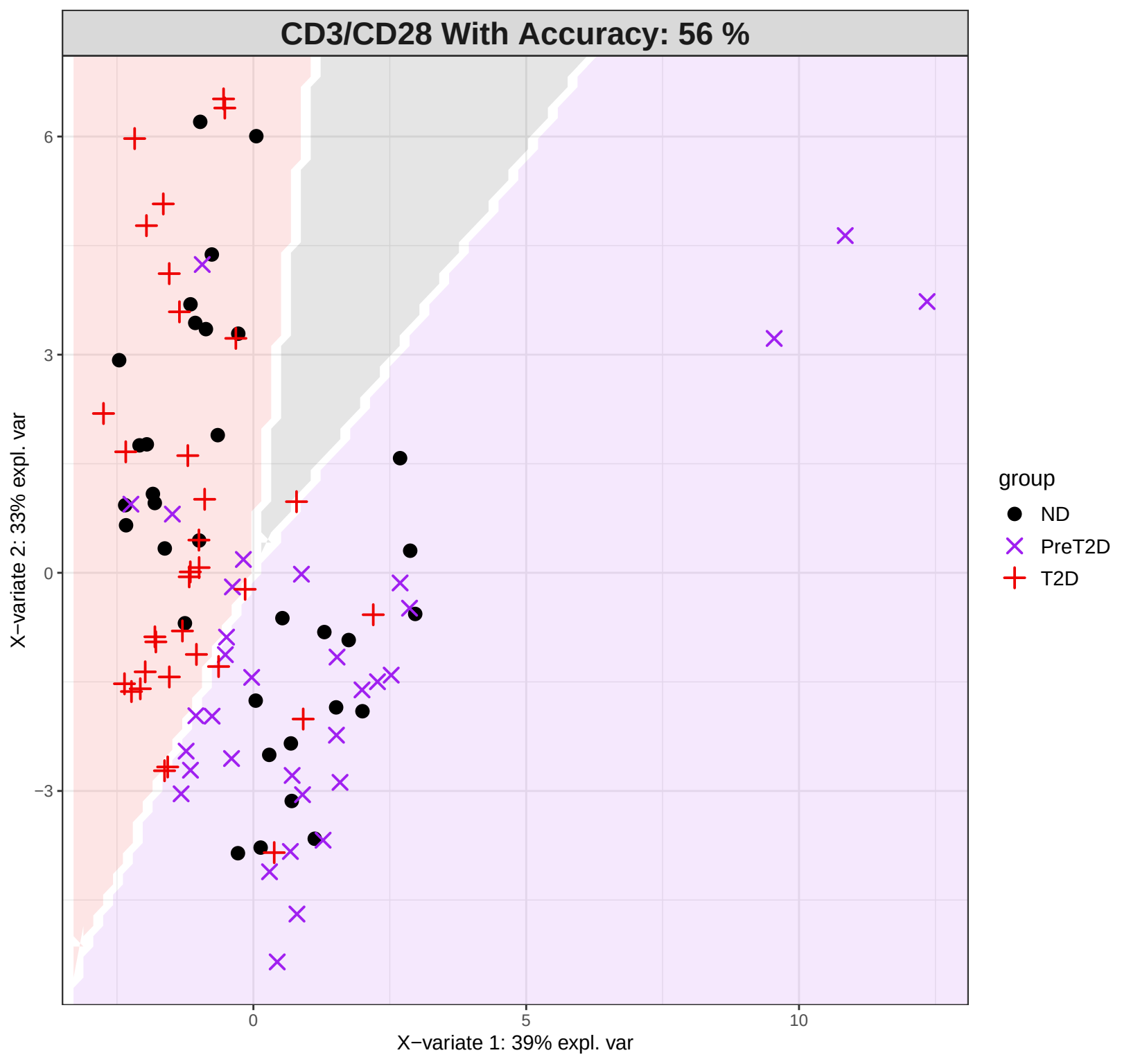
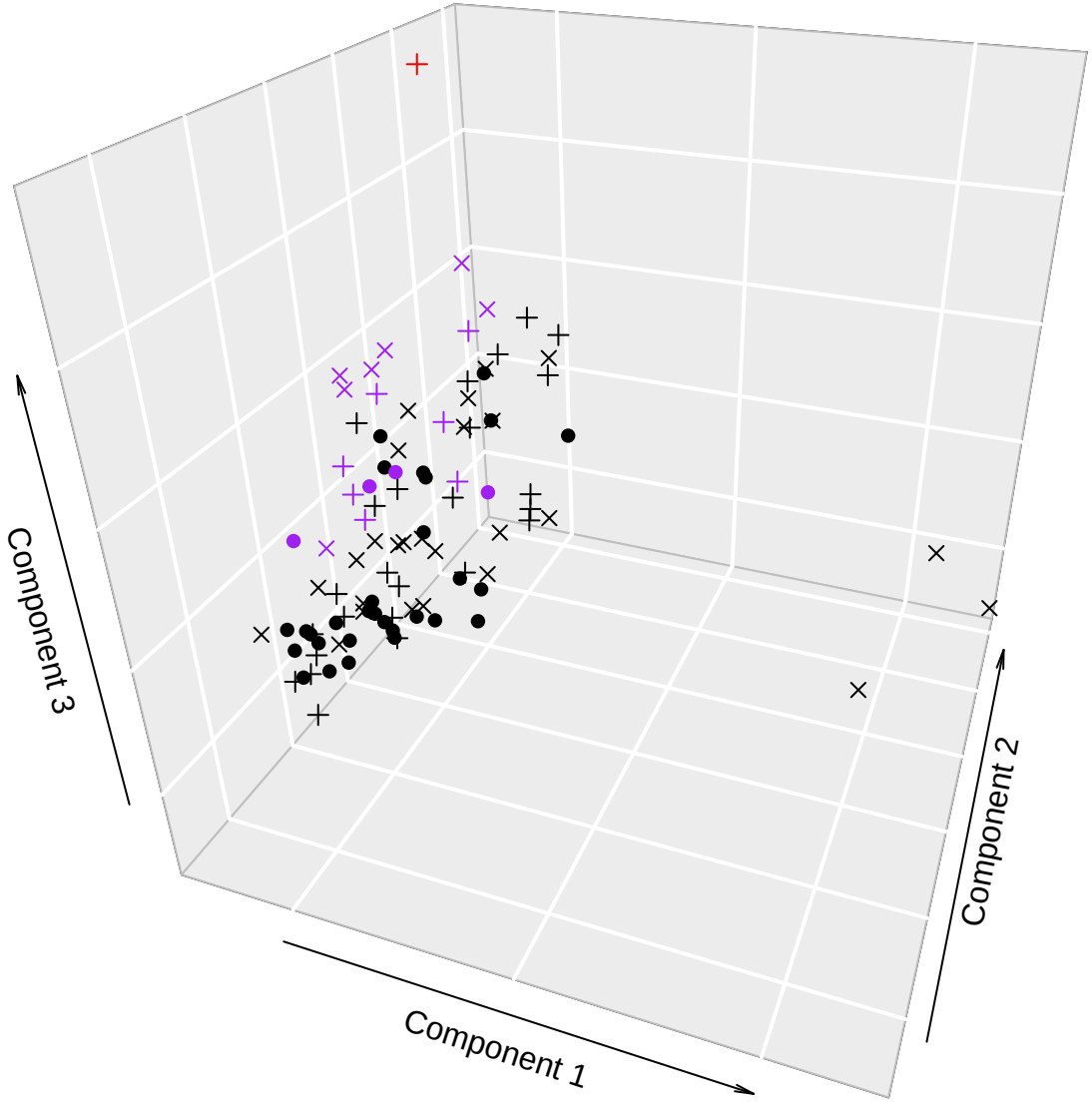
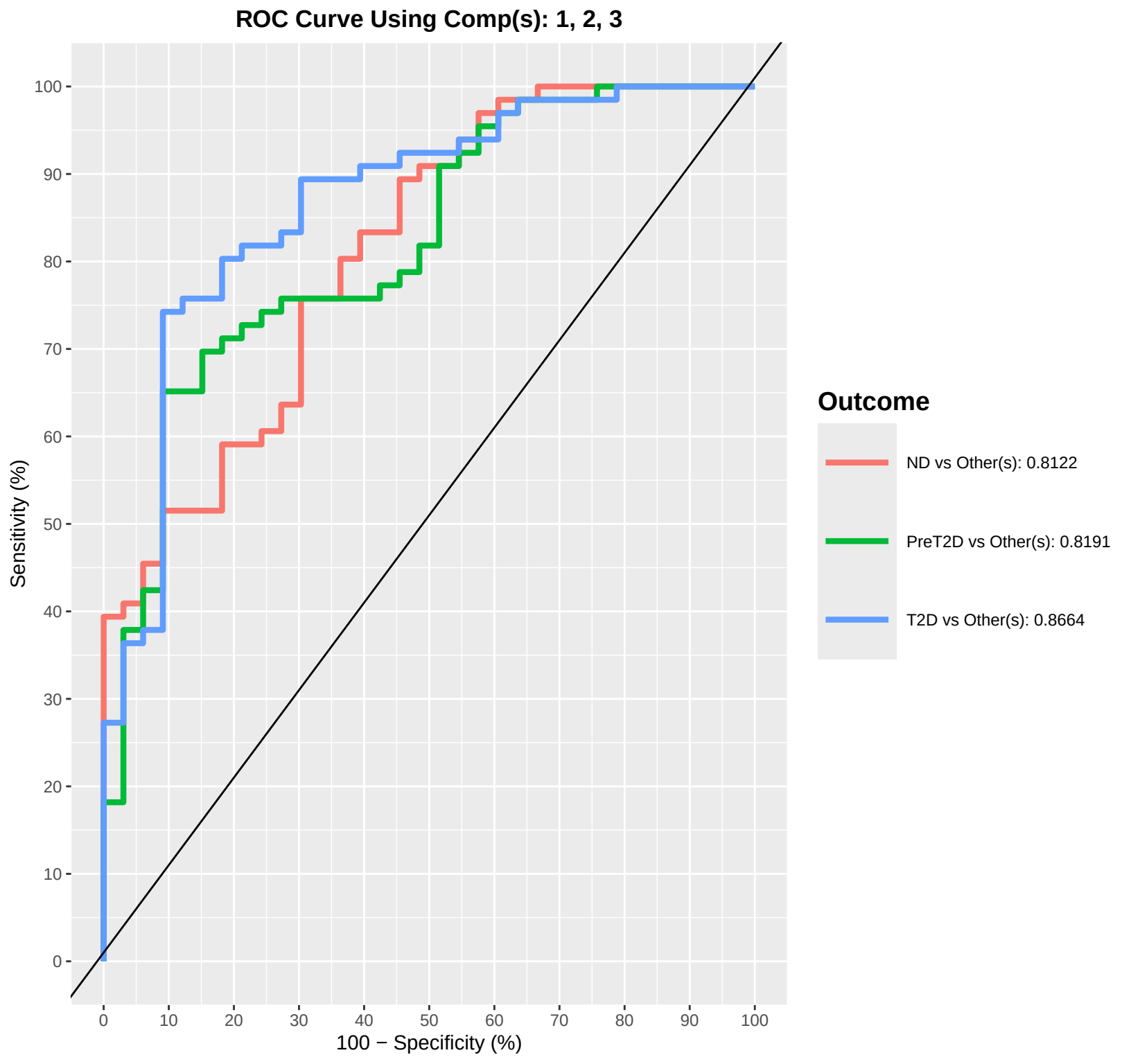
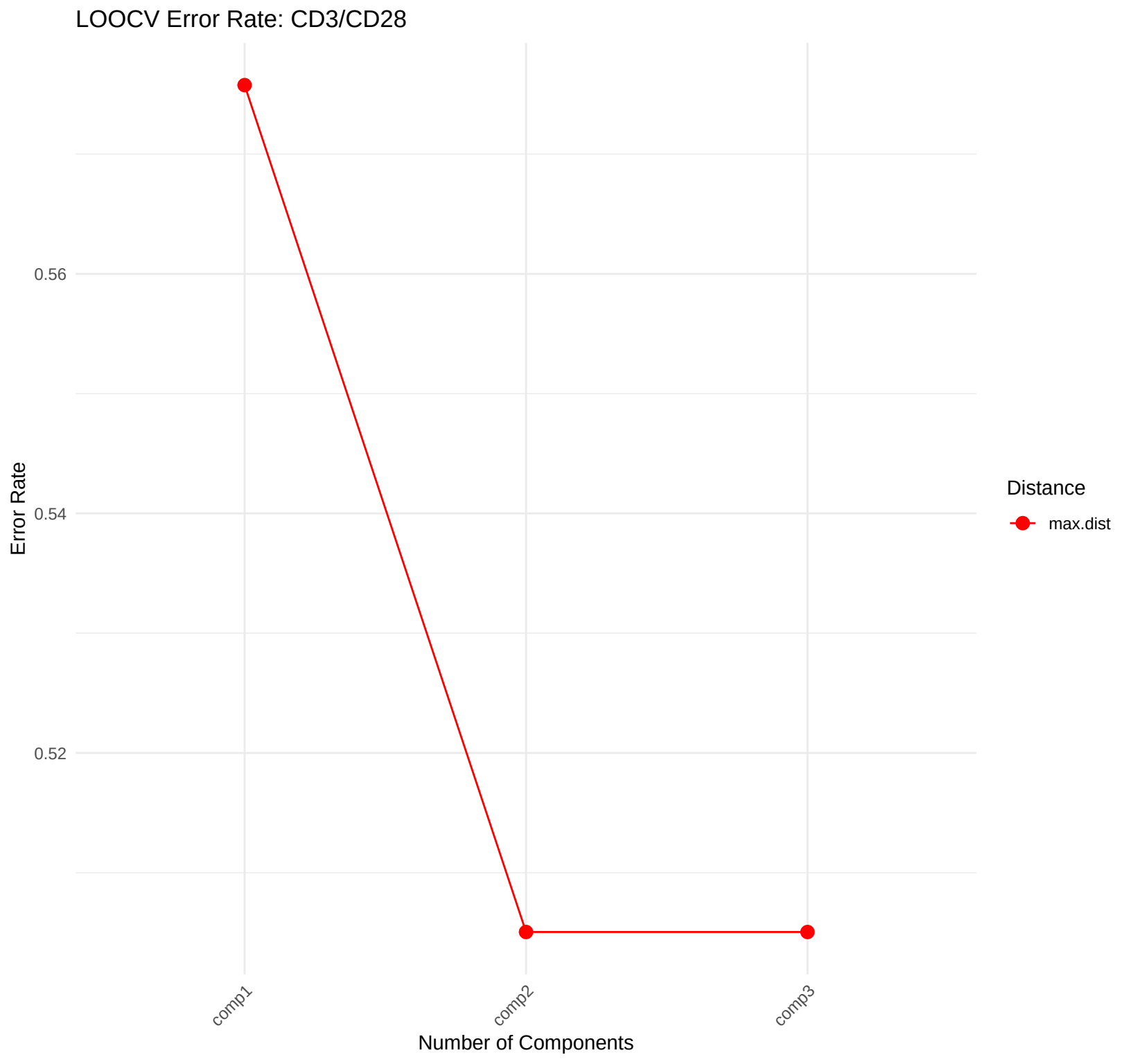
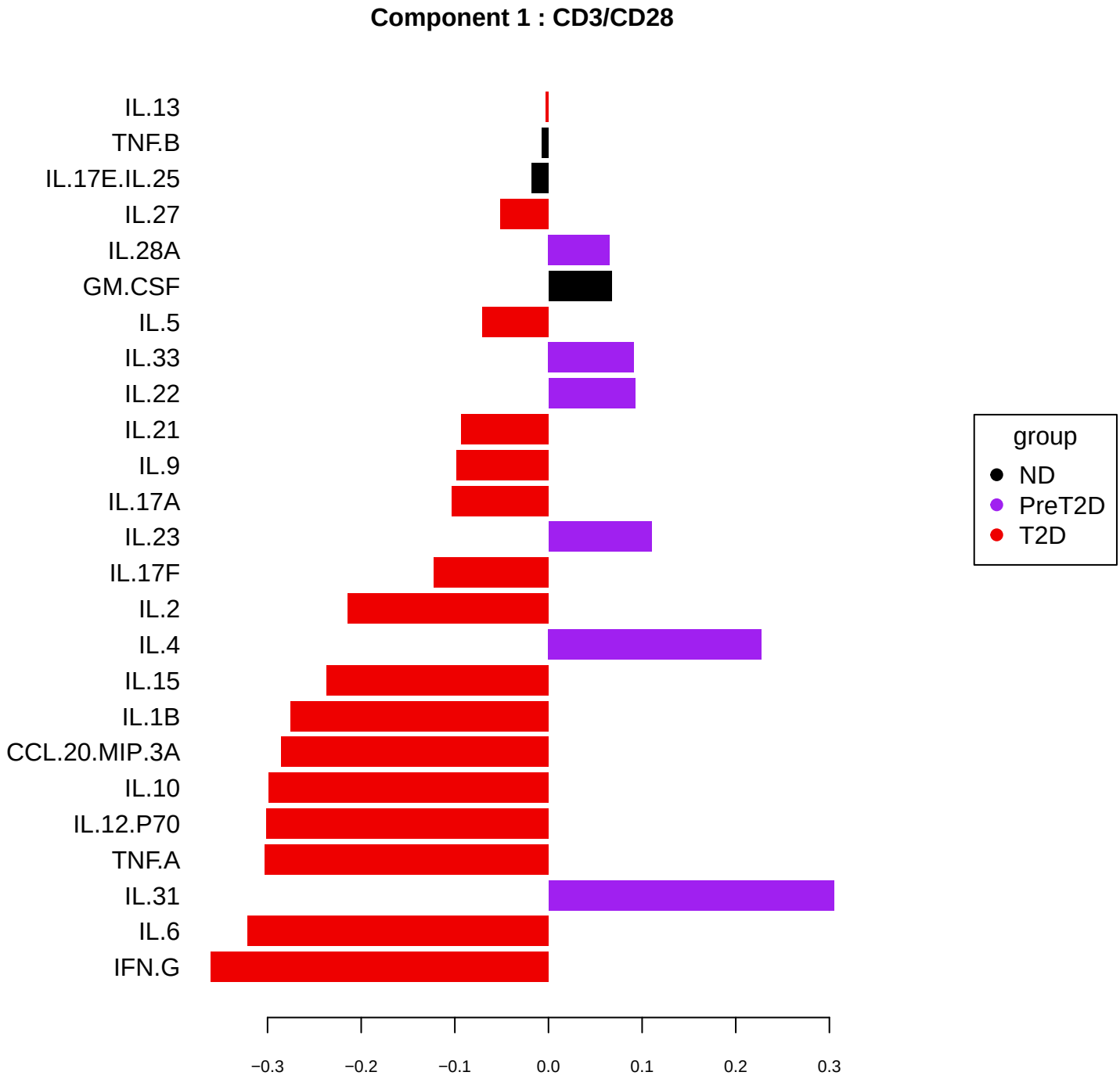

CD3/CD28 With Accuracy: 56 %
6
3
0
−3
X−variate 2: 33% expl. var
0
5
10
X−variate 1: 39% expl. var
group
ND
PreT2D
T2D

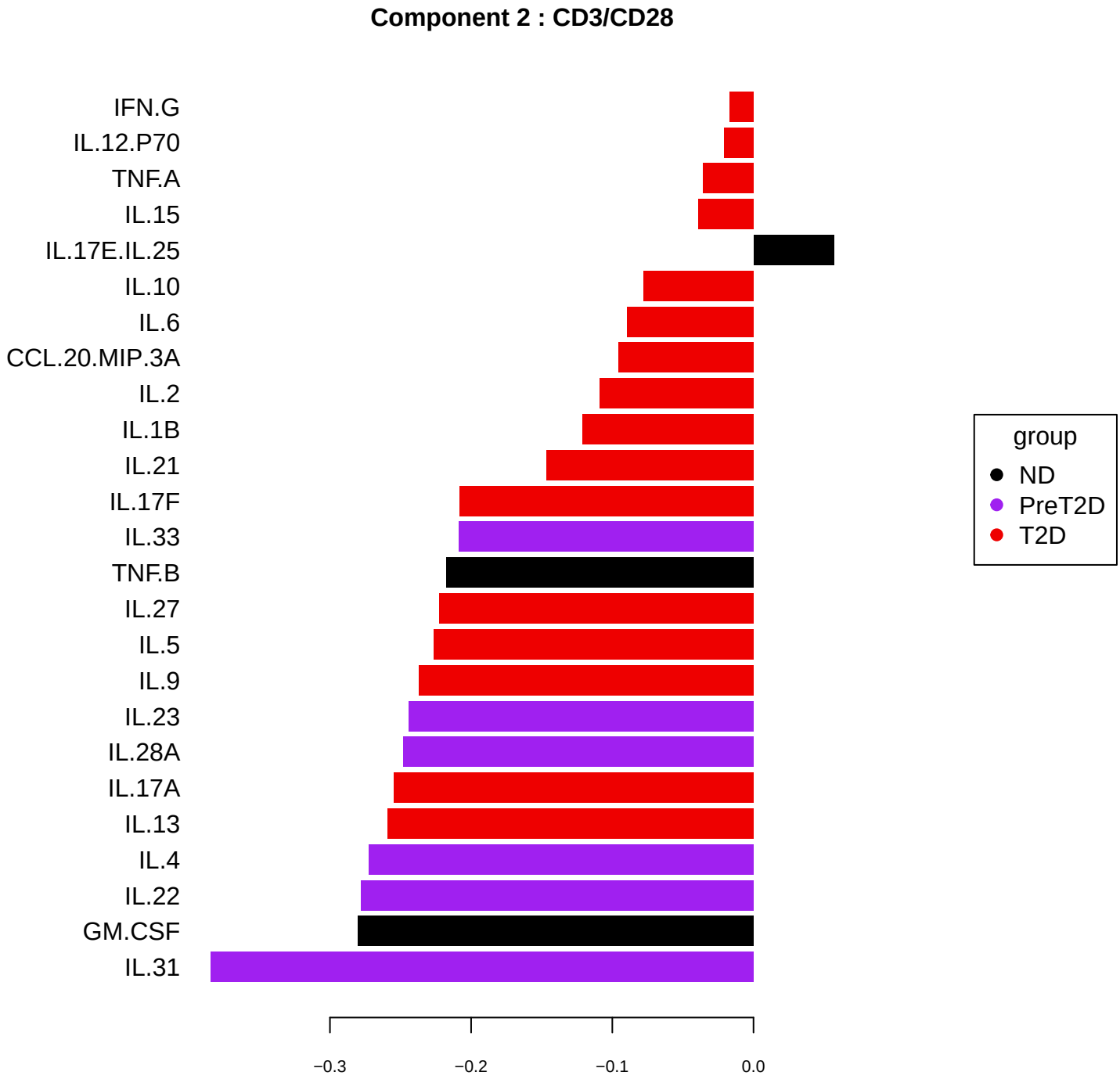
# 3D Plot: CD3/CD28

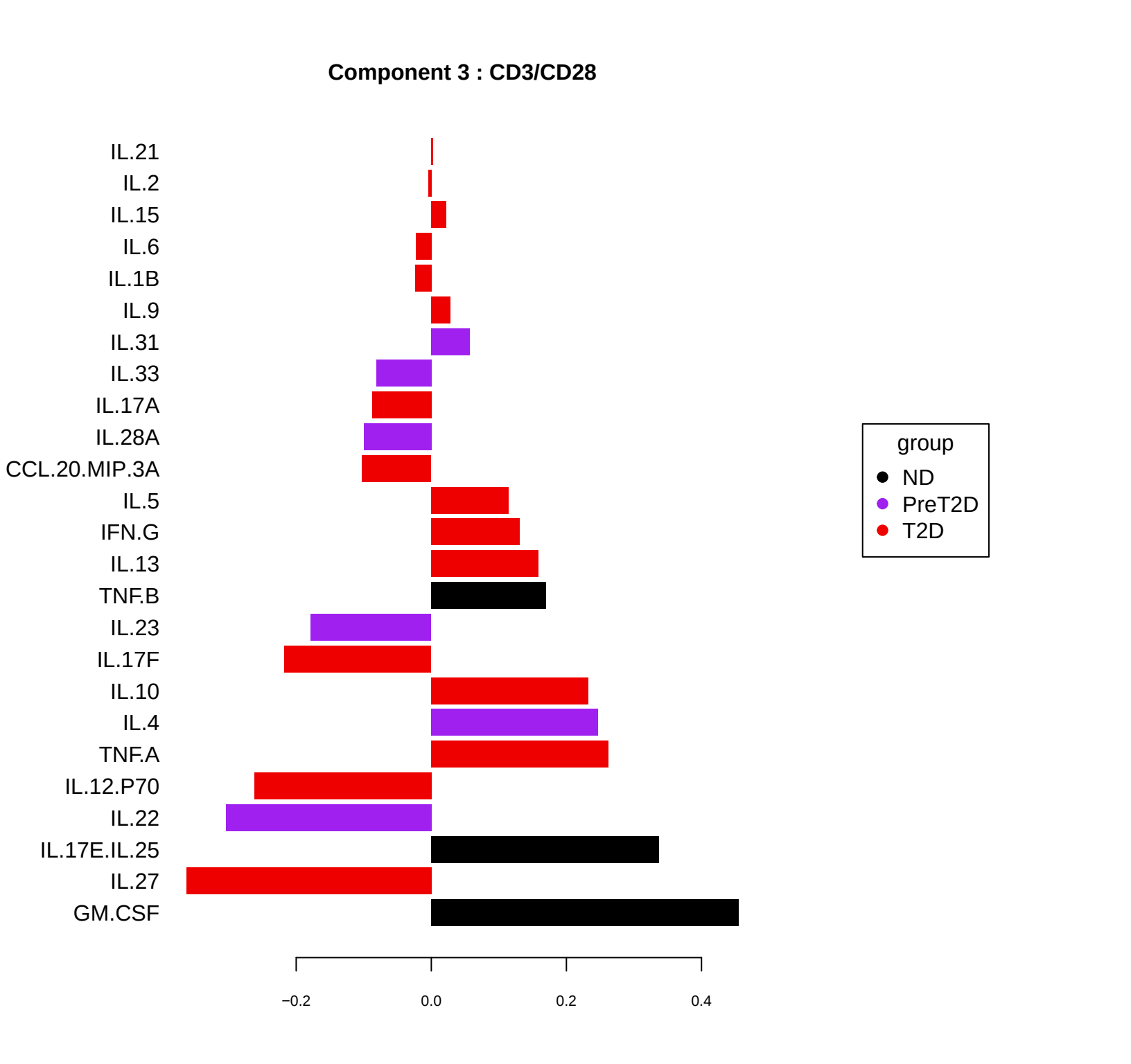


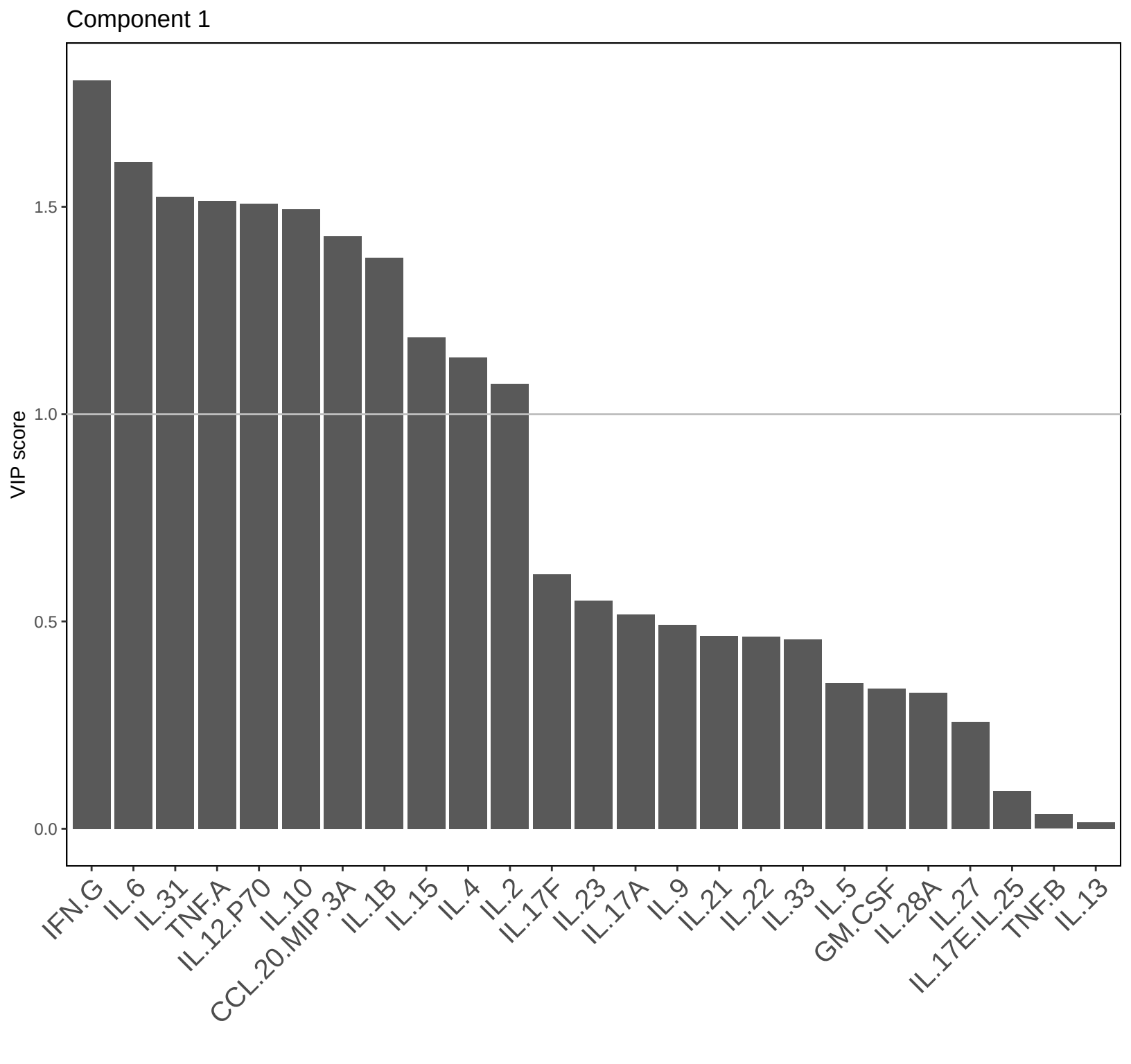

ROC Curve Using Comp(s): 1, 2, 3
Sensitivity (%)
100
90
80
70
60
50
40
30
20
10
0
0
10
20
30
40
50
60
70
80
90
100
100 − Specificity (%)
Outcome
ND vs Other(s): 0.8122
PreT2D vs Other(s): 0.8191
T2D vs Other(s): 0.8664

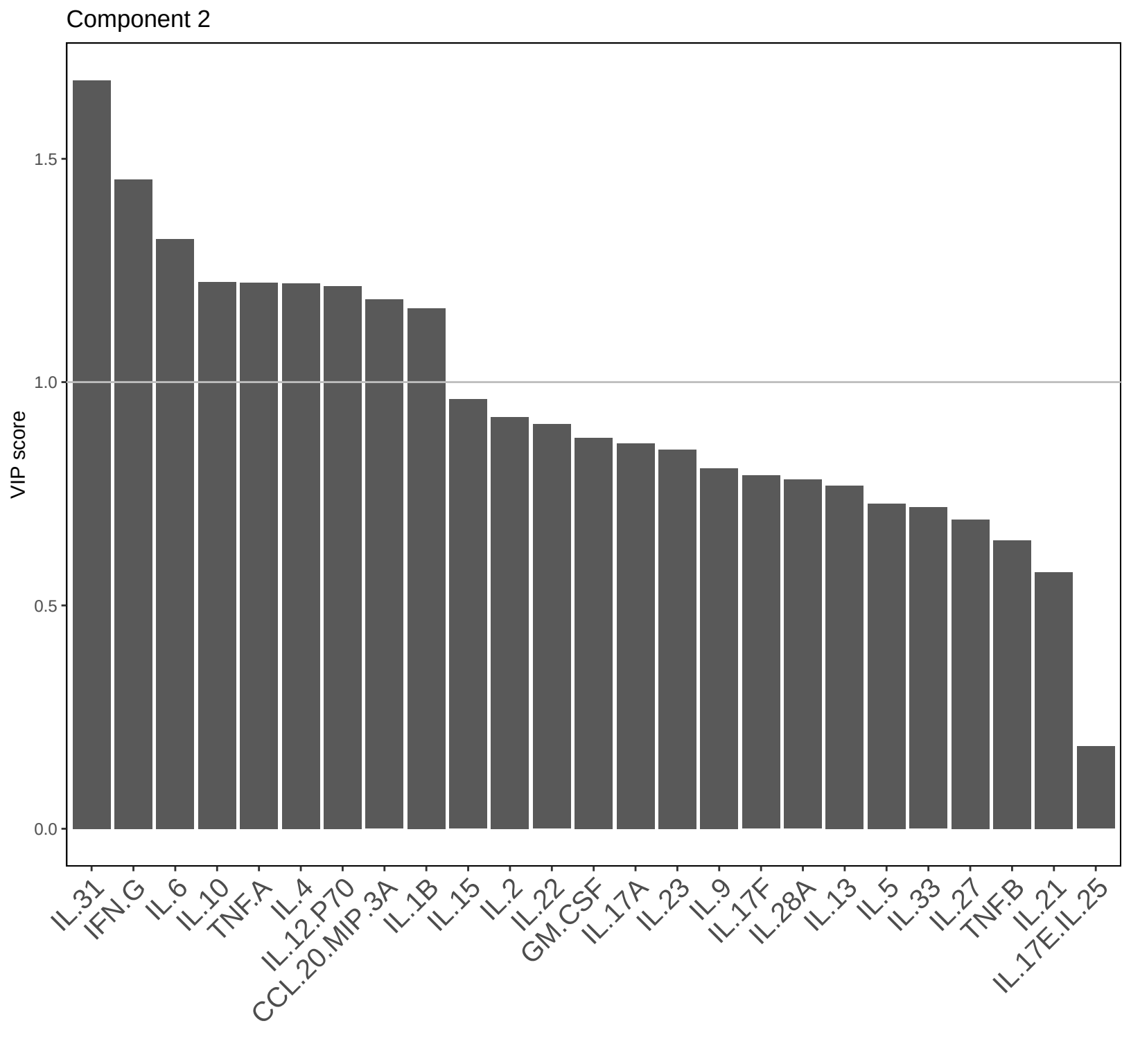

LOOCV Error Rate: CD3/CD28
Error Rate
0.56
0.54
0.52
comp1
comp2
comp3
Number of Components
Distance
max.dist

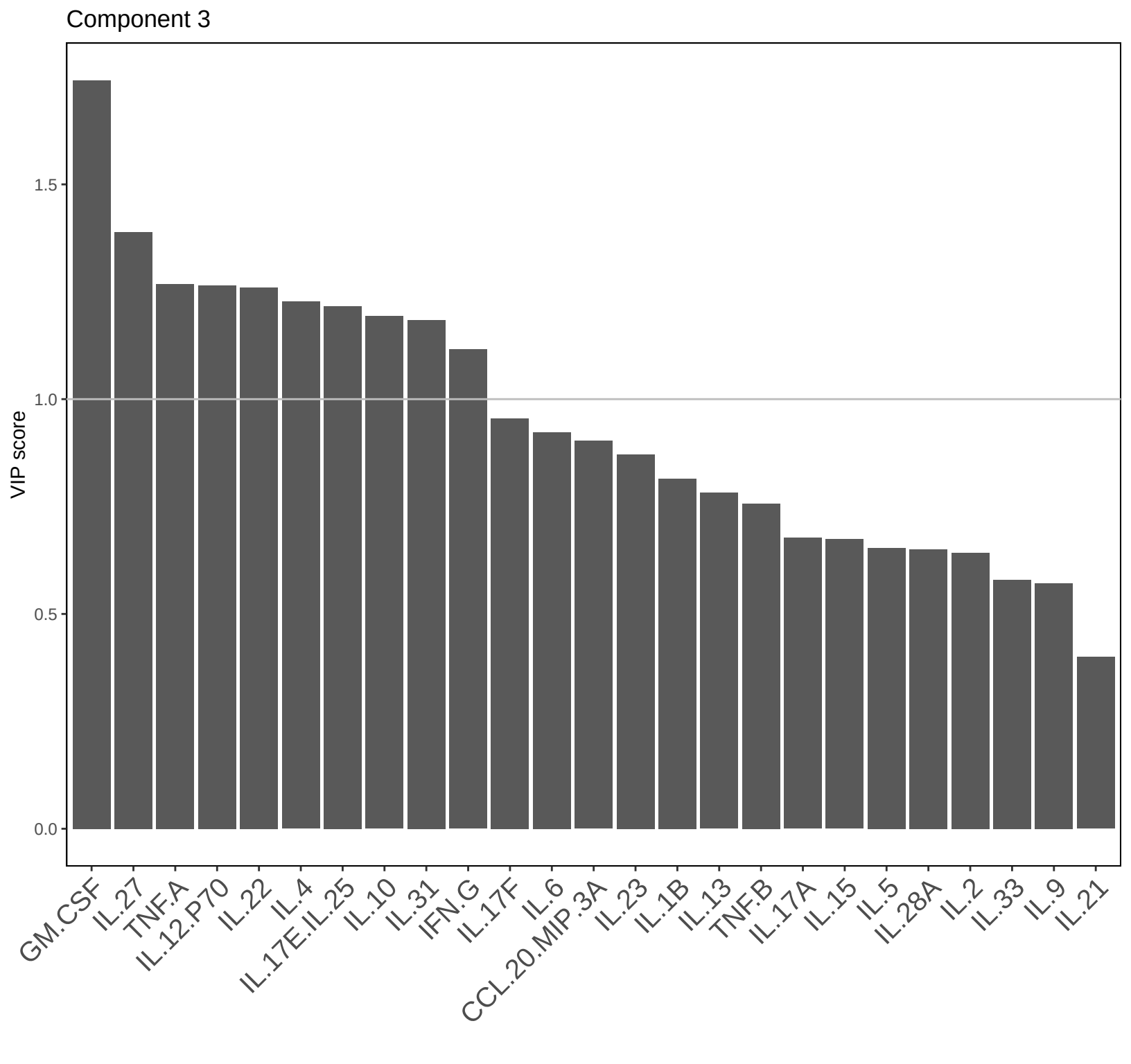

Component 1 : CD3/CD28
IL.13
TNF.B
IL.17E.IL.25
IL.27
IL.28A
GM.CSF
IL.5
IL.33
IL.22
IL.21
IL.9
IL.17A
IL.23
IL.17F
IL.2
IL.4
IL.15
IL.1B
CCL.20.MIP.3A
IL.10
IL.12.P70
TNF.A
IL.31
IL.6
IFN.G
−0.3
−0.2
−0.1
0.0
0.1
0.2
0.3
group
ND
PreT2D
T2D

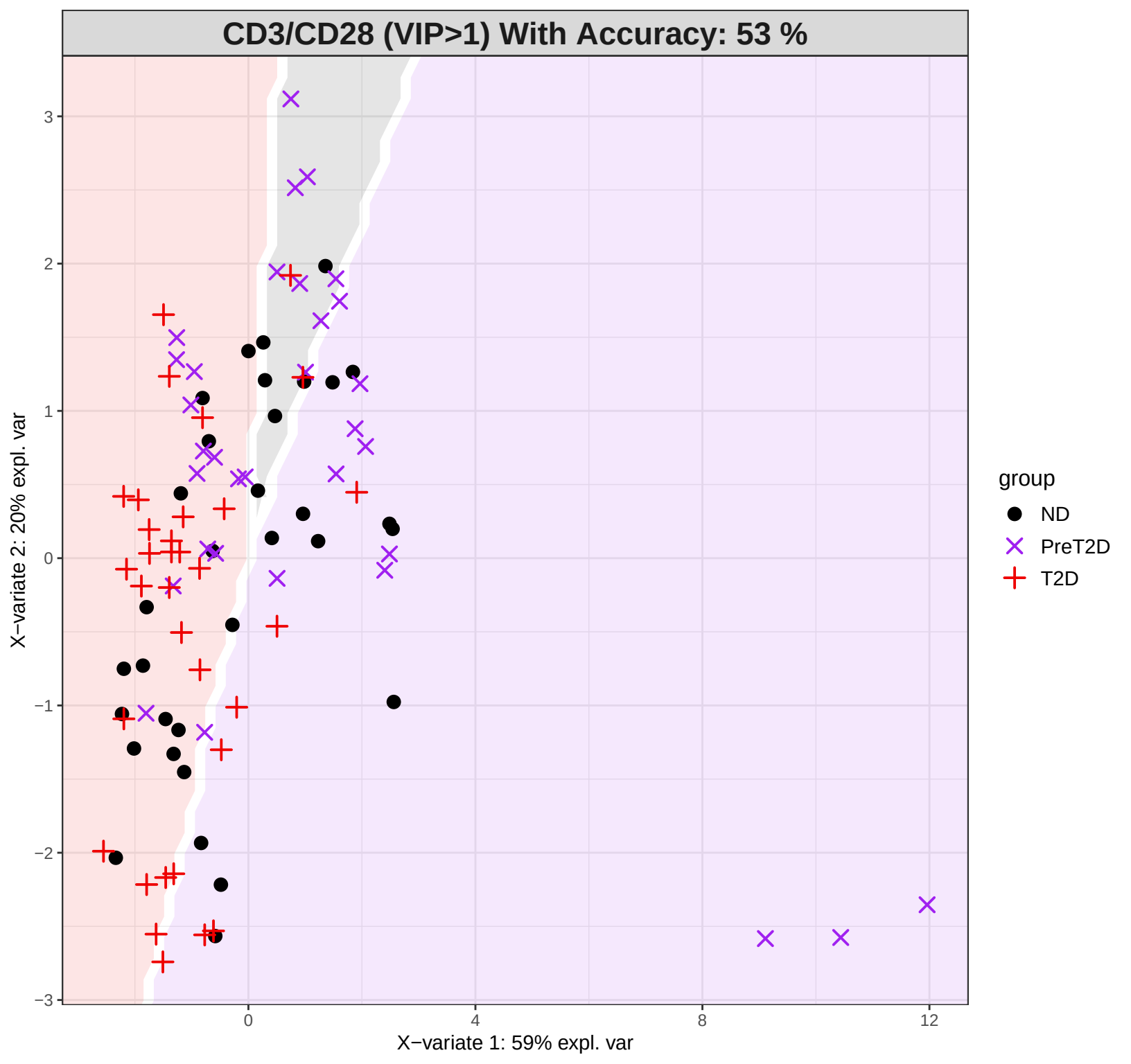

Component 2 : CD3/CD28
IFN.G
IL.12.P70
TNF.A
IL.15
IL.17E.IL.25
IL.10
IL.6
CCL.20.MIP.3A
IL.2
IL.1B
IL.21
IL.17F
IL.33
TNF.B
IL.27
IL.5
IL.9
IL.23
IL.28A
IL.17A
IL.13
IL.4
IL.22
GM.CSF
IL.31
−0.3
−0.2
−0.1
0.0
group
ND
PreT2D
T2D

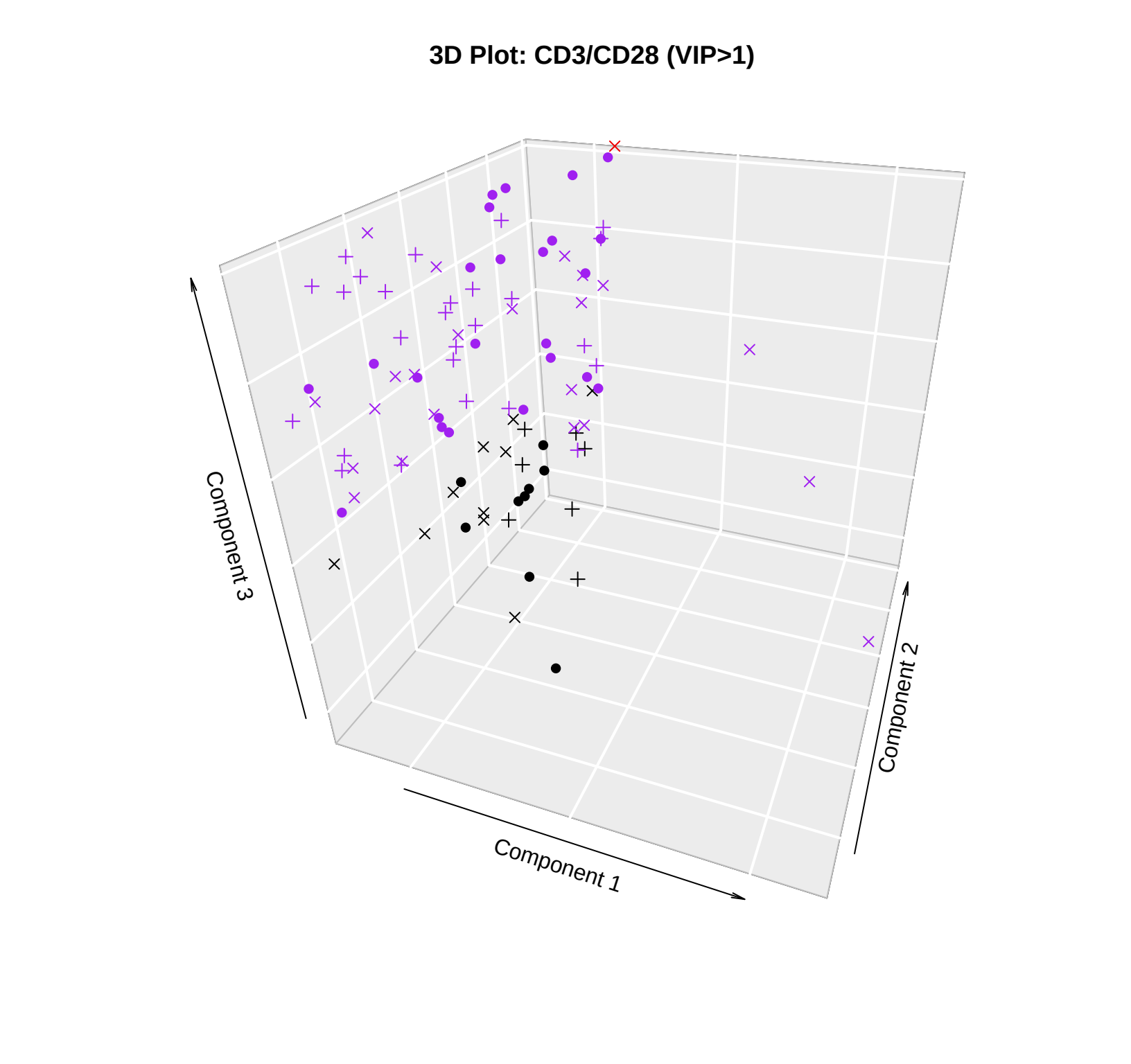

Component 3 : CD3/CD28
IL.21
IL.2
IL.15
IL.6
IL.1B
IL.9
IL.31
IL.33
IL.17A
IL.28A
CCL.20.MIP.3A
IL.5
IFN.G
IL.13
TNF.B
IL.23
IL.17F
IL.10
IL.4
TNF.A
IL.12.P70
IL.22
IL.17E.IL25
IL.27
GM.CSF
−0.2
0.0
0.2
0.4
group
ND
PreT2D
T2D

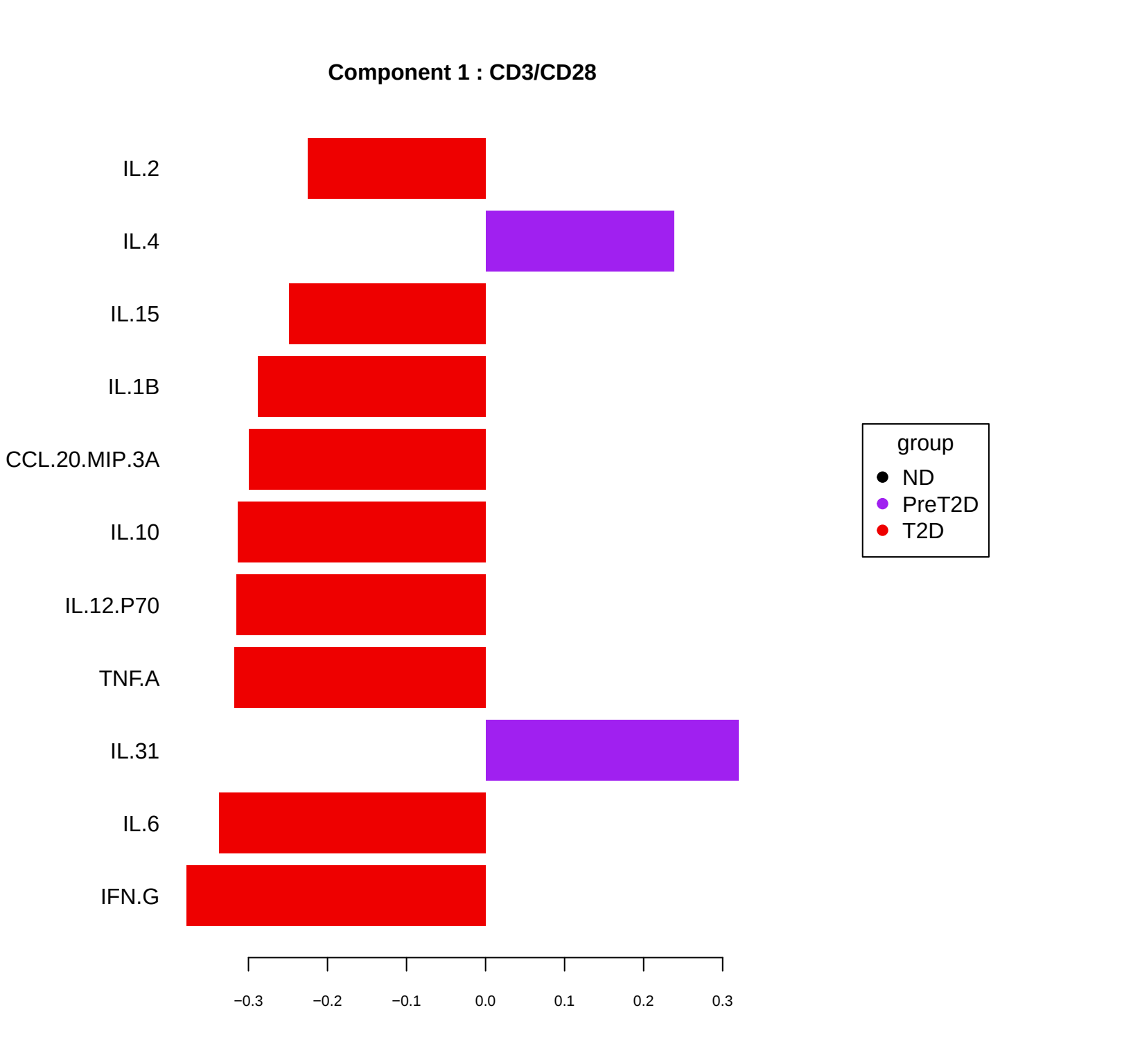

Component 1
VIP score
1.5
1.0
0.5
0.0
IFN.G
IL.6
IL.31
TNF.A
IL.12.P70
IL.10
CCL.20.MIP.3A
IL.1B
IL.15
IL.4
IL.2
IL.17F
IL.23
IL.17A
IL.9
IL.21
IL.22
IL.33
IL.5
GM.CSF
IL.28A
IL.27
IL.17E.IL.25
TNF.B
IL.13

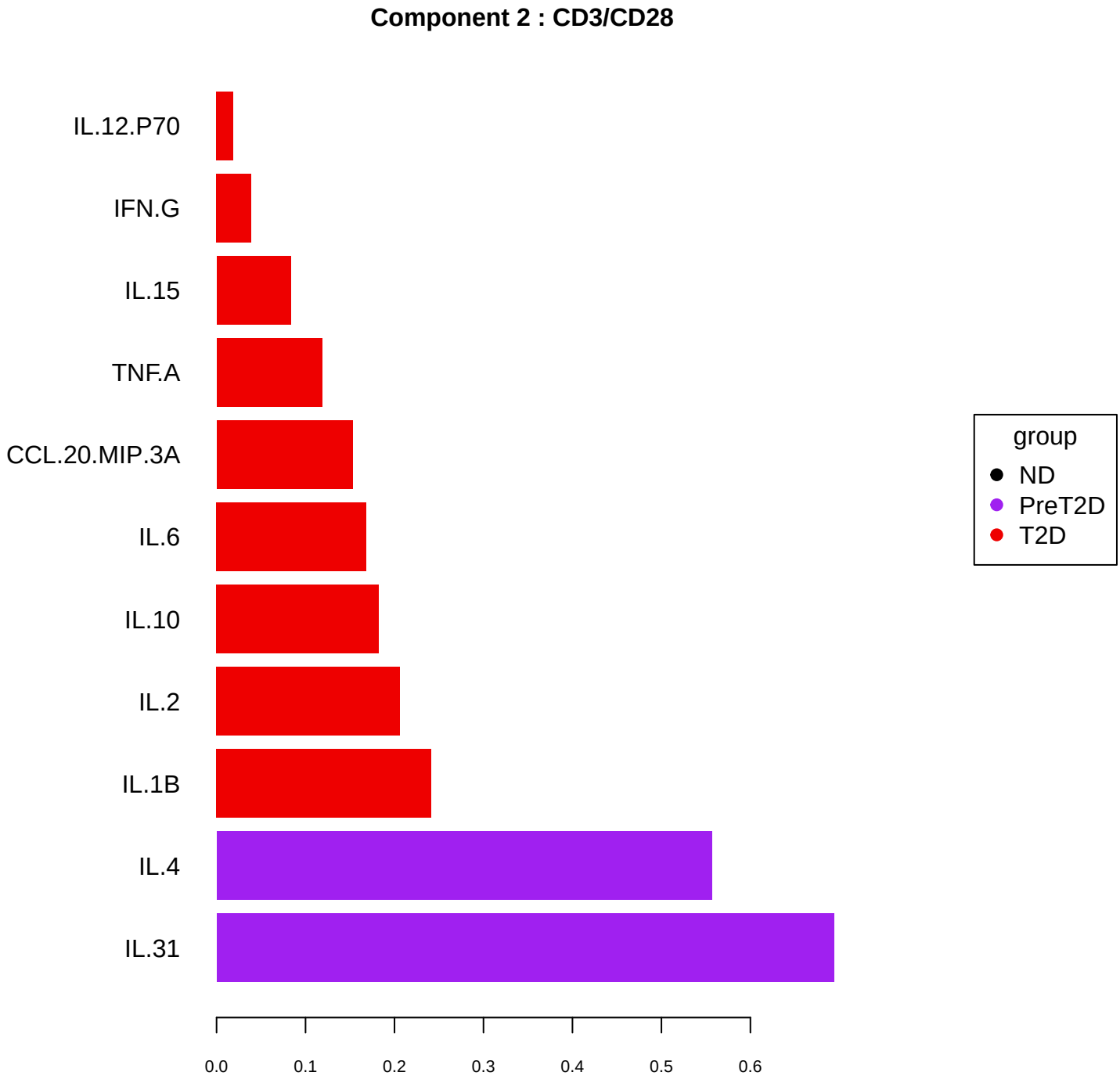

Component 2
VIP score
1.5
1.0
0.5
0.0
IL.31
IFN.G
IL.6
IL.10
TNF.A
IL.4
IL.12.P70
CCL.20.MIP.3A
IL.1B
IL.15
IL.2
IL.22
GM.CSF
IL.17A
IL.23
IL.9
IL.17F
IL.28A
IL.13
IL.5
IL.33
IL.27
TNF.B
IL.21
IL.17E.IL.25

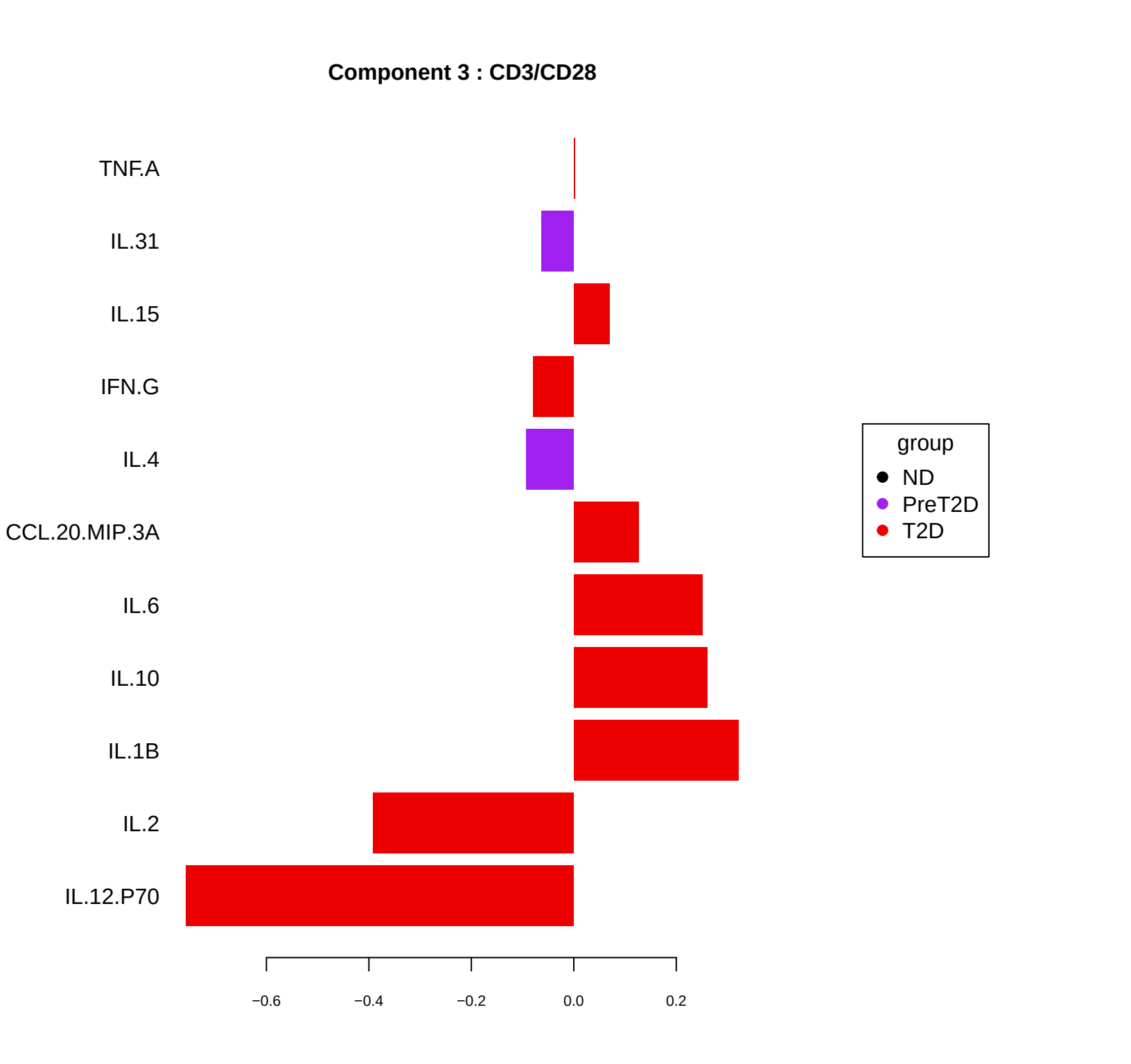

Component 3
VIP score
1.5
1.0
0.5
0.0
GM.CSF
IL.27
TNF.A
IL.12.P70
IL.22
IL.4
IL.17E.IL.25
IL.10
IL.31
IFN.G
IL.17F
IL.6
CCL.20.MIP.3A
IL.23
IL.1B
IL.13
TNF.B
IL.17A
IL.15
IL.5
IL.28A
IL.2
IL.33
IL.9
IL.21

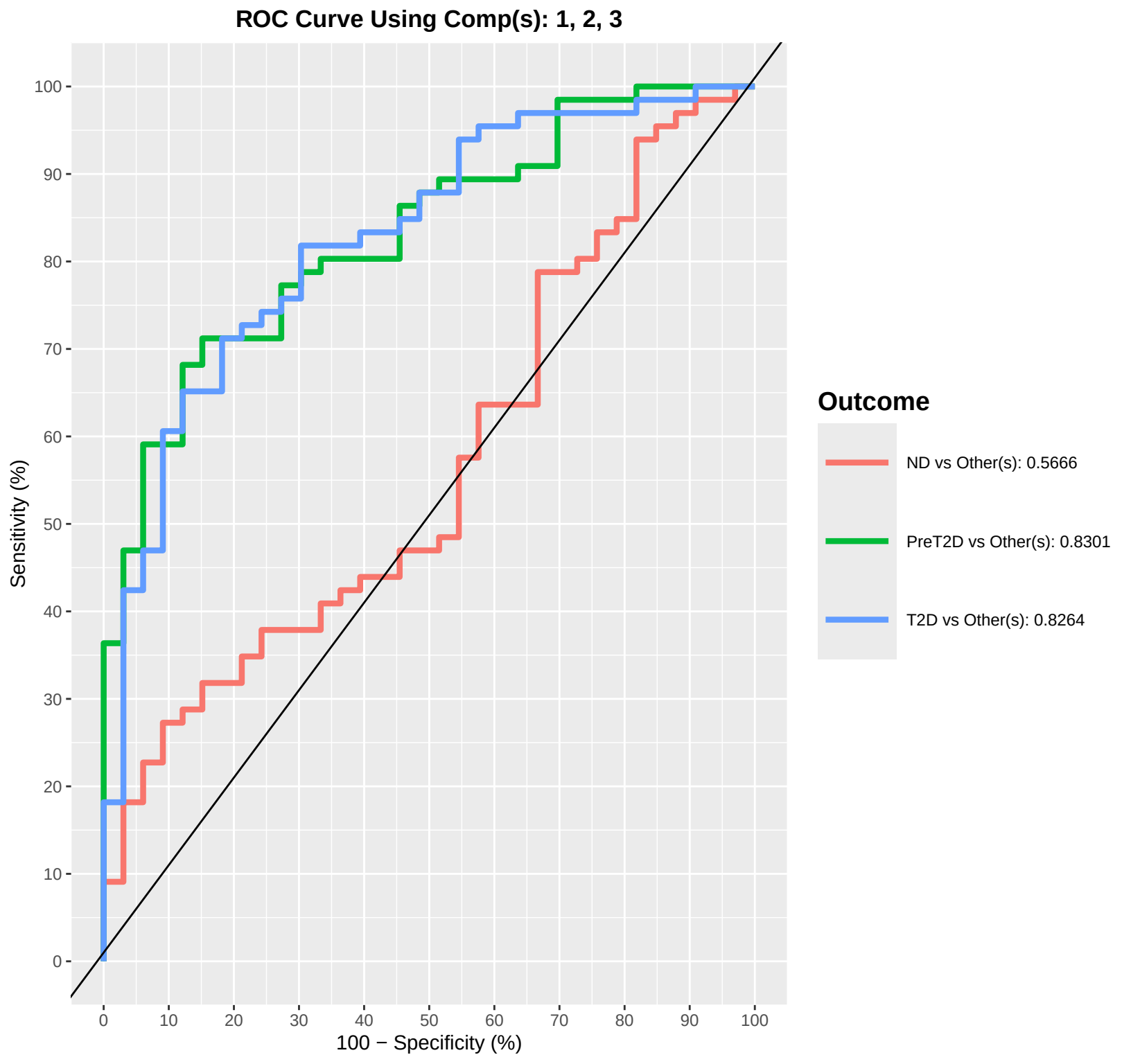

CD3/CD28 (VIP>1) With Accuracy: 53 %
X−variate 2: 20% expl. var
X−variate 1: 59% expl. var
3
2
1
0
−1
−2
−3
0
4
8
12
group
ND
PreT2D
T2D

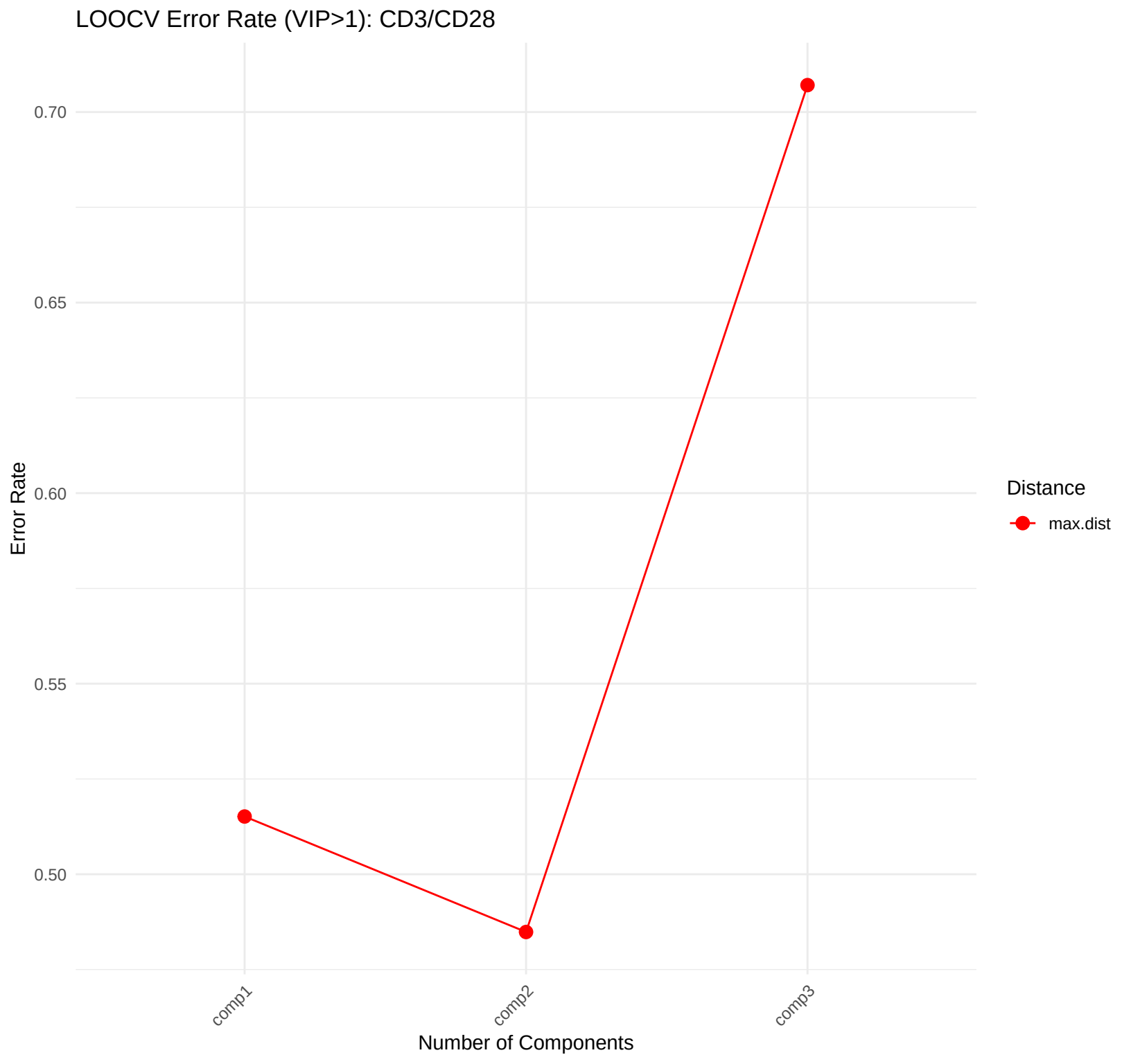

3D Plot: CD3/CD28 (VIP>1)
Component 3
Component 1
Component 2

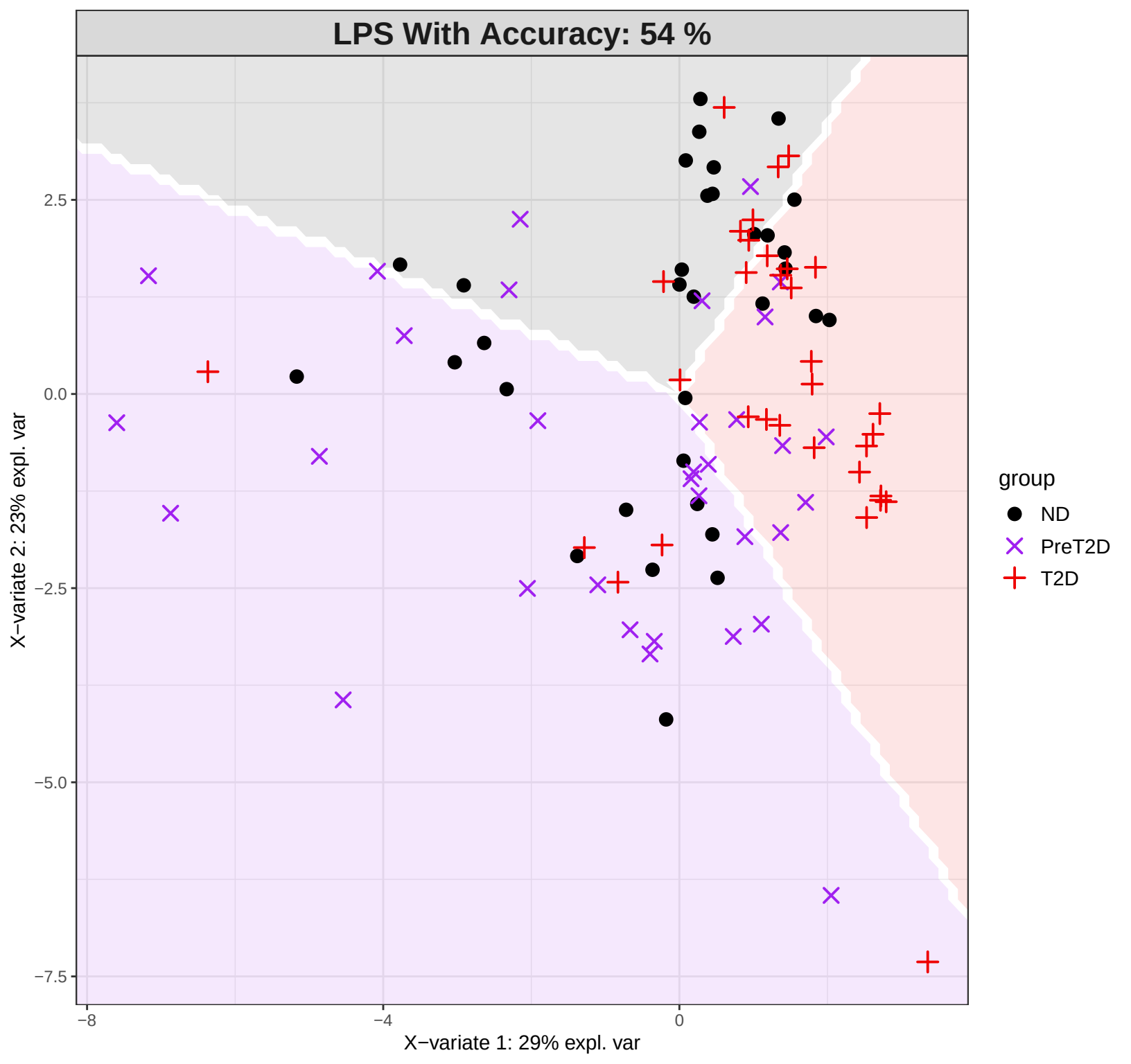

Component 1 : CD3/CD28
IL.2
IL.4
IL.15
IL.1B
CCL.20.MIP.3A
IL.10
IL.12.P70
TNF.A
IL.31
IL.6
IFN.G
−0.3
−0.2
−0.1
0.0
0.1
0.2
0.3
group
ND
PreT2D
T2D


Component 2 : CD3/CD28
IL.12.P70
IFN.G
IL.15
TNF.A
CCL.20.MIP.3A
IL.6
IL.10
IL.2
IL.1B
IL.4
IL.31
0.0
0.1
0.2
0.3
0.4
0.5
0.6
group
ND
PreT2D
T2D

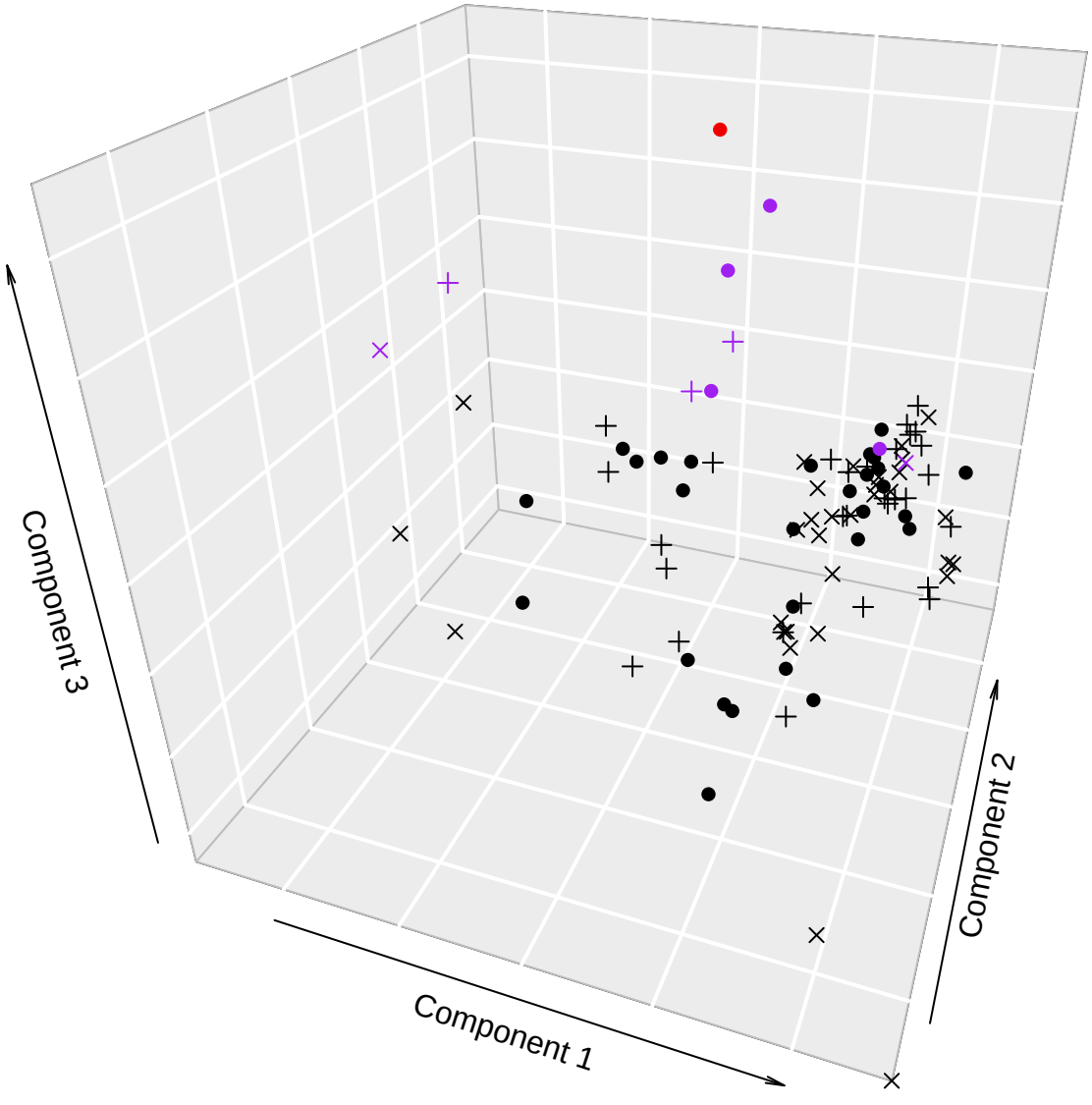

Component 3 : CD3/CD28
TNF.A
IL.31
IL.15
IFN.G
IL.4
CCL.20.MIP.3A
IL.6
IL.10
IL.1B
IL.2
IL.12.P70
−0.6
−0.4
−0.2
0.0
0.2
group
ND
PreT2D
T2D

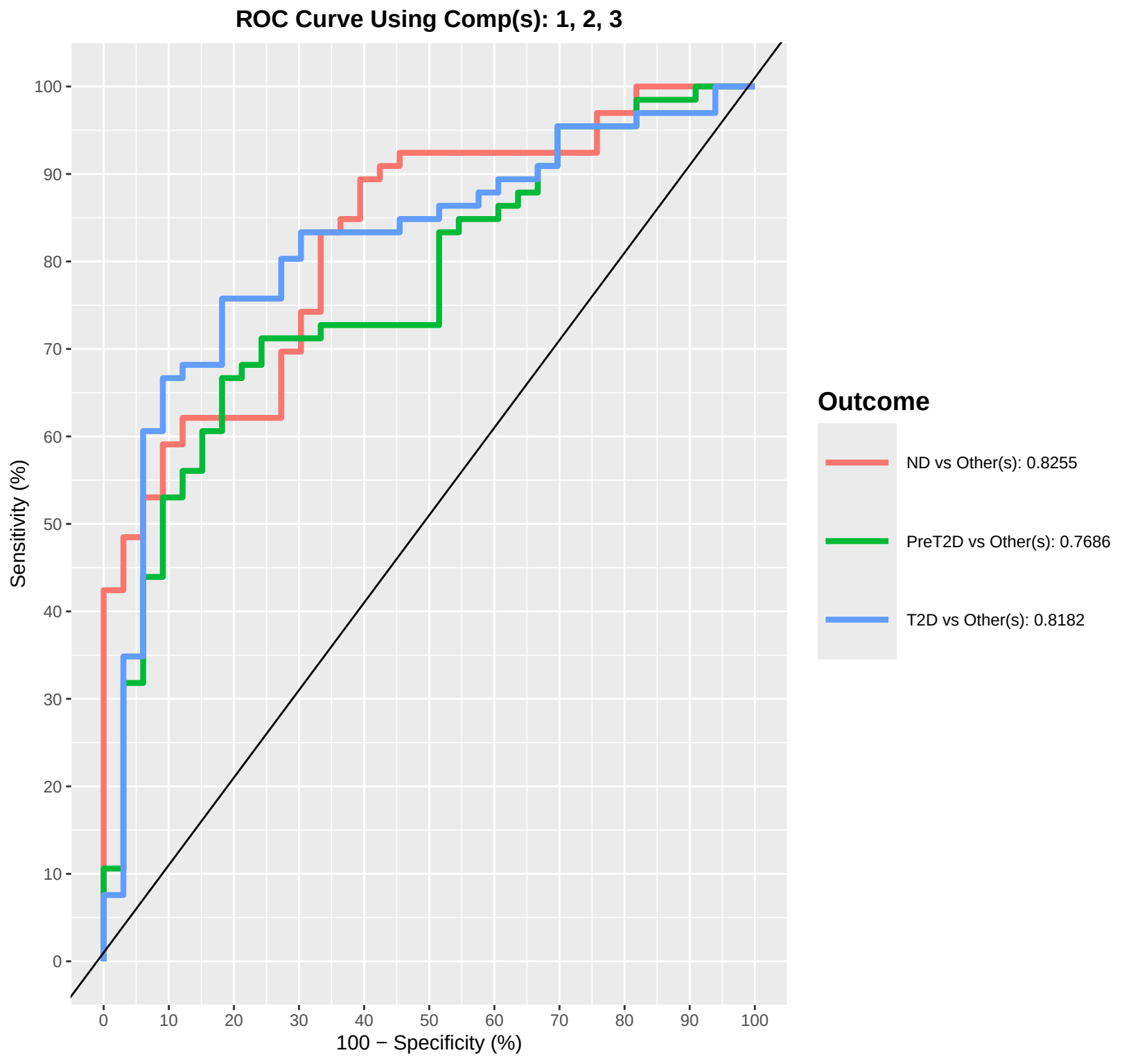

ROC Curve Using Comp(s): 1, 2, 3
Sensitivity (%)
100 − Specificity (%)
0
10
20
30
40
50
60
70
80
90
100
Outcome
ND vs Other(s): 0.5666
PreT2D vs Other(s): 0.8301
T2D vs Other(s): 0.8264

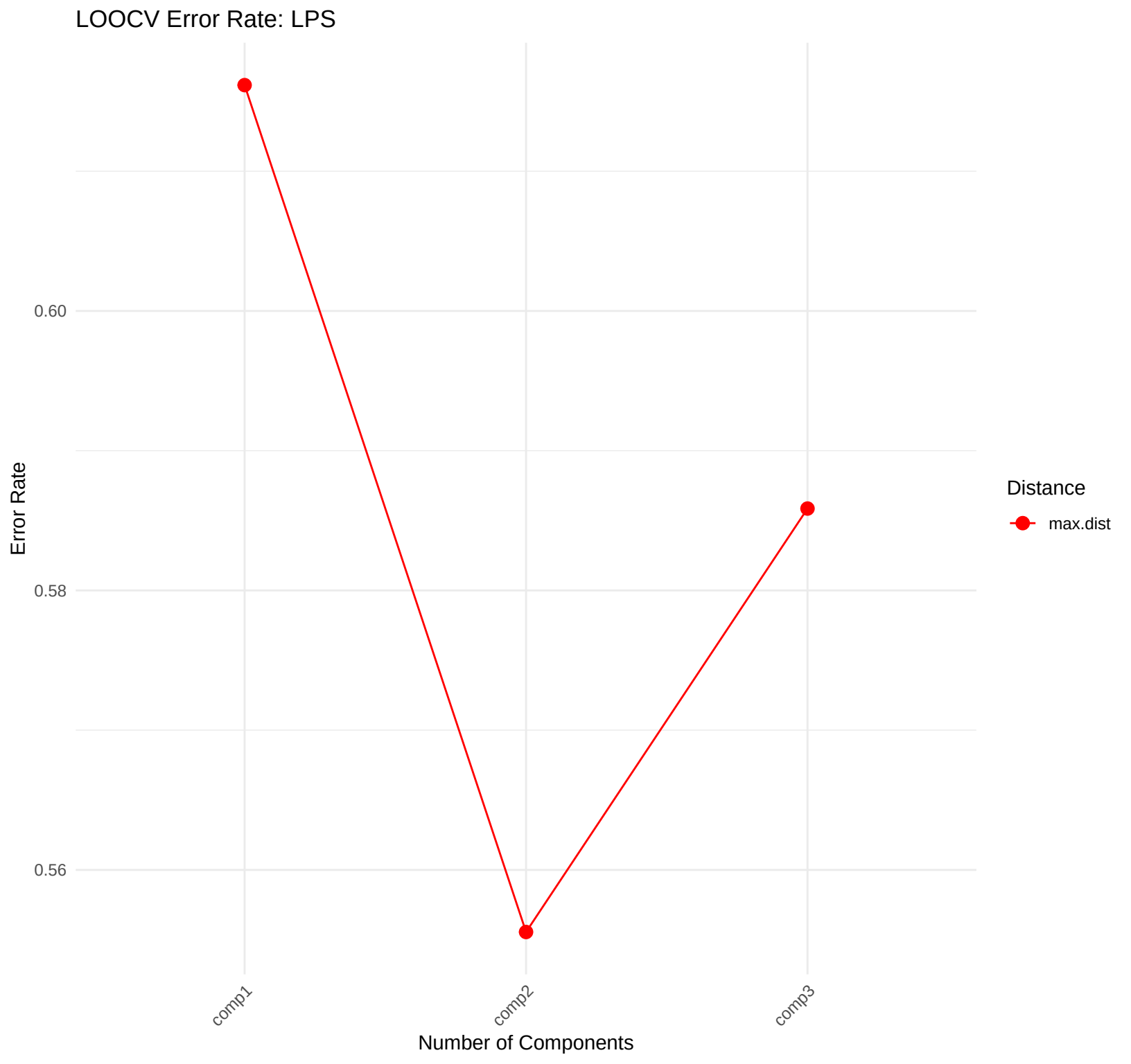

LOOCV Error Rate (VIP>1): CD3/CD28
0.70
0.65
0.60
0.55
0.50
Error Rate
comp1
comp2
comp3
Number of Components
Distance
max.dist

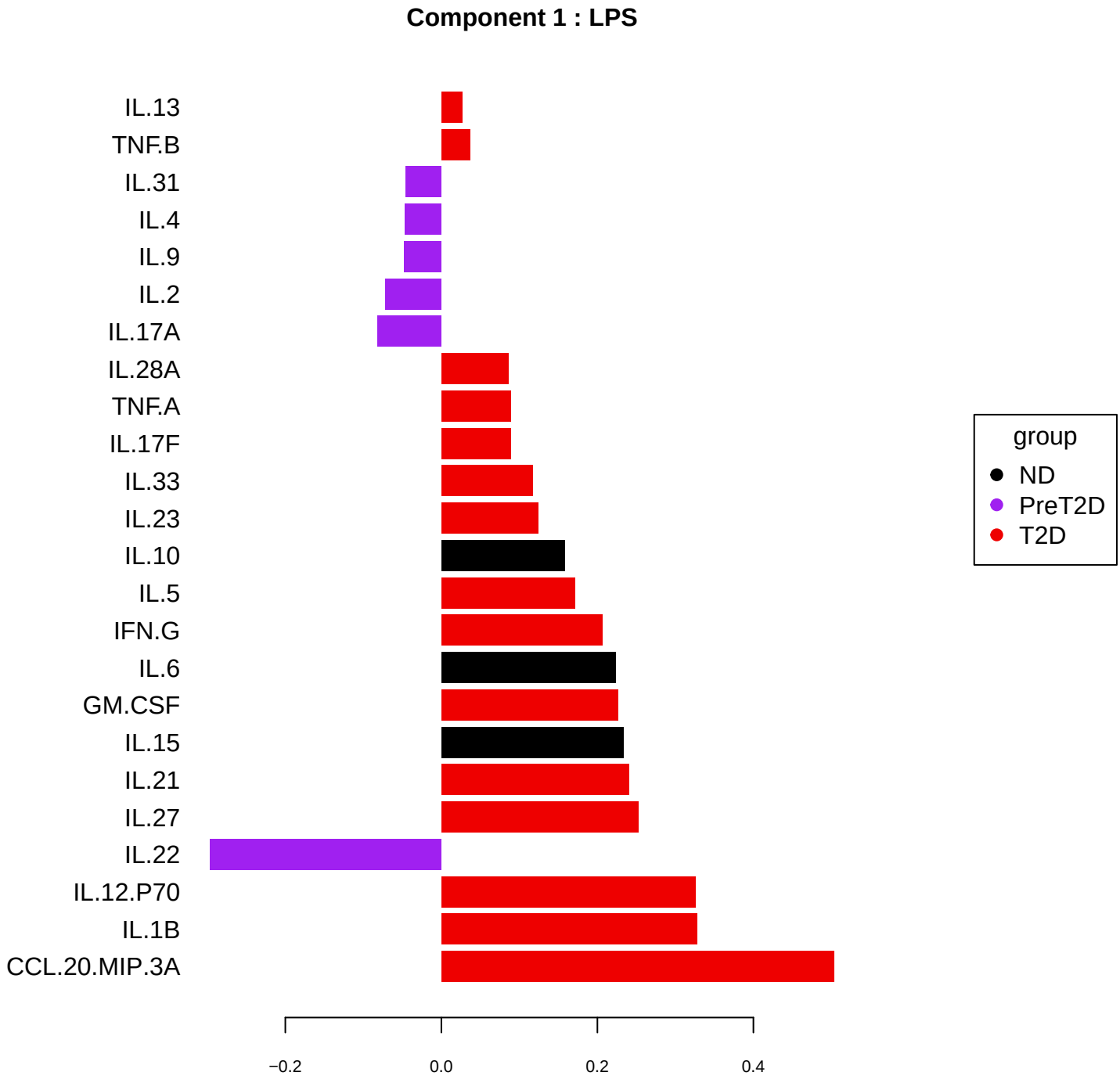

LPS With Accuracy: 54 %
2.5
0.0
−2.5
−5.0
−7.5
X−variate 2: 23% expl. var
−8
−4
0
X−variate 1: 29% expl. var
group
ND
PreT2D
T2D

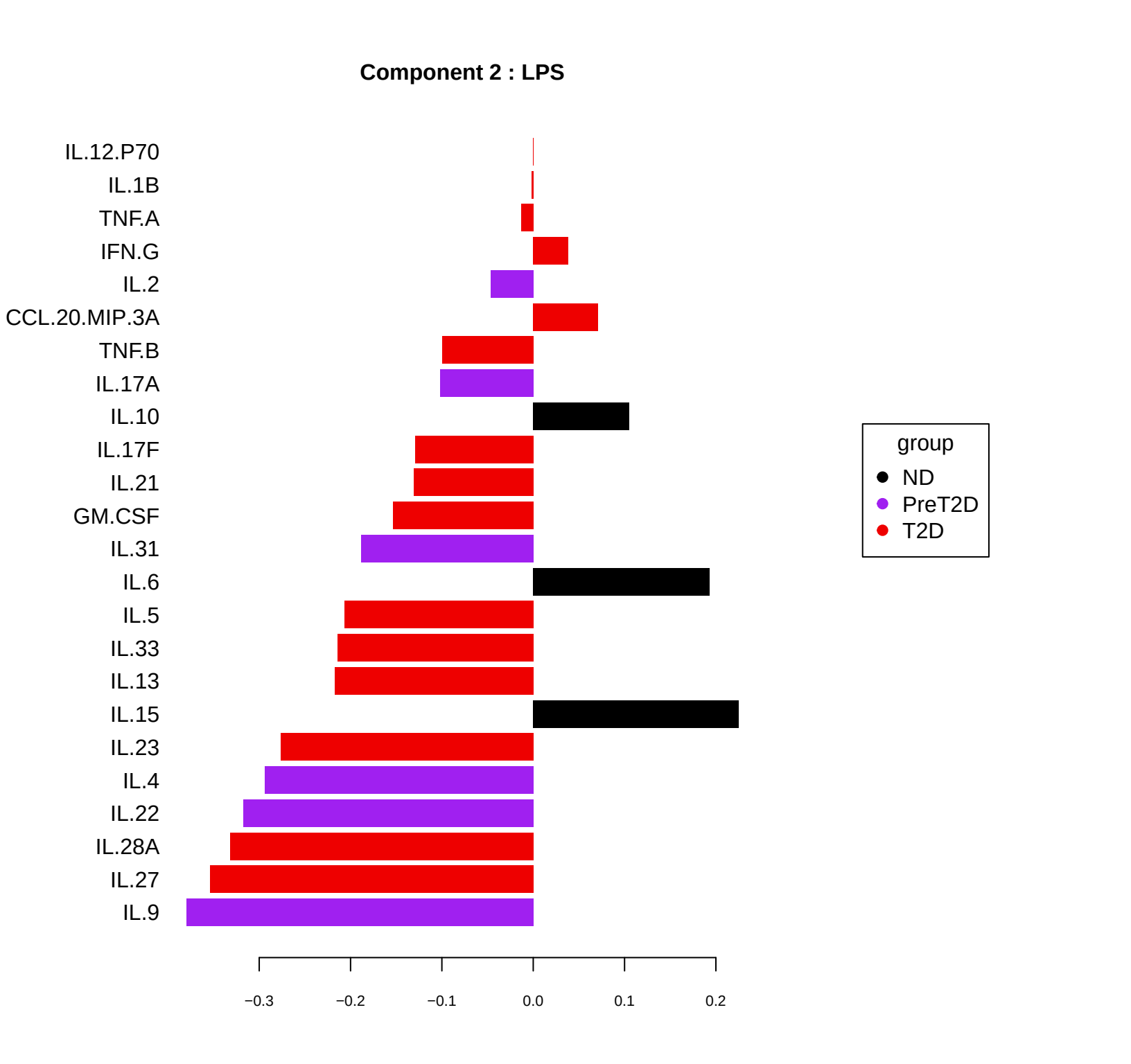
# 3D Plot: LPS

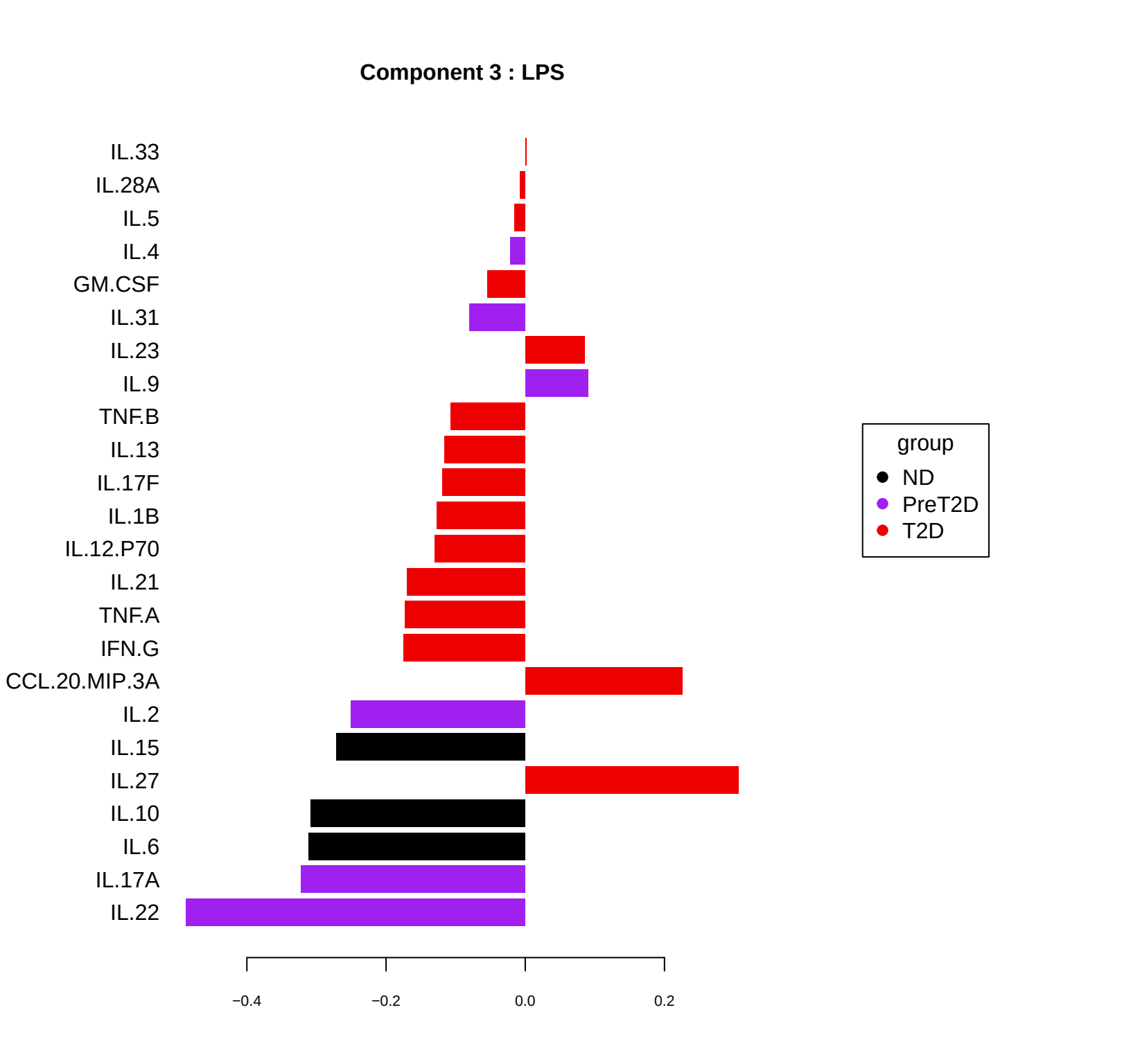


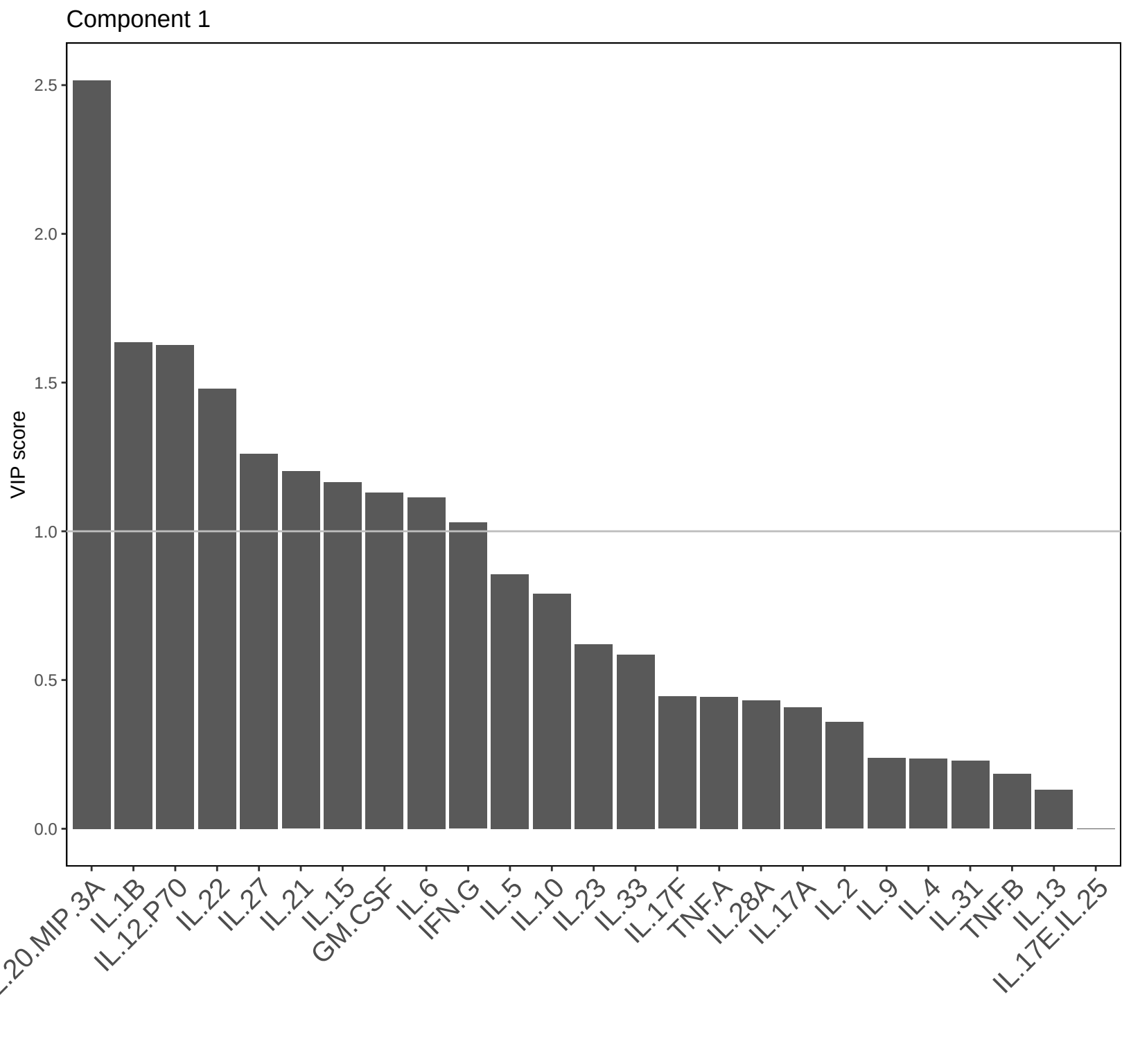

ROC Curve Using Comp(s): 1, 2, 3
Sensitivity (%)
100 − Specificity (%)
0
10
20
30
40
50
60
70
80
90
100
Outcome
ND vs Other(s): 0.8255
PreT2D vs Other(s): 0.7686
T2D vs Other(s): 0.8182

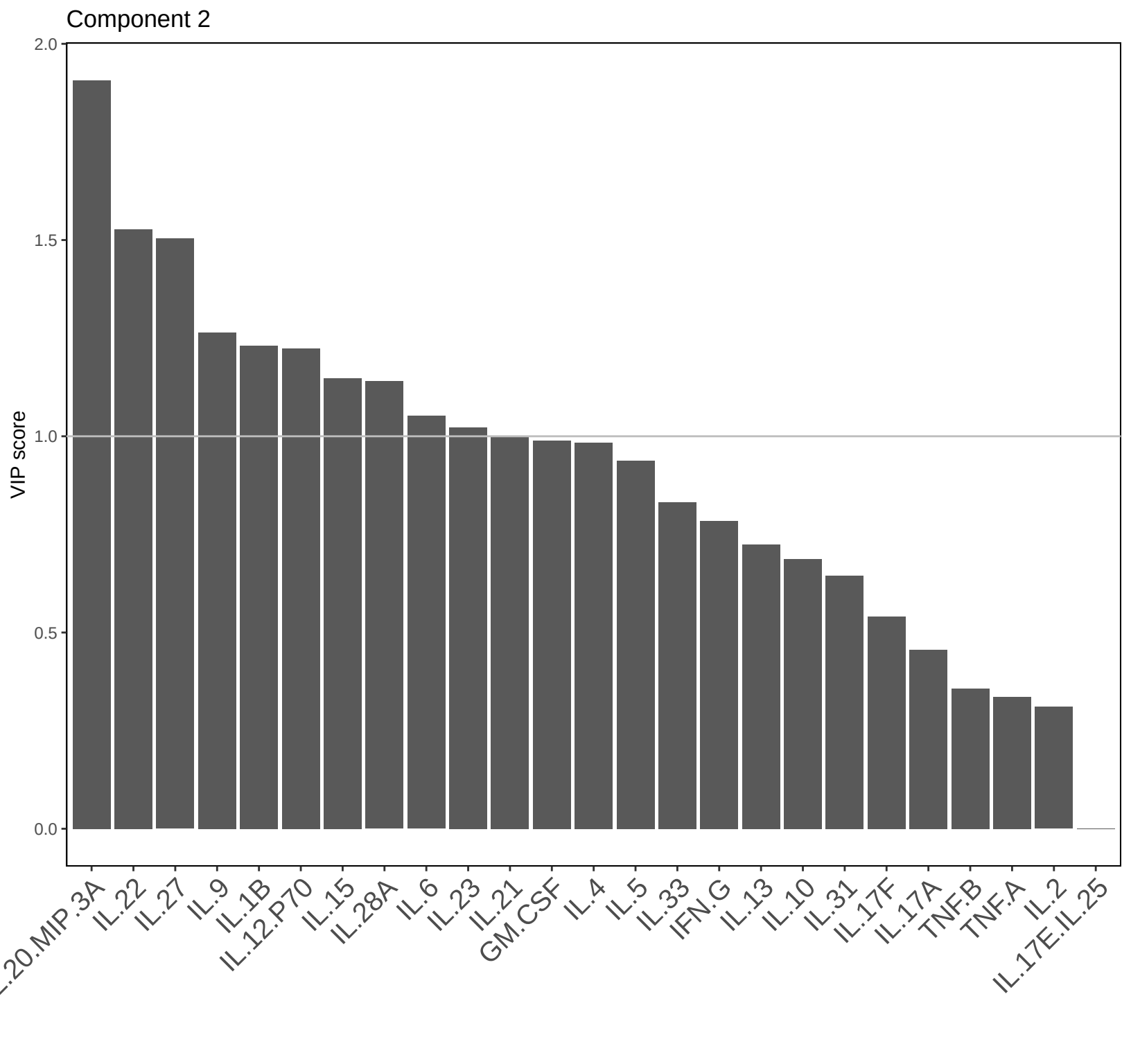

LOOCV Error Rate: LPS
0.60
0.58
0.56
Error Rate
comp1
comp2
comp3
Number of Components
Distance
max.dist

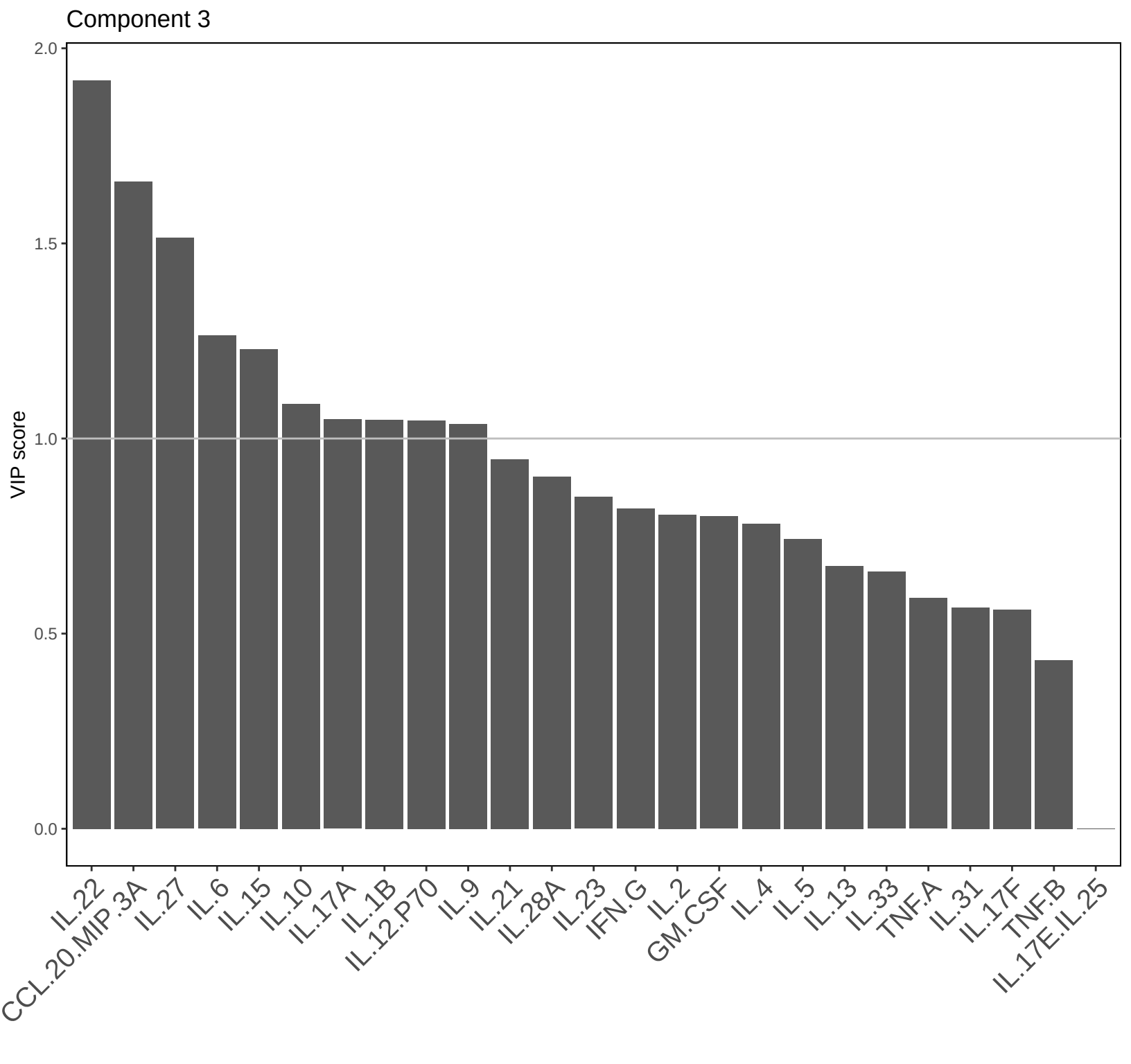

Component 1 : LPS
IL.13
TNF.B
IL.31
IL.4
IL.9
IL.2
IL.17A
IL.28A
TNF.A
IL.17F
IL.33
IL.23
IL.10
IL.5
IFN.G
IL.6
GM.CSF
IL.15
IL.21
IL.27
IL.22
IL.12.P70
IL.1B
CCL.20.MIP.3A
−0.2
0.0
0.2
0.4
group
ND
PreT2D
T2D

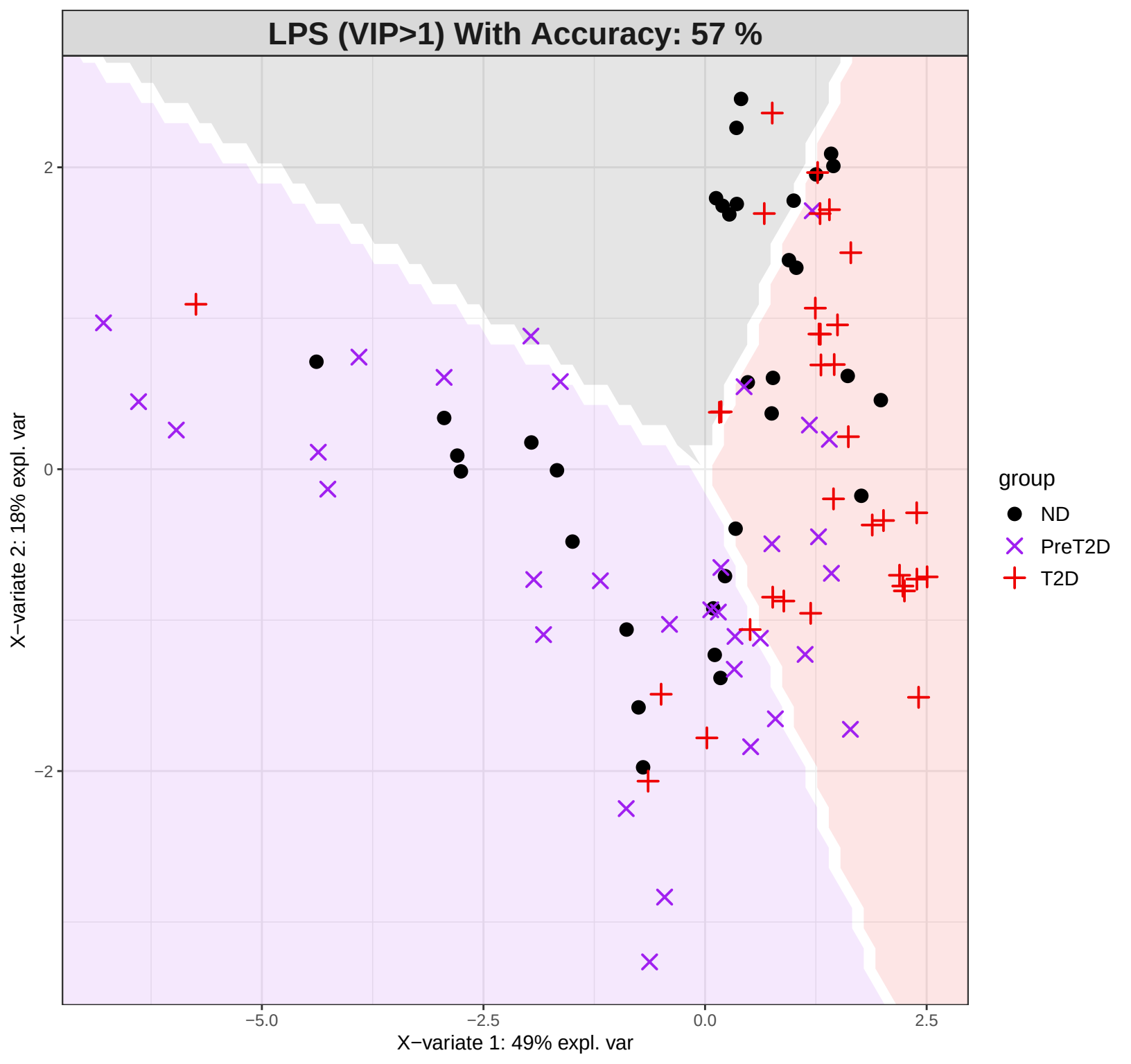

Component 2 : LPS
IL.12.P70
IL.1B
TNF.A
IFN.G
IL.2
CCL.20.MIP.3A
TNF.B
IL.17A
IL.10
IL.17F
IL.21
GM.CSF
IL.31
IL.6
IL.5
IL.33
IL.13
IL.15
IL.23
IL.4
IL.22
IL.28A
IL.27
IL.9
−0.3
−0.2
−0.1
0.0
0.1
0.2
group
ND
PreT2D
T2D


Component 3 : LPS
IL.33
IL.28A
IL.5
IL.4
GM.CSF
IL.31
IL.23
IL.9
TNF.B
IL.13
IL.17F
IL.1B
IL.12.P70
IL.21
TNF.A
IFN.G
CCL.20.MIP.3A
IL.2
IL.15
IL.27
IL.10
IL.6
IL.17A
IL.22
−0.4
−0.2
0.0
0.2
group
ND
PreT2D
T2D

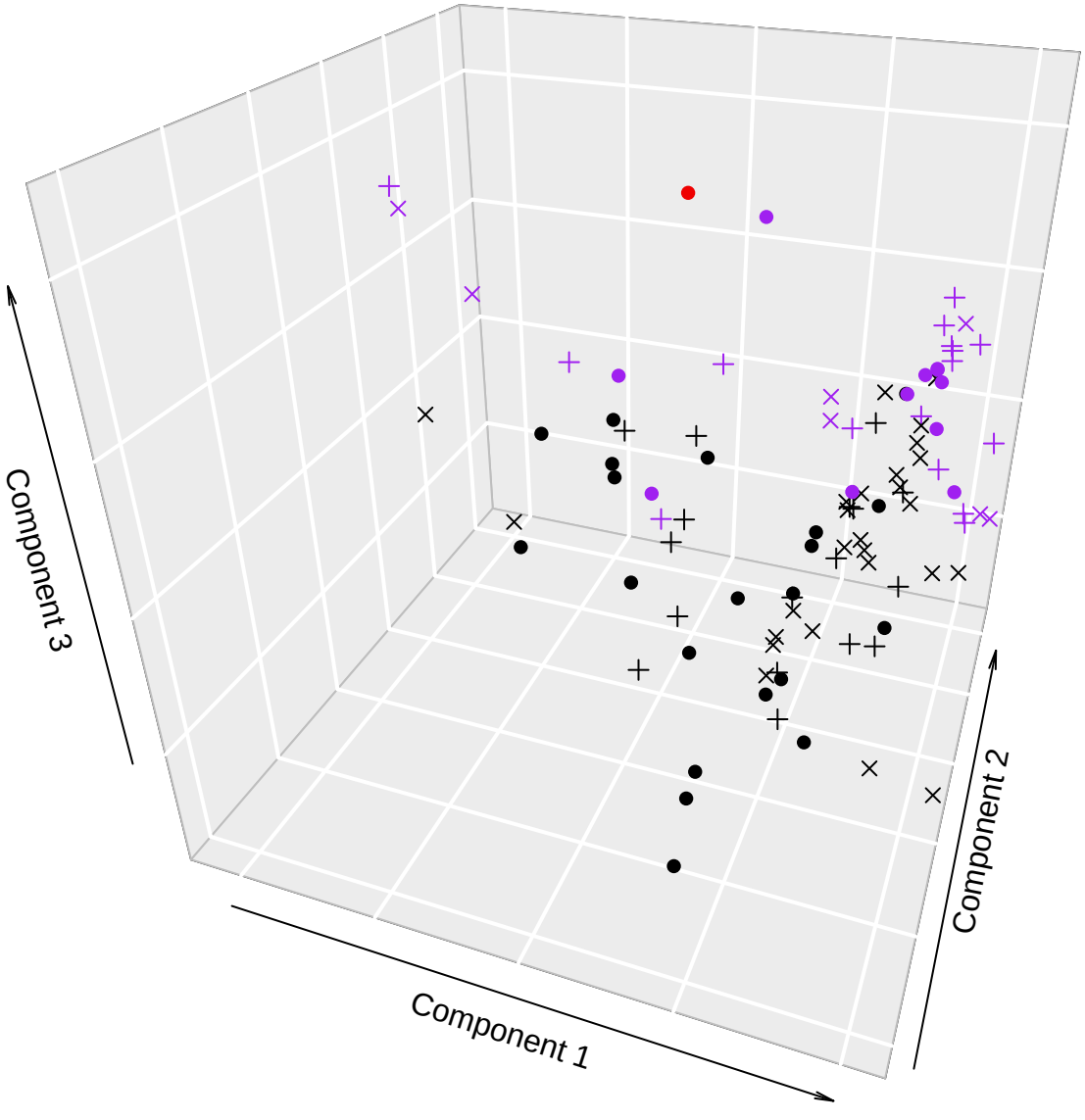

Component 1
VIP score
2.5
2.0
1.5
1.0
0.5
0.0
L.20.MIP.3A
IL.1B
IL.12.P70
IL.22
IL.27
IL.21
IL.15
GM.CSF
IL.6
IFN.G
IL.5
IL.10
IL.23
IL.33
IL.17F
TNF.A
IL.28A
IL.17A
IL.2
IL.9
IL.4
IL.31
TNF.B
IL.13
IL.17E.IL.25

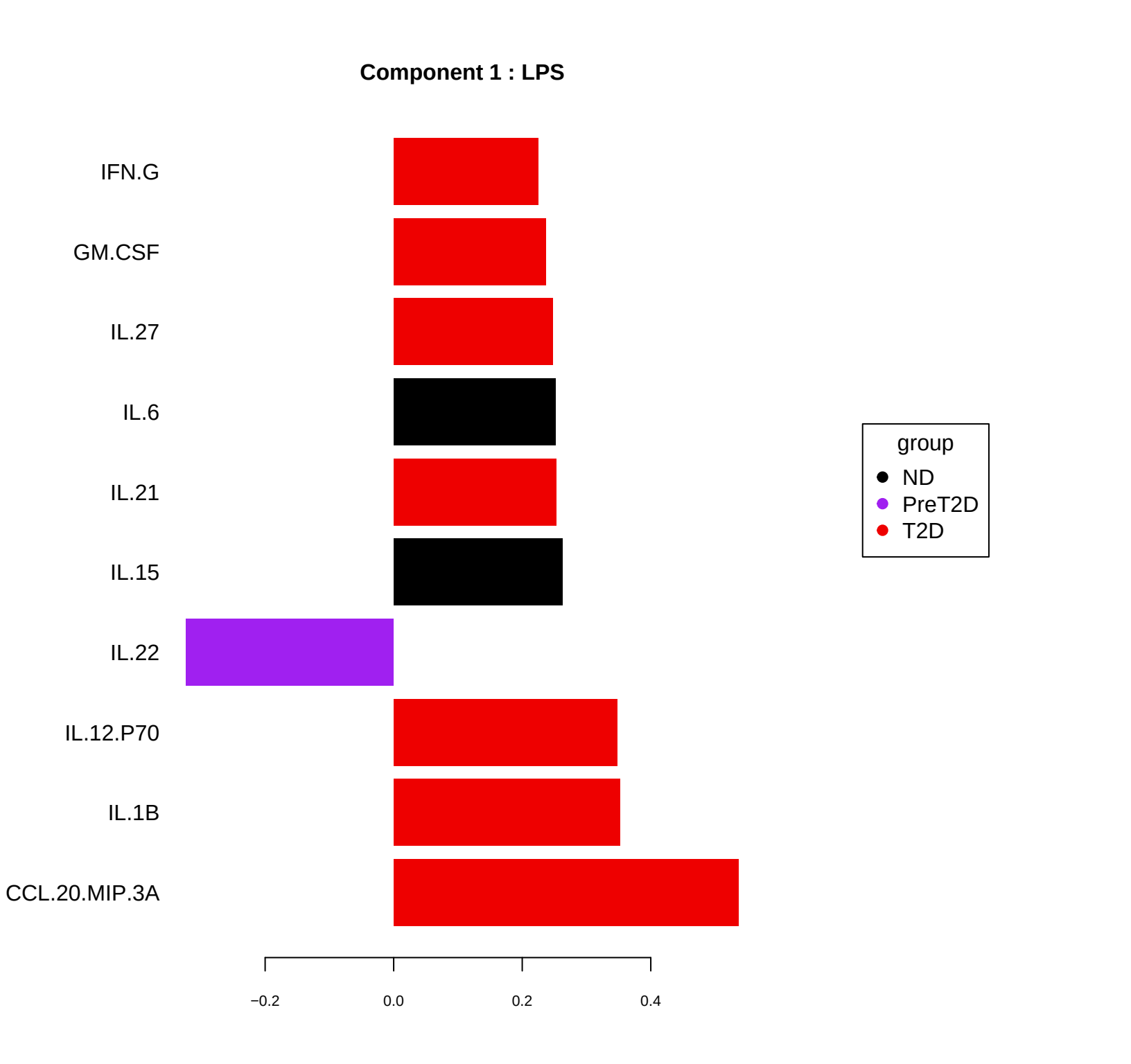

Component 2
VIP score
2.0
1.5
1.0
0.5
0.0
L.20.MIP.3A
IL.22
IL.27
IL.9
IL.1B
IL.12.P70
IL.15
IL.28A
IL.6
IL.23
IL.21
GM.CSF
IL.4
IL.5
IL.33
IFN.G
IL.13
IL.10
IL.31
IL.17F
IL.17A
TNF.B
TNF.A
IL.2
IL.17E.IL.25

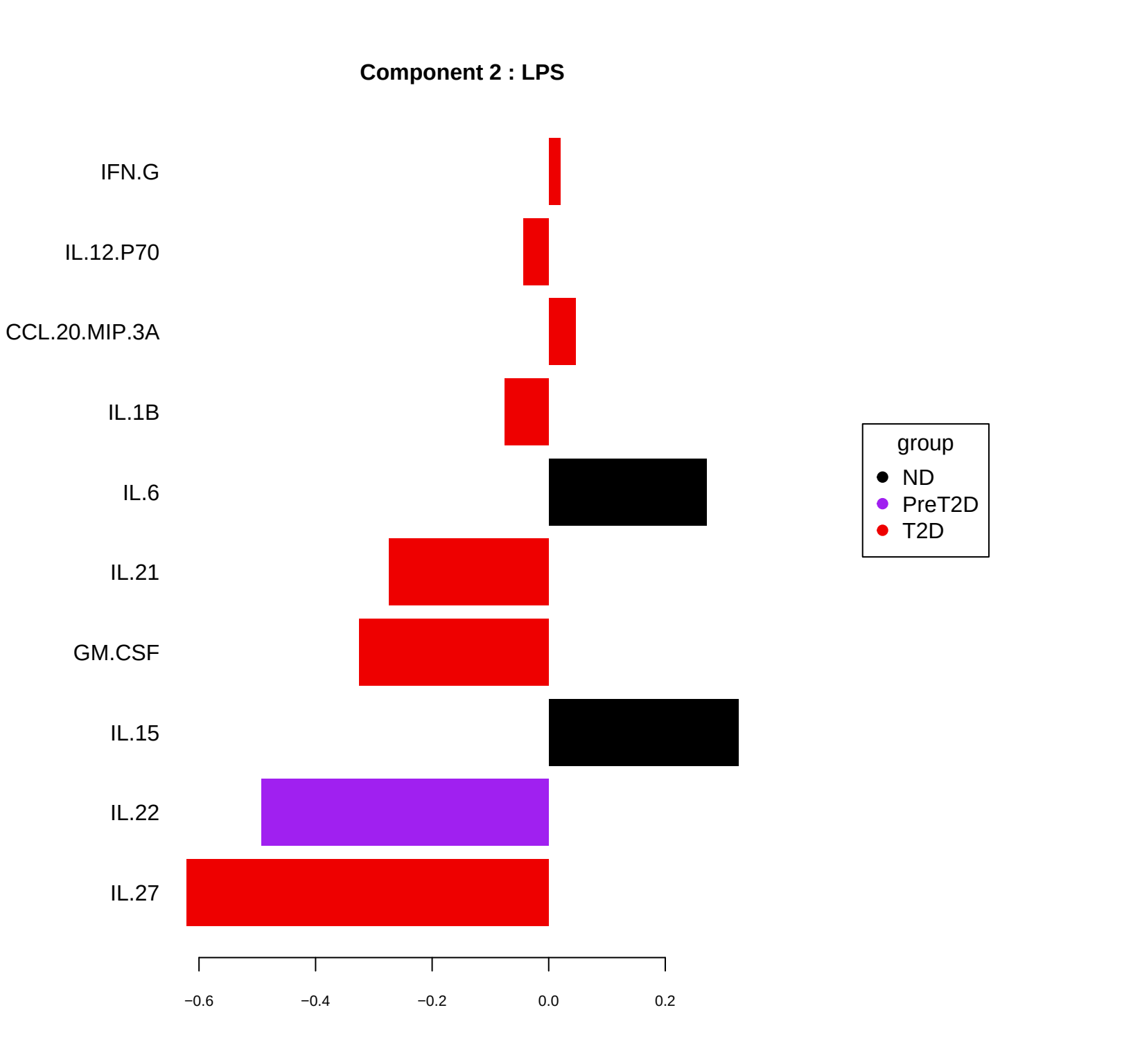

Component 3
VIP score
2.0
1.5
1.0
0.5
0.0
IL.22
CCL.20.MIP.3A
IL.27
IL.6
IL.15
IL.10
IL.17A
IL.1B
IL.12.P70
IL.9
IL.21
IL.28A
IL.23
IFN.G
IL.2
GM.CSF
IL.4
IL.5
IL.13
IL.33
TNF.A
IL.31
IL.17F
TNF.B
IL.17E.IL.25

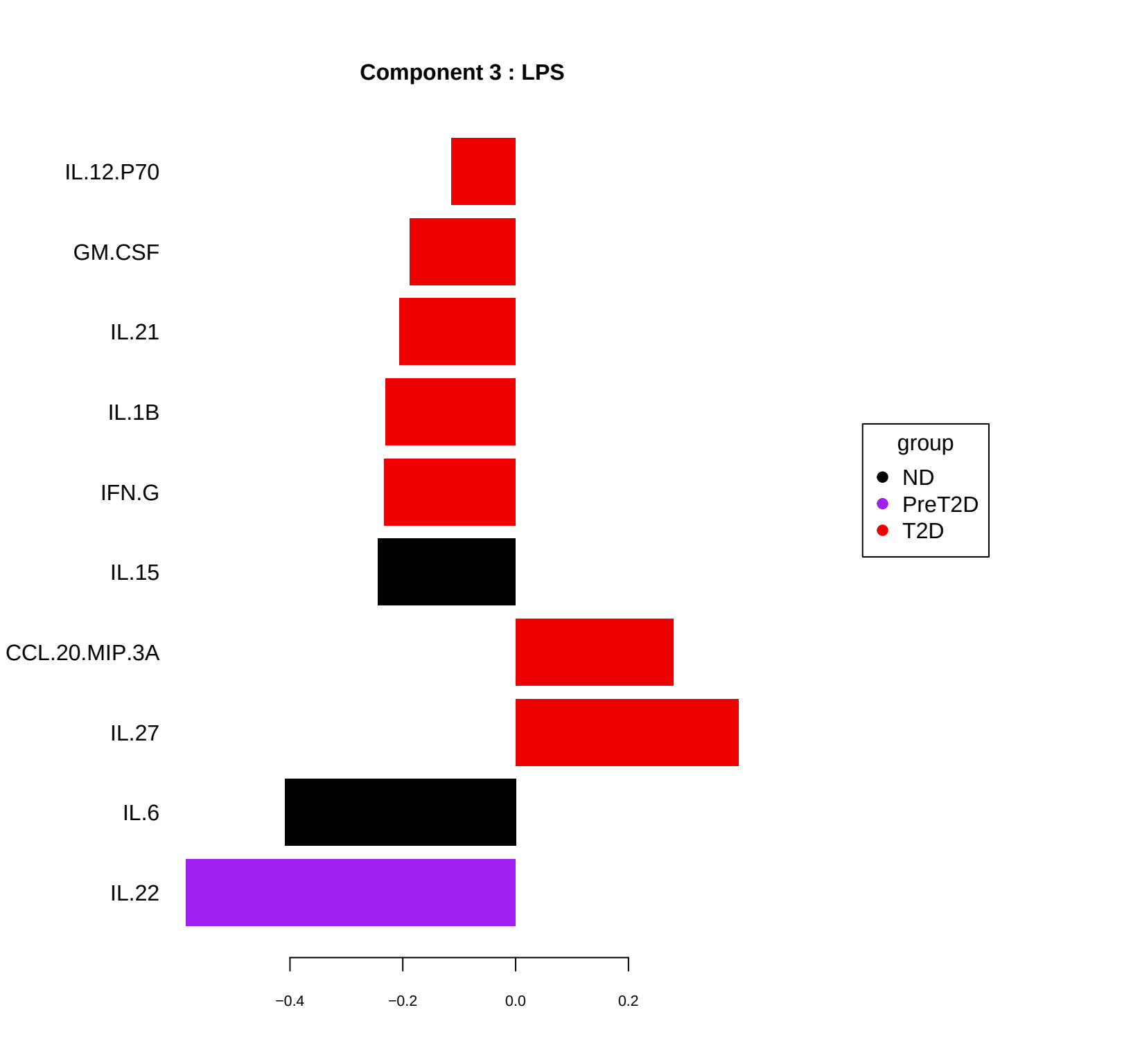

LPS (VIP>1) With Accuracy: 57 %
2
0
−2
X−variate 2: 18% expl. var
−5.0
−2.5
0.0
2.5
X−variate 1: 49% expl. var
group
ND
PreT2D
T2D

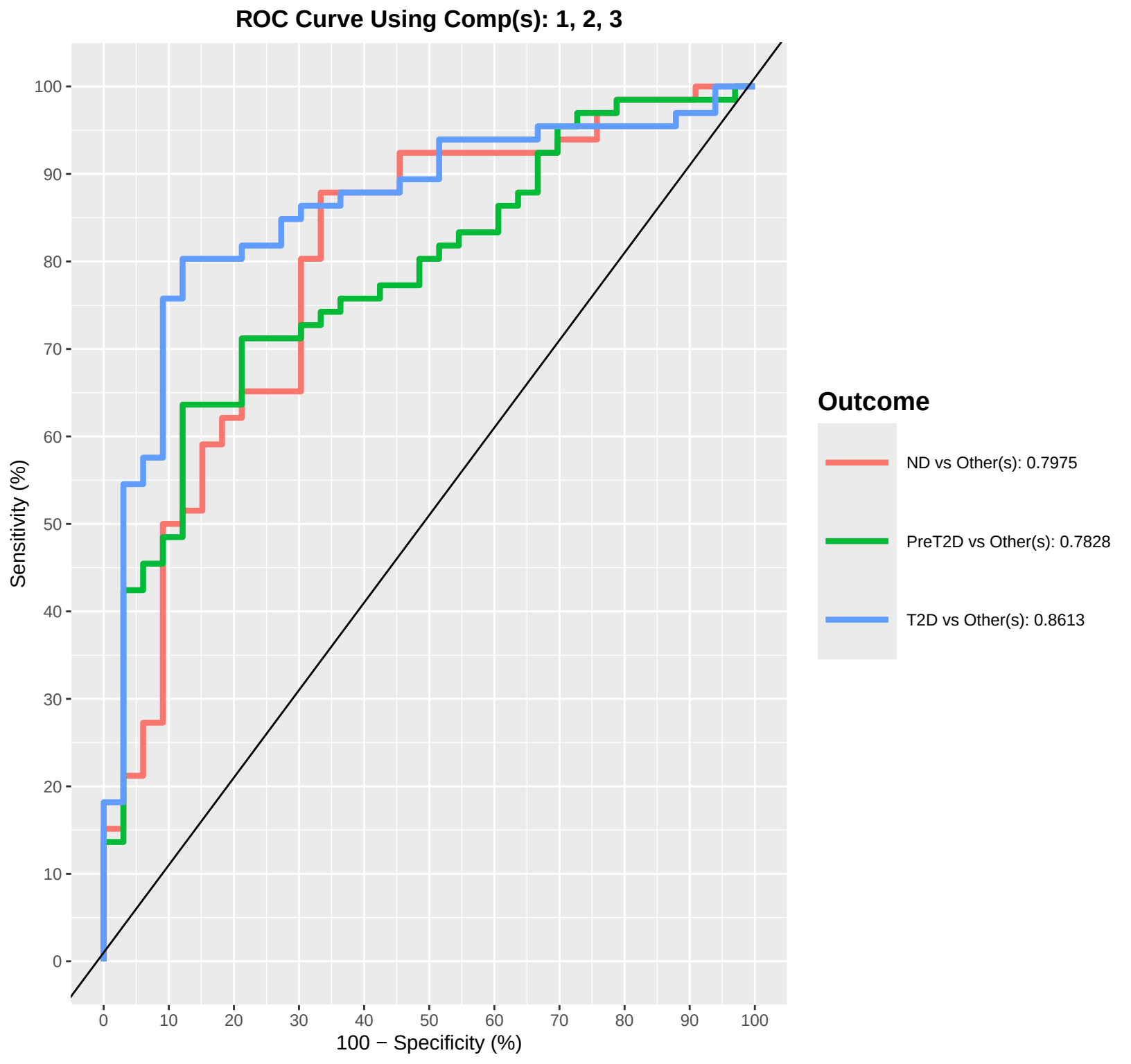
**3D Plot: LPS (VIP>1)**

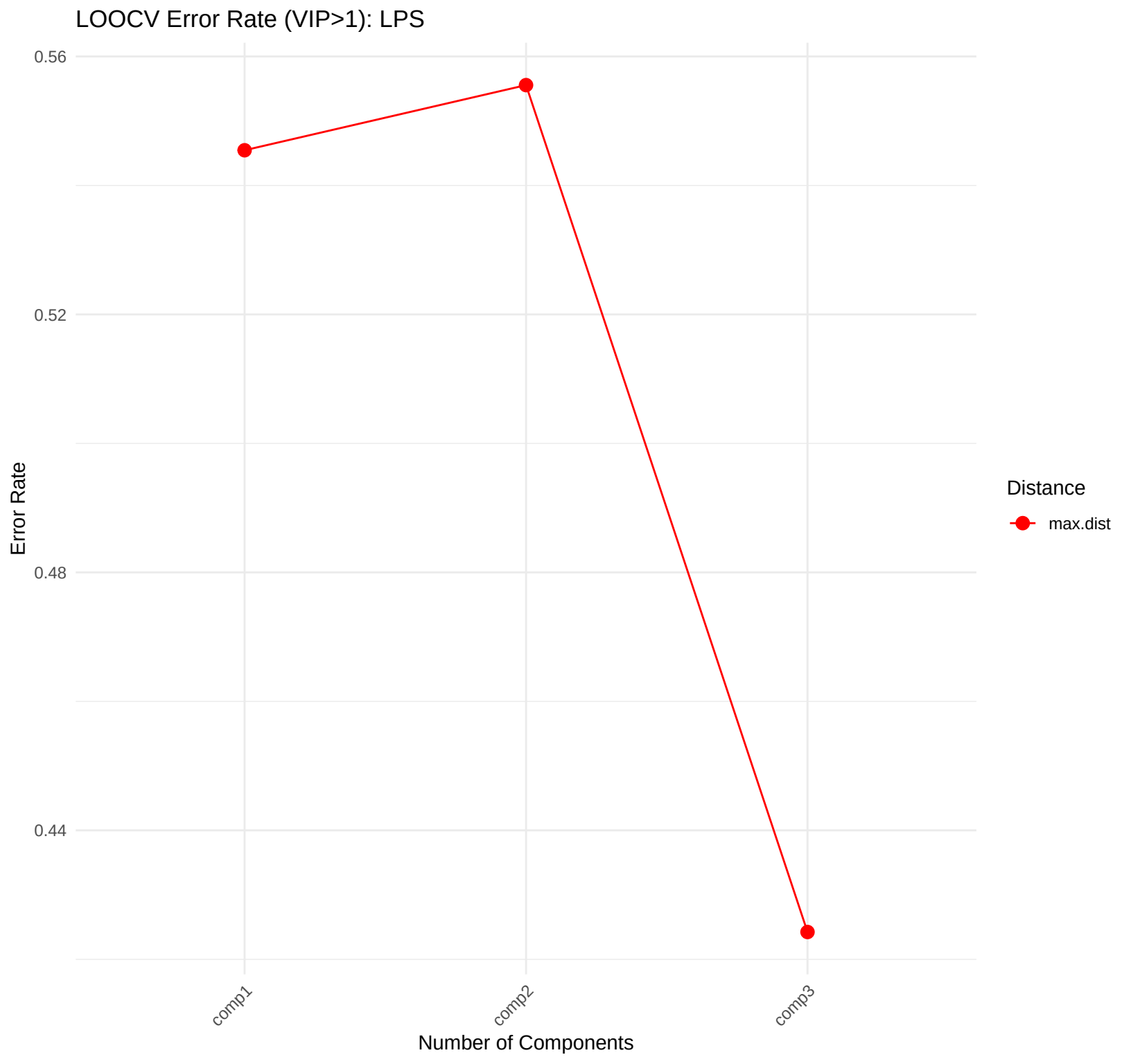


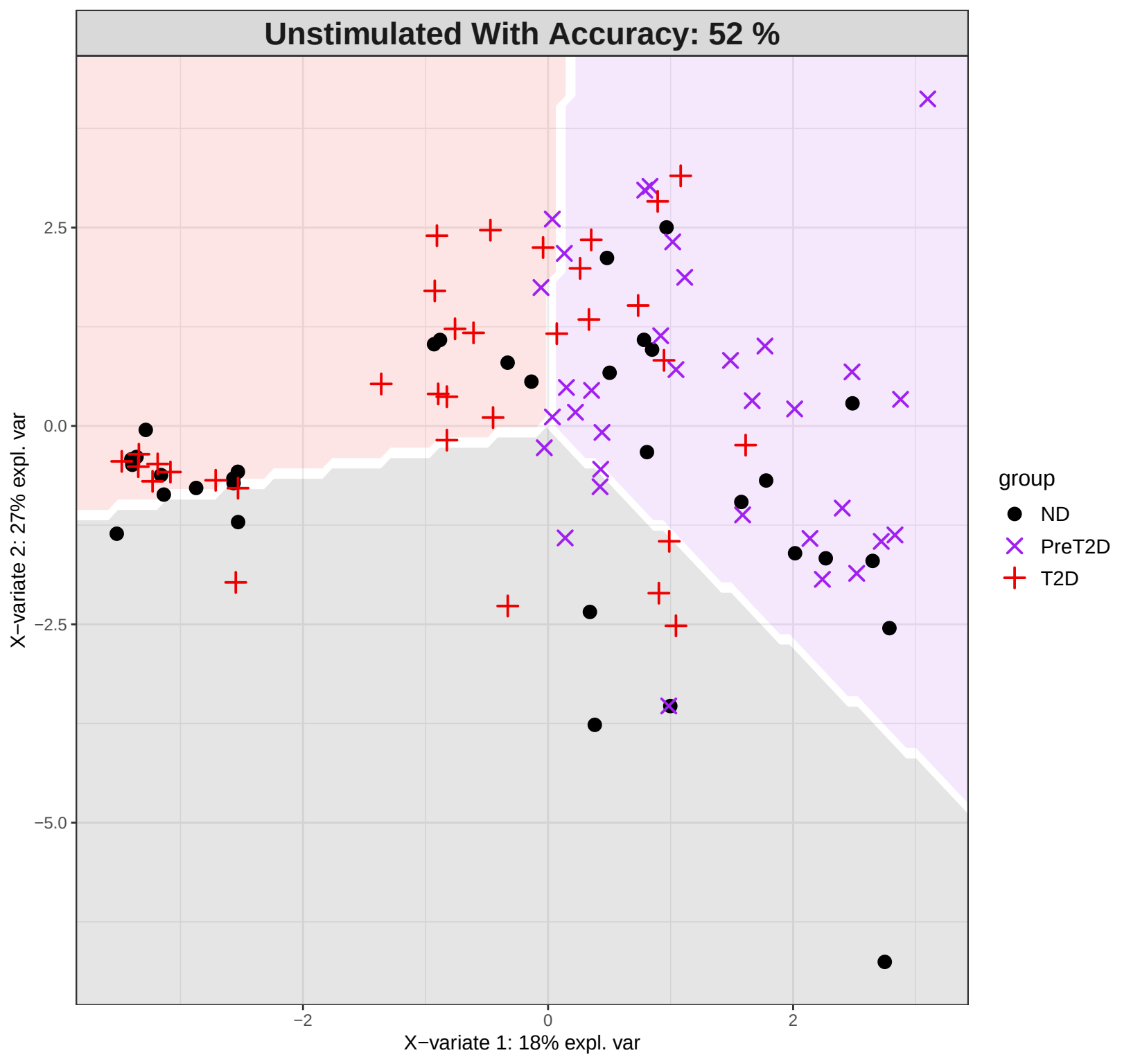

Component 1 : LPS
IFN.G
GM.CSF
IL.27
IL.6
IL.21
IL.15
IL.22
IL.12.P70
IL.1B
CCL.20.MIP.3A
−0.2
0.0
0.2
0.4
group
ND
PreT2D
T2D


Component 2 : LPS
IFN.G
IL.12.P70
CCL.20.MIP.3A
IL.1B
IL.6
IL.21
GM.CSF
IL.15
IL.22
IL.27
−0.6
−0.4
−0.2
0.0
0.2
group
ND
PreT2D
T2D

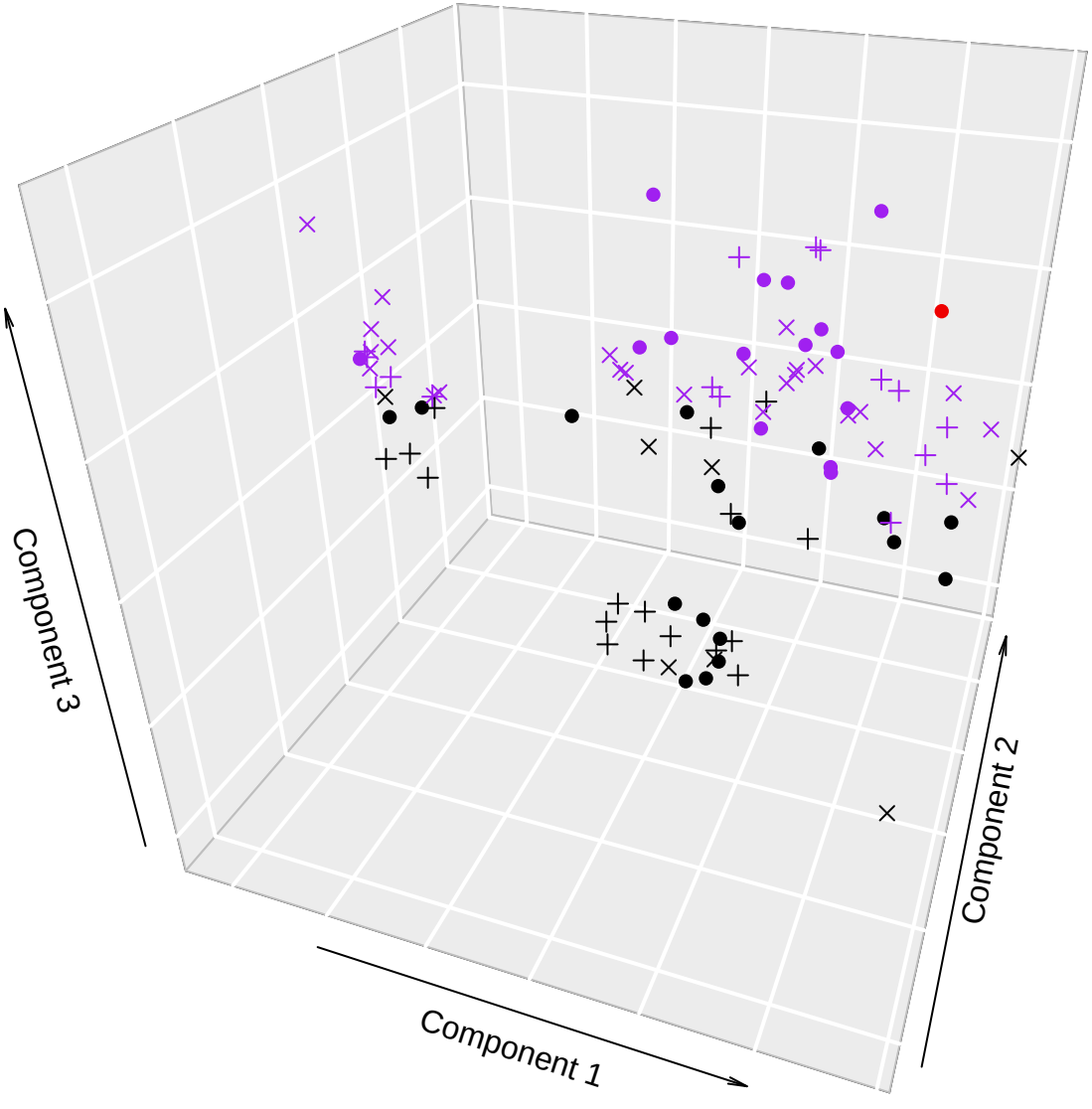

Component 3 : LPS
IL.12.P70
GM.CSF
IL.21
IL.1B
IFN.G
IL.15
CCL.20.MIP.3A
IL.27
IL.6
IL.22
−0.4
−0.2
0.0
0.2
group
ND
PreT2D
T2D

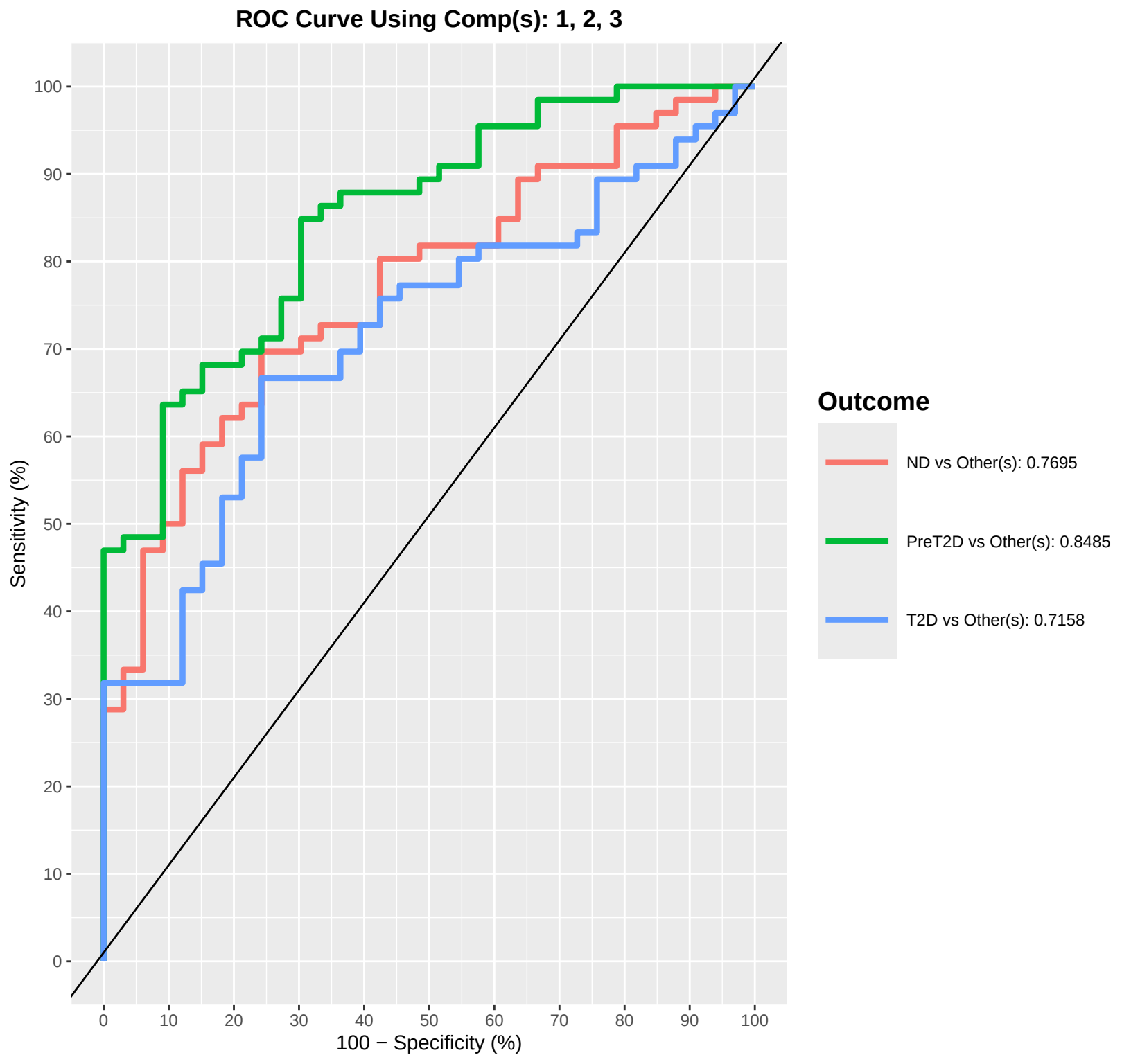

ROC Curve Using Comp(s): 1, 2, 3
Sensitivity (%)
100
90
80
70
60
50
40
30
20
10
0
0
10
20
30
40
50
60
70
80
90
100
100 − Specificity (%)
Outcome
ND vs Other(s): 0.7975
PreT2D vs Other(s): 0.7828
T2D vs Other(s): 0.8613

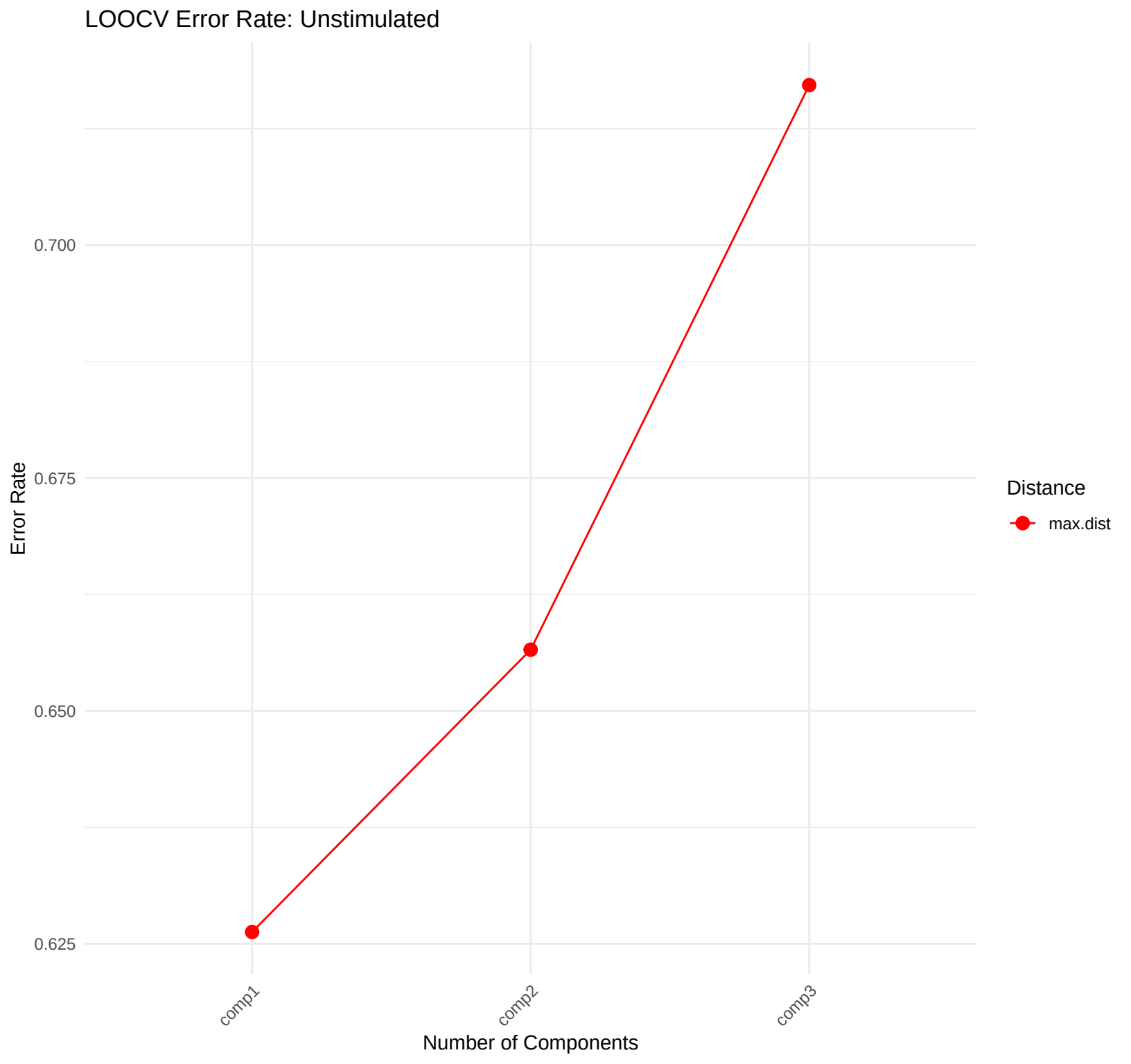

LOOCV Error Rate (VIP>1): LPS
0.56
0.52
0.48
0.44
Error Rate
comp1
comp2
comp3
Number of Components
Distance
max.dist

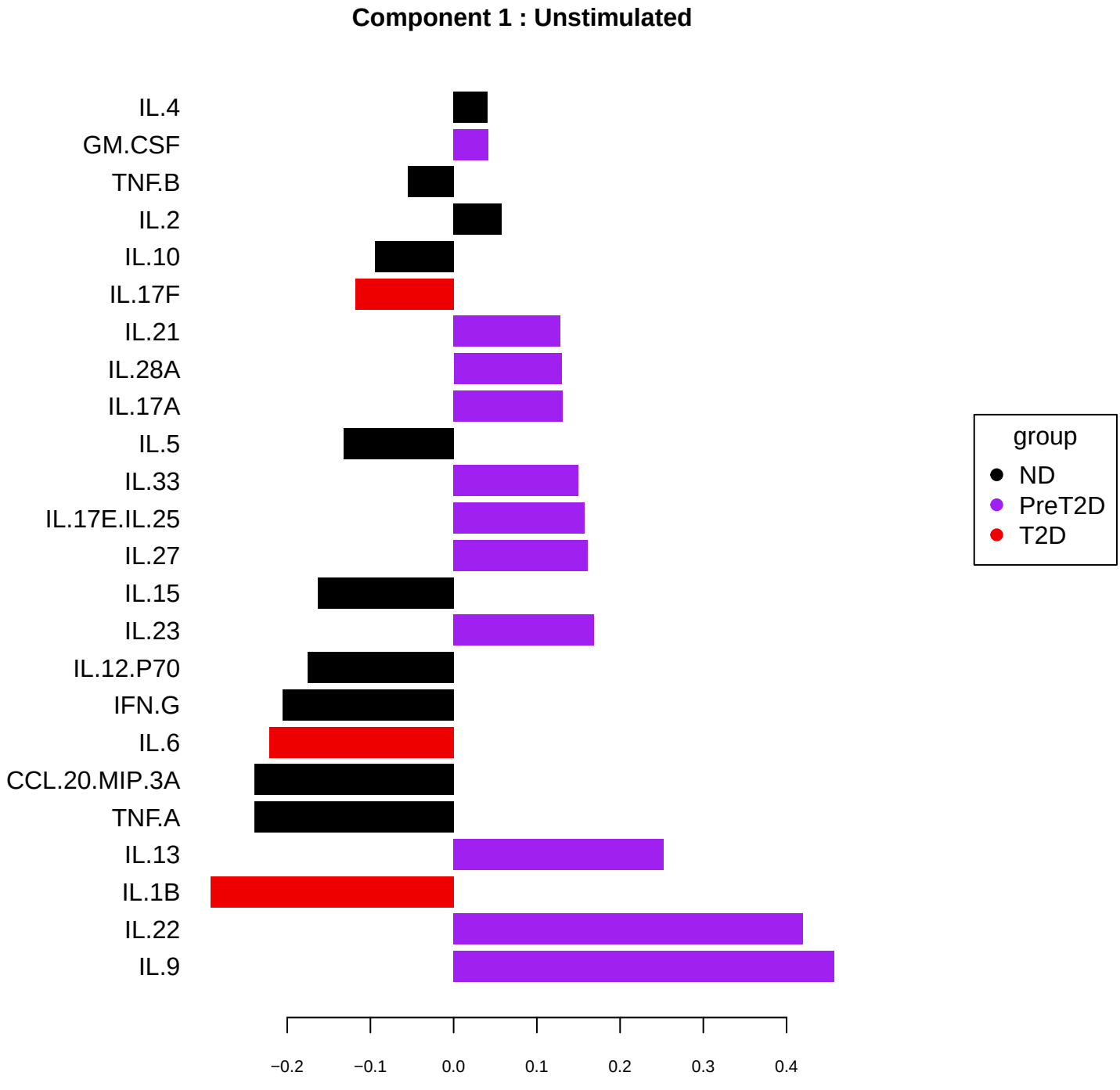

Unstimulated With Accuracy: 52 %
2.5
0.0
−2.5
−5.0
X−variate 2: 27% expl. var
−2
0
2
X−variate 1: 18% expl. var
group
ND
PreT2D
T2D

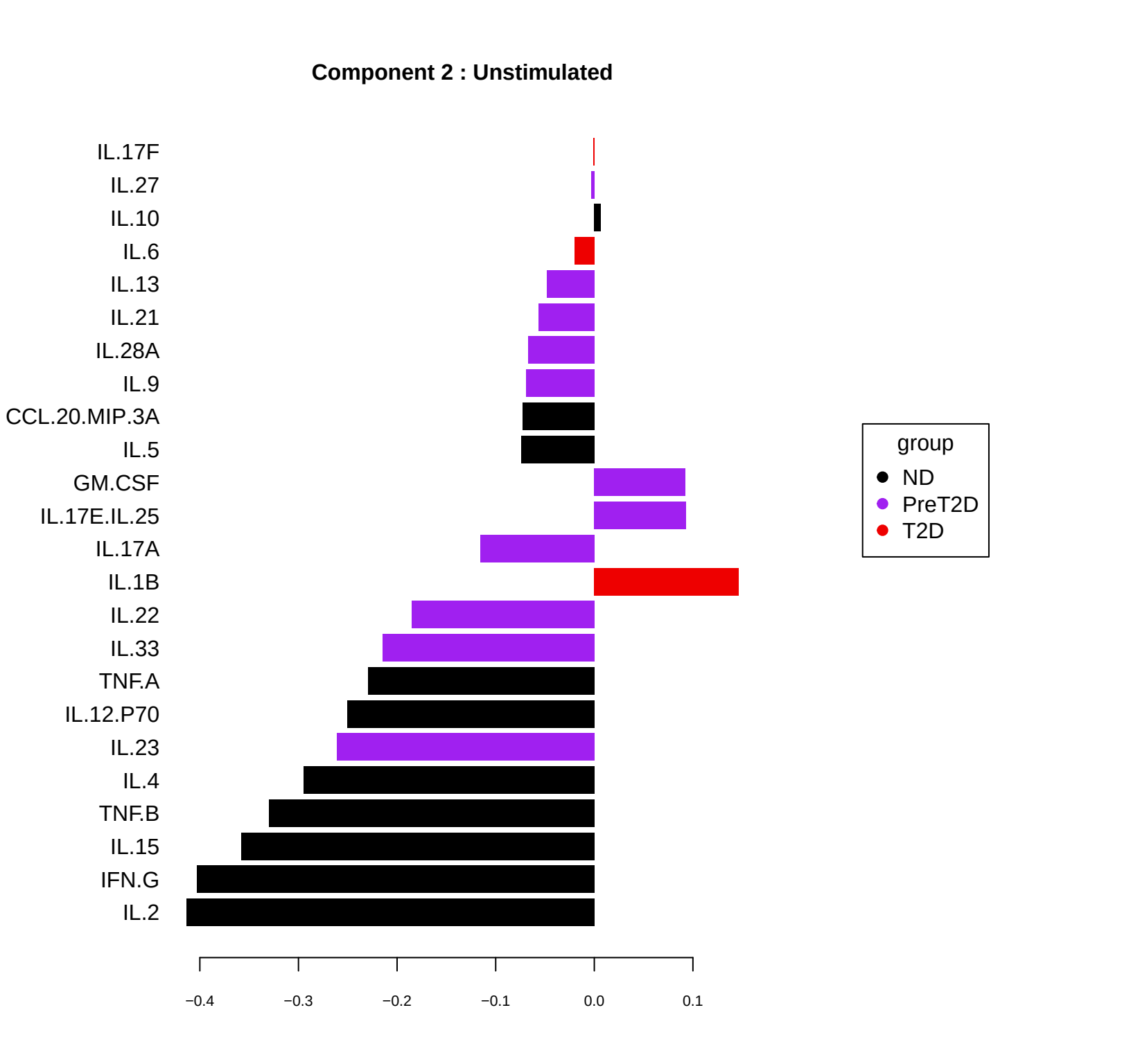
# 3D Plot: Unstimulated

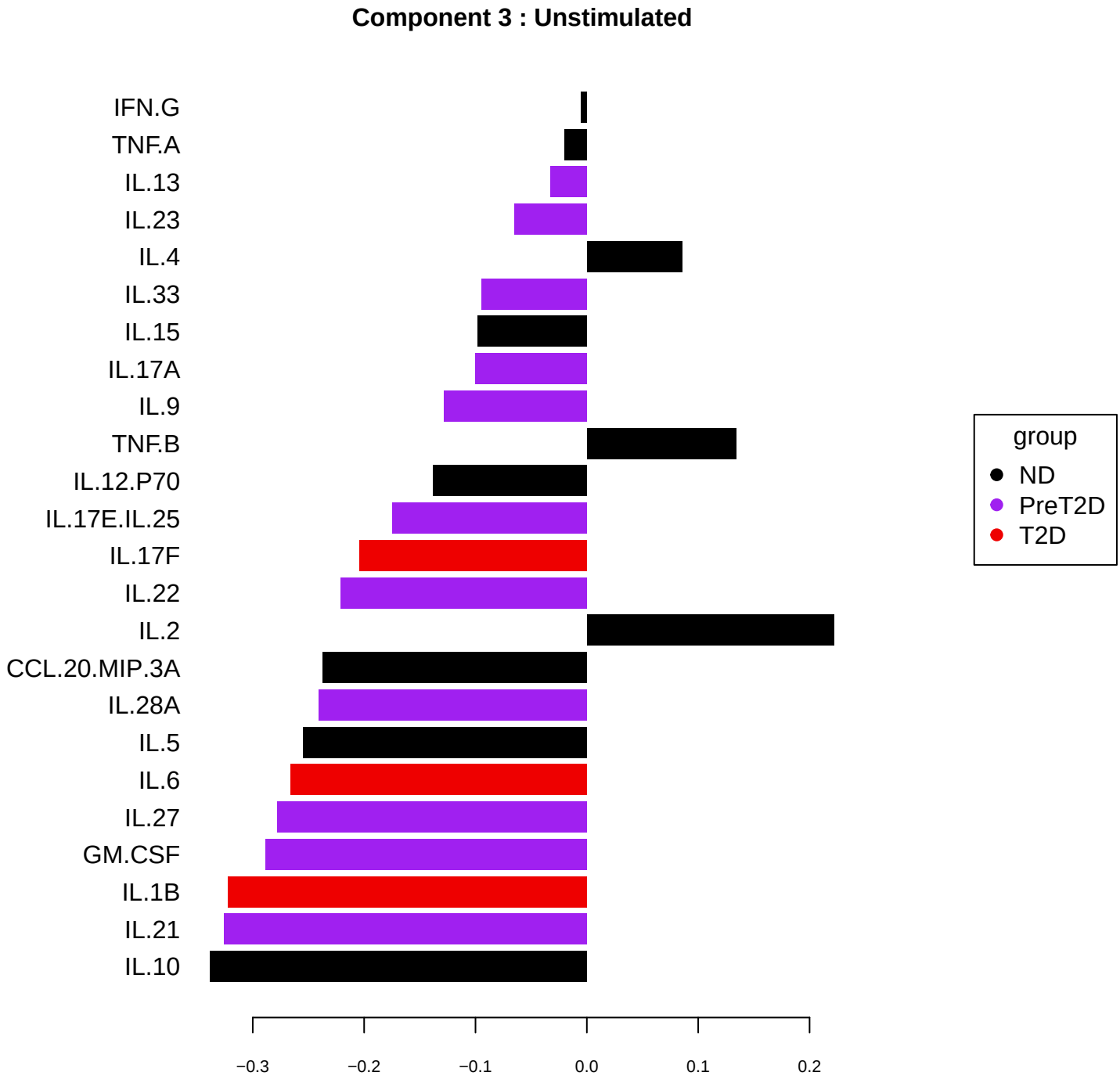


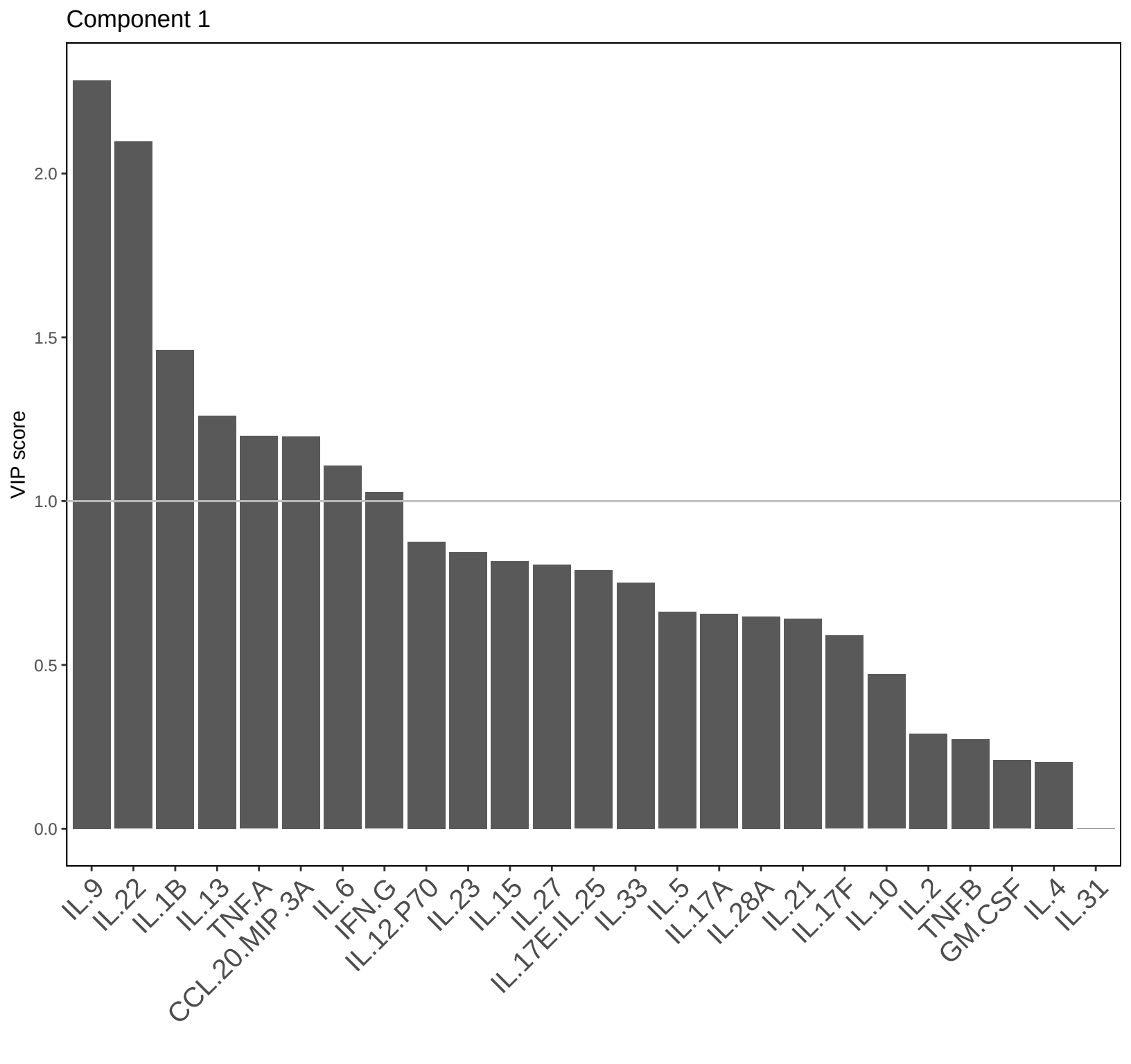

ROC Curve Using Comp(s): 1, 2, 3
Sensitivity (%)
100
90
80
70
60
50
40
30
20
10
0
0
10
20
30
40
50
60
70
80
90
100
100 − Specificity (%)
Outcome
ND vs Other(s): 0.7695
PreT2D vs Other(s): 0.8485
T2D vs Other(s): 0.7158

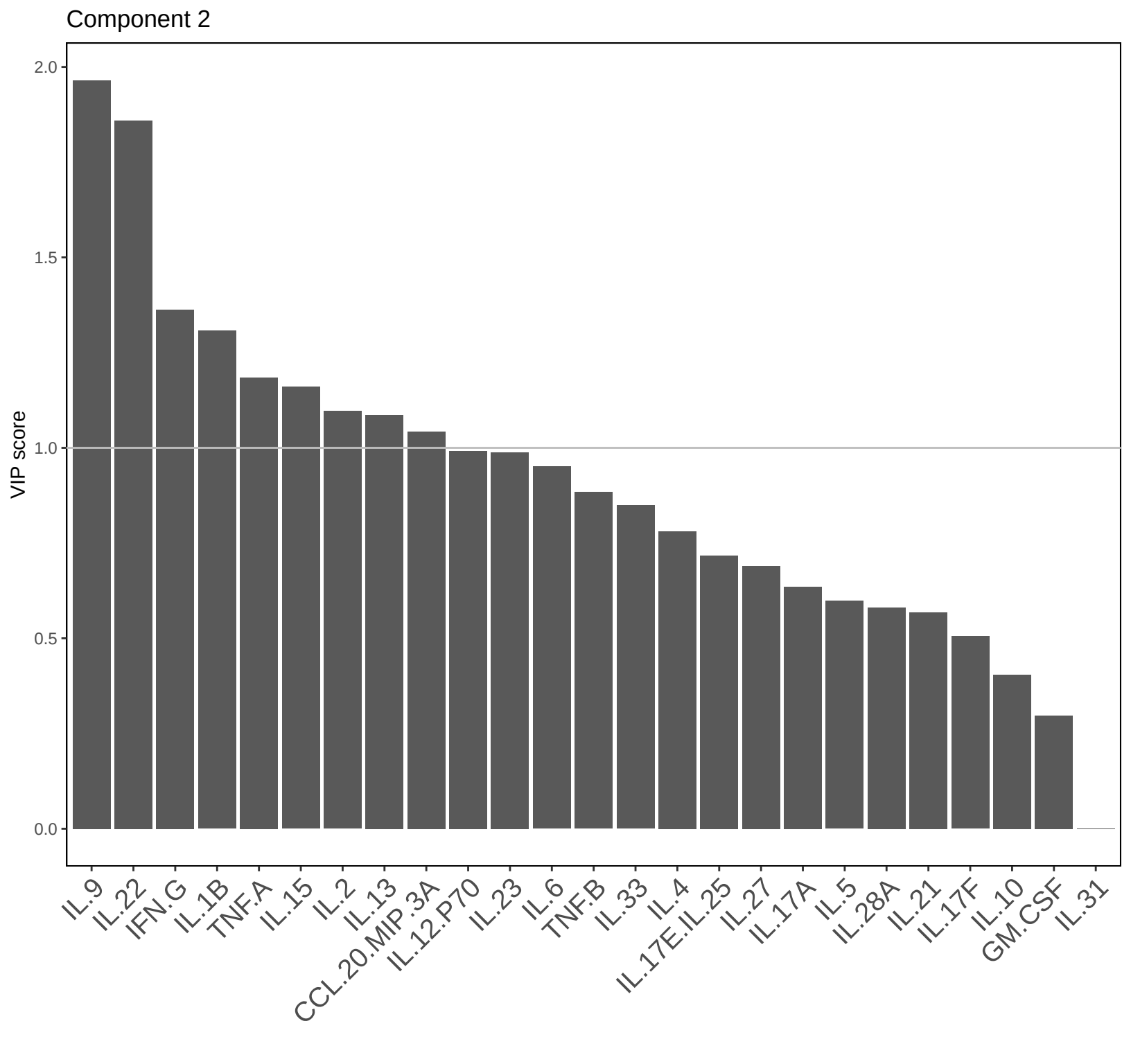

LOOCV Error Rate: Unstimulated
Error Rate
0.700
0.675
0.650
0.625
comp1
comp2
comp3
Number of Components
Distance
max.dist

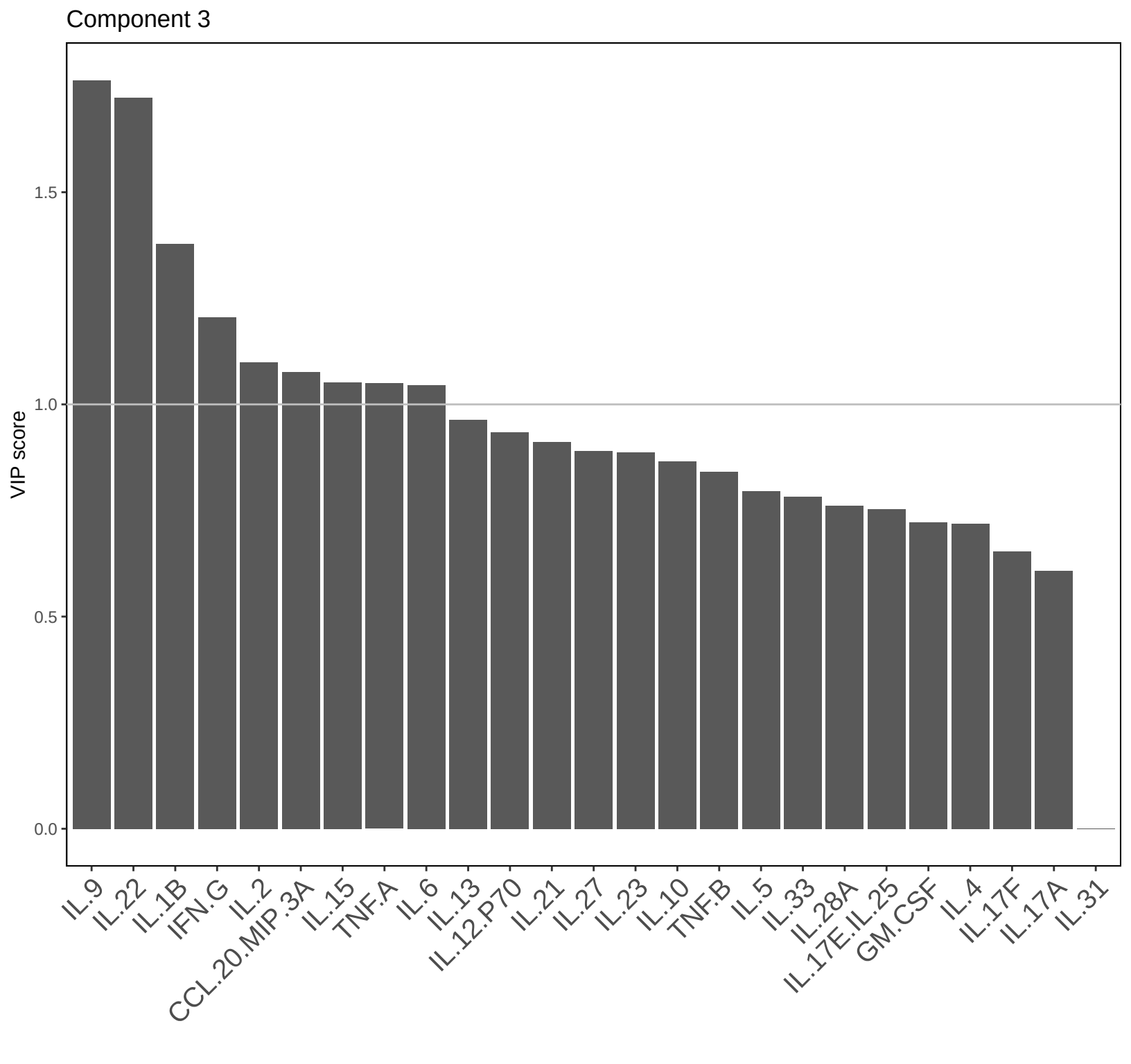

Component 1 : Unstimulated
IL.4
GM.CSF
TNF.B
IL.2
IL.10
IL.17F
IL.21
IL.28A
IL.17A
IL.5
IL.33
IL.17E.IL.25
IL.27
IL.15
IL.23
IL.12.P70
IFN.G
IL.6
CCL.20.MIP.3A
TNF.A
IL.13
IL.1B
IL.22
IL.9
−0.2
−0.1
0.0
0.1
0.2
0.3
0.4
group
ND
PreT2D
T2D

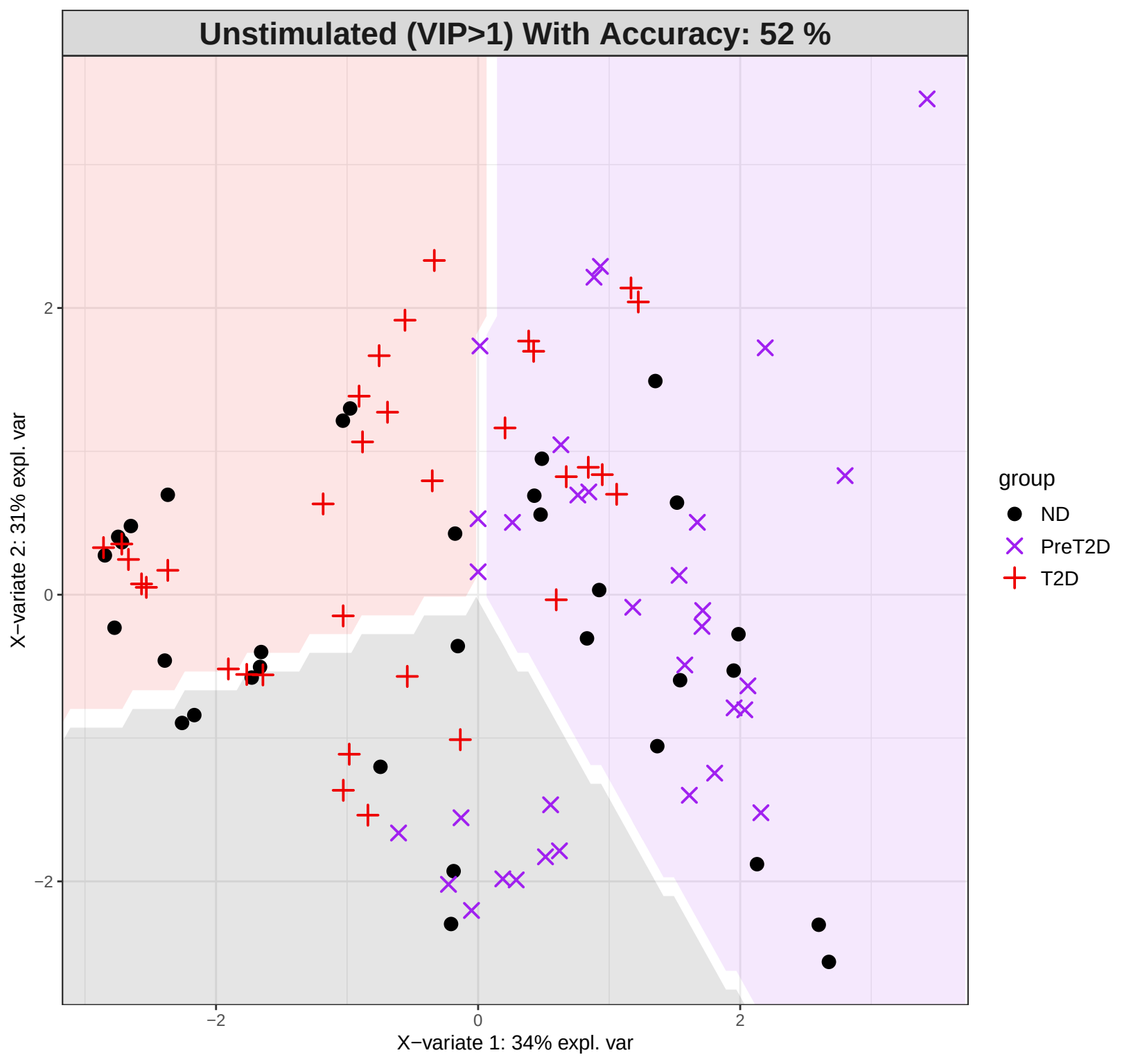

Component 2 : Unstimulated
IL.17F
IL.27
IL.10
IL.6
IL.13
IL.21
IL.28A
IL.9
CCL.20.MIP.3A
IL.5
GM.CSF
IL.17E.IL.25
IL.17A
IL.1B
IL.22
IL.33
TNF.A
IL.12.P70
IL.23
IL.4
TNF.B
IL.15
IFN.G
IL.2
−0.4
−0.3
−0.2
−0.1
0.0
0.1
group
ND
PreT2D
T2D


Component 3 : Unstimulated
IFN.G
TNF.A
IL.13
IL.23
IL.4
IL.33
IL.15
IL.17A
IL.9
TNF.B
IL.12.P70
IL.17E.IL.25
IL.17F
IL.22
IL.2
CCL.20.MIP.3A
IL.28A
IL.5
IL.6
IL.27
GM.CSF
IL.1B
IL.21
IL.10
−0.3
−0.2
−0.1
0.0
0.1
0.2
group
ND
PreT2D
T2D

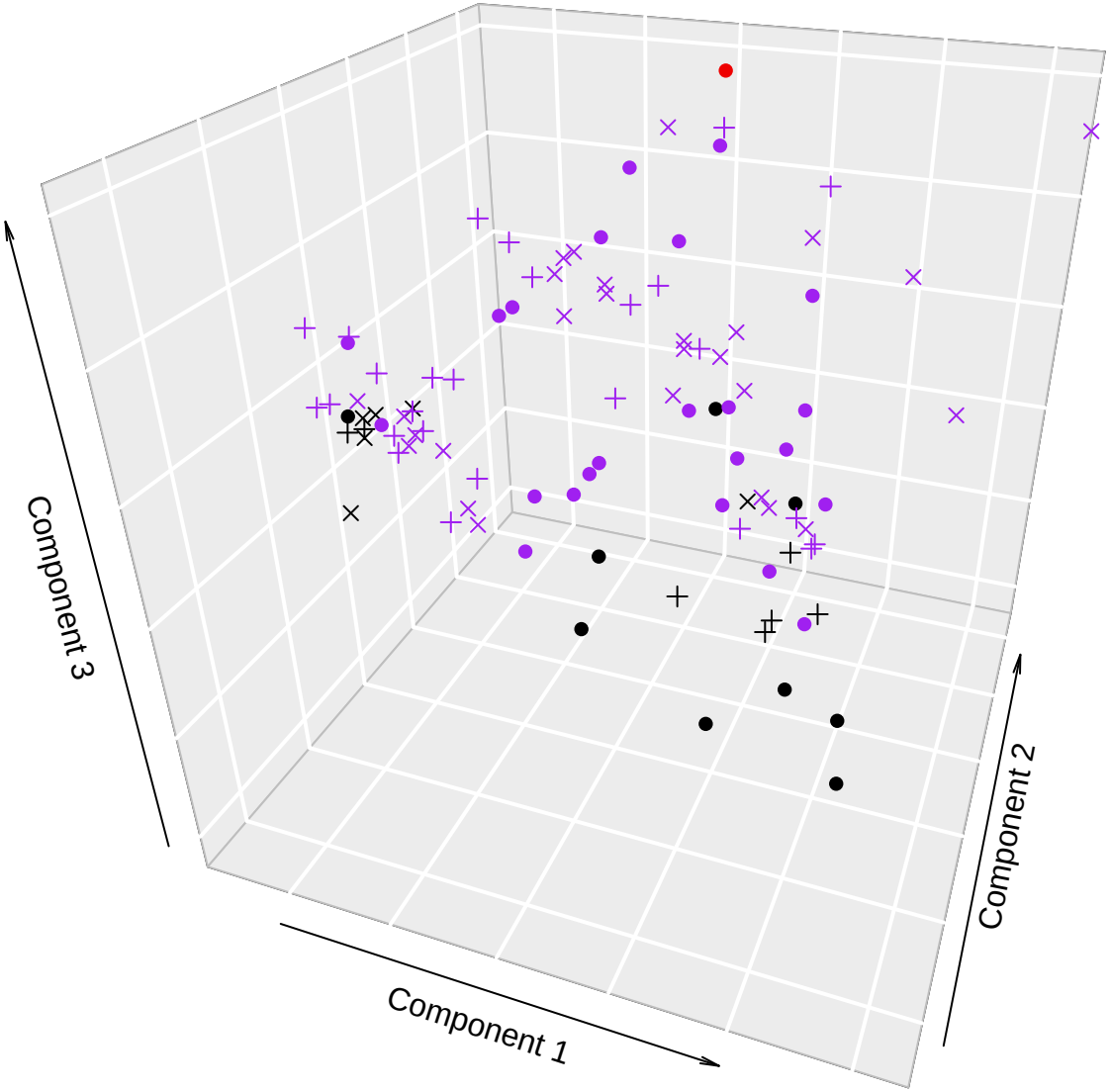

Component 1
VIP score
2.0
1.5
1.0
0.5
0.0
IL.9
IL.22
IL.1B
IL.13
TNF.A
CCL.20.MIP.3A
IL.6
IFN.G
IL.12.P70
IL.23
IL.15
IL.27
IL.17E.IL.25
IL.33
IL.5
IL.17A
IL.28A
IL.21
IL.17F
IL.10
IL.2
TNF.B
GM.CSF
IL.4
IL.31

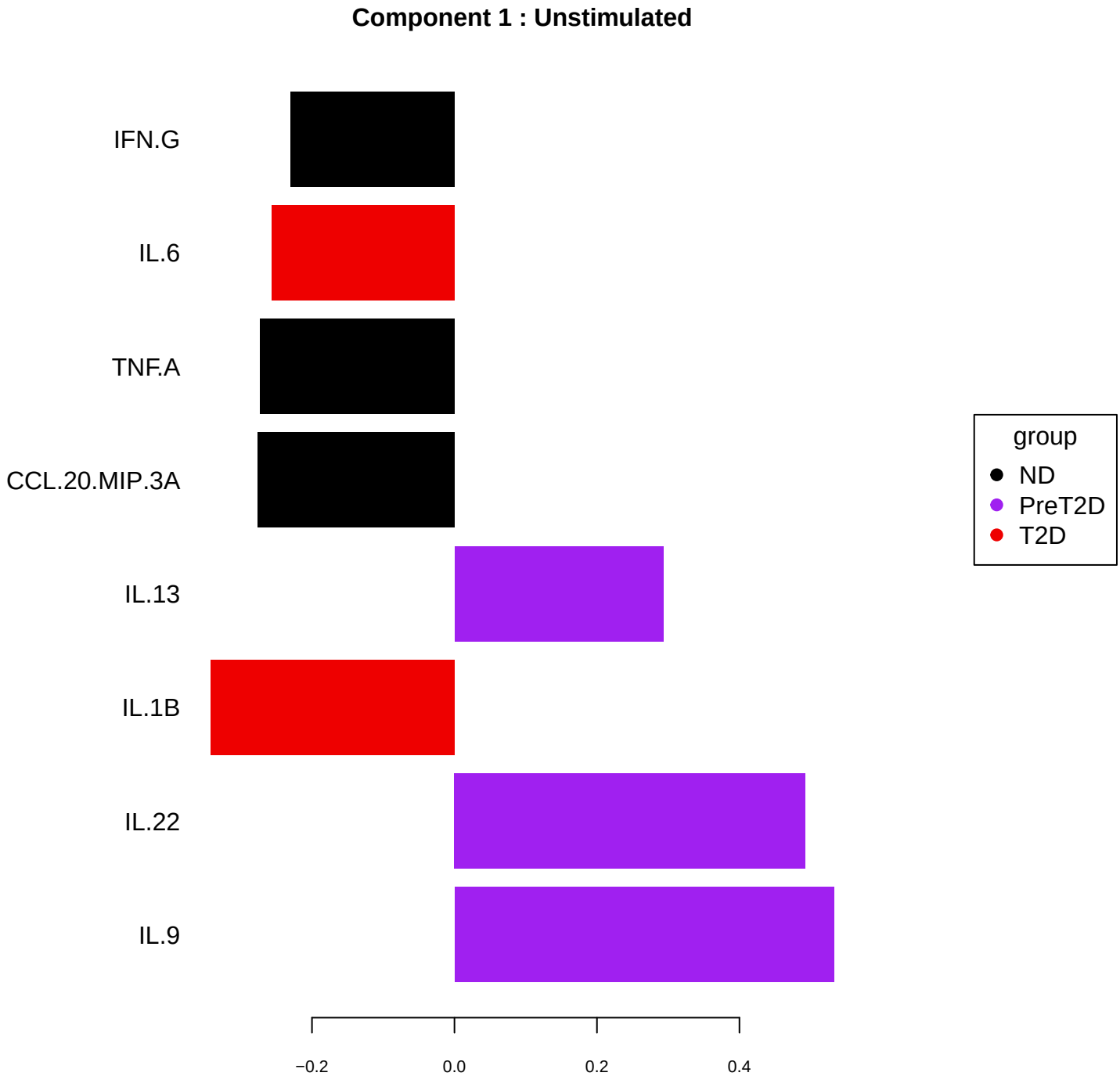

Component 2
VIP score
2.0
1.5
1.0
0.5
0.0
IL.9
IL.22
IFN.G
IL.1B
TNF.A
IL.15
IL.2
IL.13
CCL.20.MIP.3A
IL.12.P70
IL.23
IL.6
TNF.B
IL.33
IL.4
IL.17E.IL.25
IL.27
IL.17A
IL.5
IL.28A
IL.21
IL.17F
IL.10
GM.CSF
IL.31

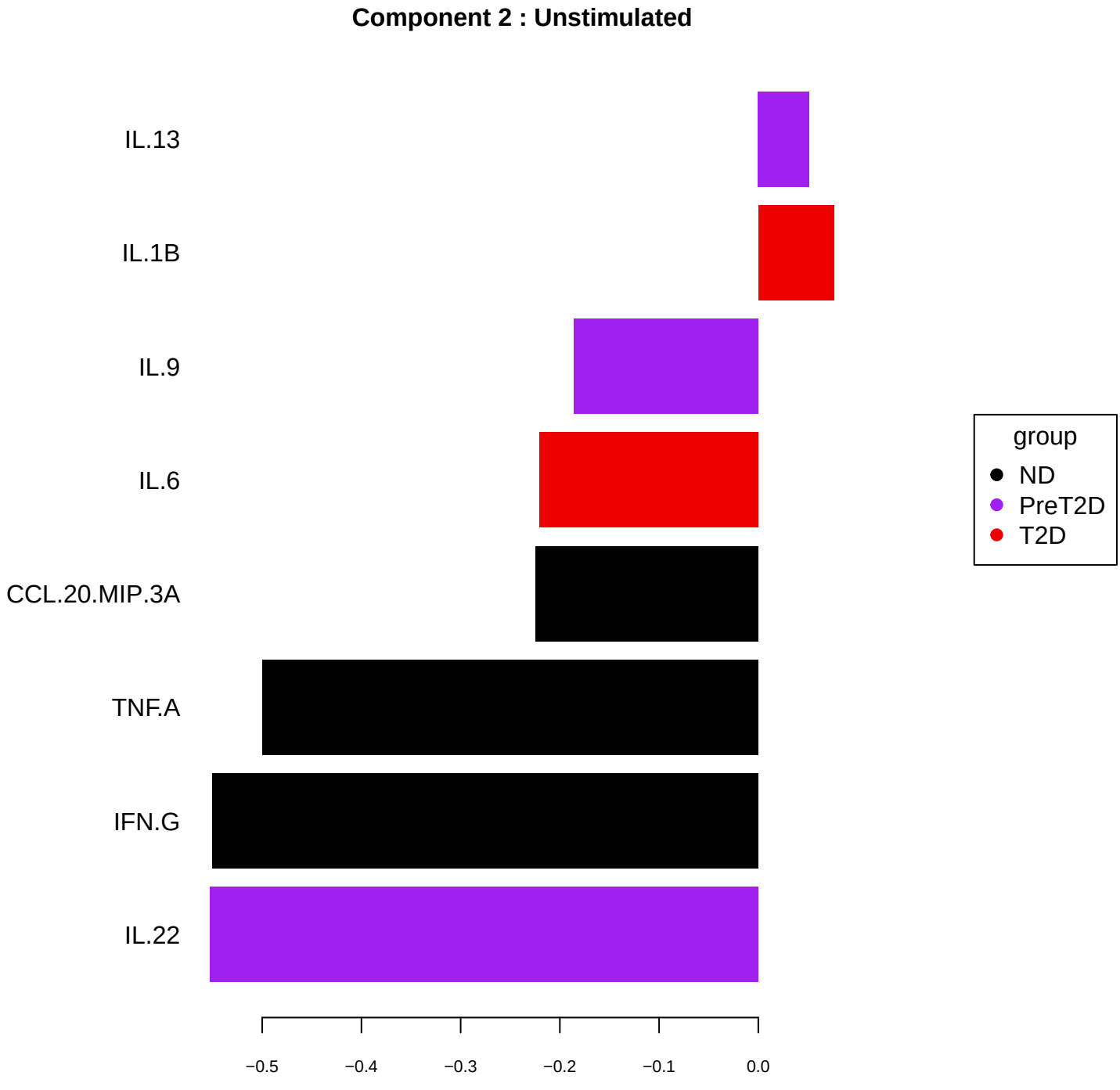

Component 3
VIP score
1.5
1.0
0.5
0.0
IL.9
IL.22
IL.1B
IFN.G
IL.2
CCL.20.MIP.3A
IL.15
TNF.A
IL.6
IL.13
IL.12.P70
IL.21
IL.27
IL.23
IL.10
TNF.B
IL.5
IL.33
IL.28A
IL.17E.IL.25
GM.CSF
IL.4
IL.17F
IL.17A
IL.31

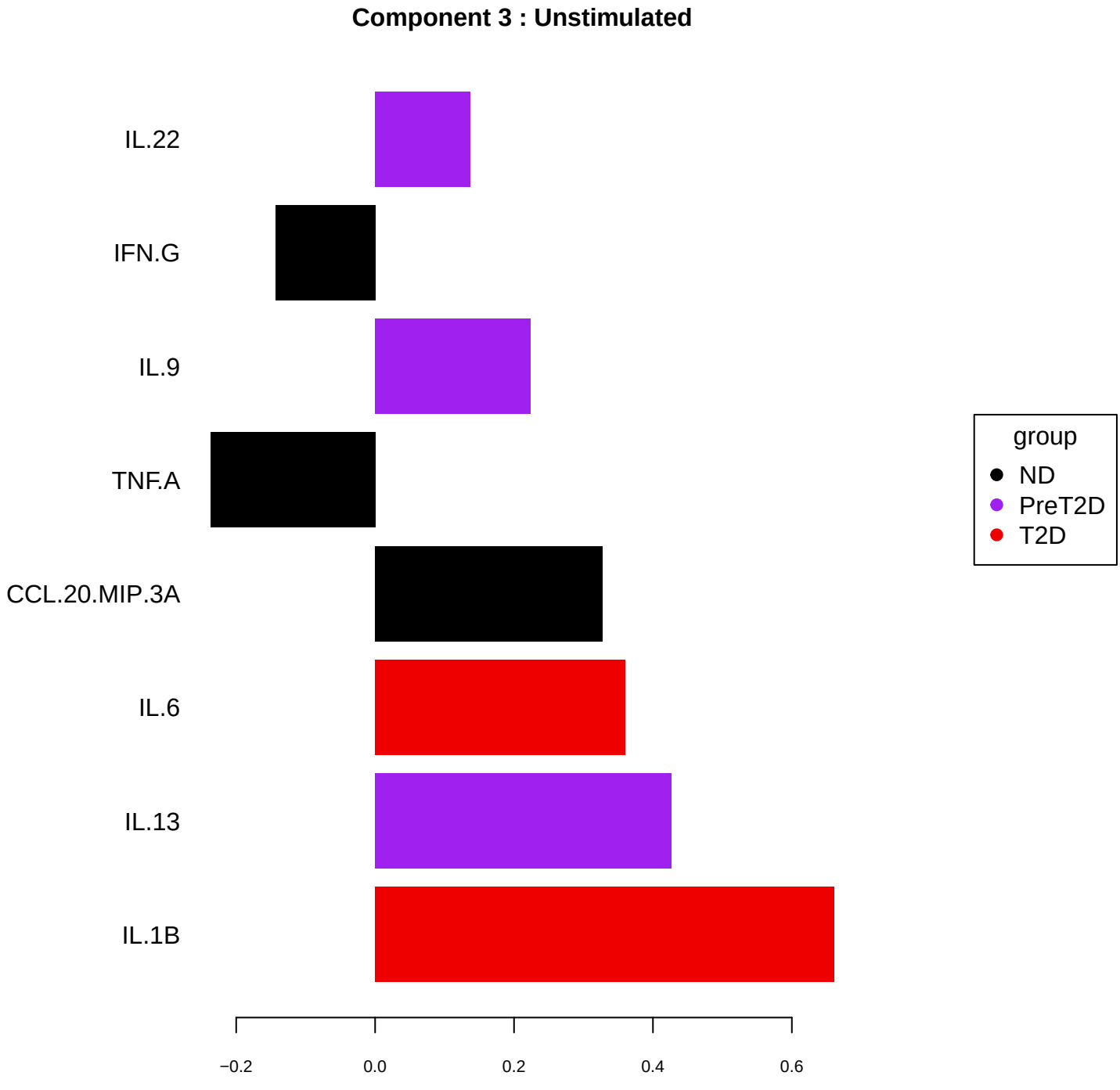

Unstimulated (VIP>1) With Accuracy: 52 %
X−variate 2: 31% expl. var
X−variate 1: 34% expl. var
2
0
−2
−2
0
2
group
ND
PreT2D
T2D

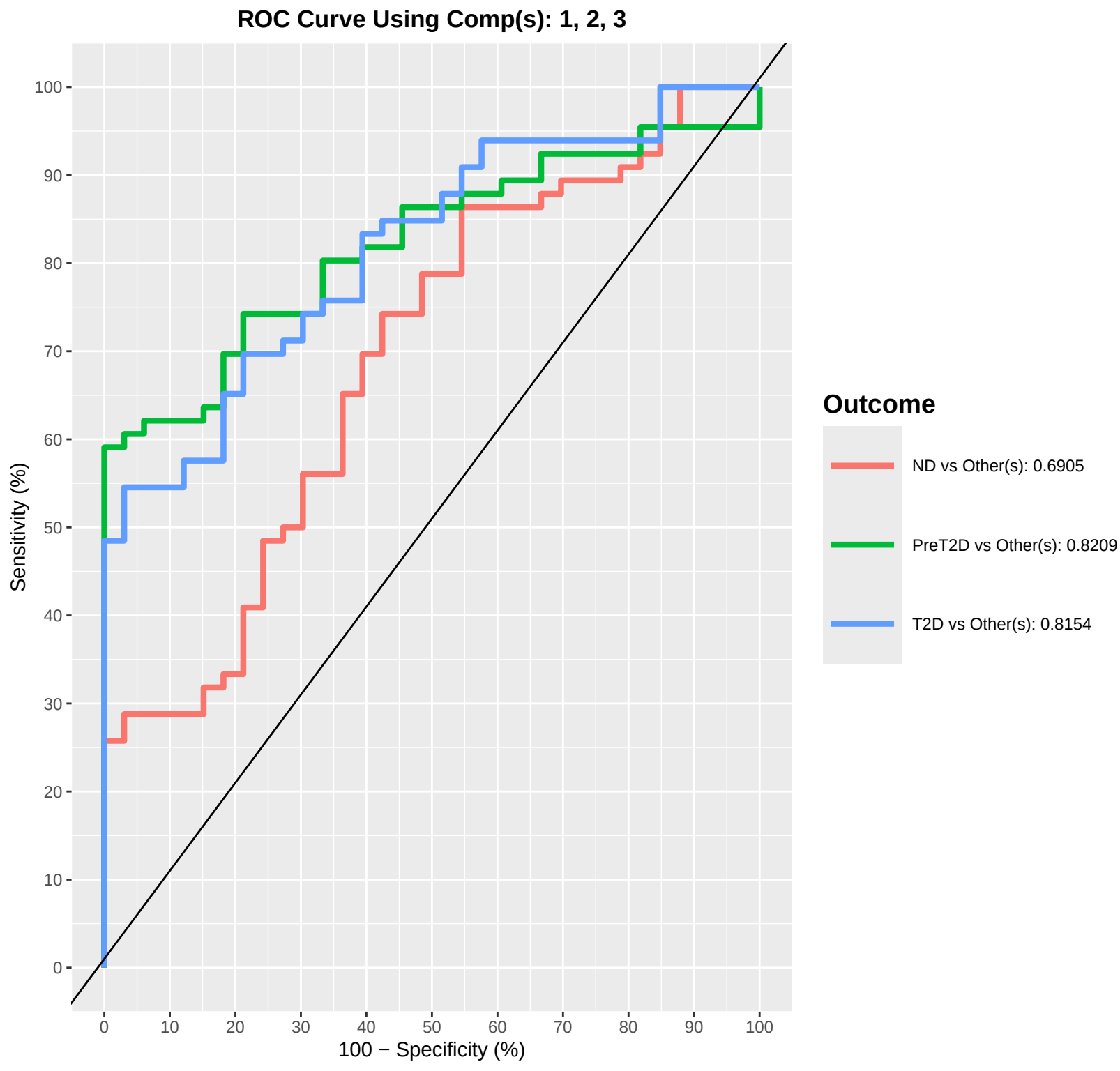
# 3D Plot: Unstimulated (VIP>1)

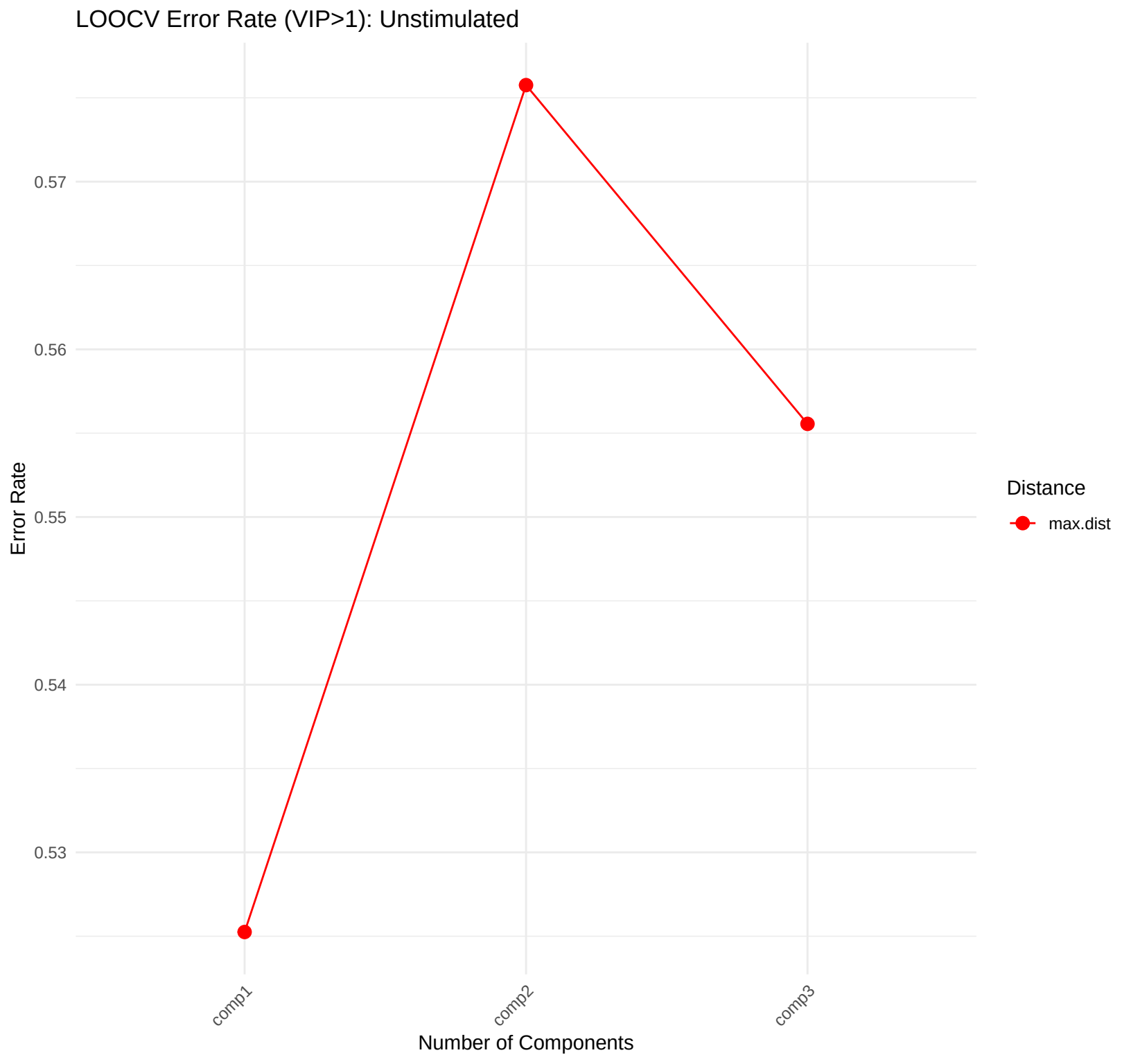



Component 1 : Unstimulated
IFN.G
IL.6
TNF.A
CCL.20.MIP.3A
IL.13
IL.1B
IL.22
IL.9
−0.2
0.0
0.2
0.4
group
ND
PreT2D
T2D


Component 2 : Unstimulated
IL.13
IL.1B
IL.9
IL.6
CCL.20.MIP.3A
TNF.A
IFN.G
IL.22
−0.5
−0.4
−0.3
−0.2
−0.1
0.0
group
ND
PreT2D
T2D


Component 3 : Unstimulated
IL.22
IFN.G
IL.9
TNF.A
CCL.20.MIP.3A
IL.6
IL.13
IL.1B
−0.2
0.0
0.2
0.4
0.6
group
ND
PreT2D
T2D


ROC Curve Using Comp(s): 1, 2, 3
Sensitivity (%)
100 − Specificity (%)
0
10
20
30
40
50
60
70
80
90
100
Outcome
ND vs Other(s): 0.6905
PreT2D vs Other(s): 0.8209
T2D vs Other(s): 0.8154


LOOCV Error Rate (VIP>1): Unstimulated
0.57
0.56
0.55
0.54
0.53
Error Rate
comp1
comp2
comp3
Number of Components
Distance
max.dist