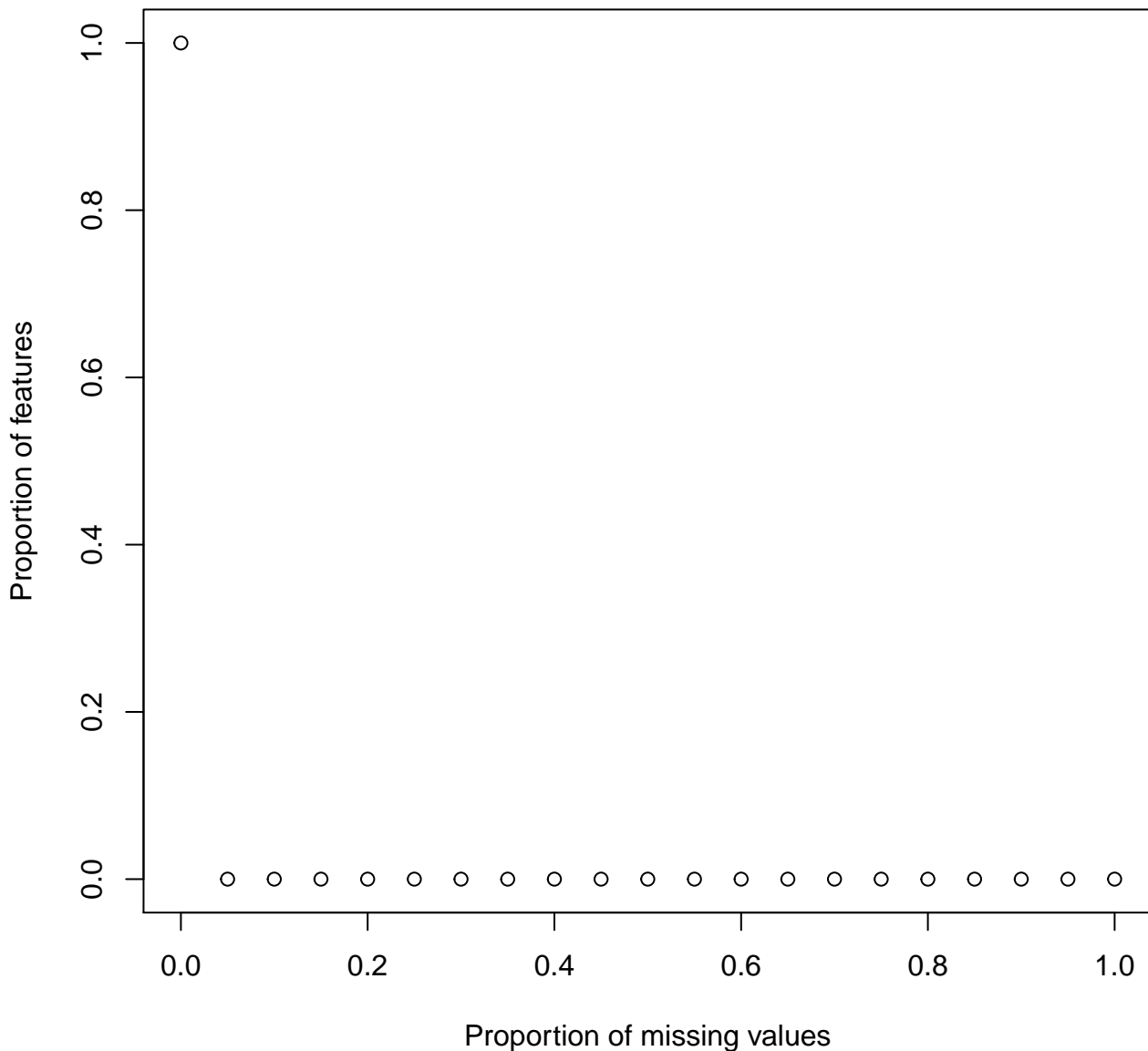
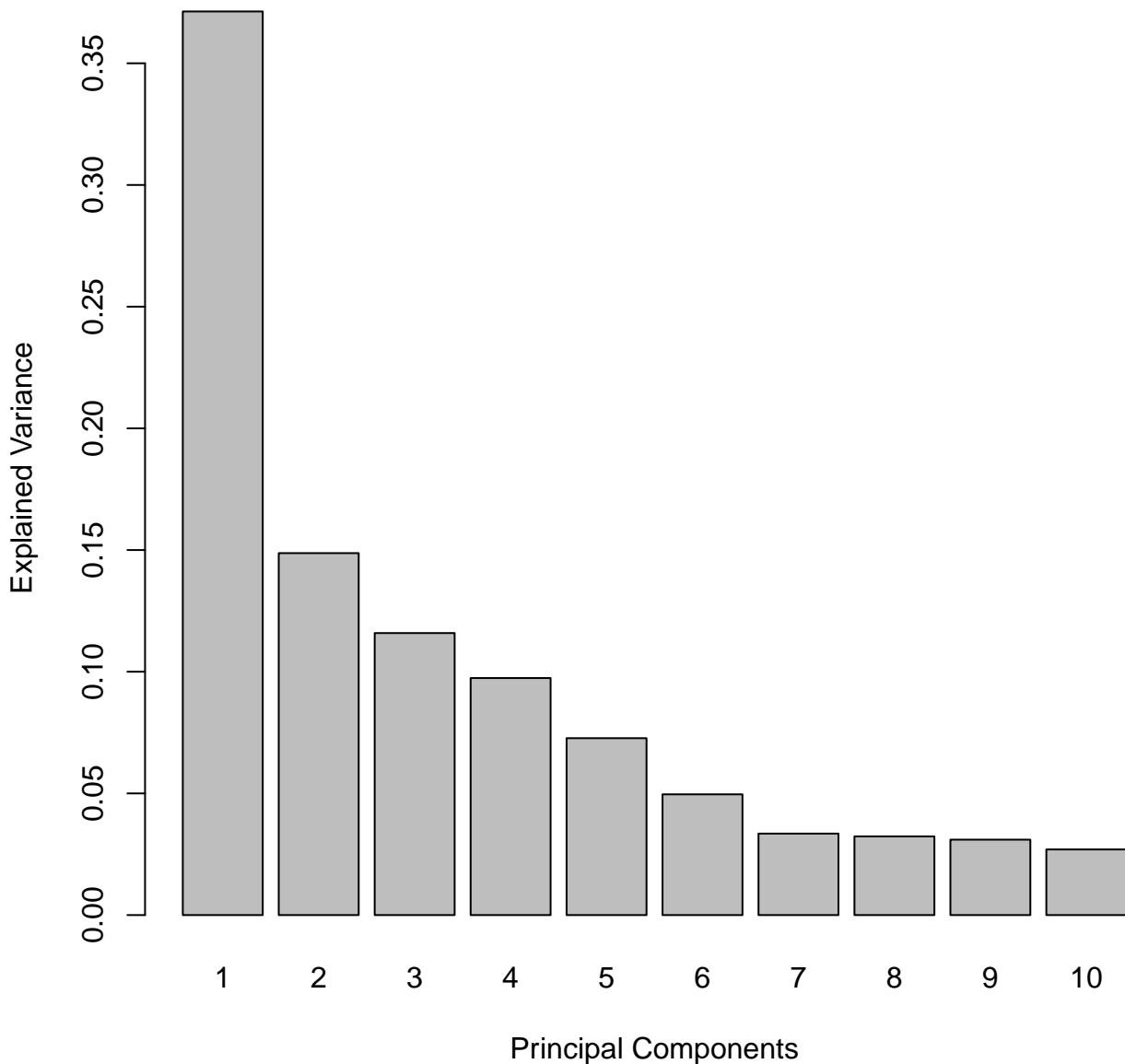


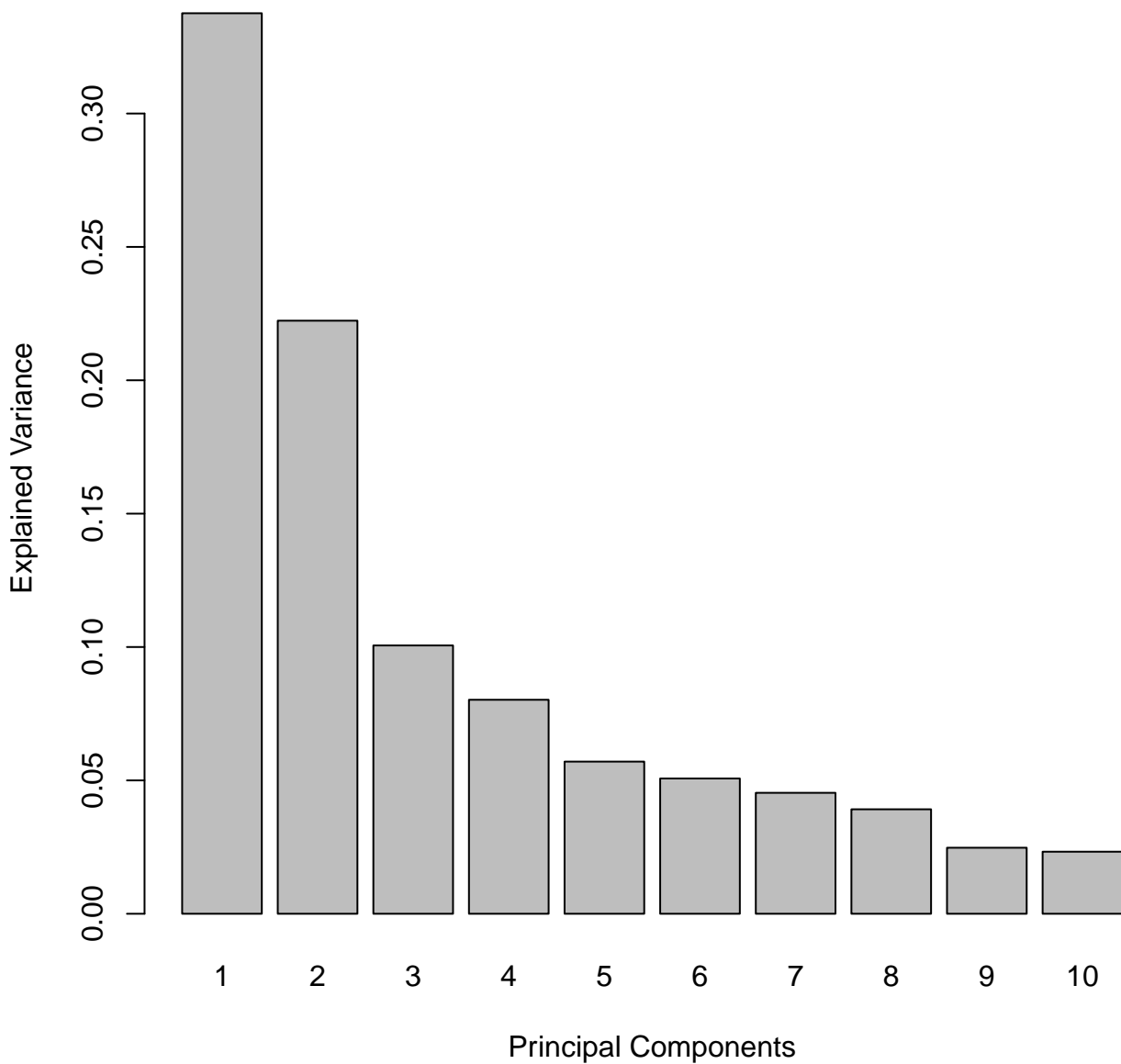
RNA_Seq missing value proportions for unfiltered data



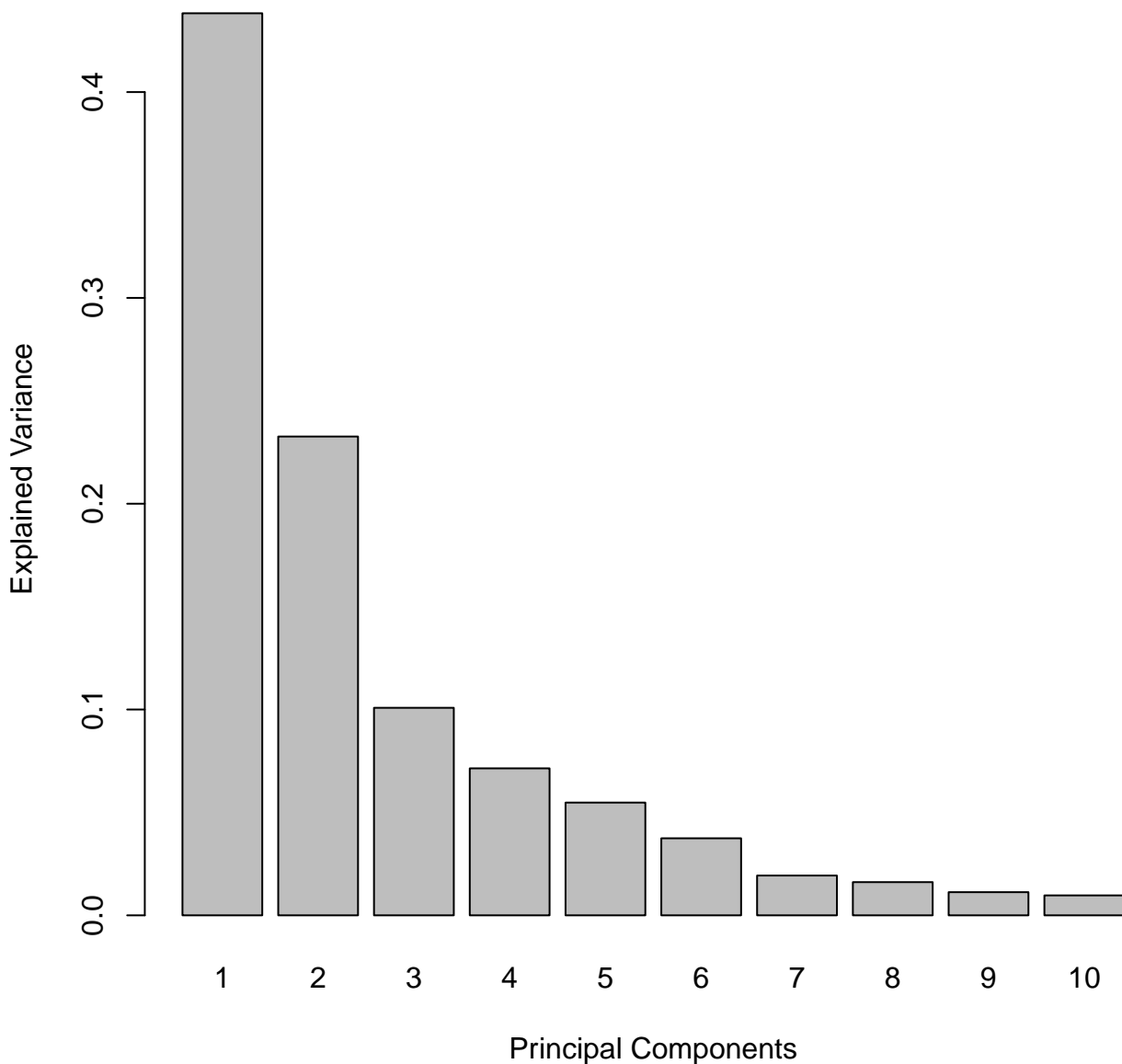
Metabolomics screeplot



Proteomics screeplot



RNA_Seq screeplot



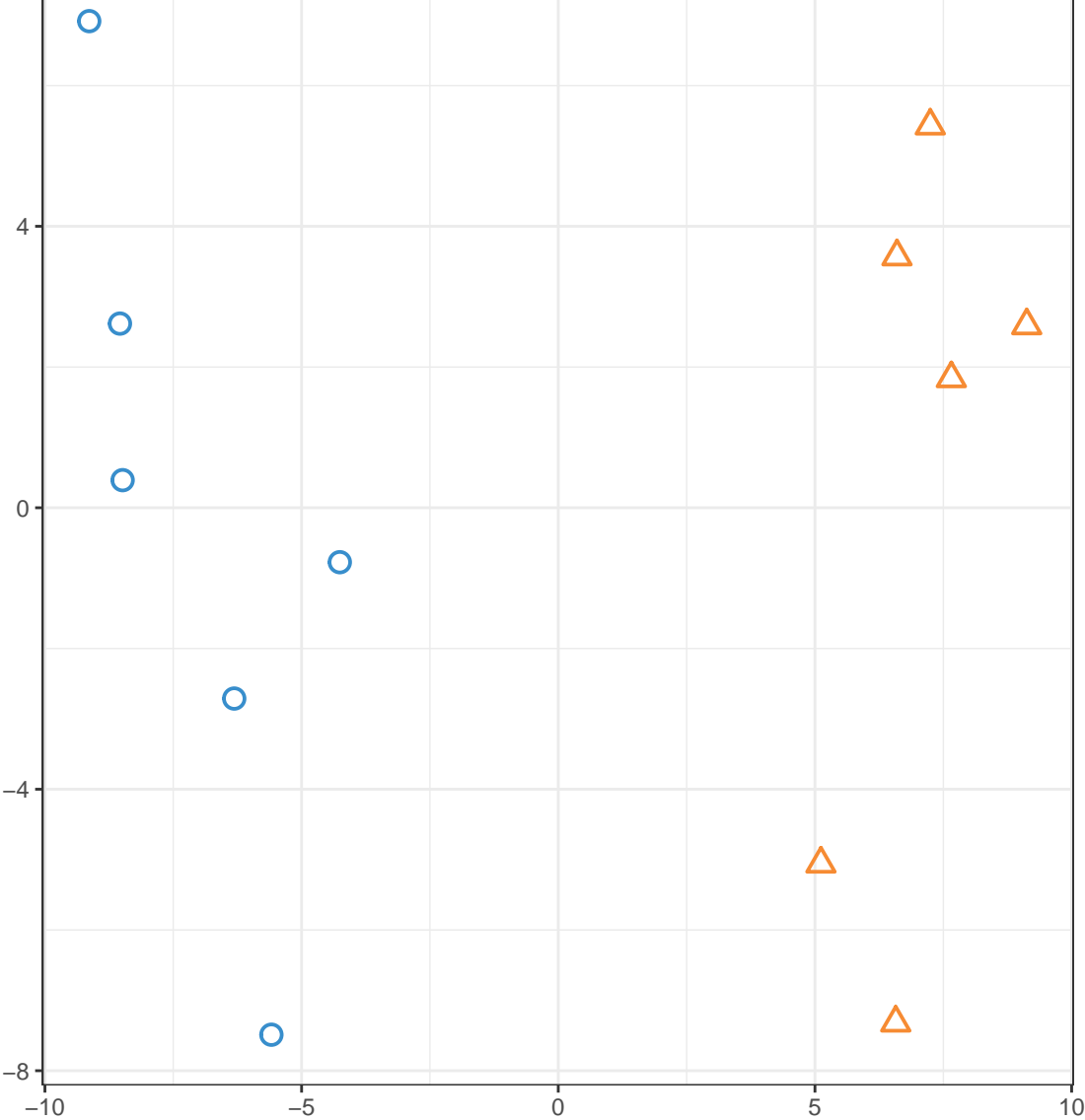
No Impute n_PCs = 10
Metabolomics PCs (1,2)

PC2: 15% expl. var

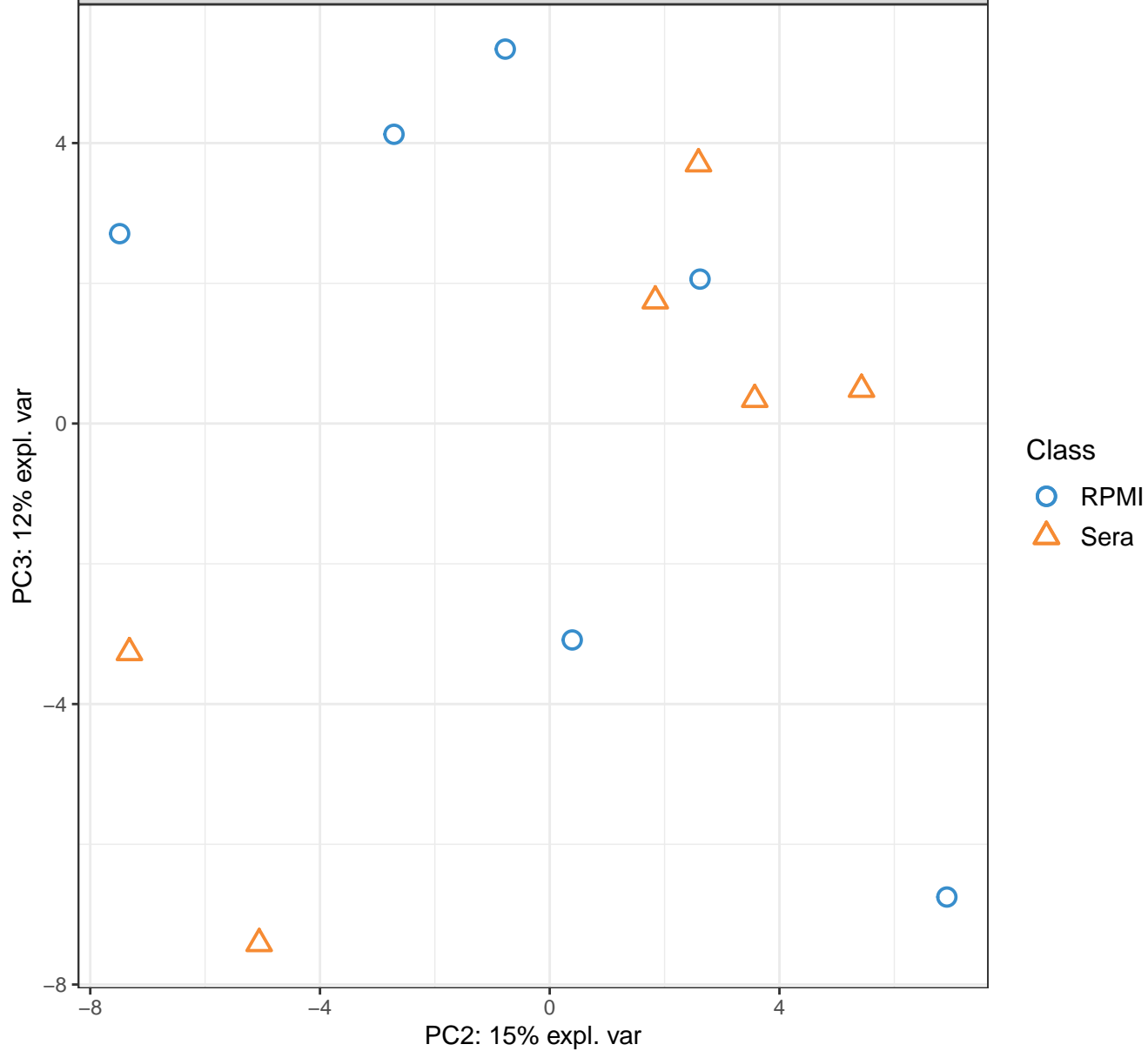
PC1: 37% expl. var

Class

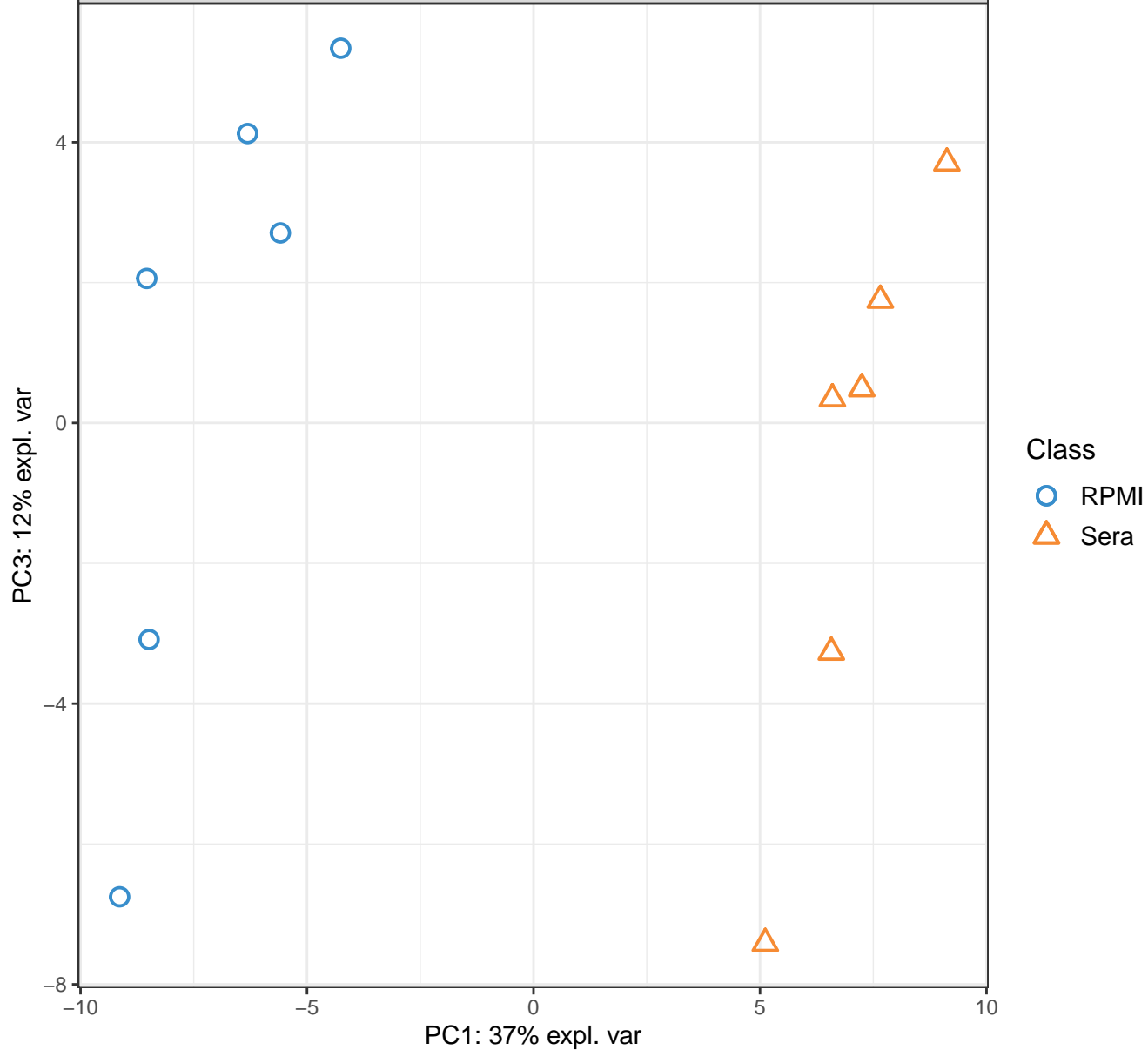
○ RPMI
△ Sera



No Impute n_PCs = 10
Metabolomics PCs (2,3)

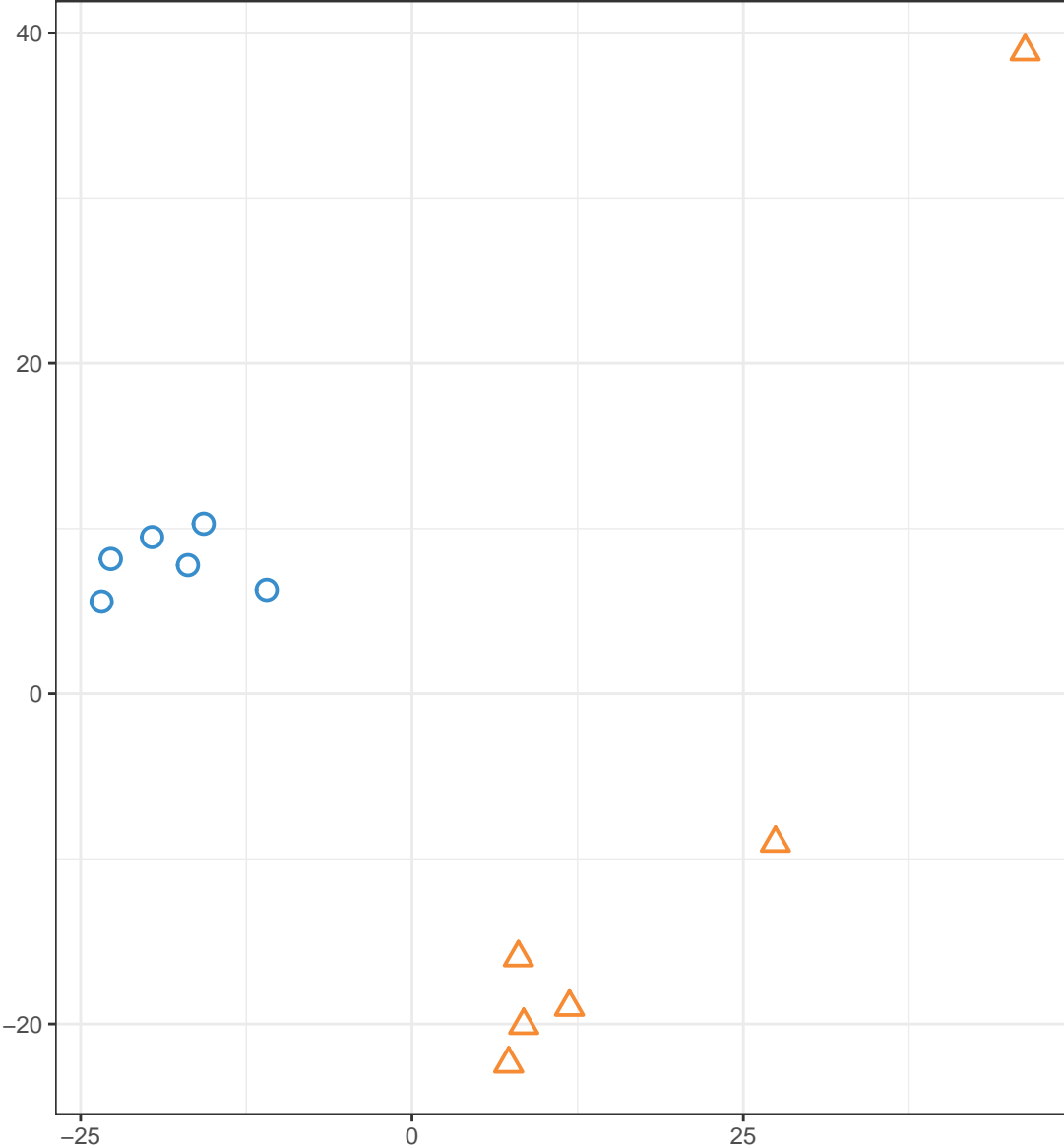


No Impute n_PCs = 10
Metabolomics PCs (1,3)



No Impute n_PCs = 10
Proteomics PCs (1,2)

PC2: 22% expl. var

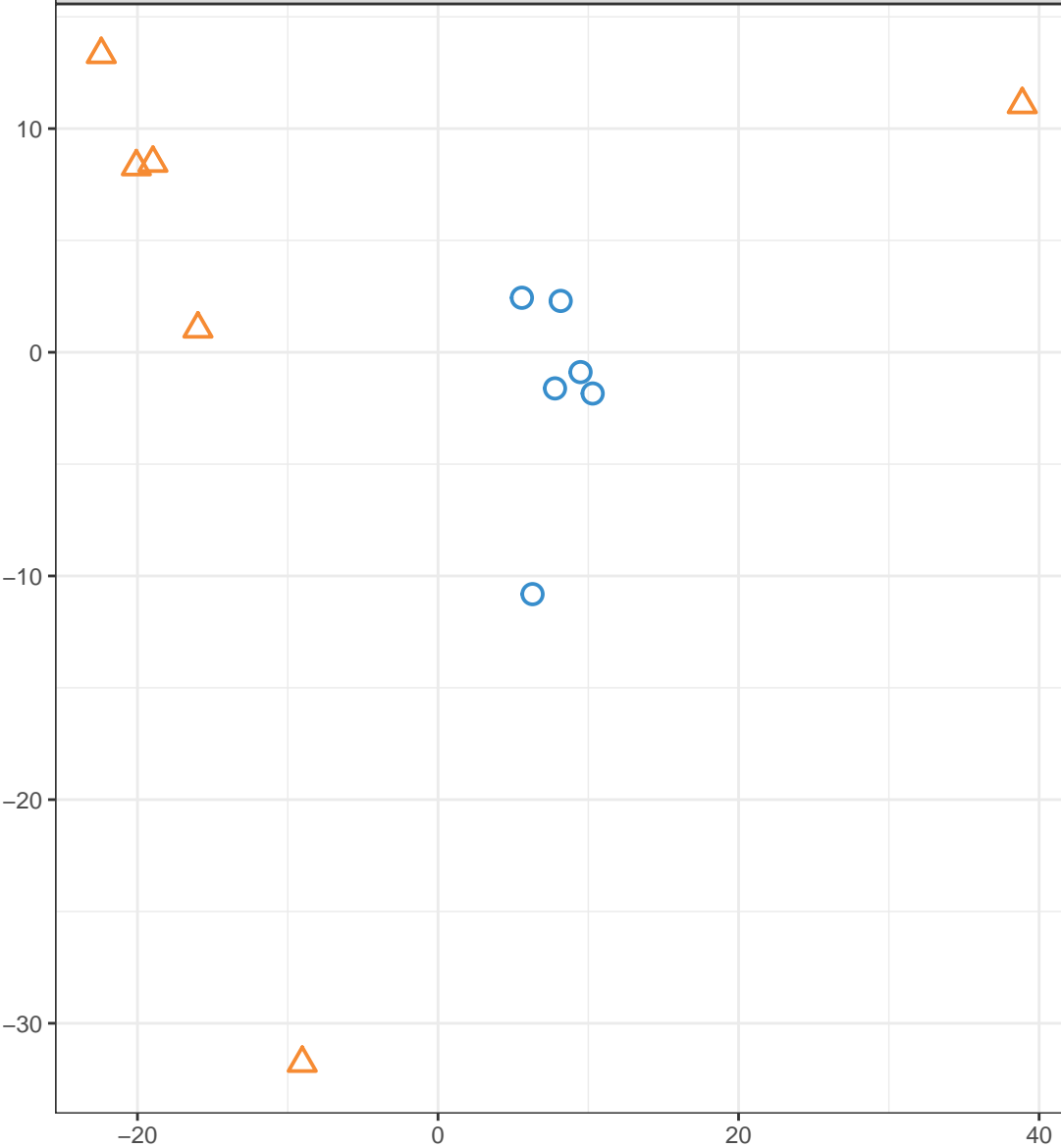


Class

○ RPMI
△ Sera

No Impute n_PCs = 10
Proteomics PCs (2,3)

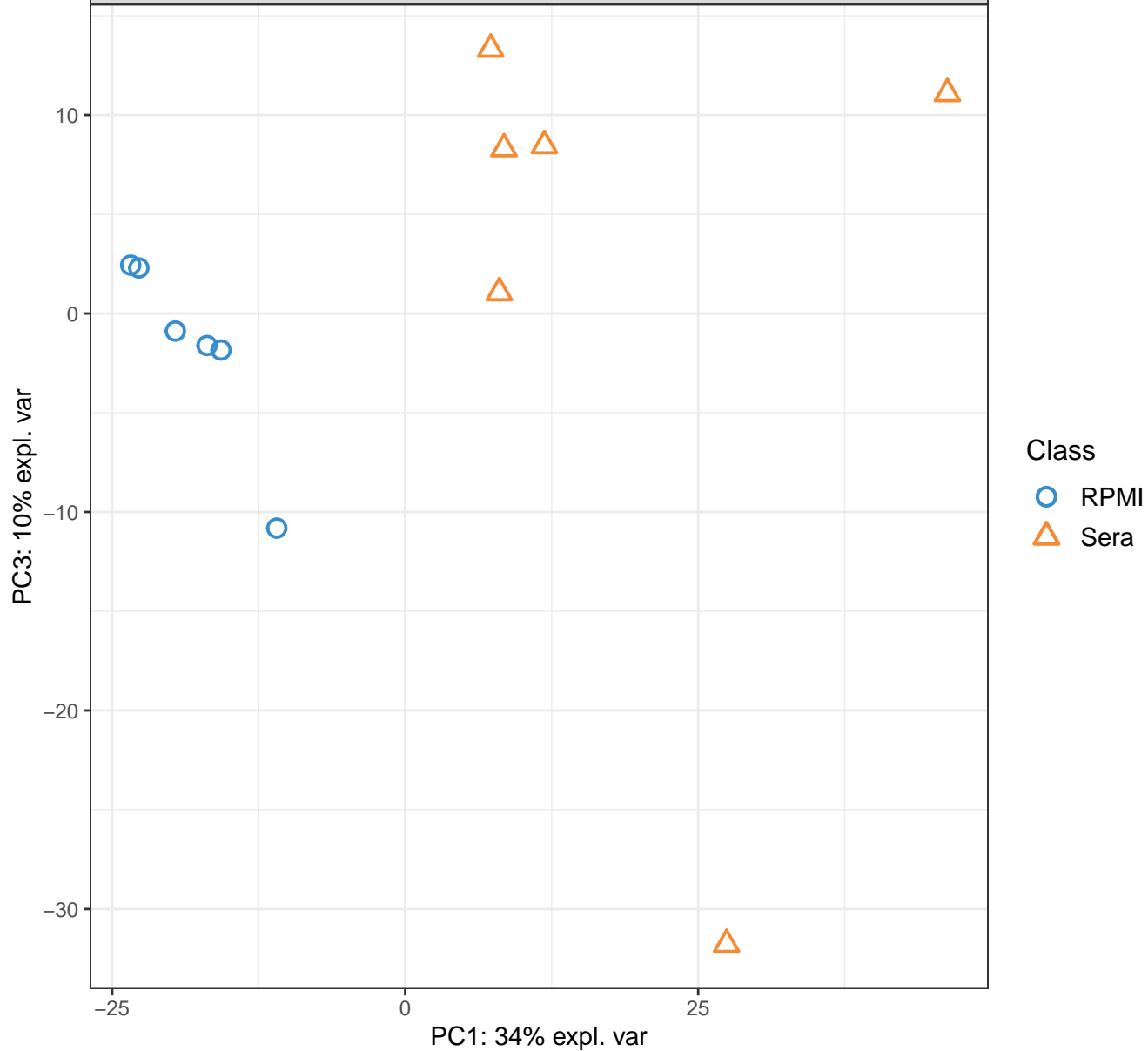
PC3: 10% expl. var



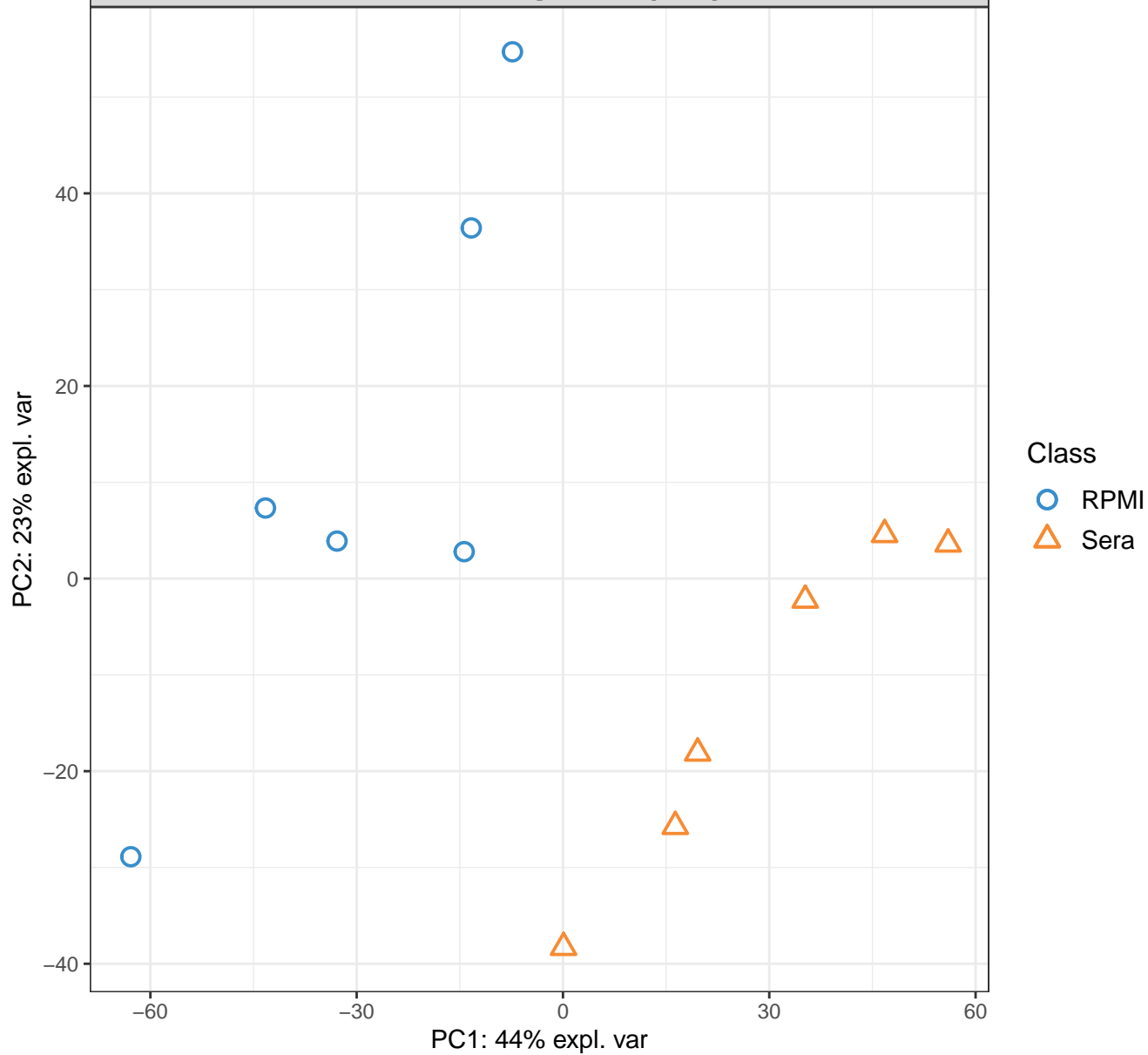
Class

○ RPMI
△ Sera

**No Impute n_PCs = 10
Proteomics PCs (1,3)**



No Impute n_PCs = 10
RNA_Seq PCs (1,2)



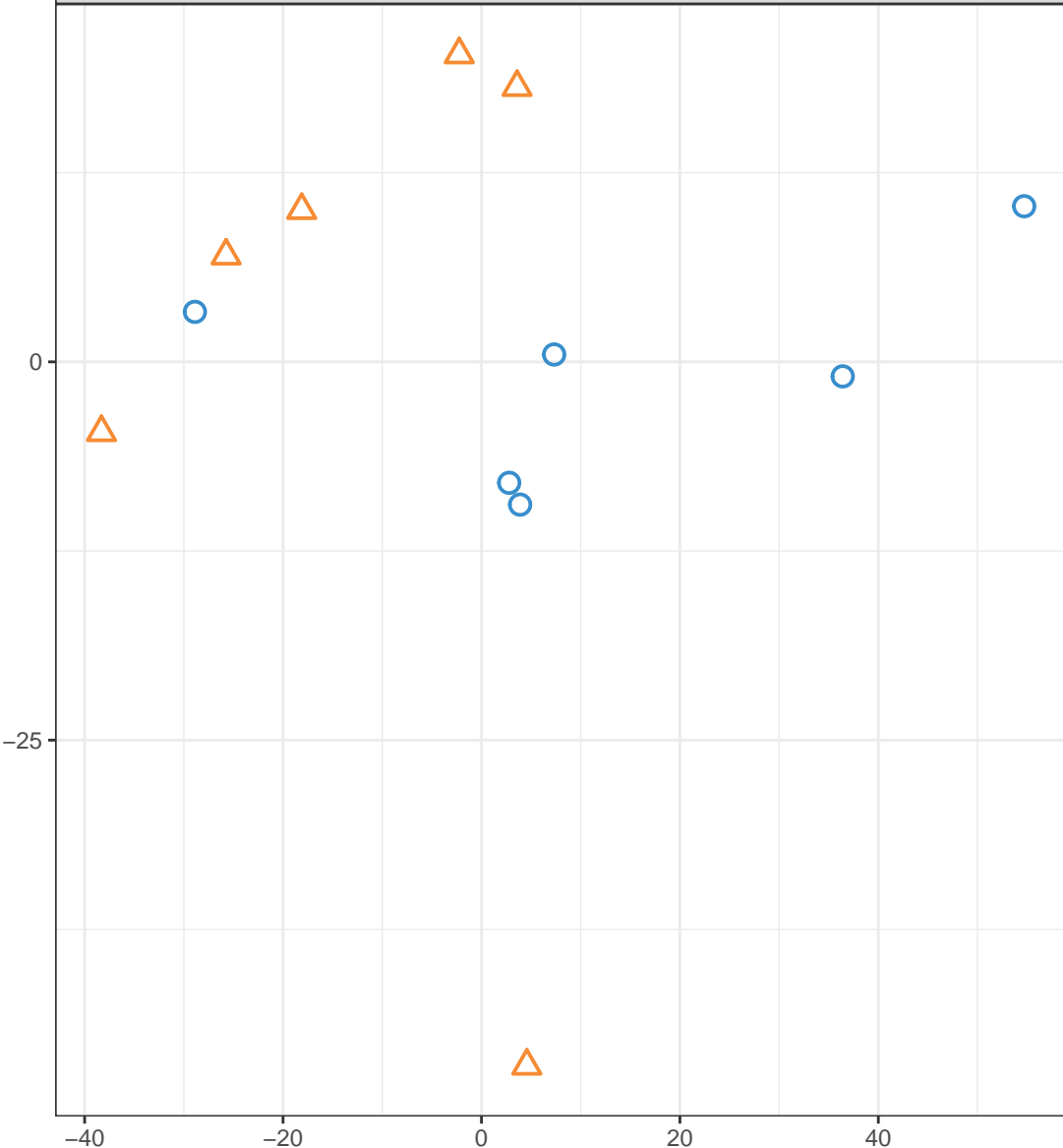
No Impute n_PCs = 10
RNA_Seq PCs (2,3)

PC3: 10% expl. var

PC2: 23% expl. var

Class

○ RPMI
△ Sera



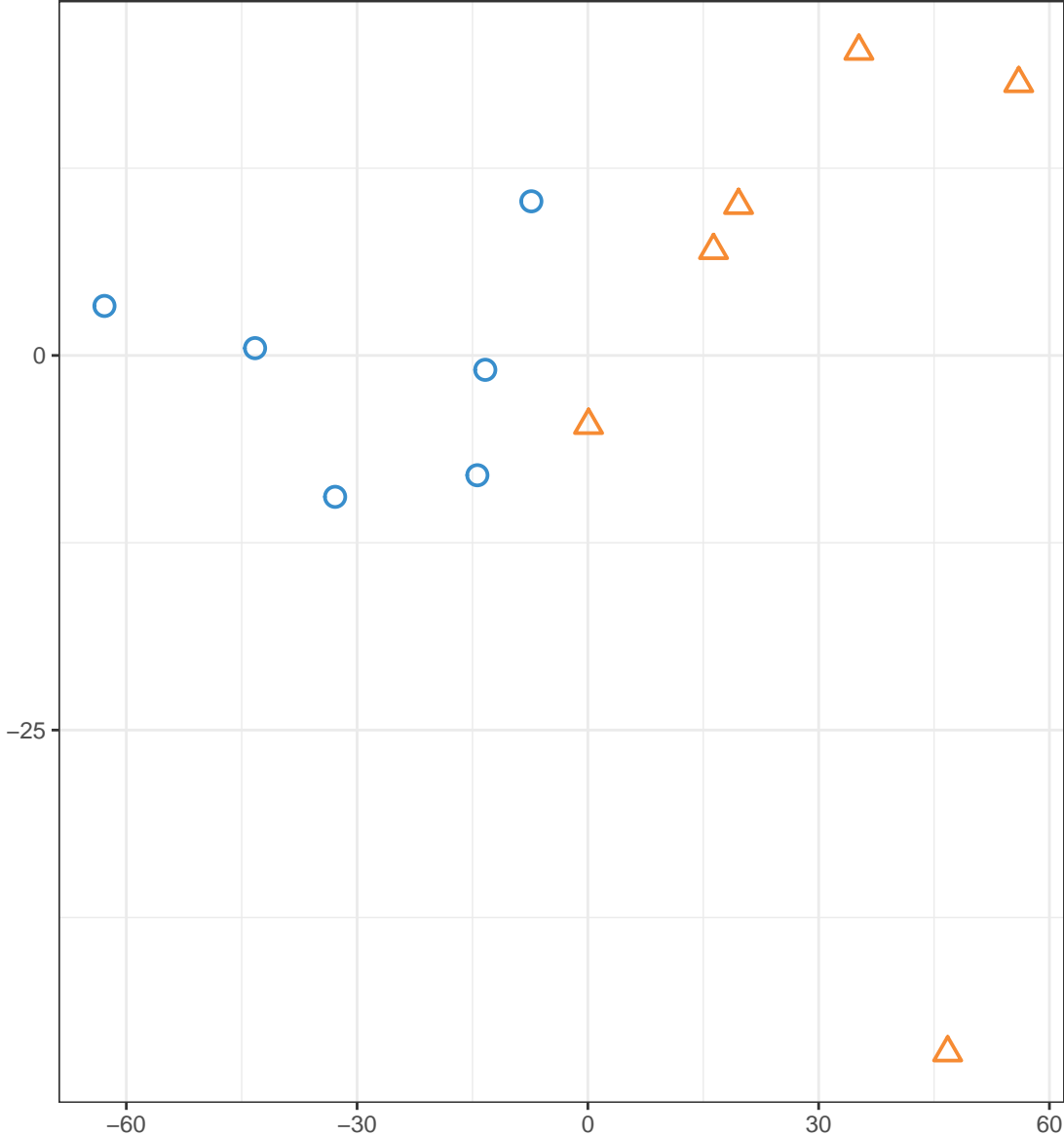
No Impute n_PCs = 10
RNA_Seq PCs (1,3)

PC3: 10% expl. var

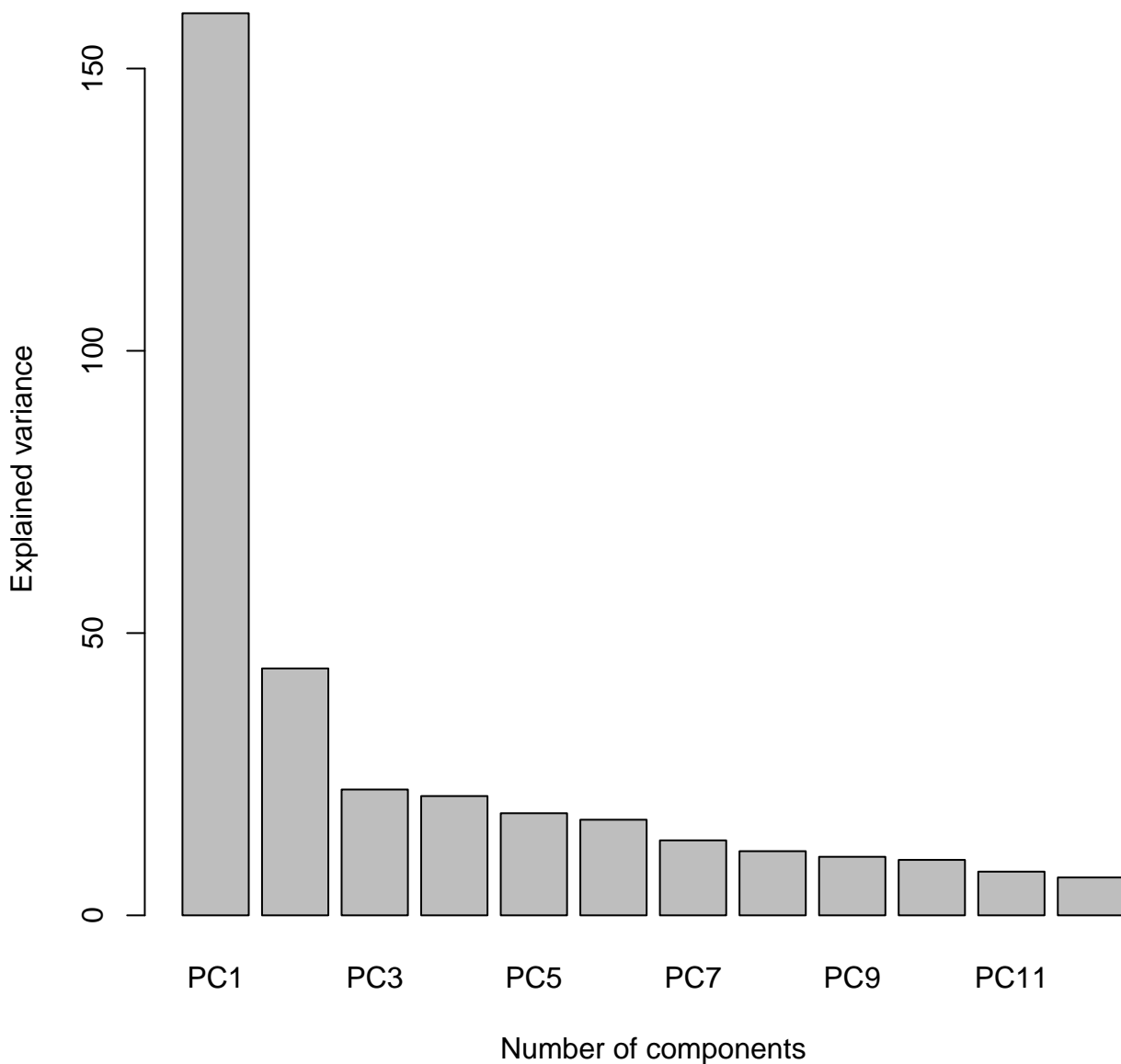
PC1: 44% expl. var

Class

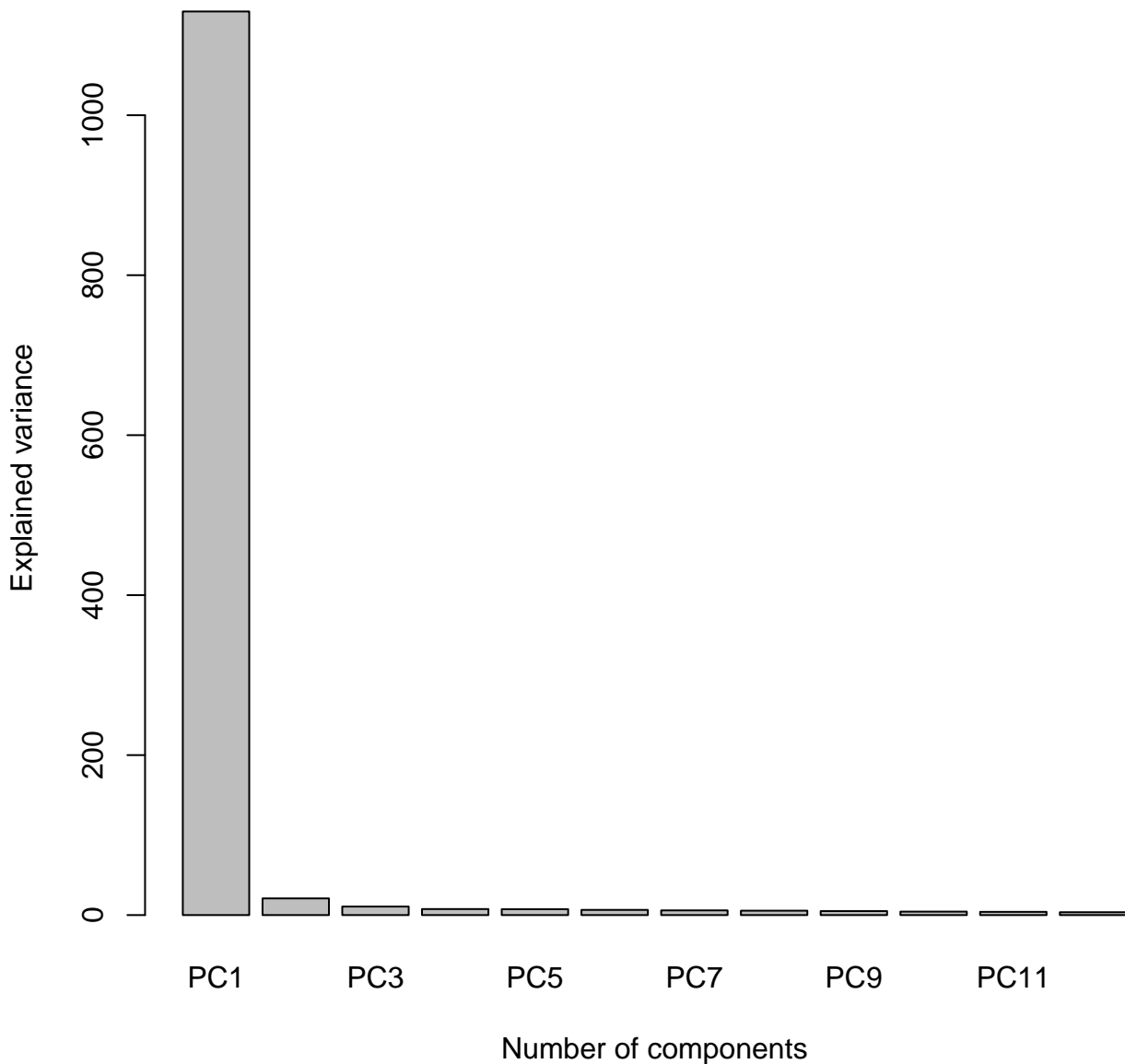
○ RPMI
△ Sera



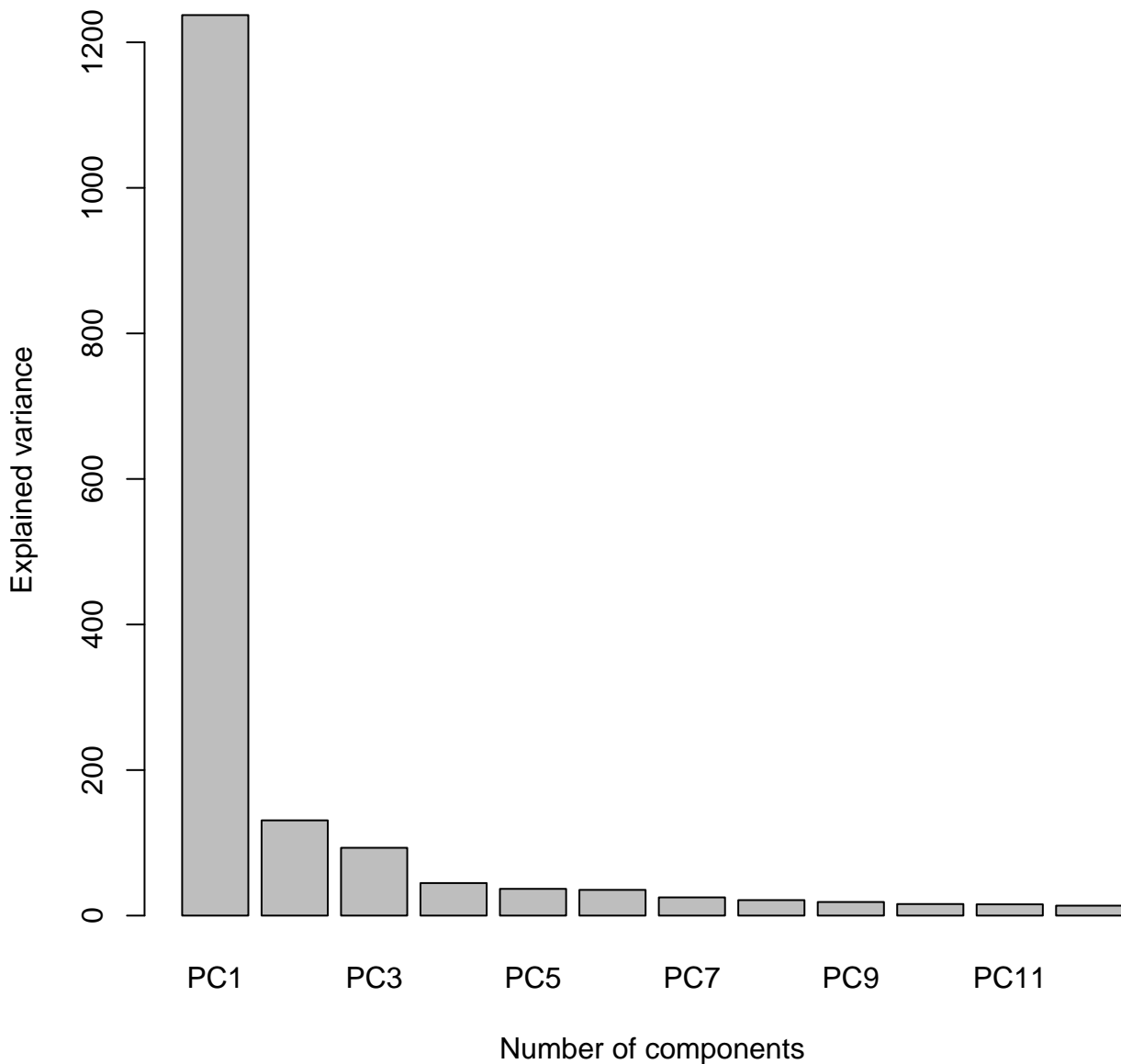
Metabolomics Screeplot (nipals imputed)



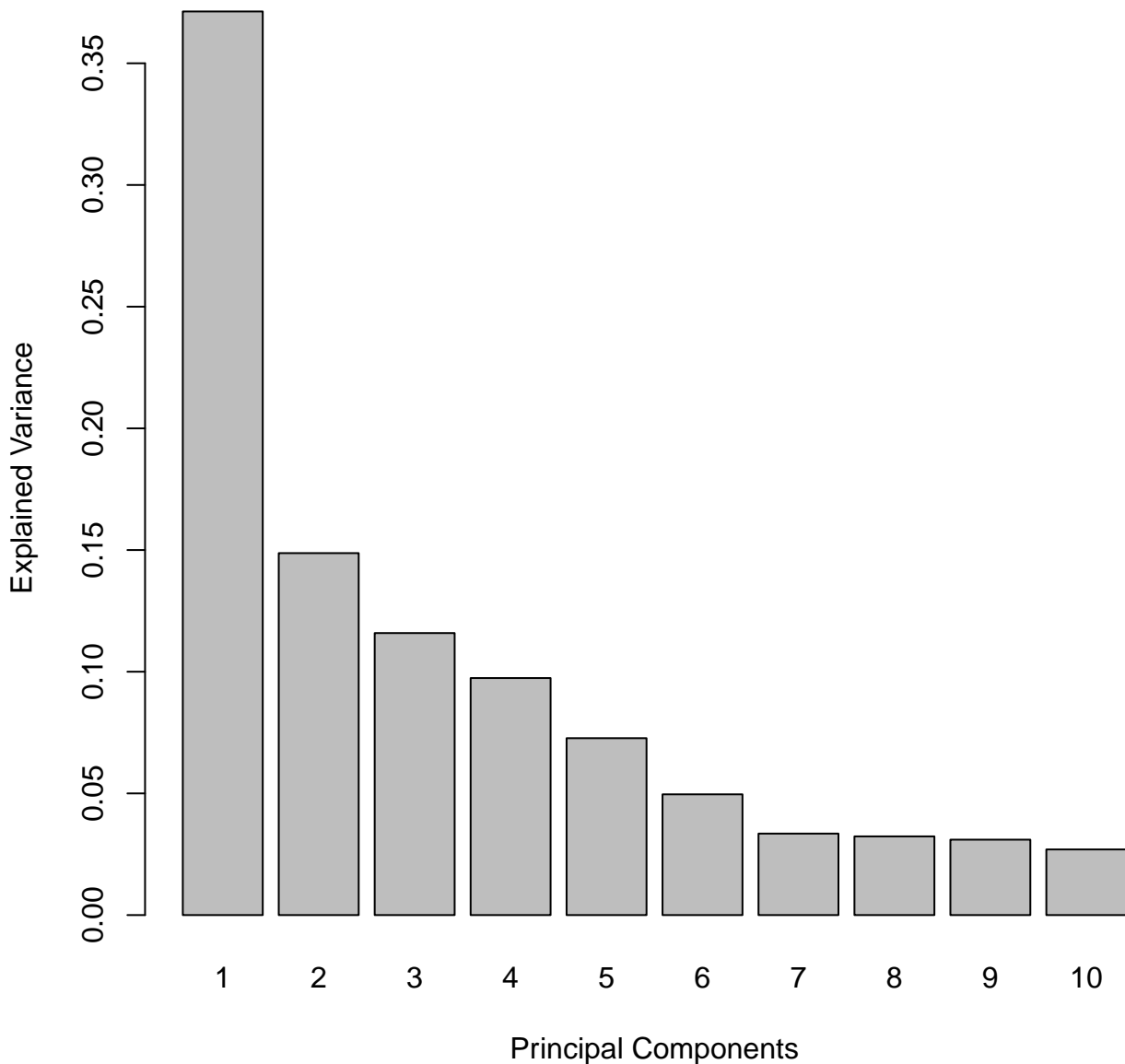
Proteomics Screeplot (nipals imputed)



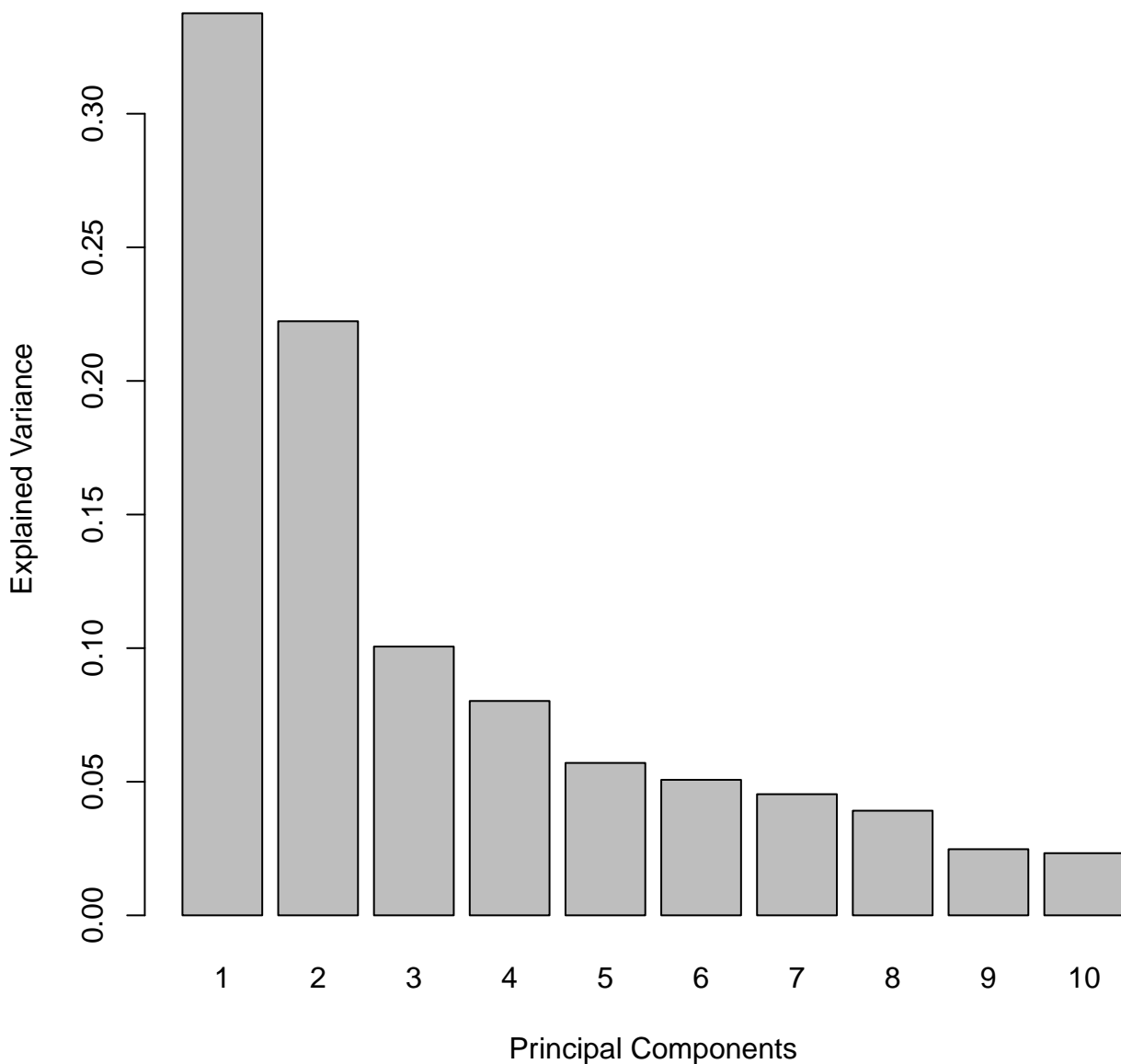
RNA_Seq Screeplot (nipals imputed)



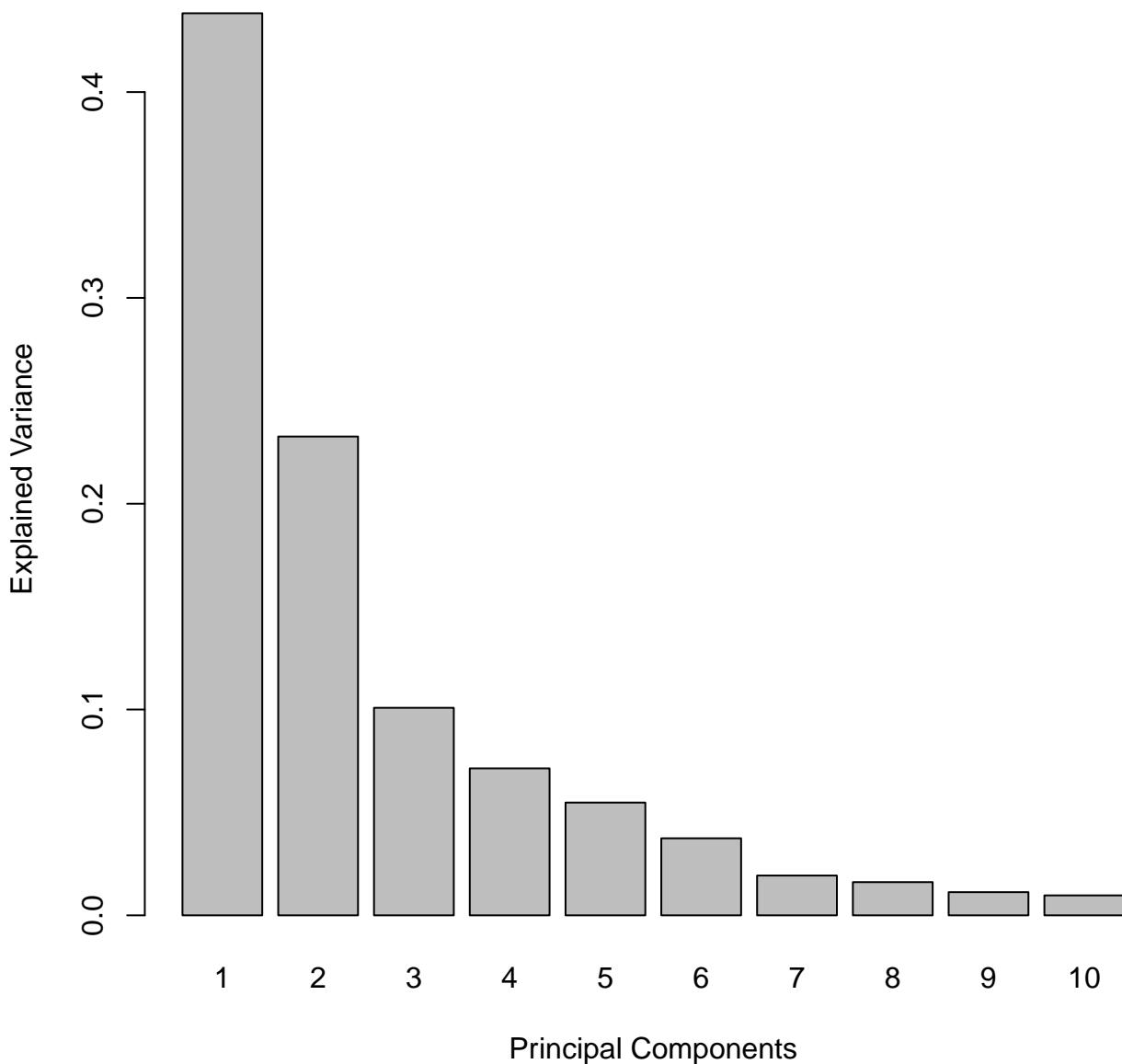
Metabolomics screeplot



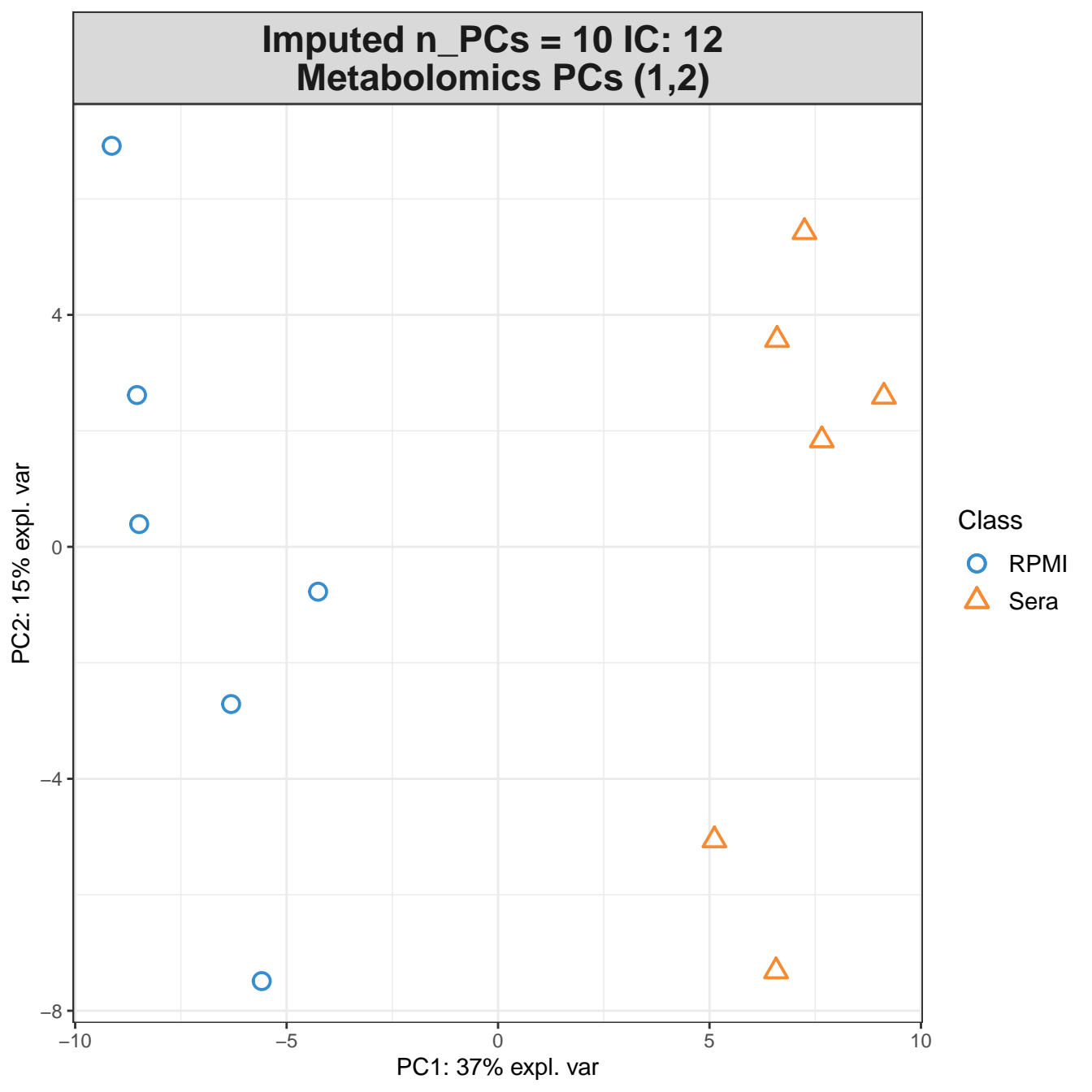
Proteomics screeplot



RNA_Seq screeplot

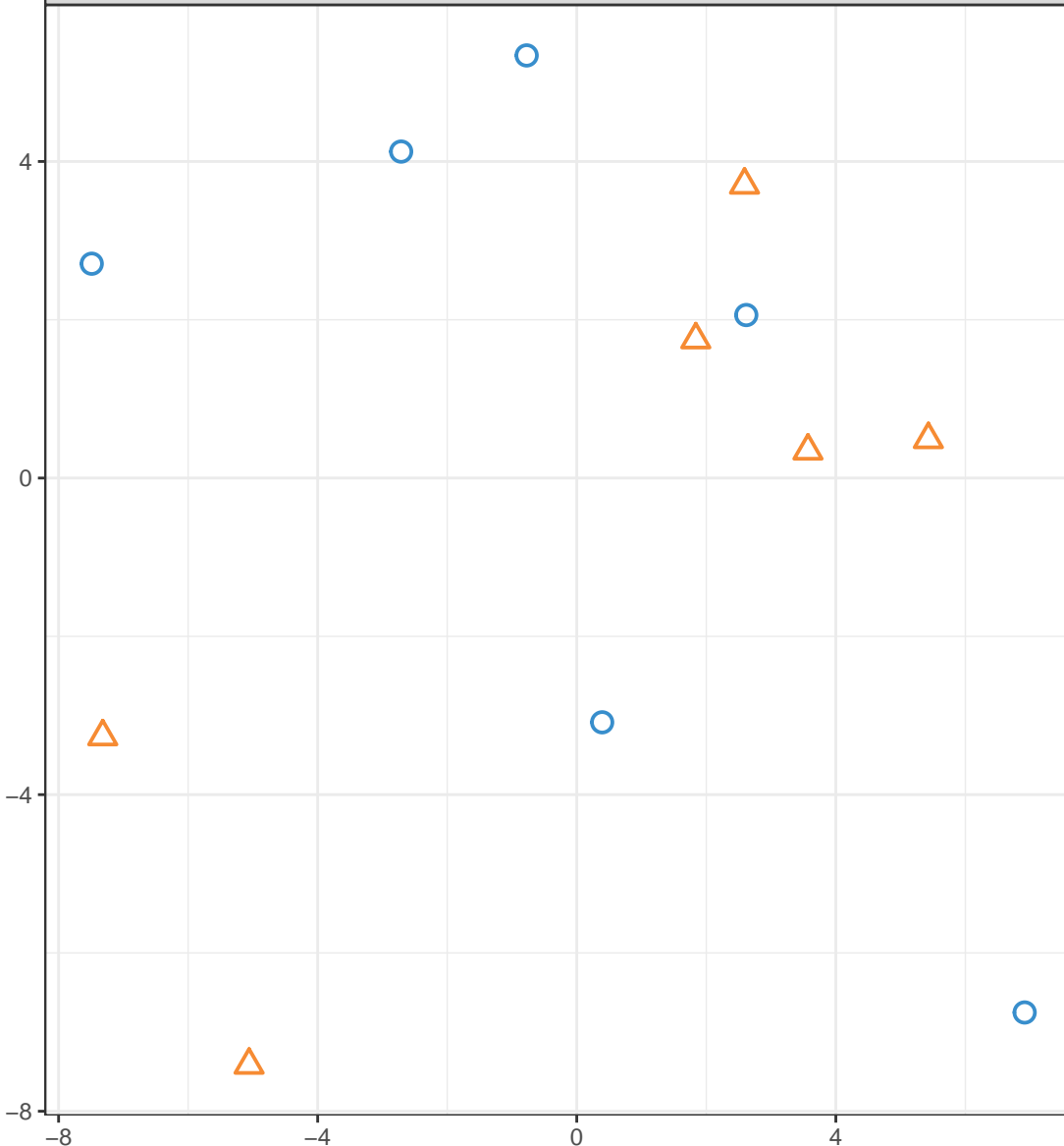


Imputed n_PCs = 10 IC: 12
Metabolomics PCs (1,2)



**Imputed n_PCs = 10 IC: 12
Metabolomics PCs (2,3)**

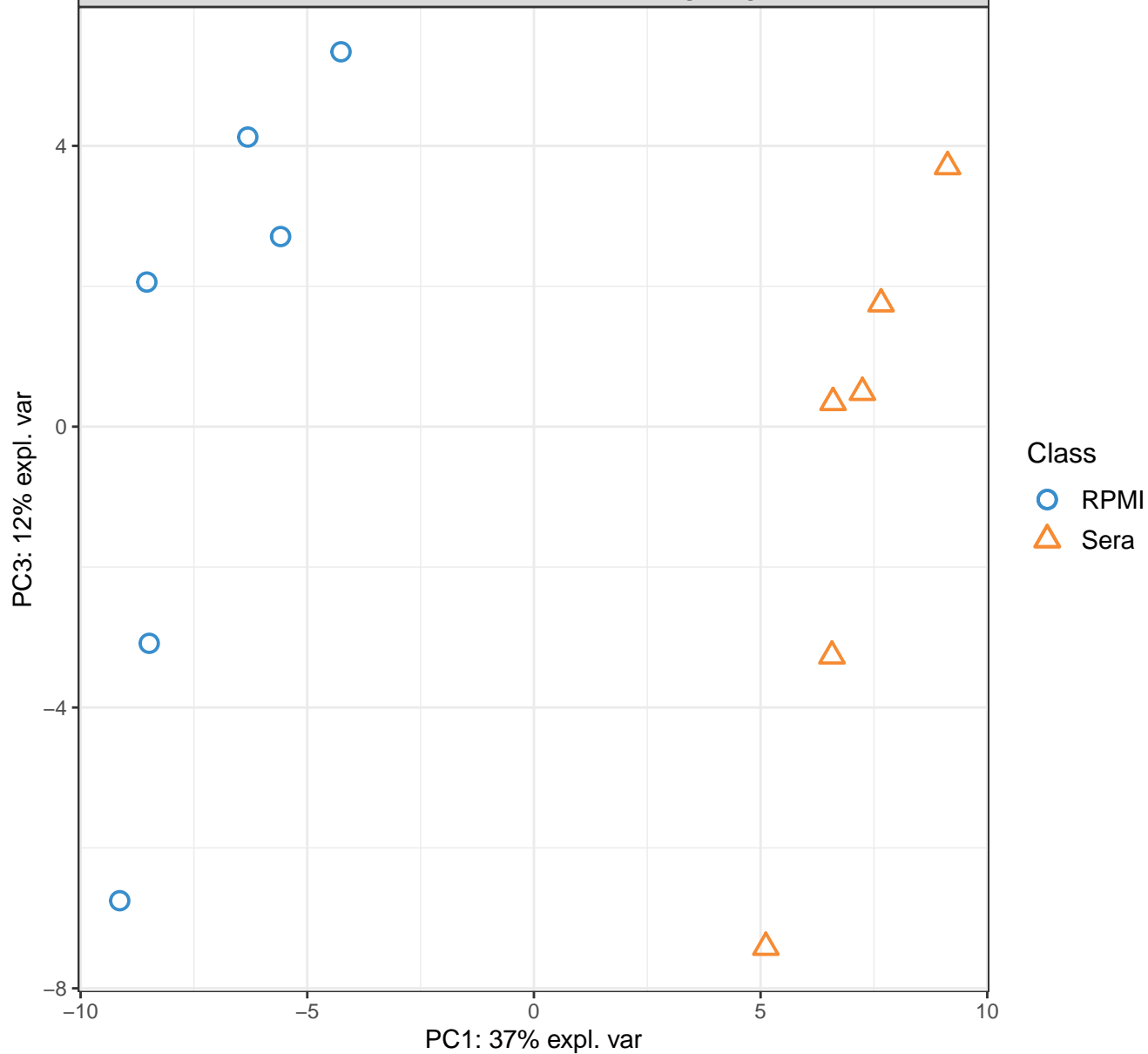
PC3: 12% expl. var



Class

○ RPMI
△ Sera

Imputed n_PCs = 10 IC: 12
Metabolomics PCs (1,3)



Imputed n_PCs = 10 IC: 12
Proteomics PCs (1,2)

PC2: 22% expl. var

40

20

0

-20

-25

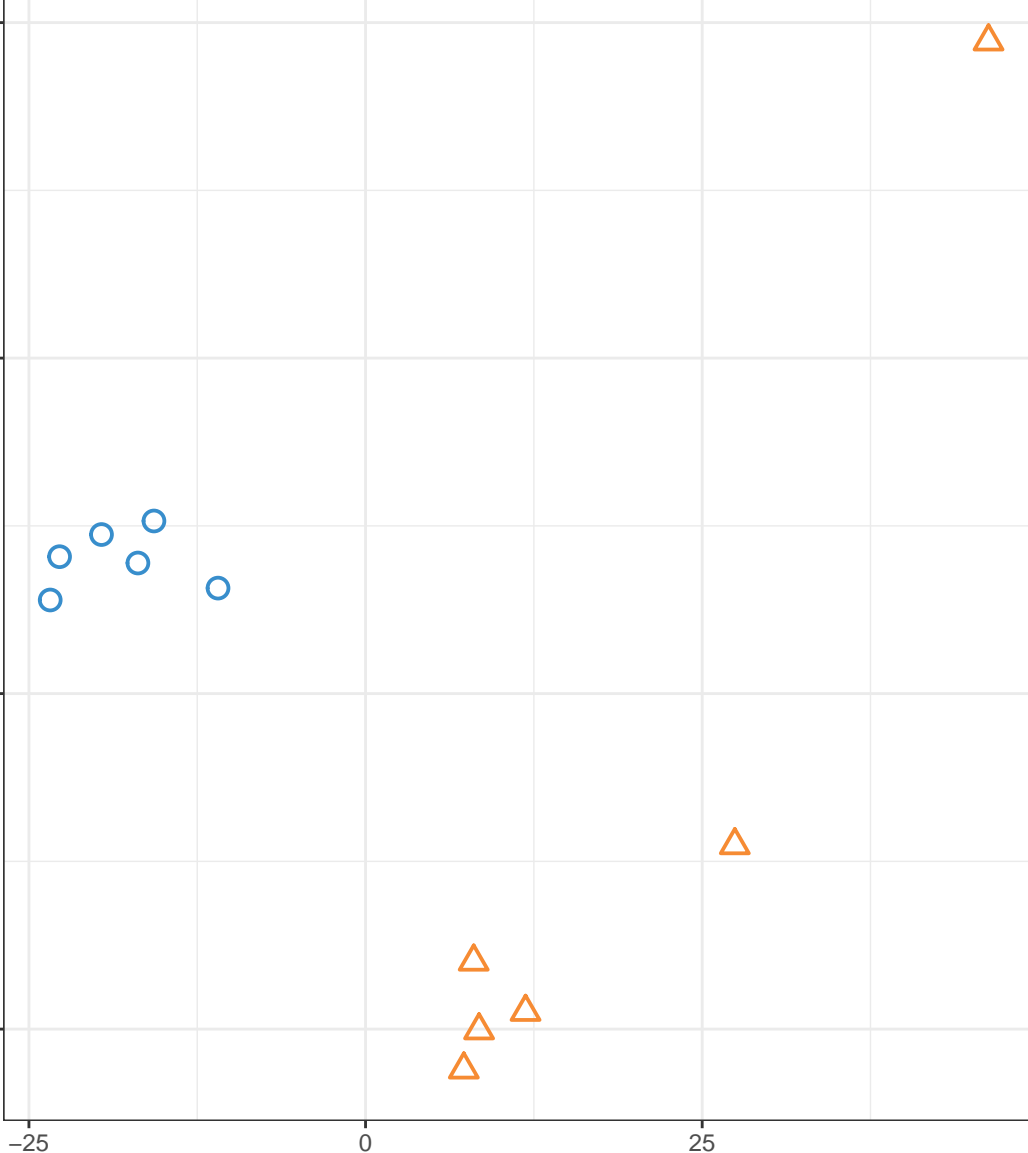
0

25

PC1: 34% expl. var

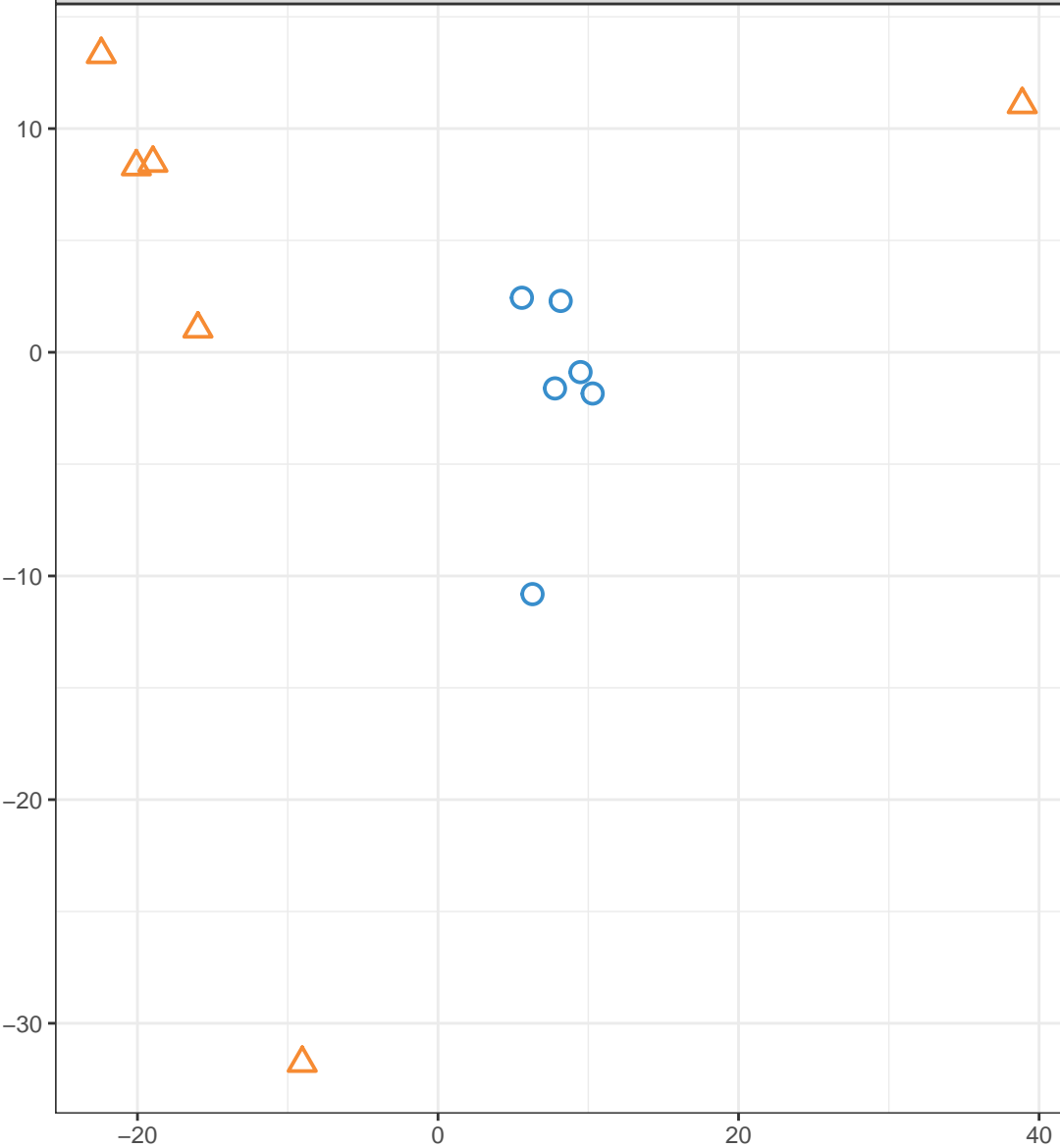
Class

○ RPMI
△ Sera



Imputed n_PCs = 10 IC: 12
Proteomics PCs (2,3)

PC3: 10% expl. var

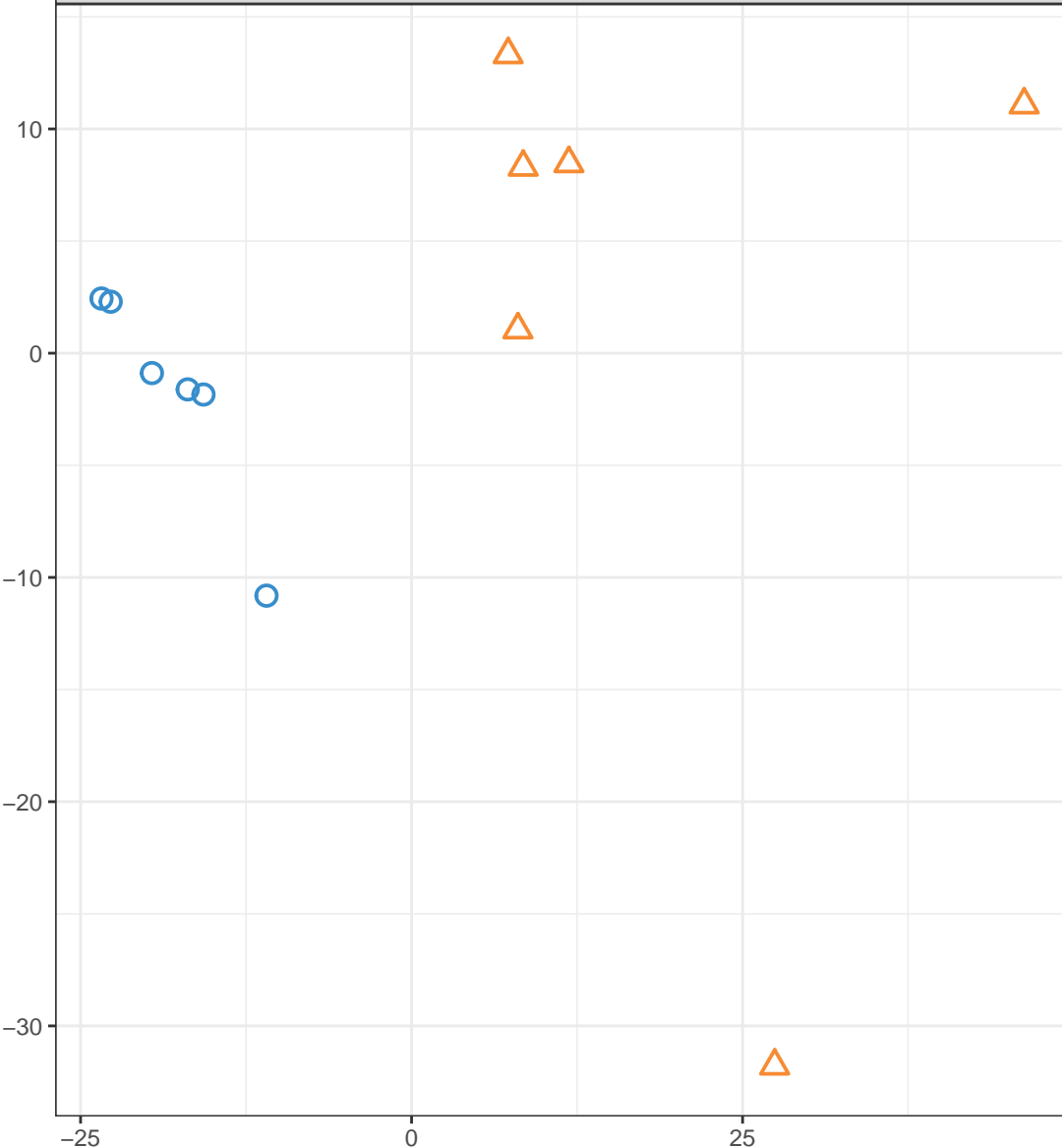


Class

○ RPMI
△ Sera

Imputed n_PCs = 10 IC: 12
Proteomics PCs (1,3)

PC3: 10% expl. var



PC1: 34% expl. var

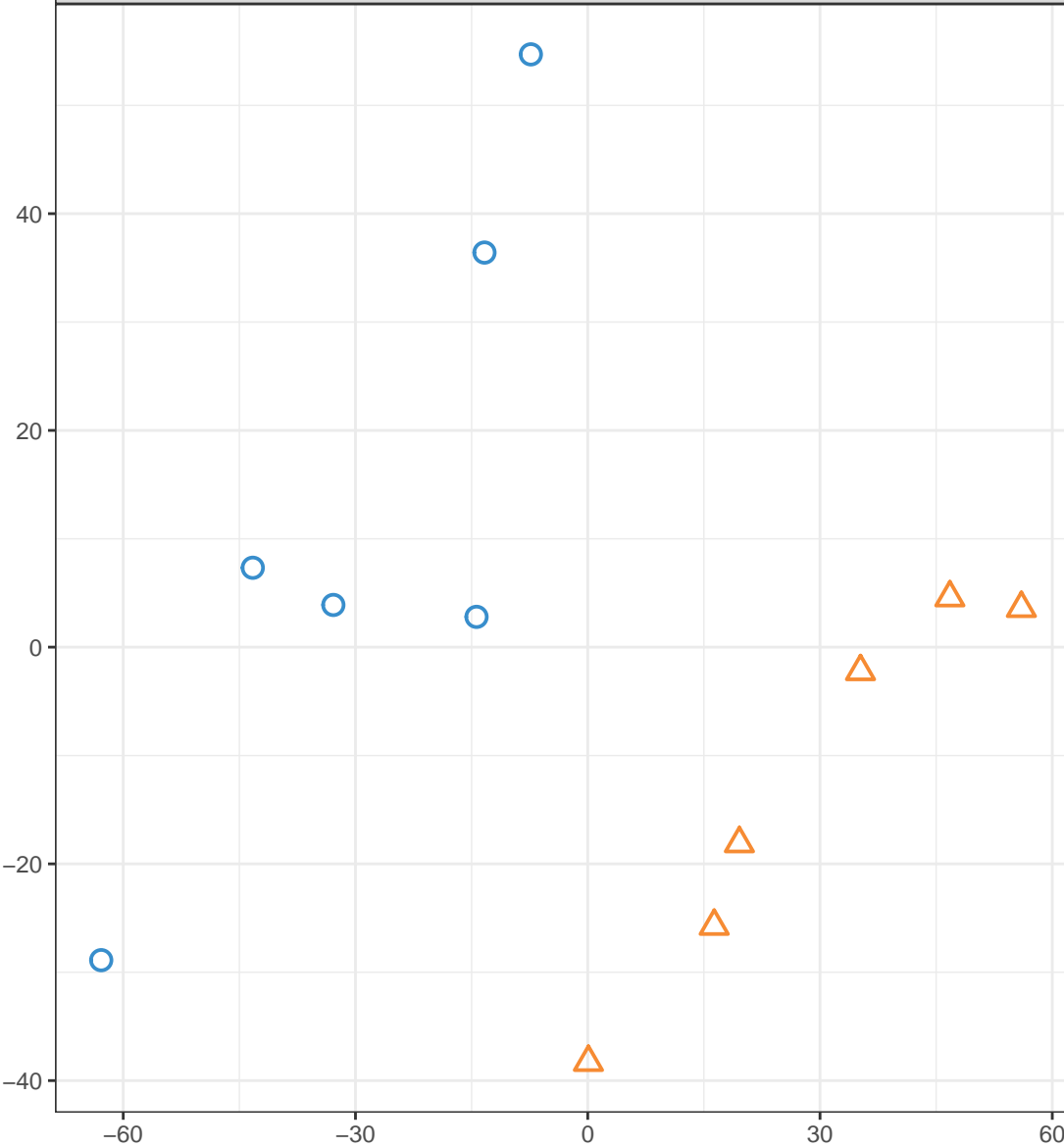
Imputed n_PCs = 10 IC: 12
RNA_Seq PCs (1,2)

PC2: 23% expl. var

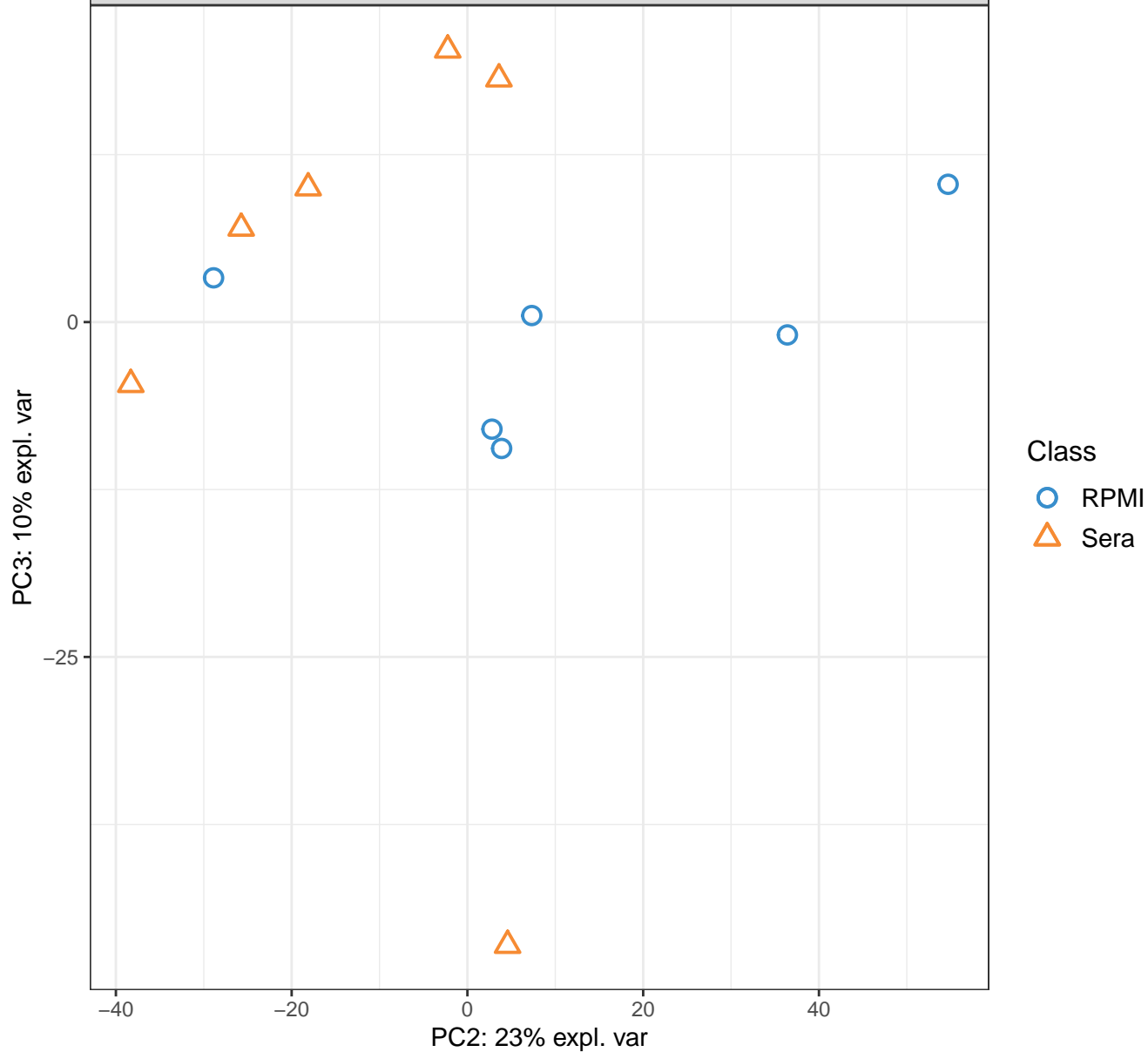
PC1: 44% expl. var

Class

○ RPMI
△ Sera



Imputed n_PCs = 10 IC: 12
RNA_Seq PCs (2,3)



Imputed n_PCs = 10 IC: 12
RNA_Seq PCs (1,3)

PC3: 10% expl. var

0

-25

-60

-30

0

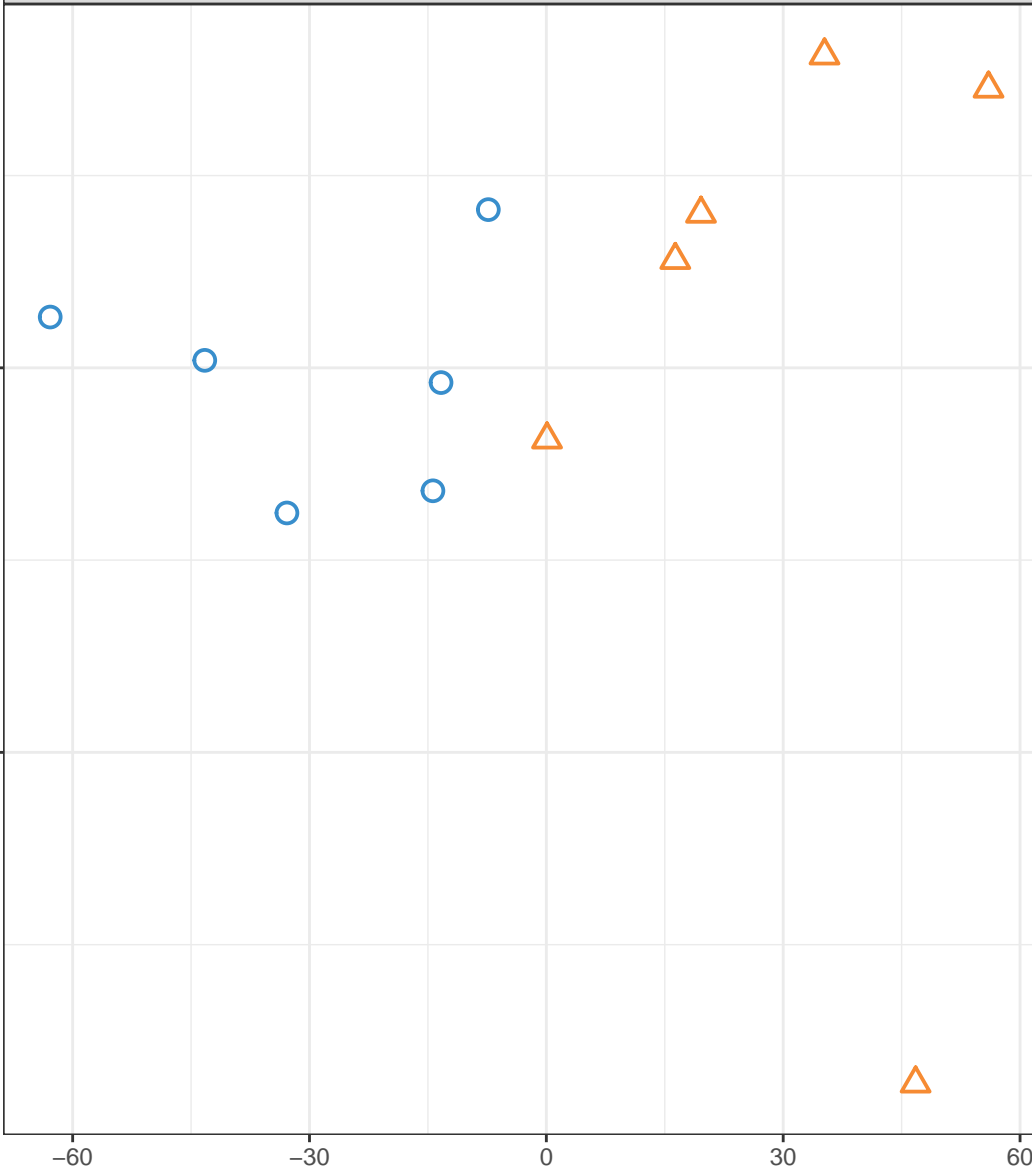
30

60

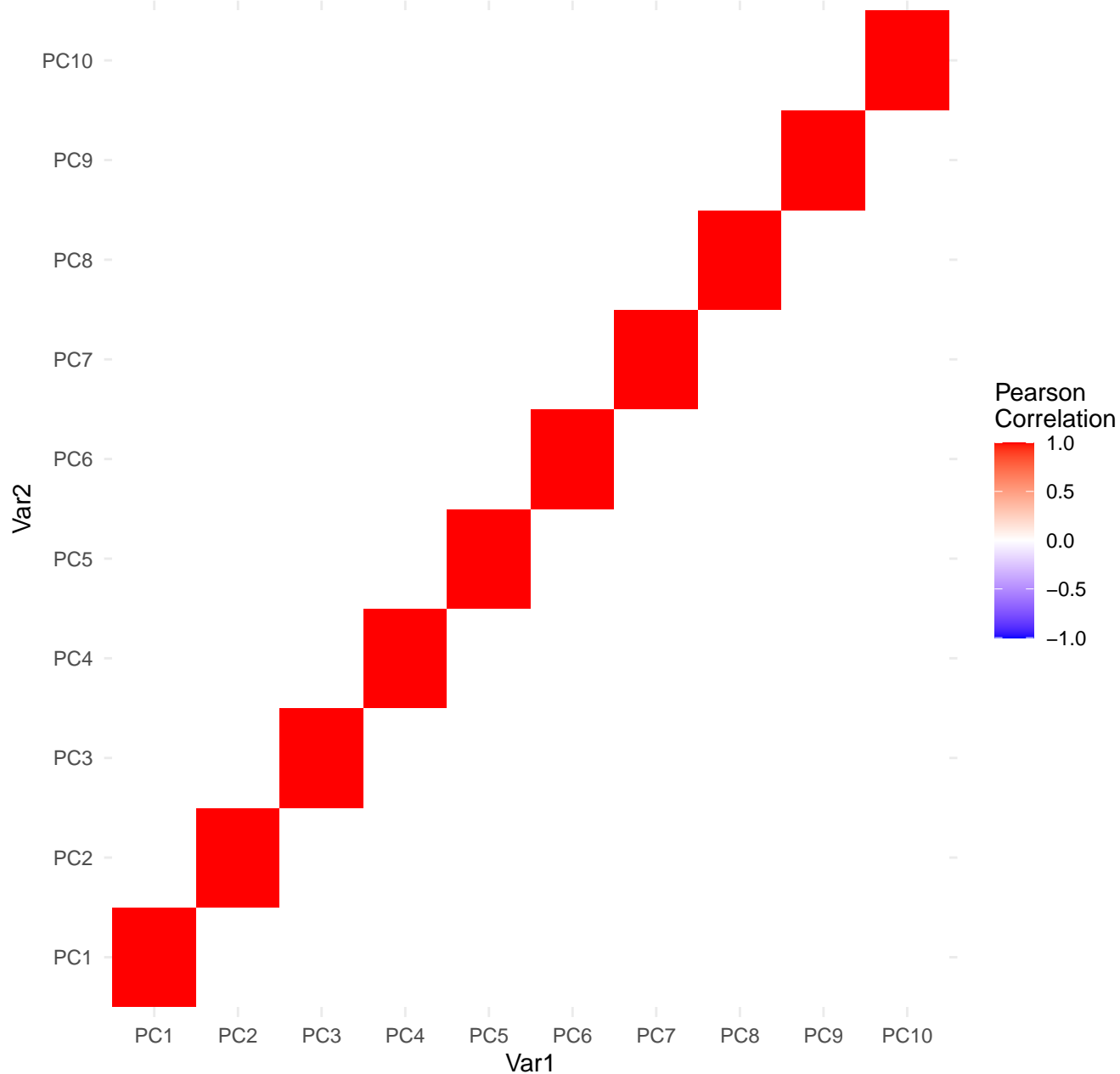
PC1: 44% expl. var

Class

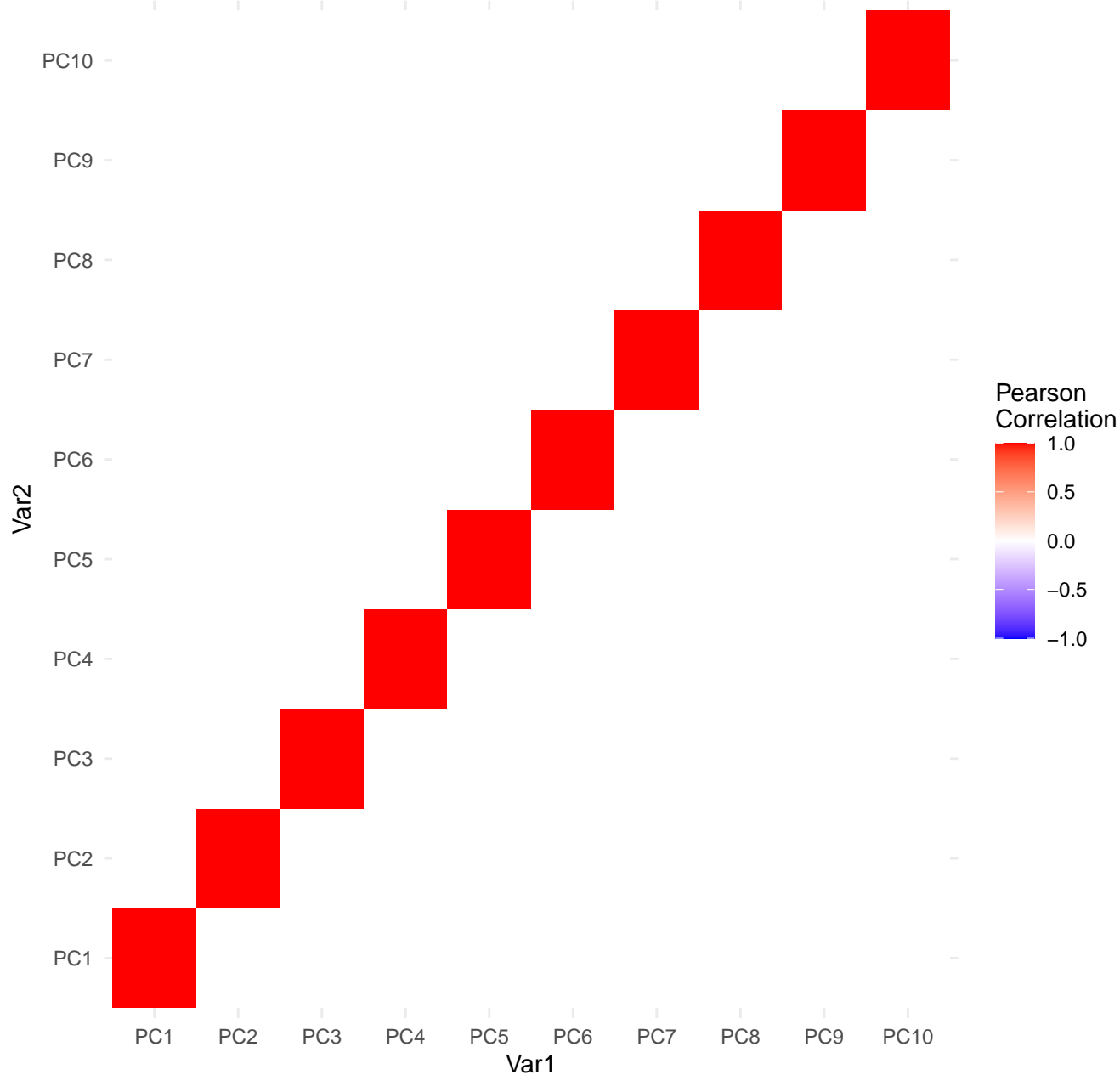
○ RPMI
△ Sera



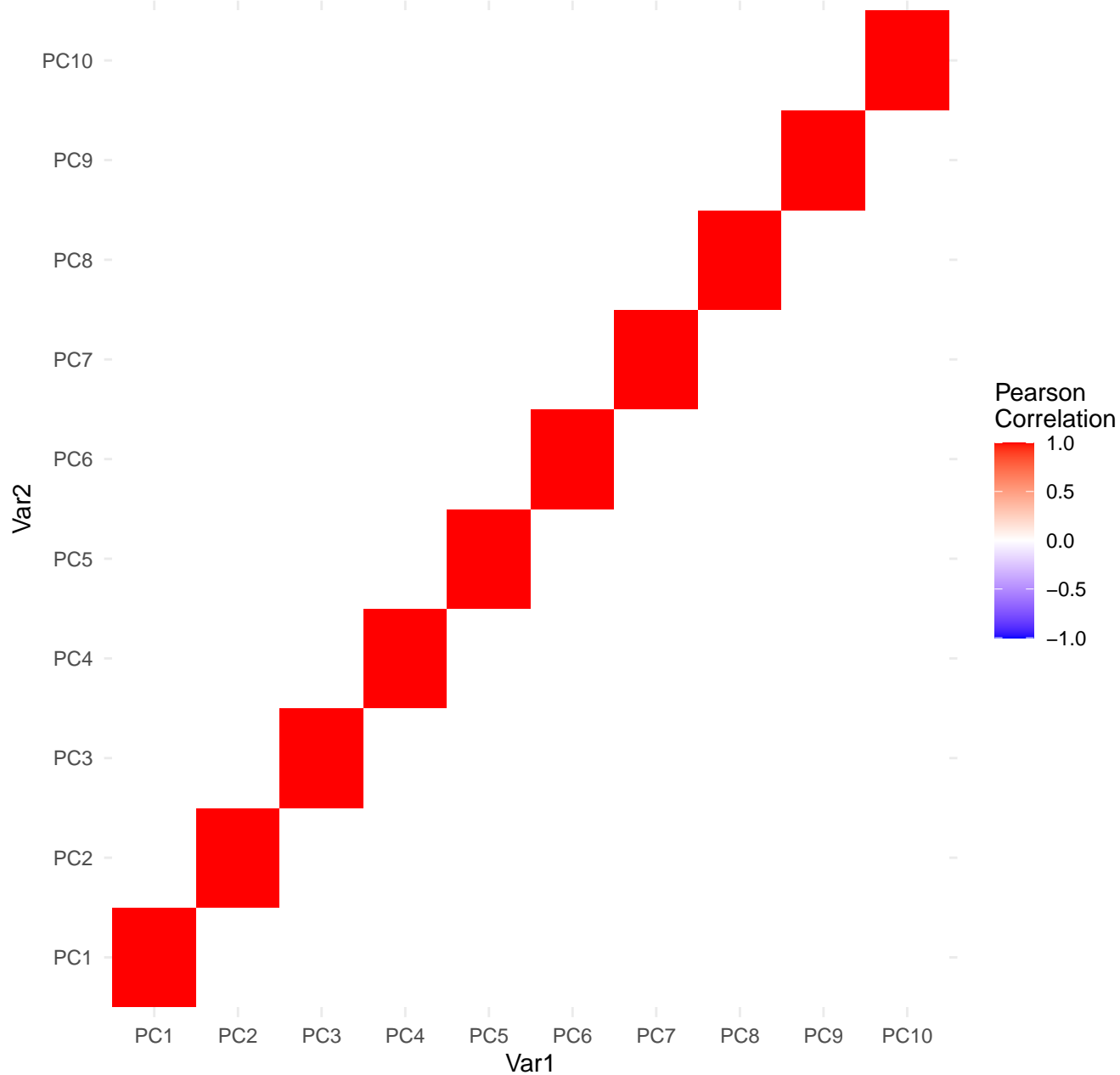
Metabolomics Correlation between imputed and unimputed data



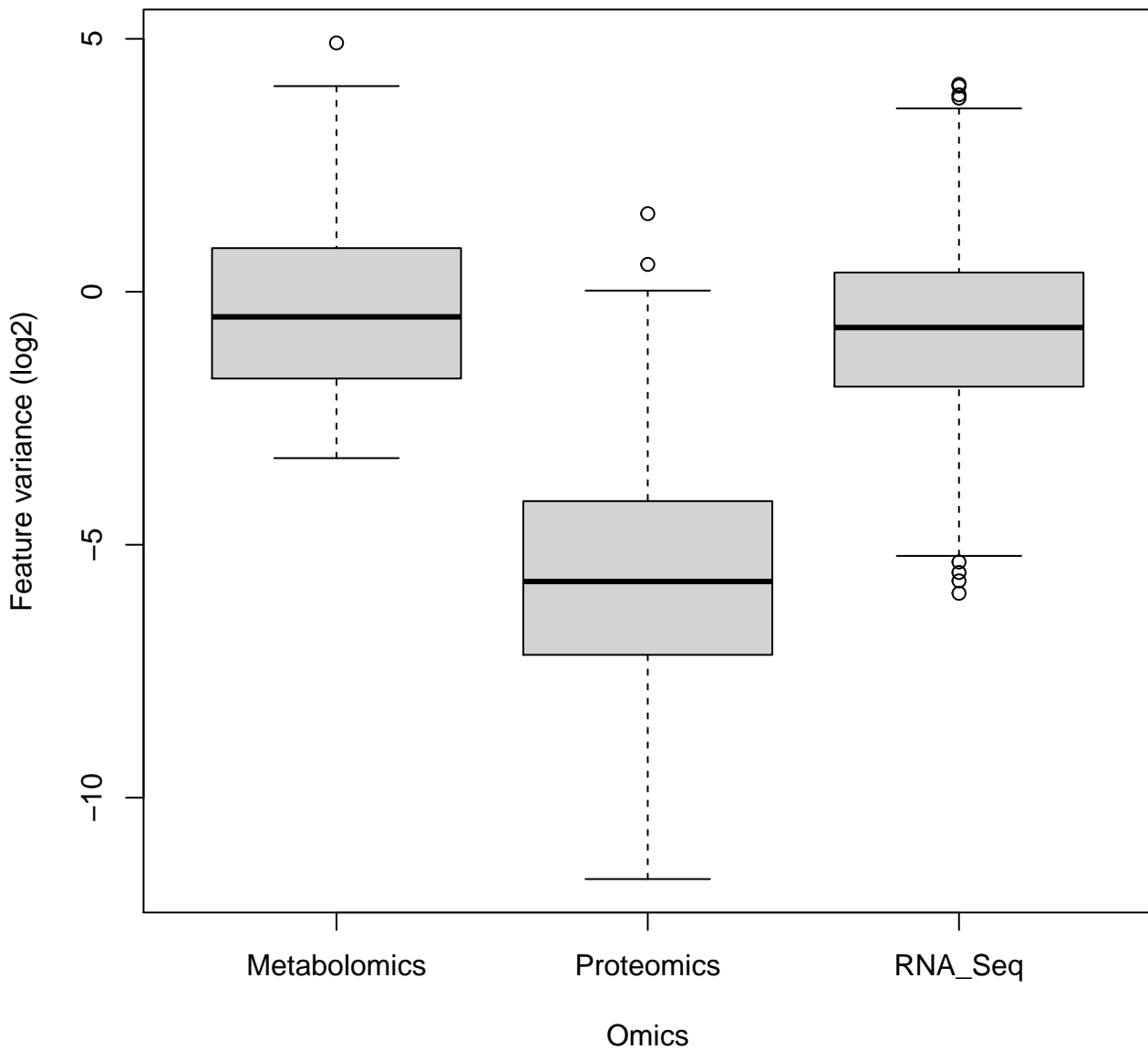
Proteomics Correlation between imputed and unimputed data



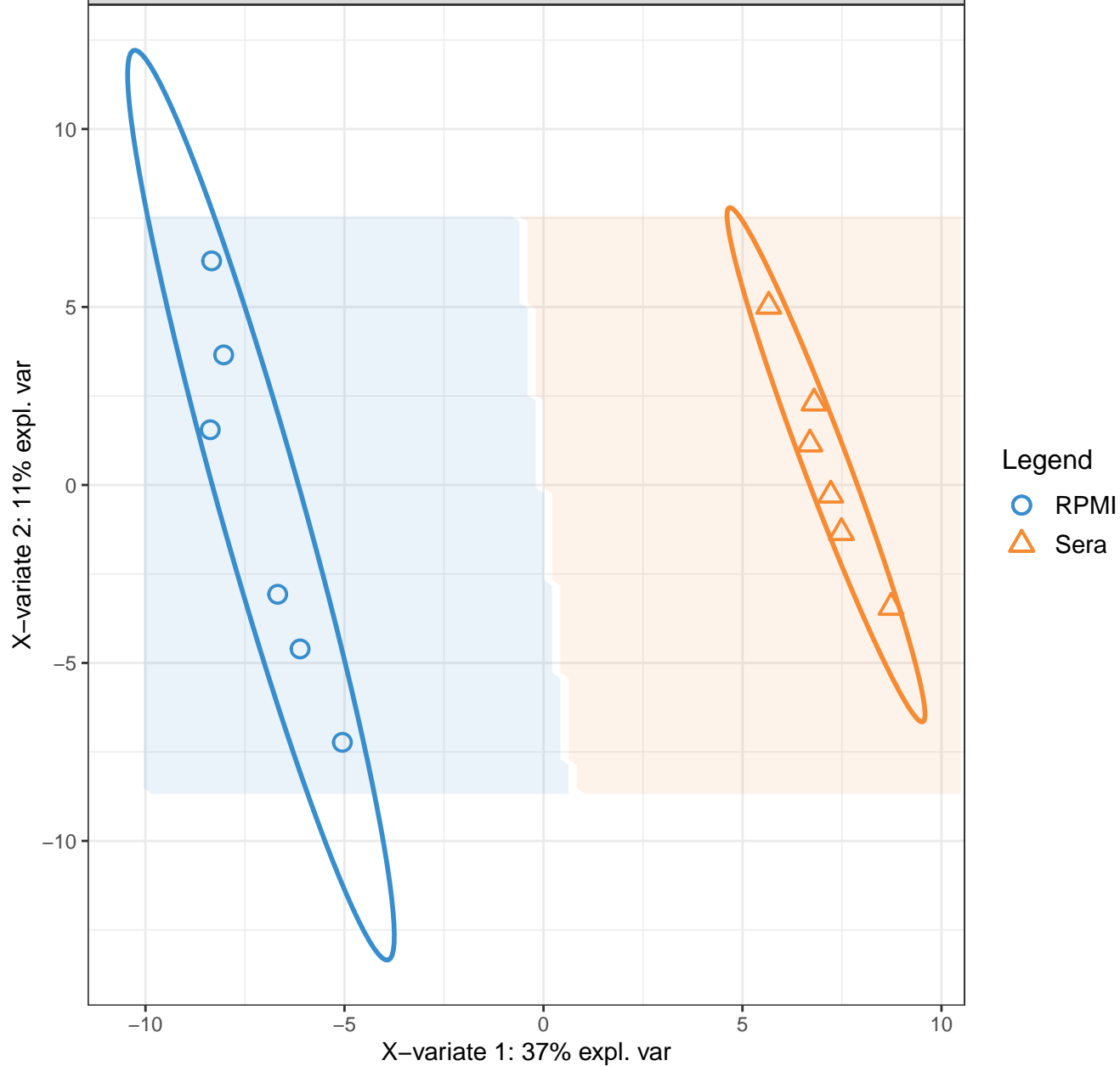
RNA_Seq Correlation between imputed and unimputed data



Feature variances (log2) per omics



Metabolomics PLSDA single 1/2



Metabolomics PLSDA single 1/2

X-variate 2: 11% expl. var

10
5
0
-5
-10

-10

-5

0

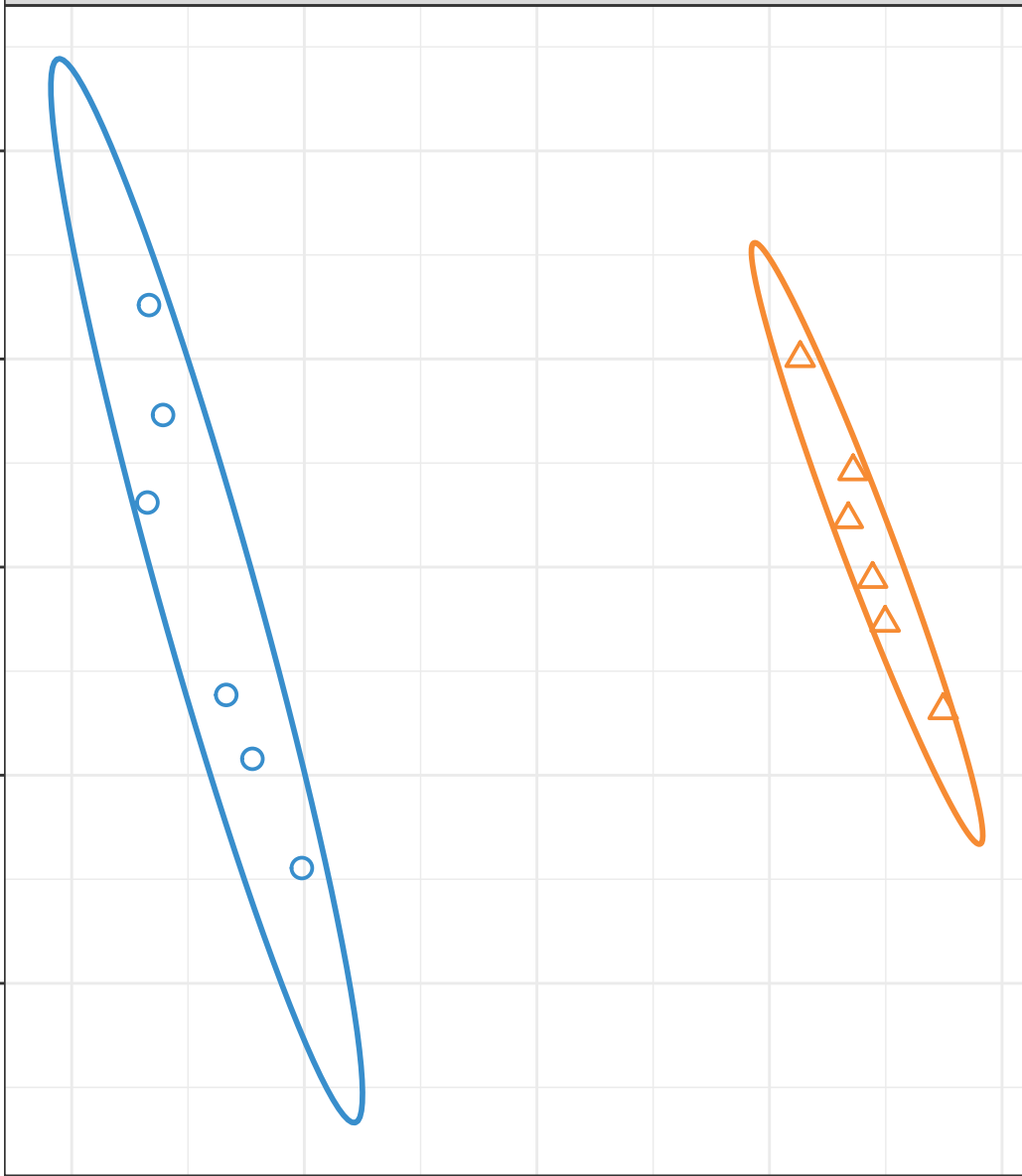
5

10

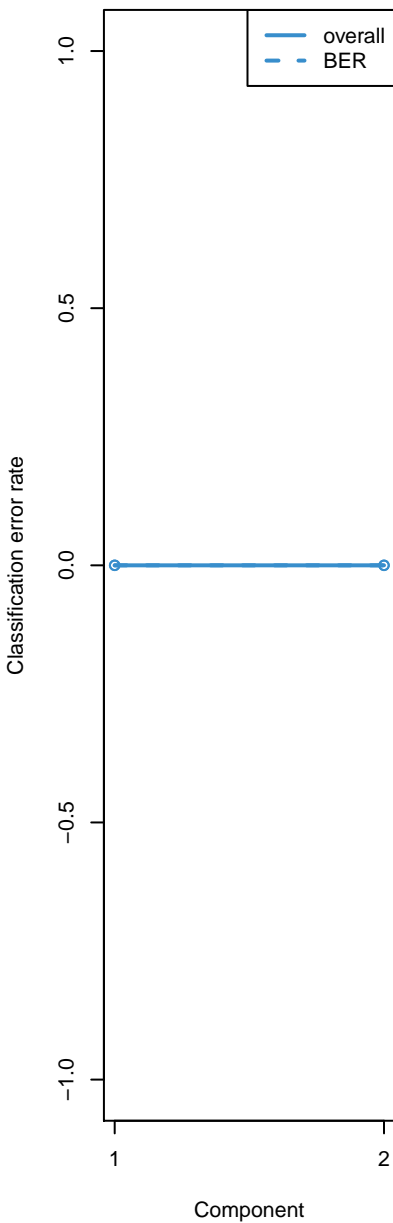
X-variate 1: 37% expl. var

Legend

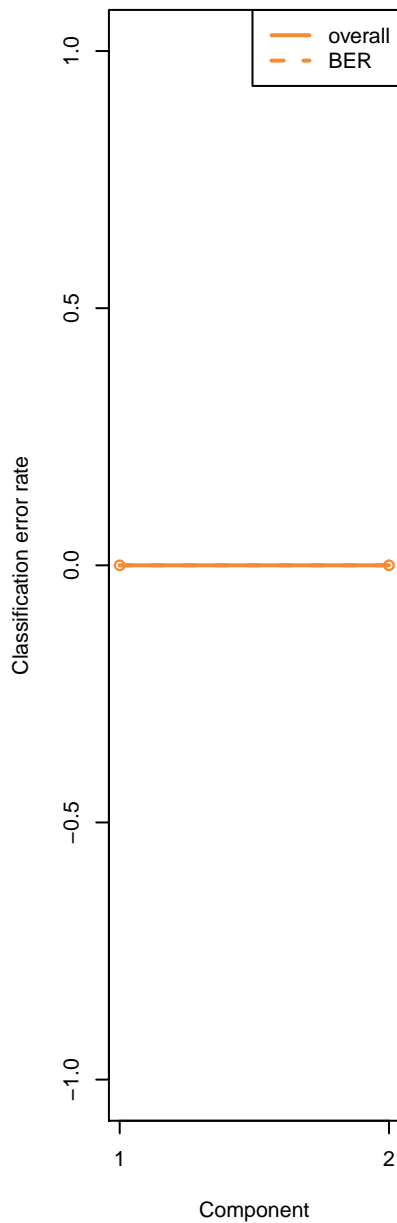
○ RPMI
△ Sera



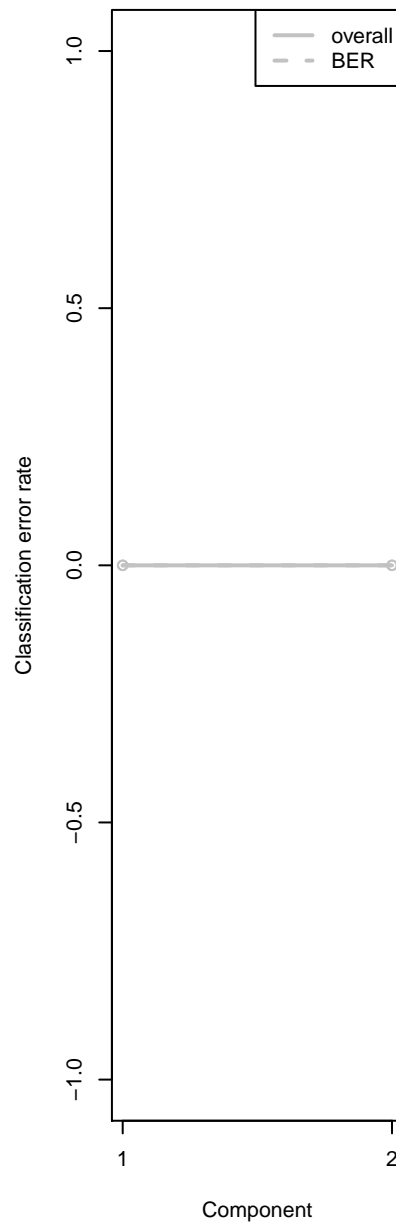
max.dist



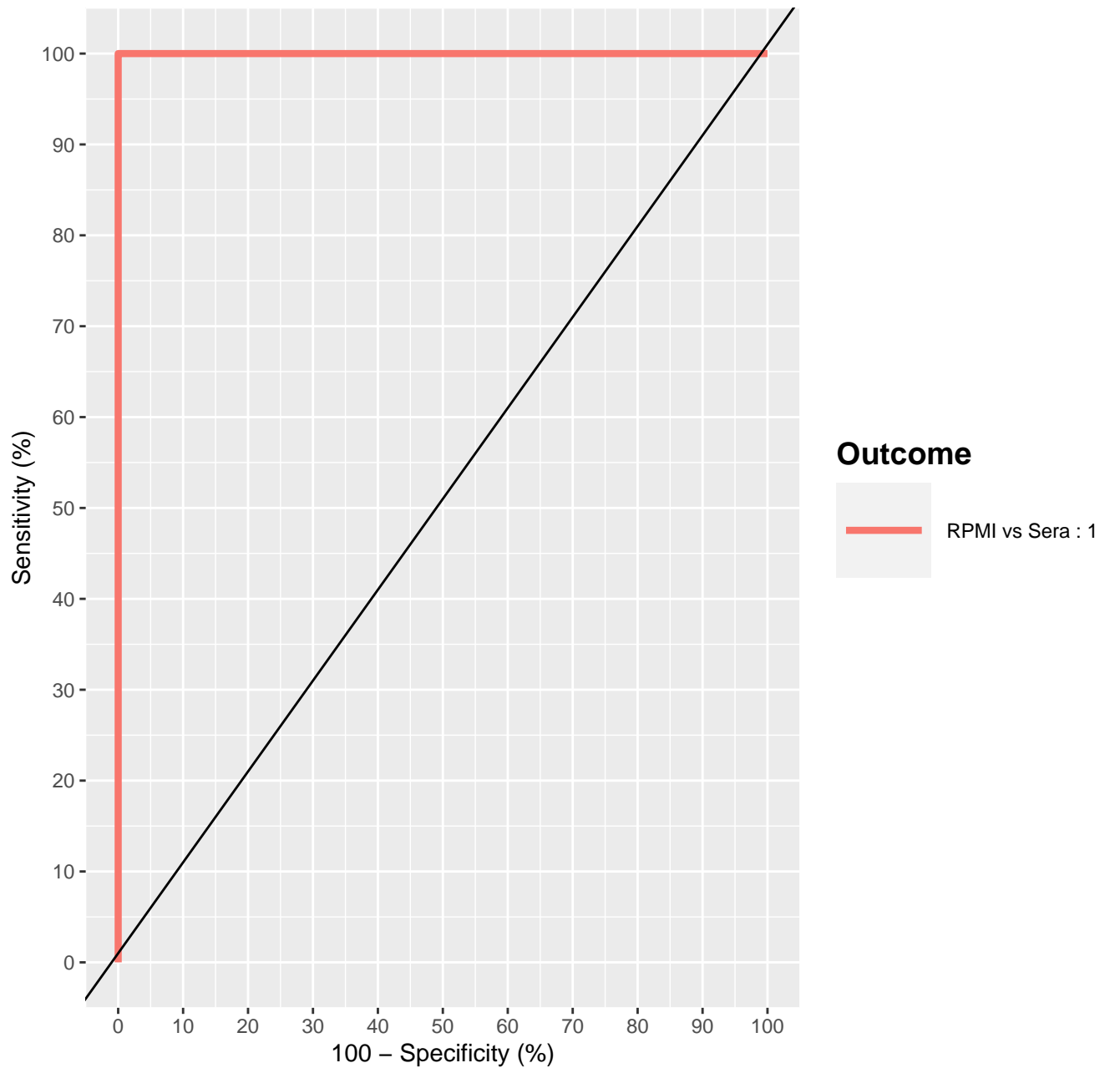
centroids.dist



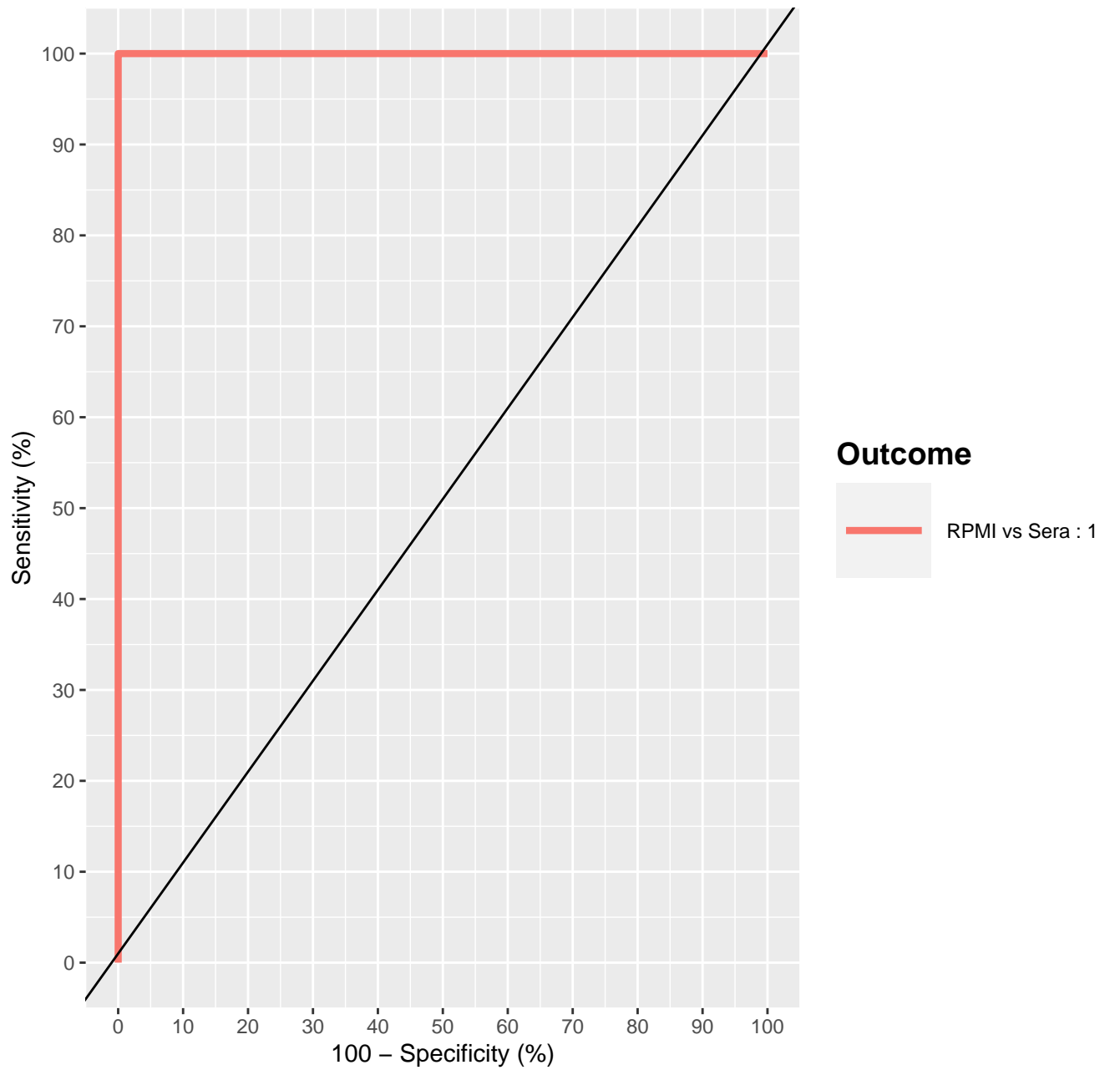
mahalanobis.dist



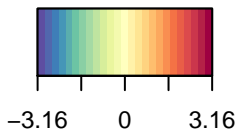
ROC Curve Comp 1



ROC Curve Comp 2



Color key

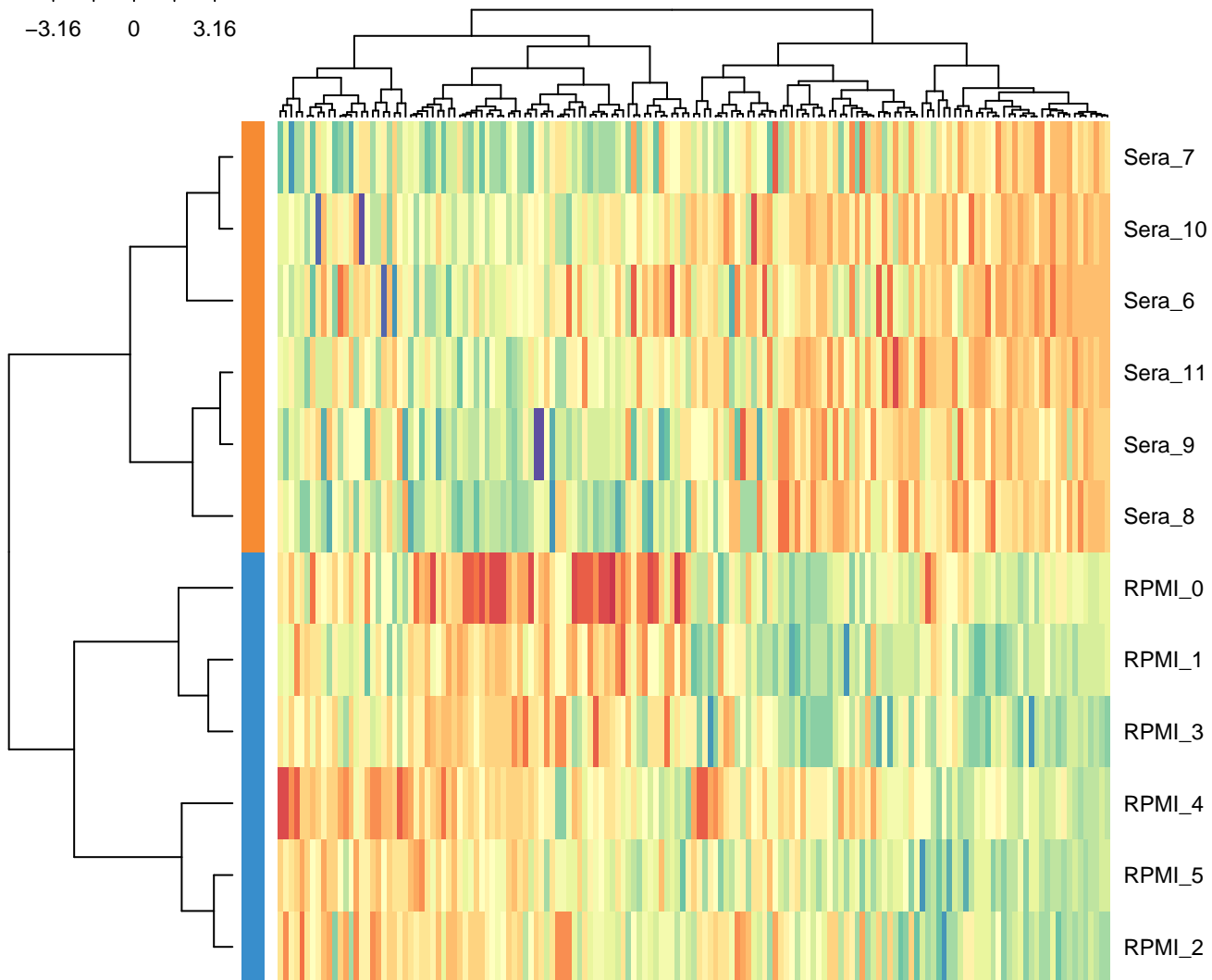


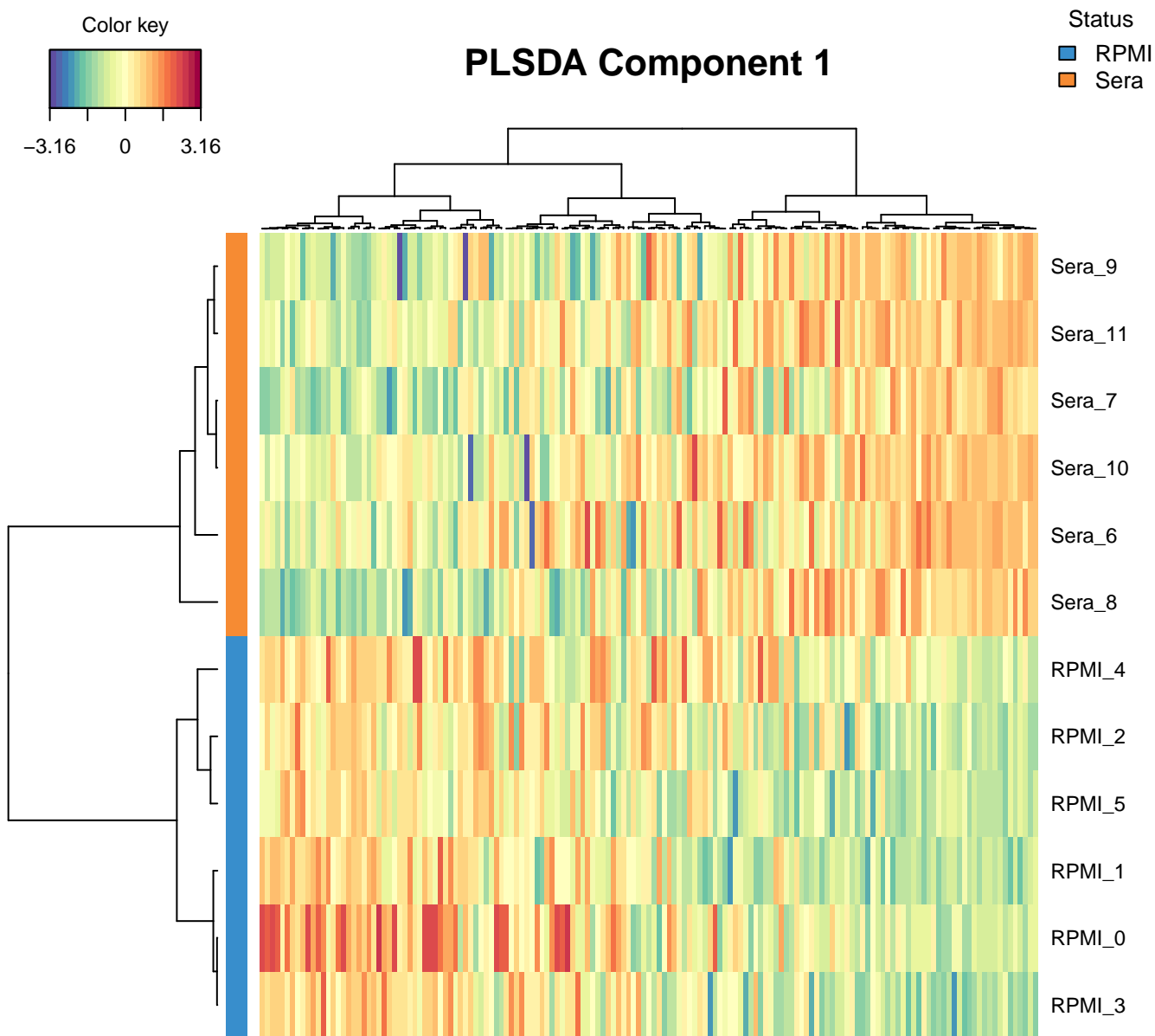
PLSDA

Status

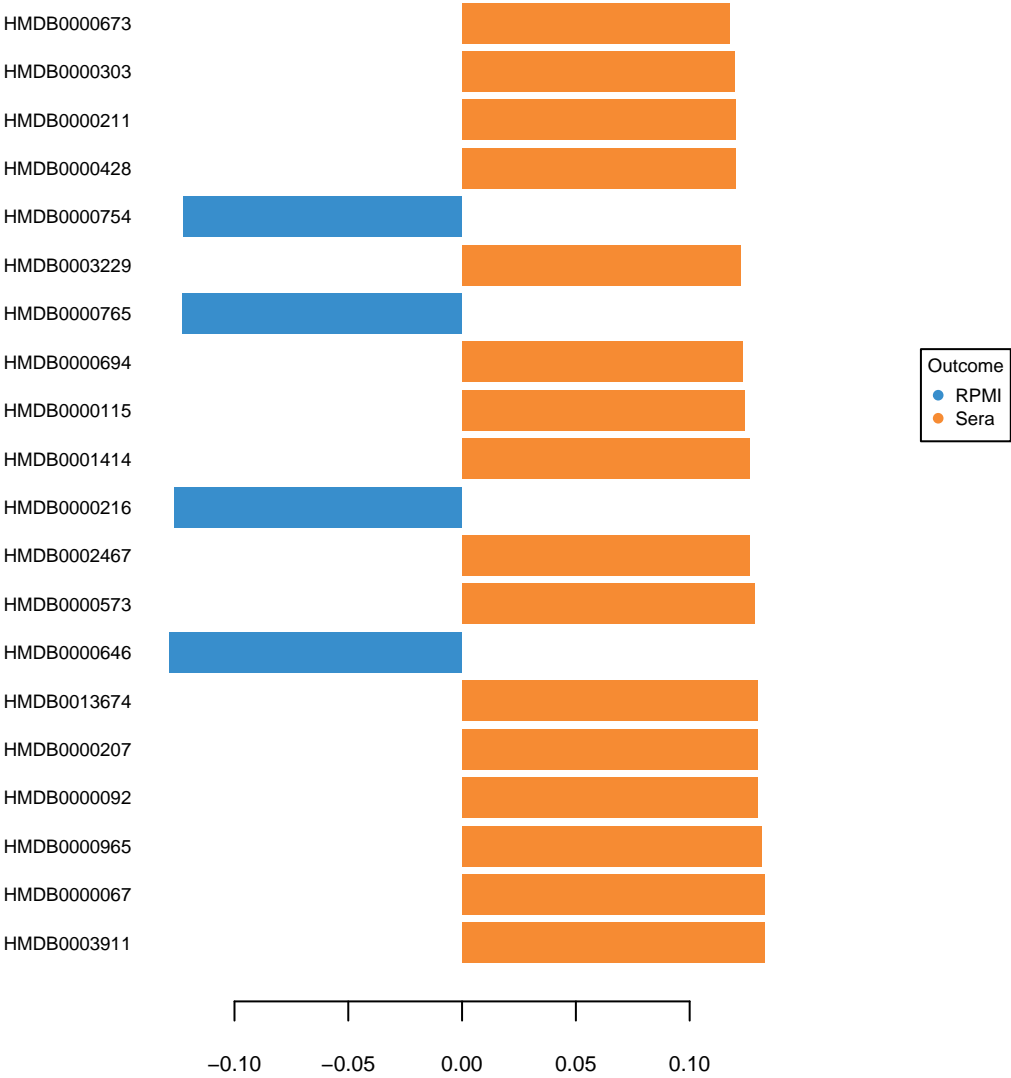
■ RPMI

■ Sera

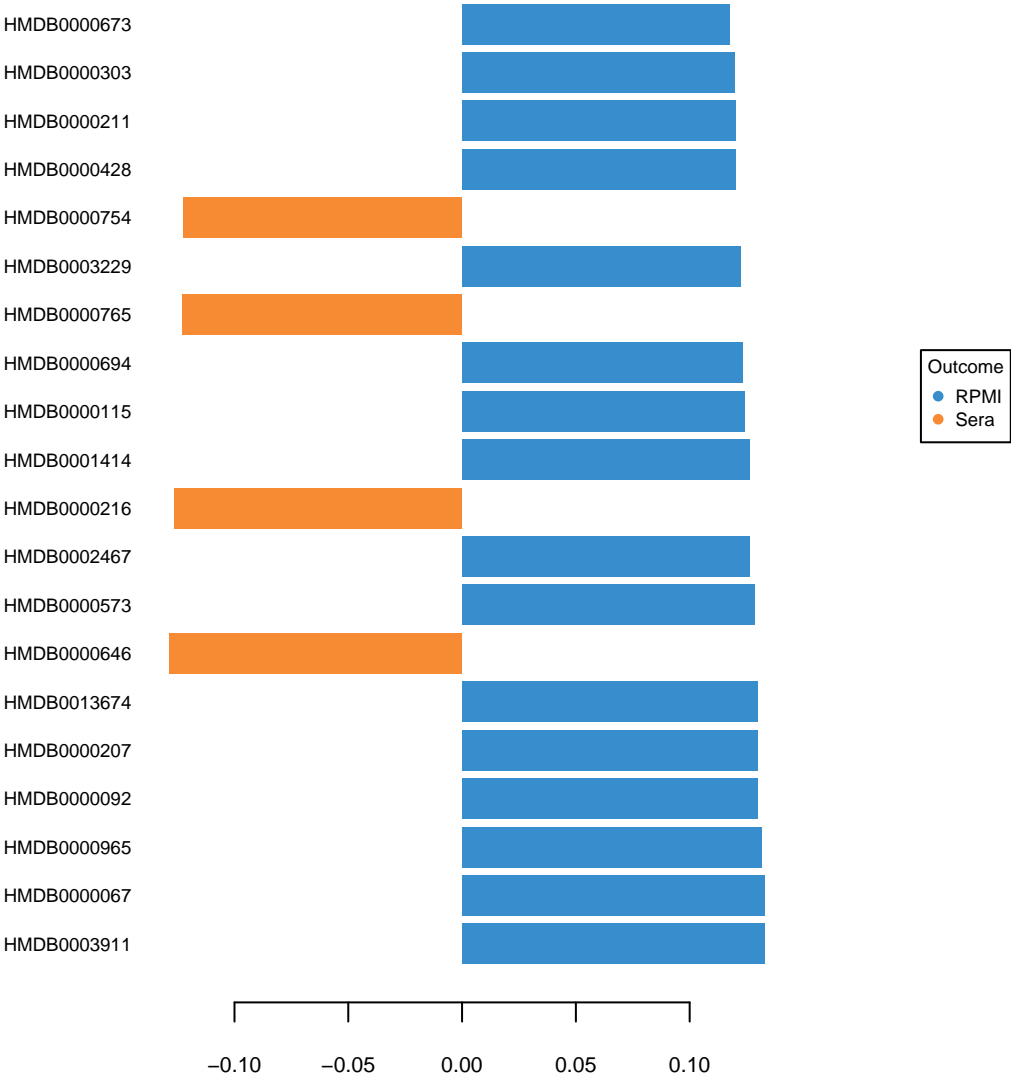




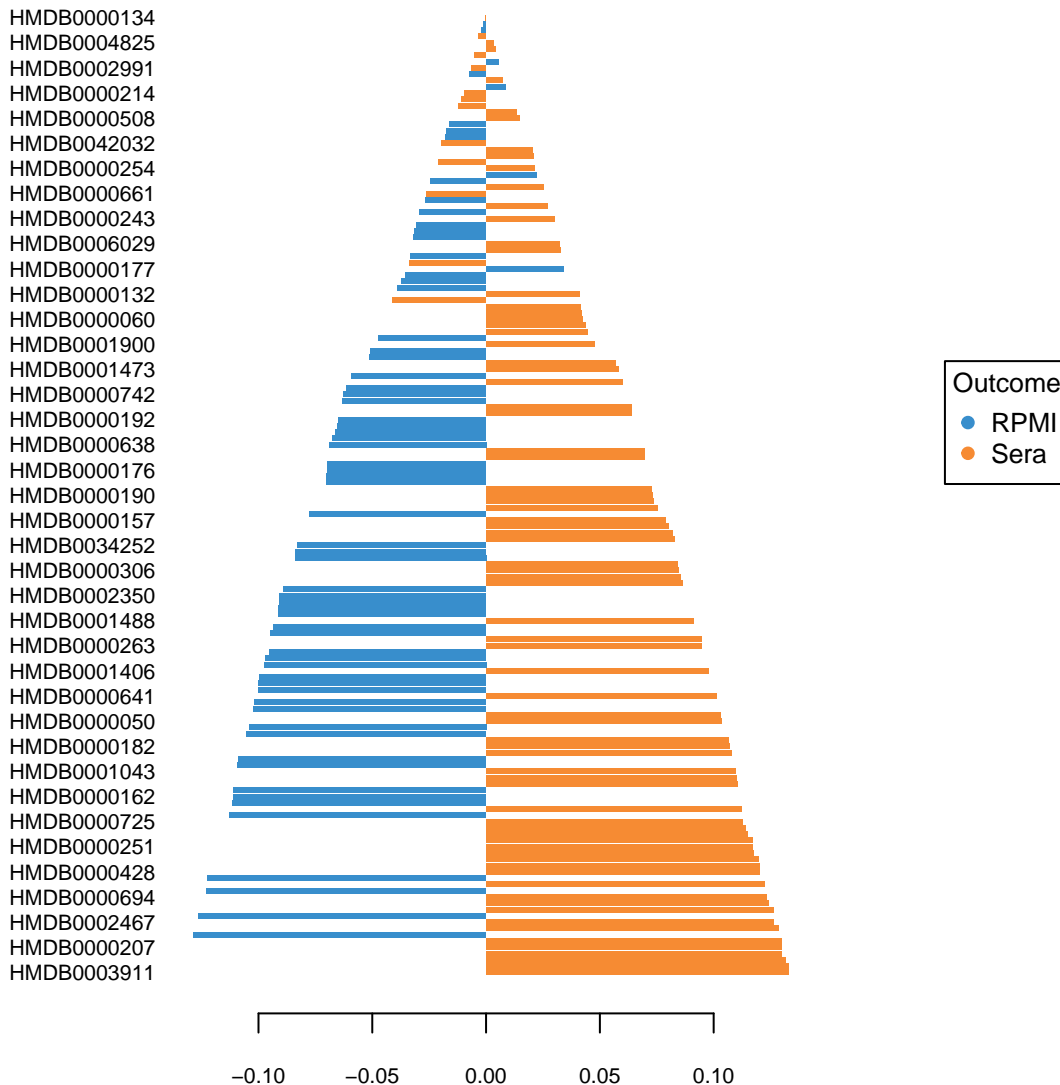
Metabolomics 1 PLSDA max load



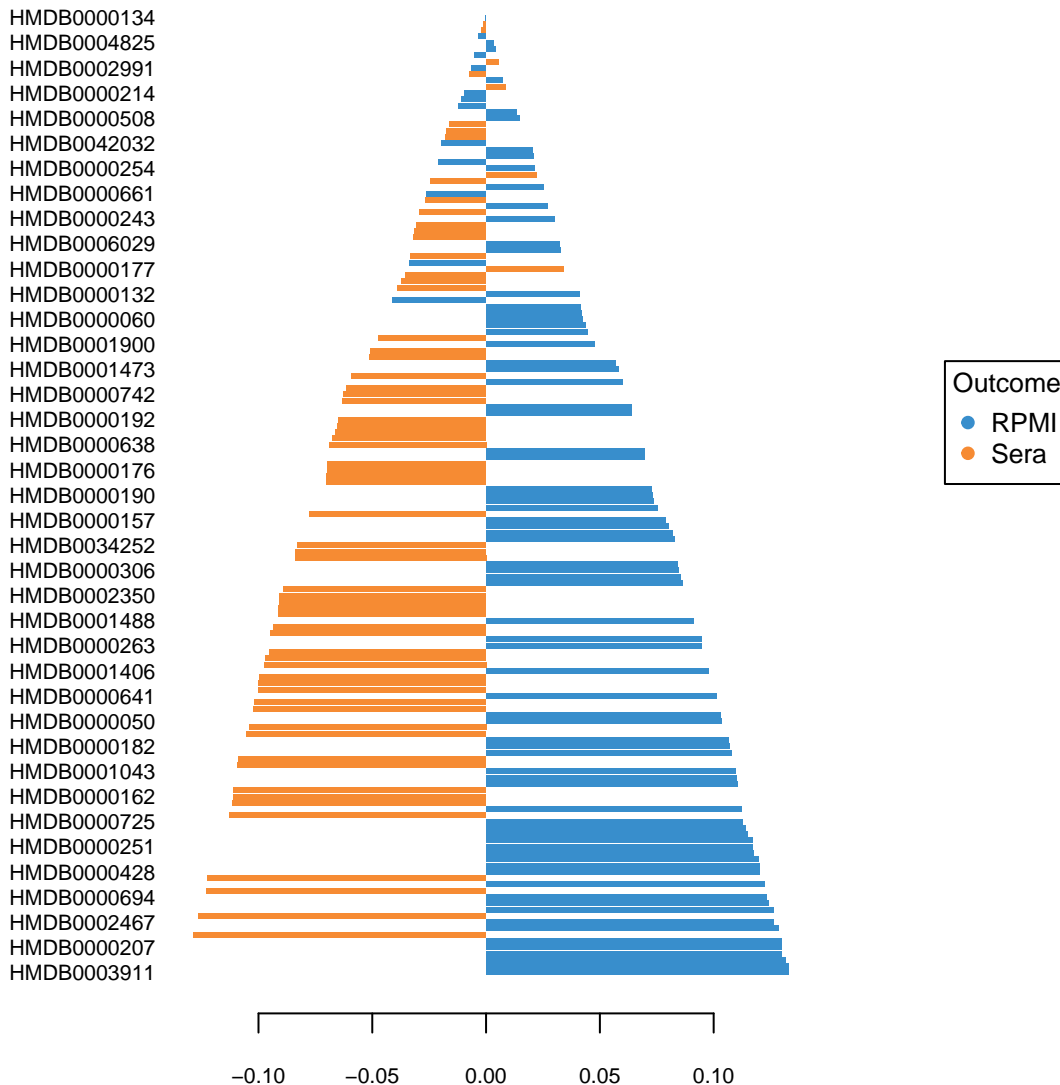
Metabolomics 1 PLSDA min load



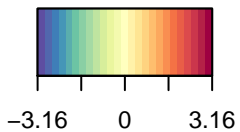
Contribution on comp 1



Contribution on comp 1



Color key

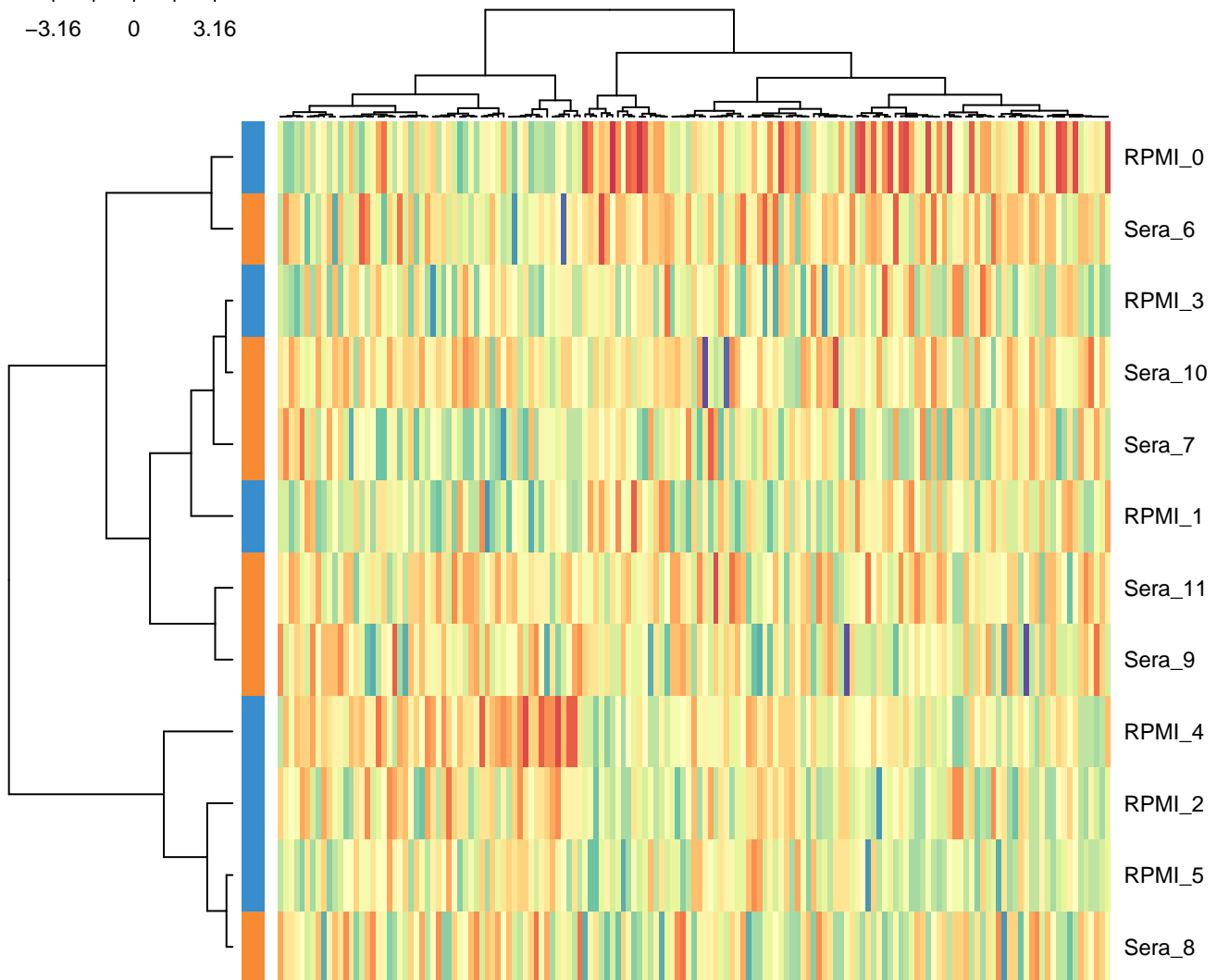


PLSDA Component 2

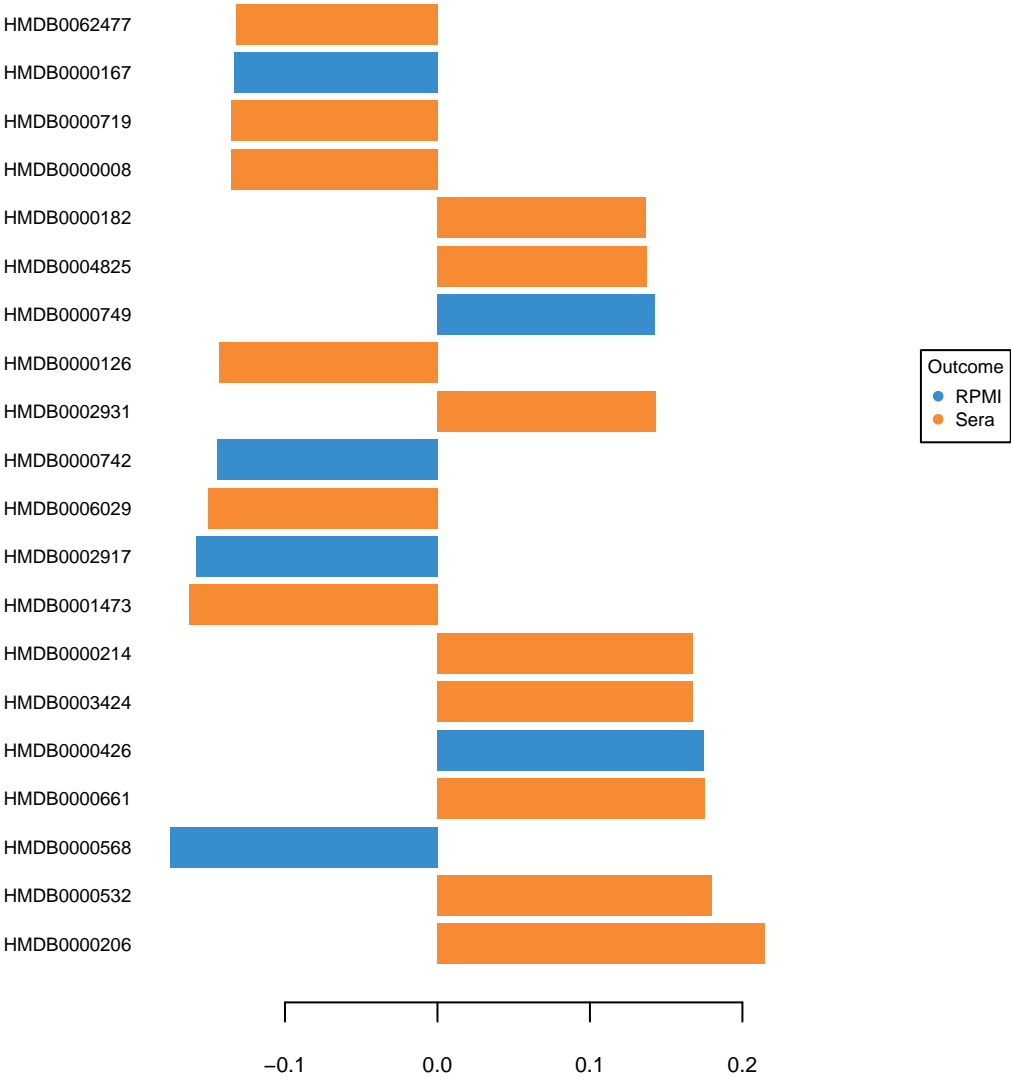
Status

■ RPMI

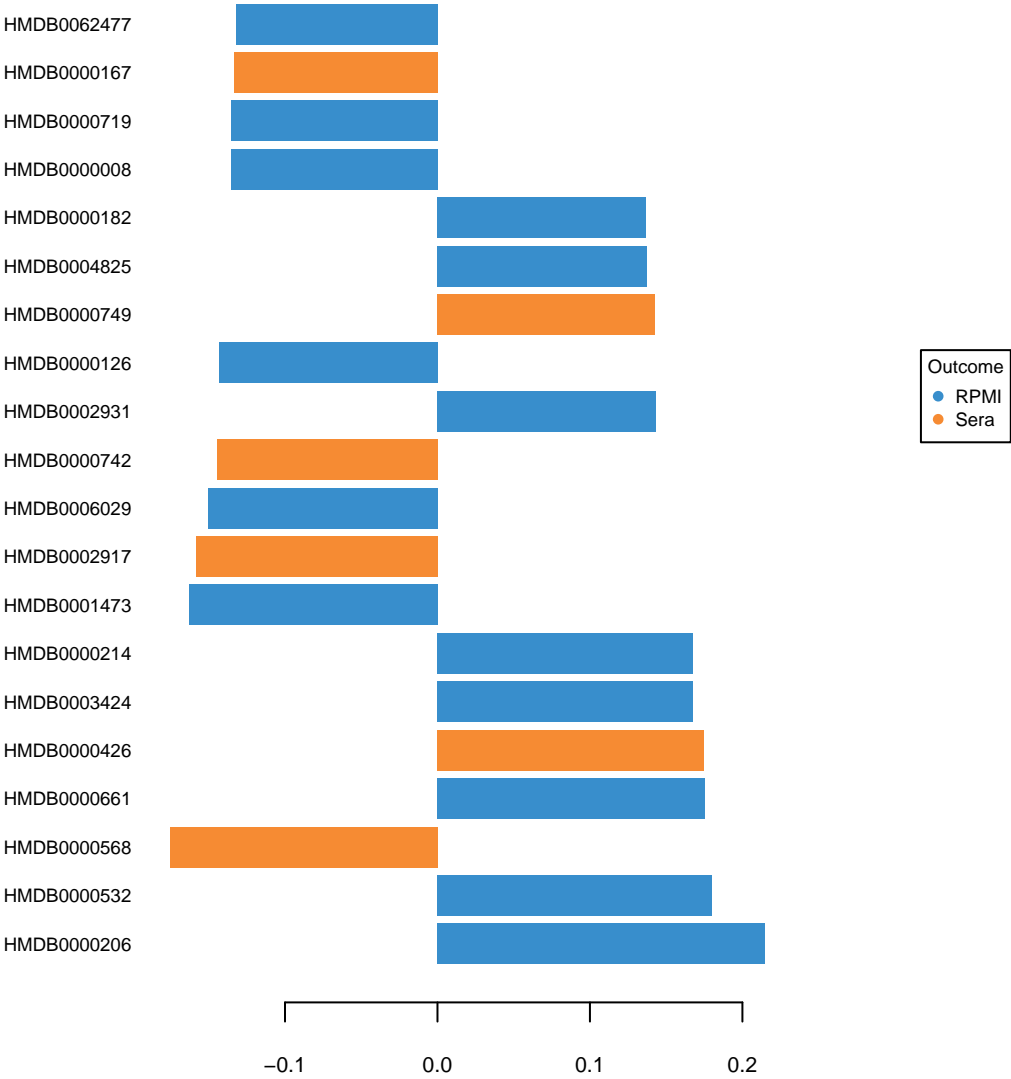
■ Sera



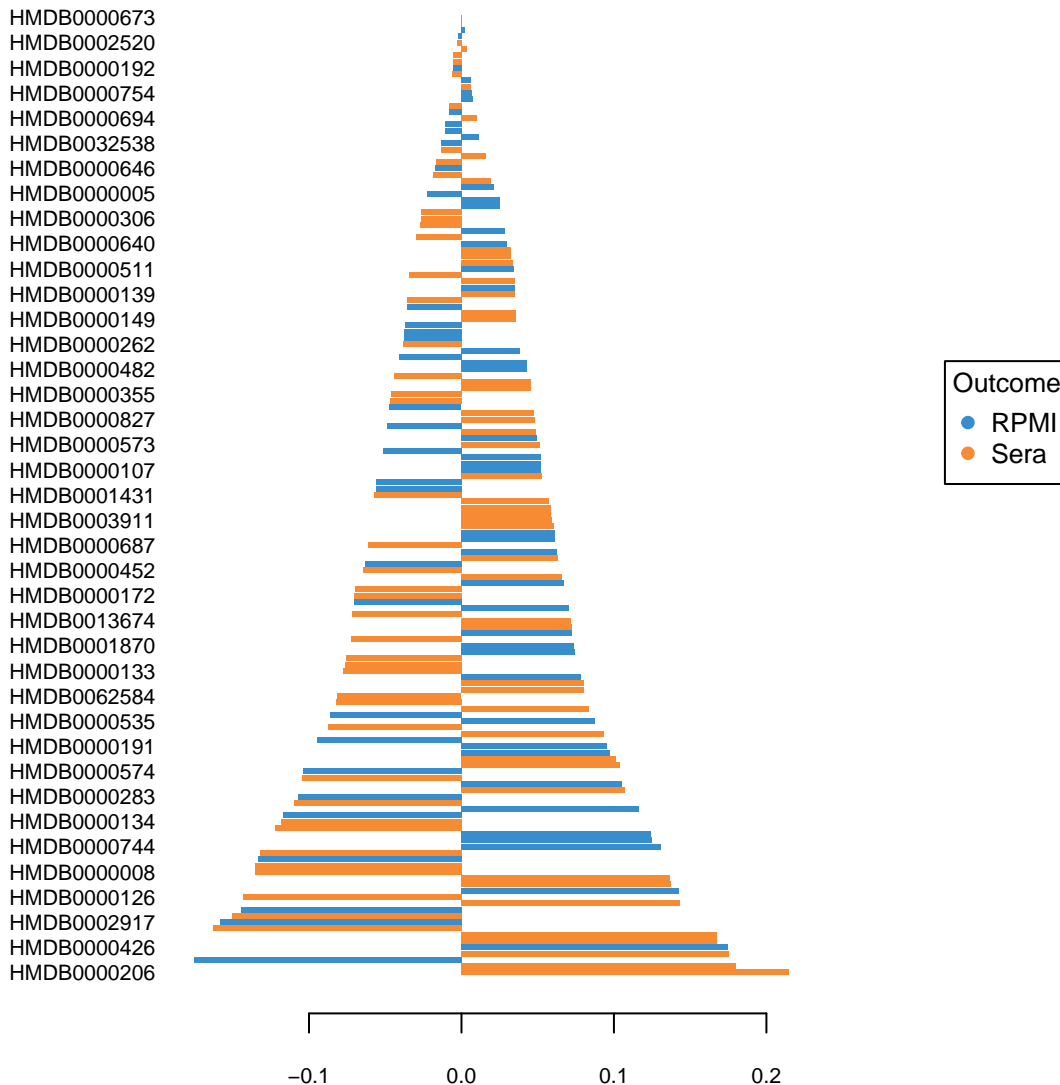
Metabolomics 2 PLSDA max load



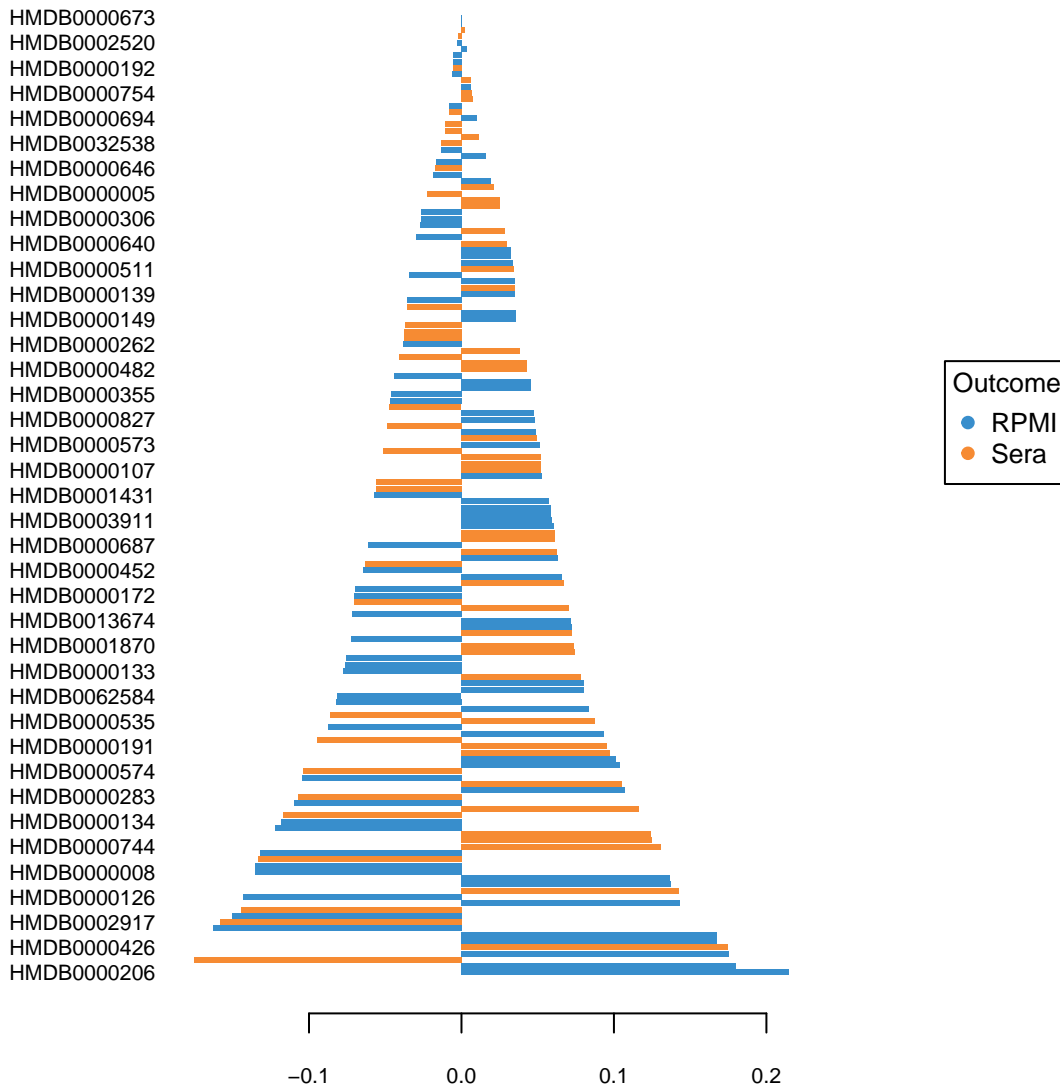
Metabolomics 2 PLSDA min load



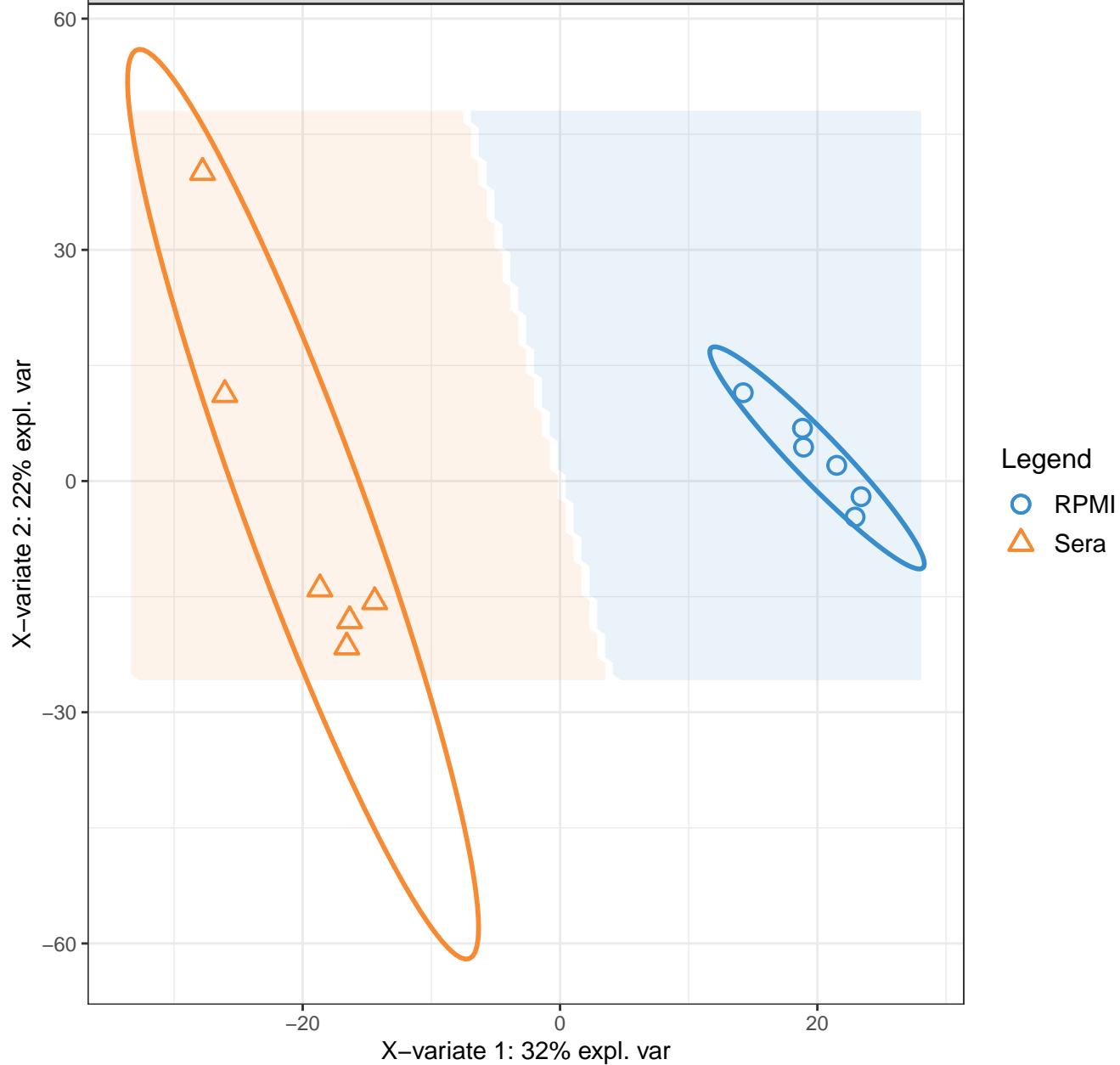
Contribution on comp 2



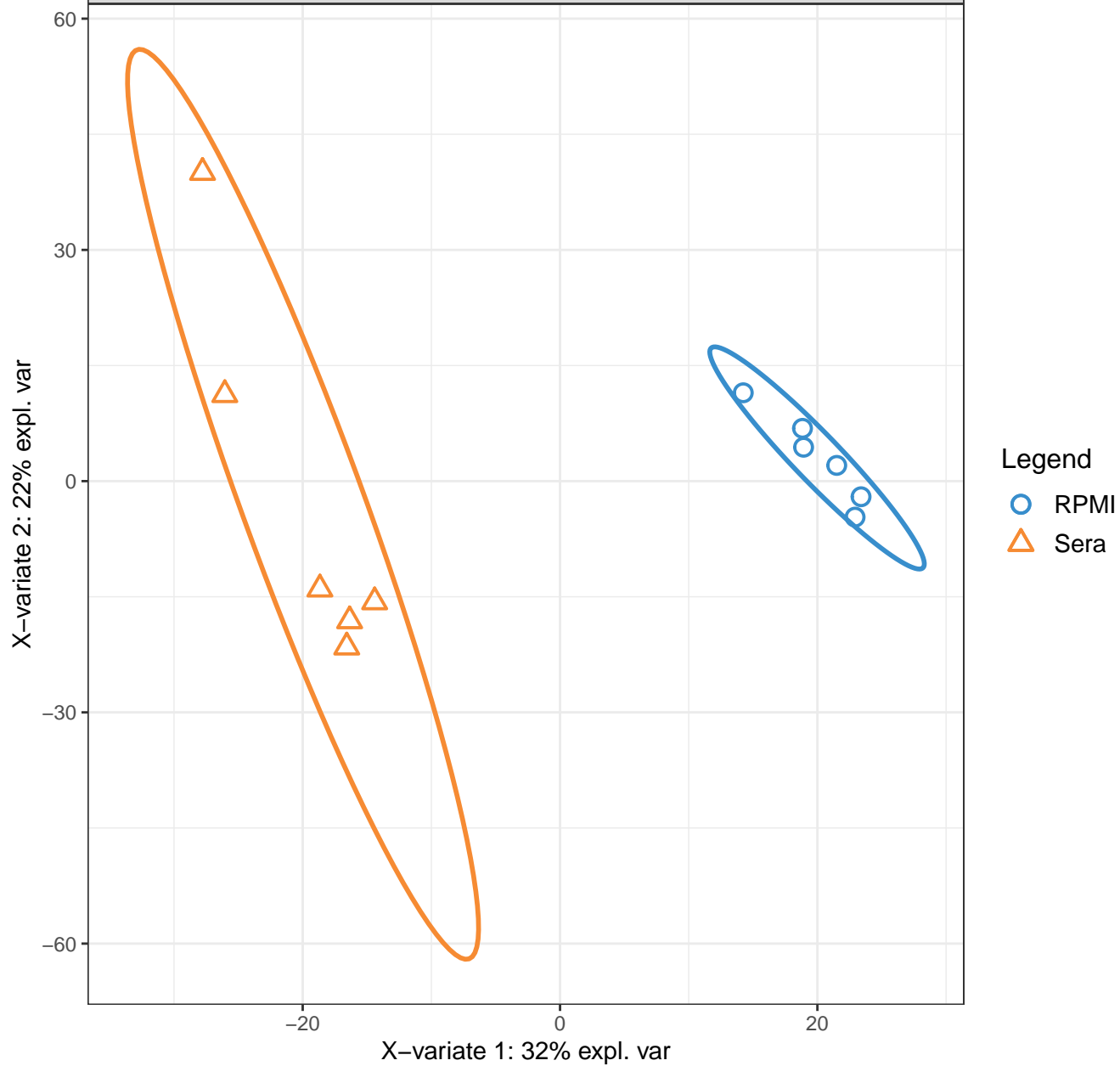
Contribution on comp 2



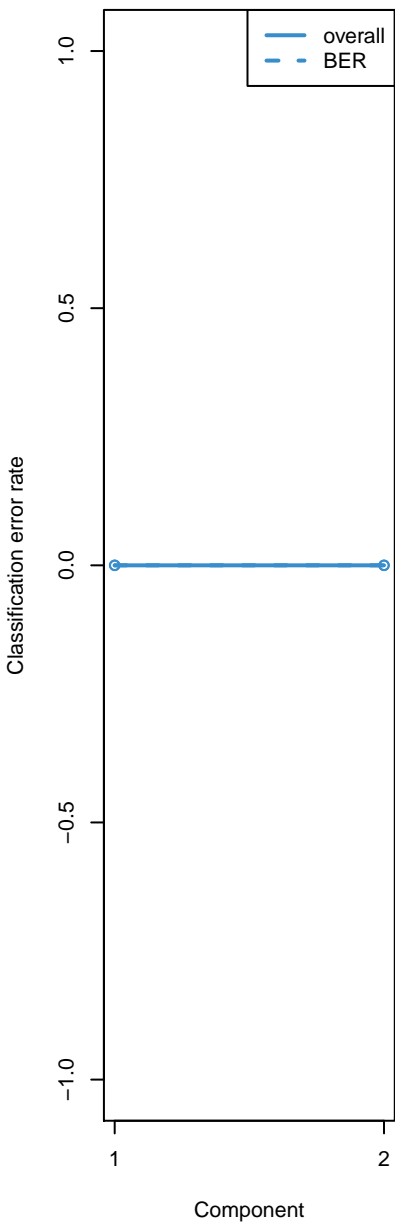
Proteomics PLSDA single 1/2



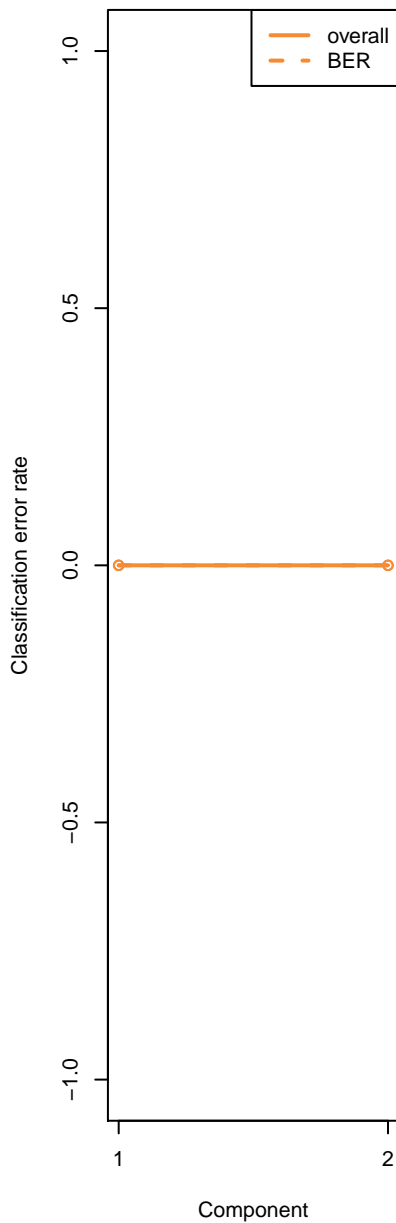
Proteomics PLSDA single 1/2



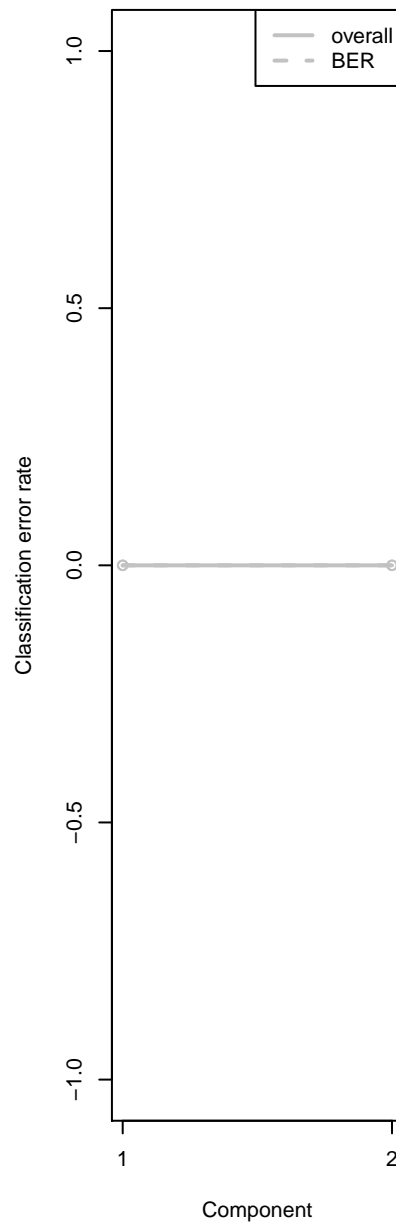
max.dist



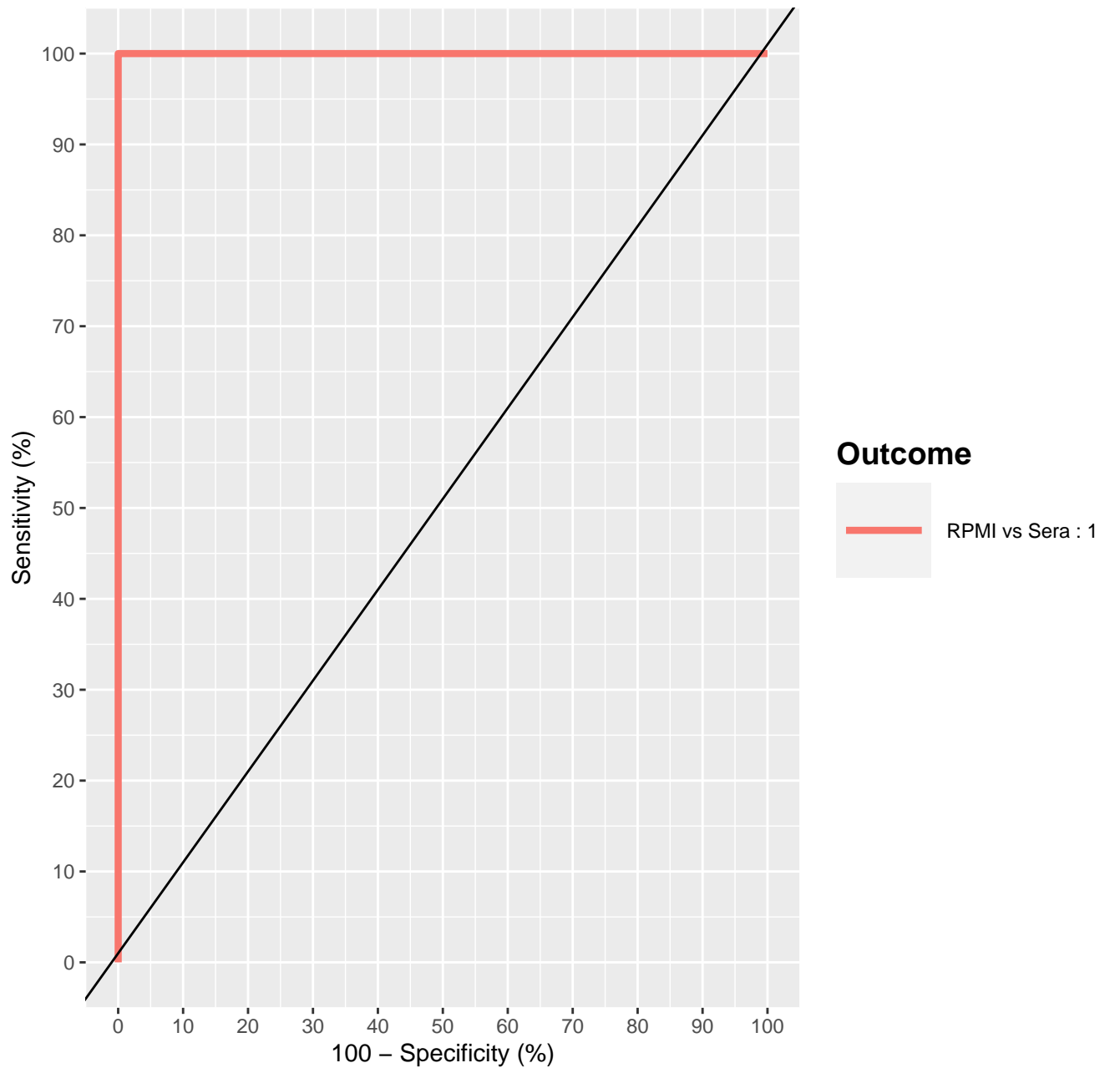
centroids.dist



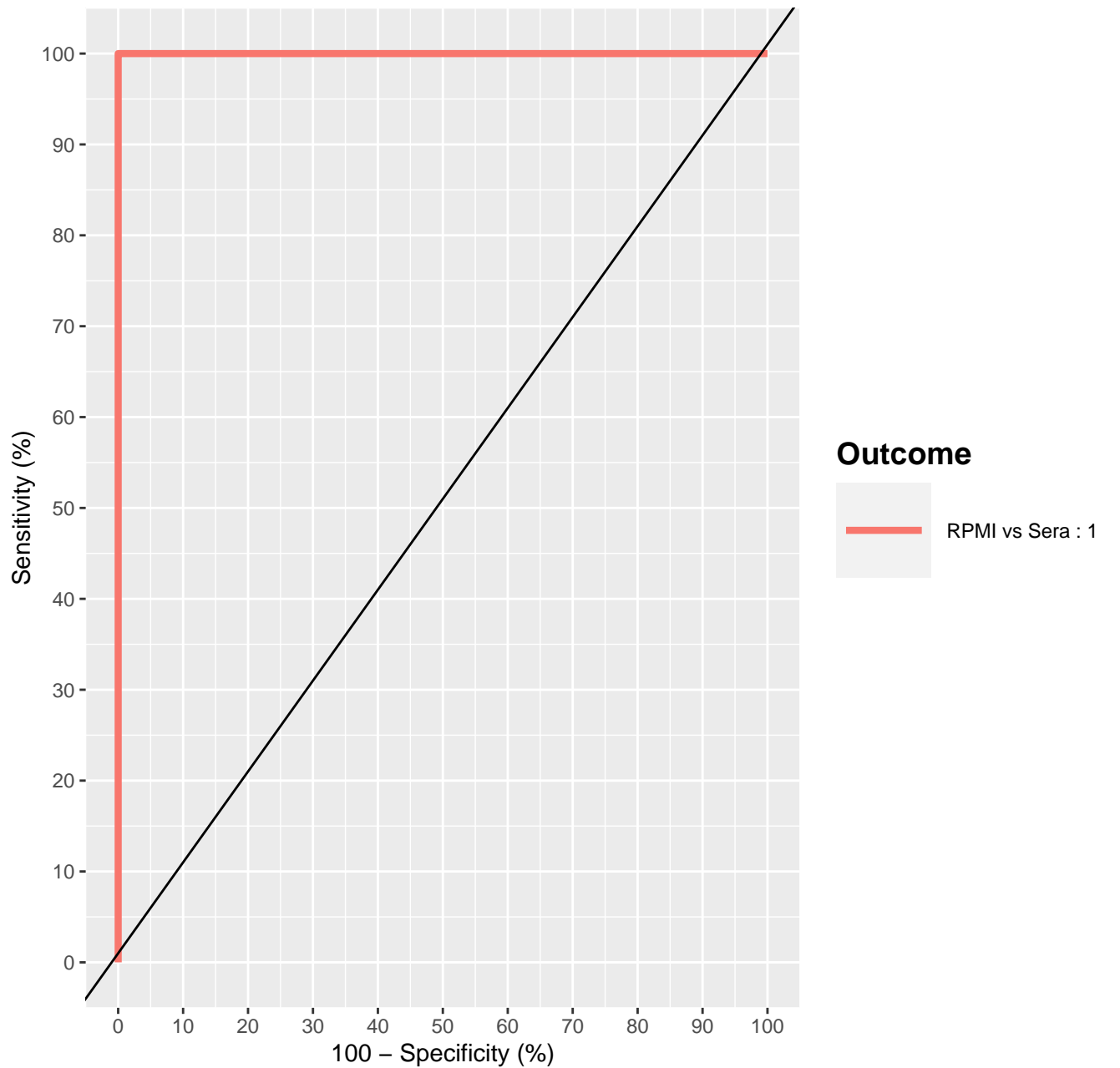
mahalanobis.dist



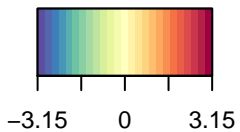
ROC Curve Comp 1



ROC Curve Comp 2



Color key

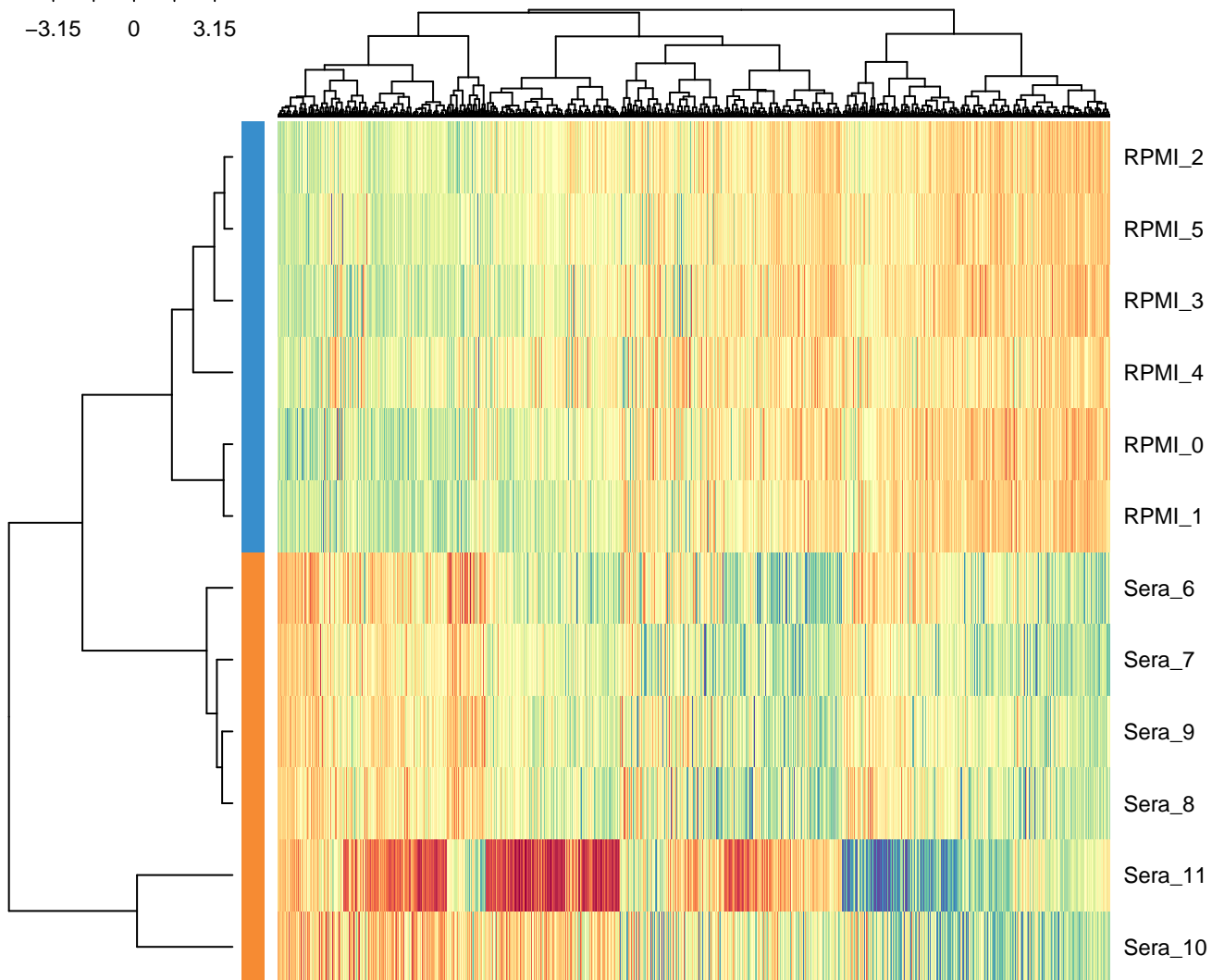


PLSDA

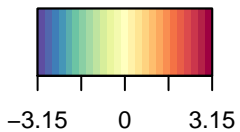
Status

■ RPMI

■ Sera



Color key

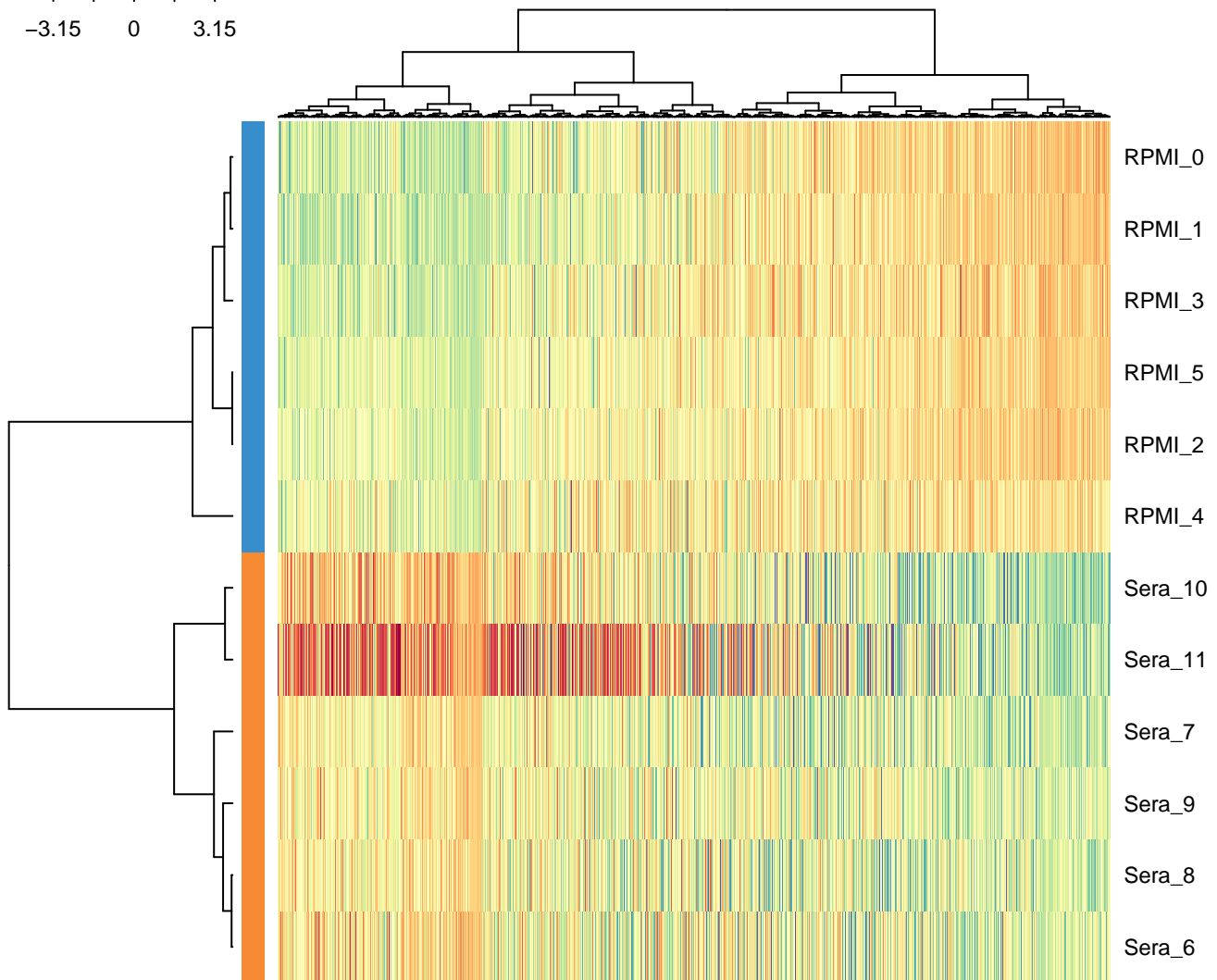


PLSDA Component 1

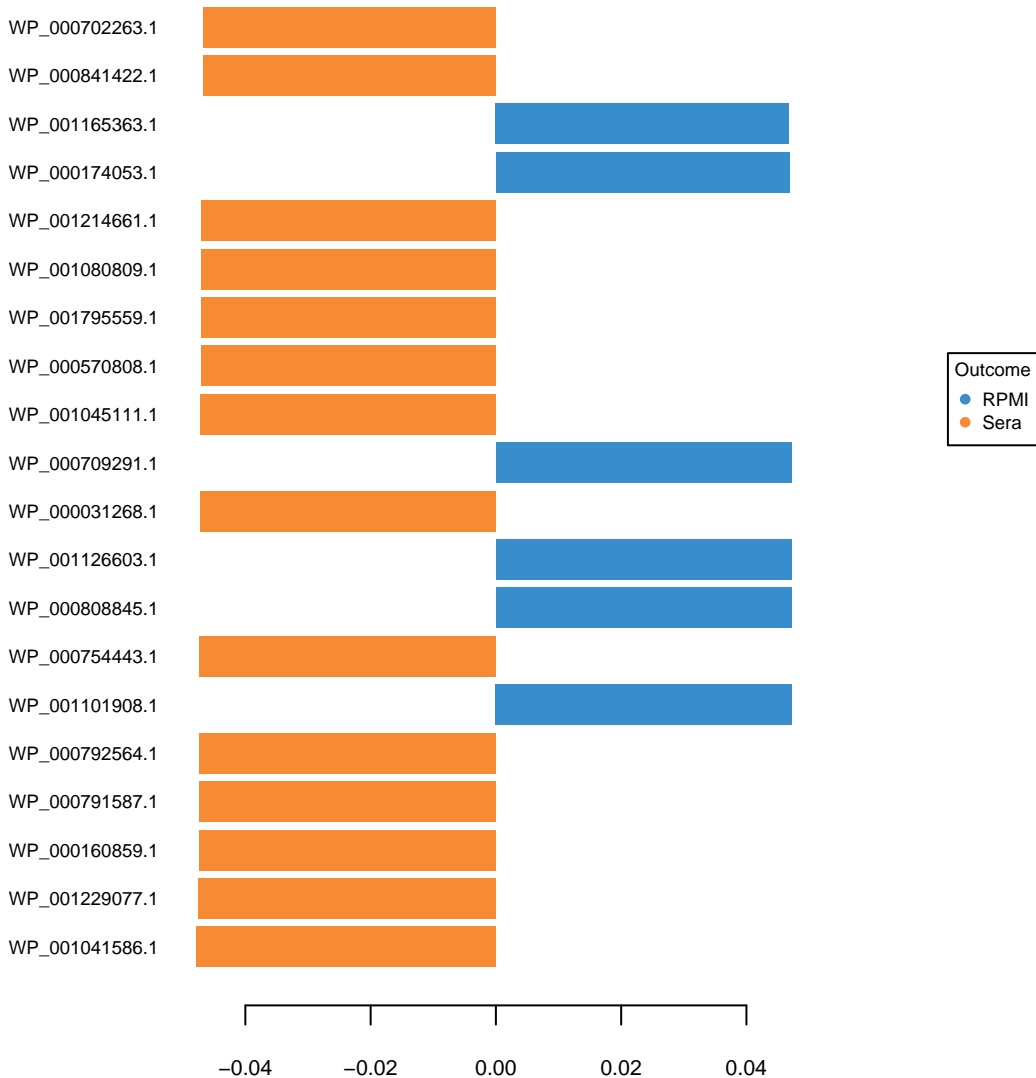
Status

RPMI

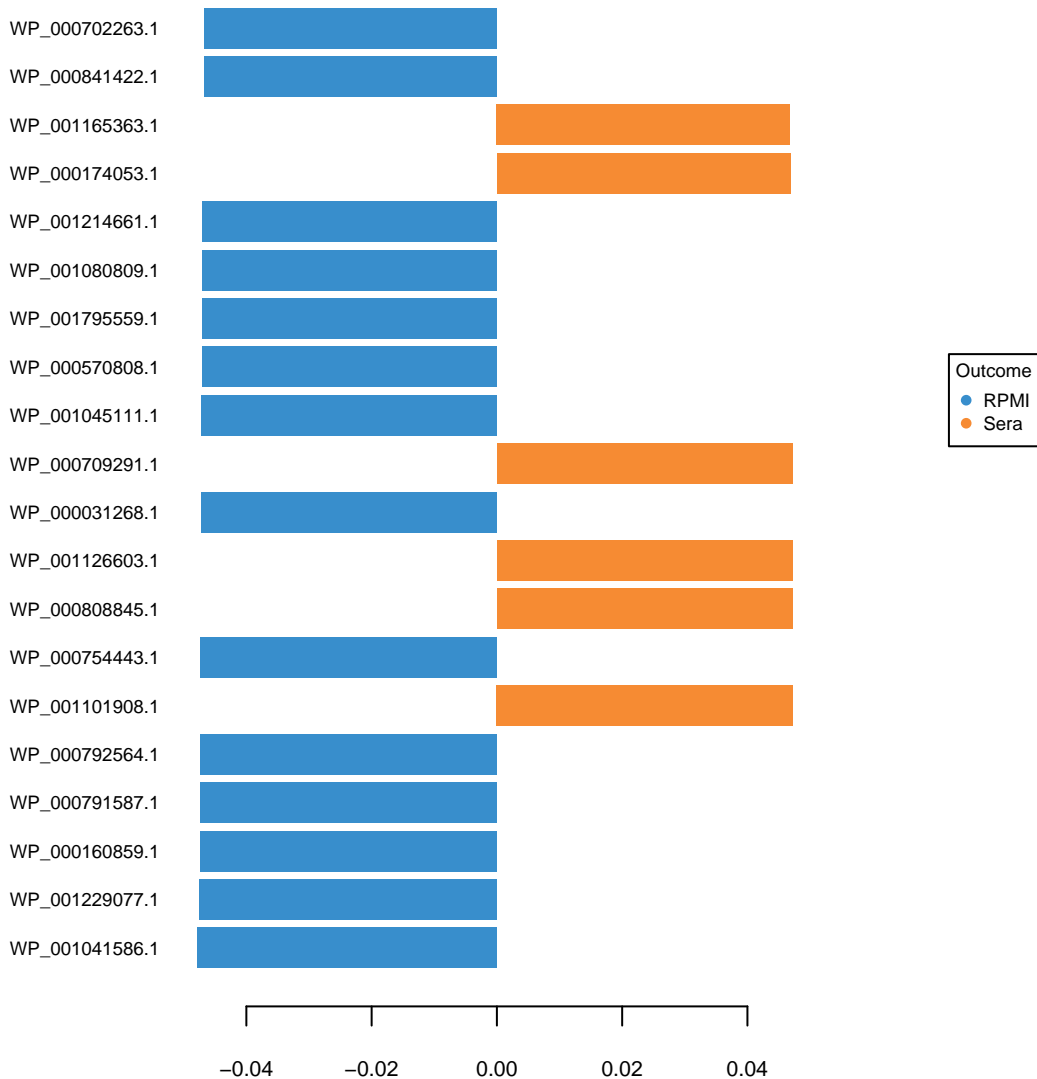
Sera



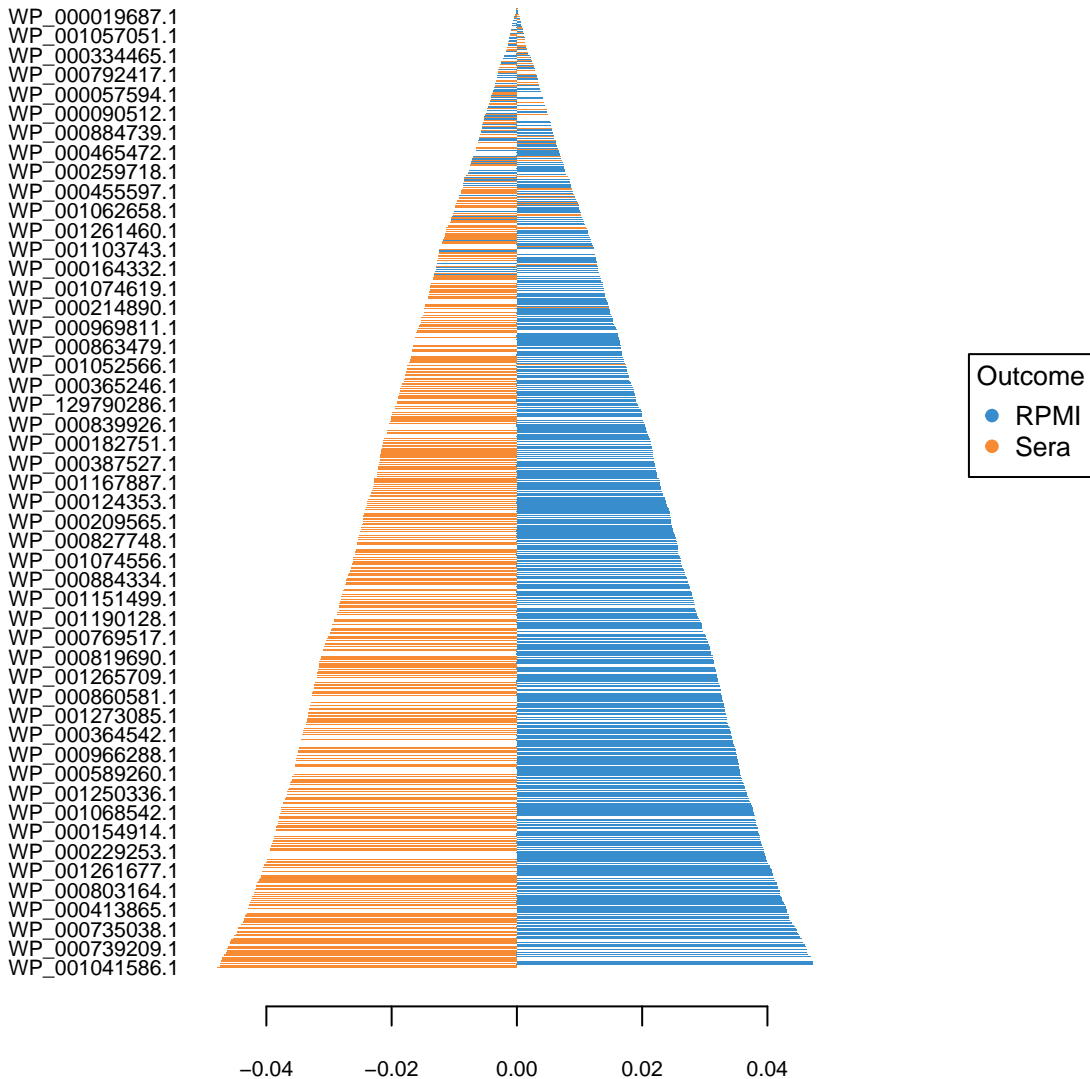
Proteomics 1 PLSDA max loadings



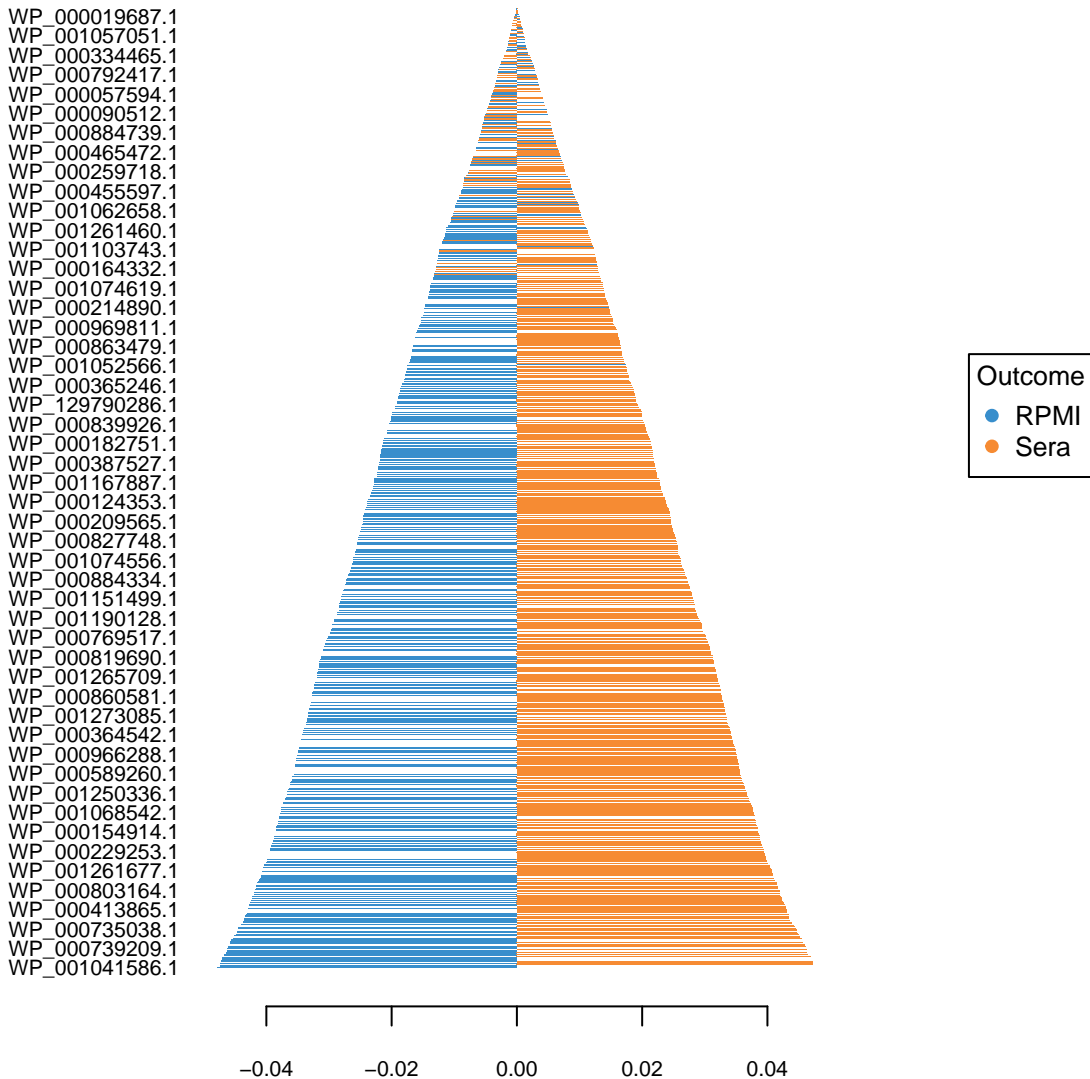
Proteomics 1 PLSDA min load



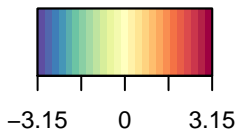
Contribution on comp 1



Contribution on comp 1



Color key

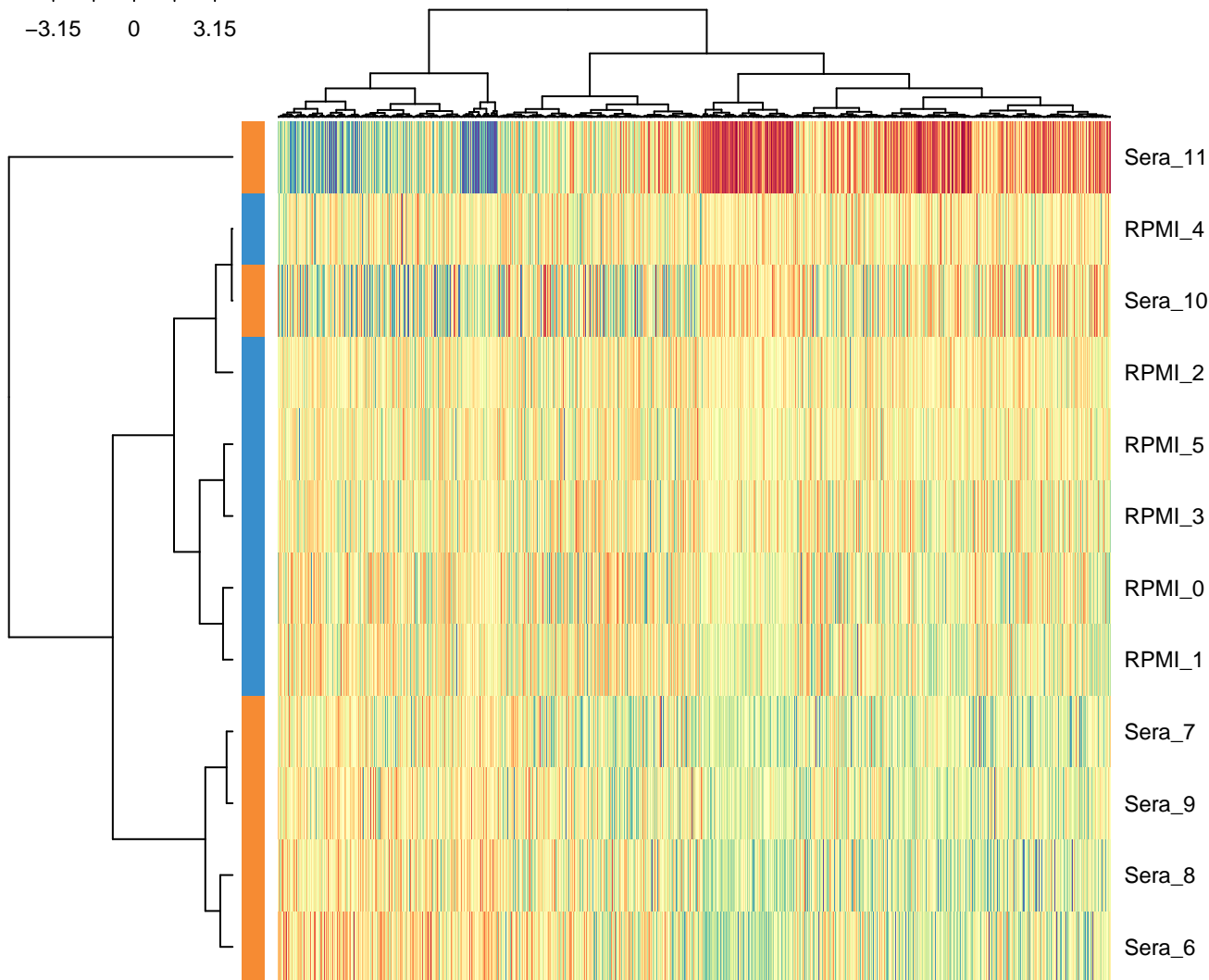


PLSDA Component 2

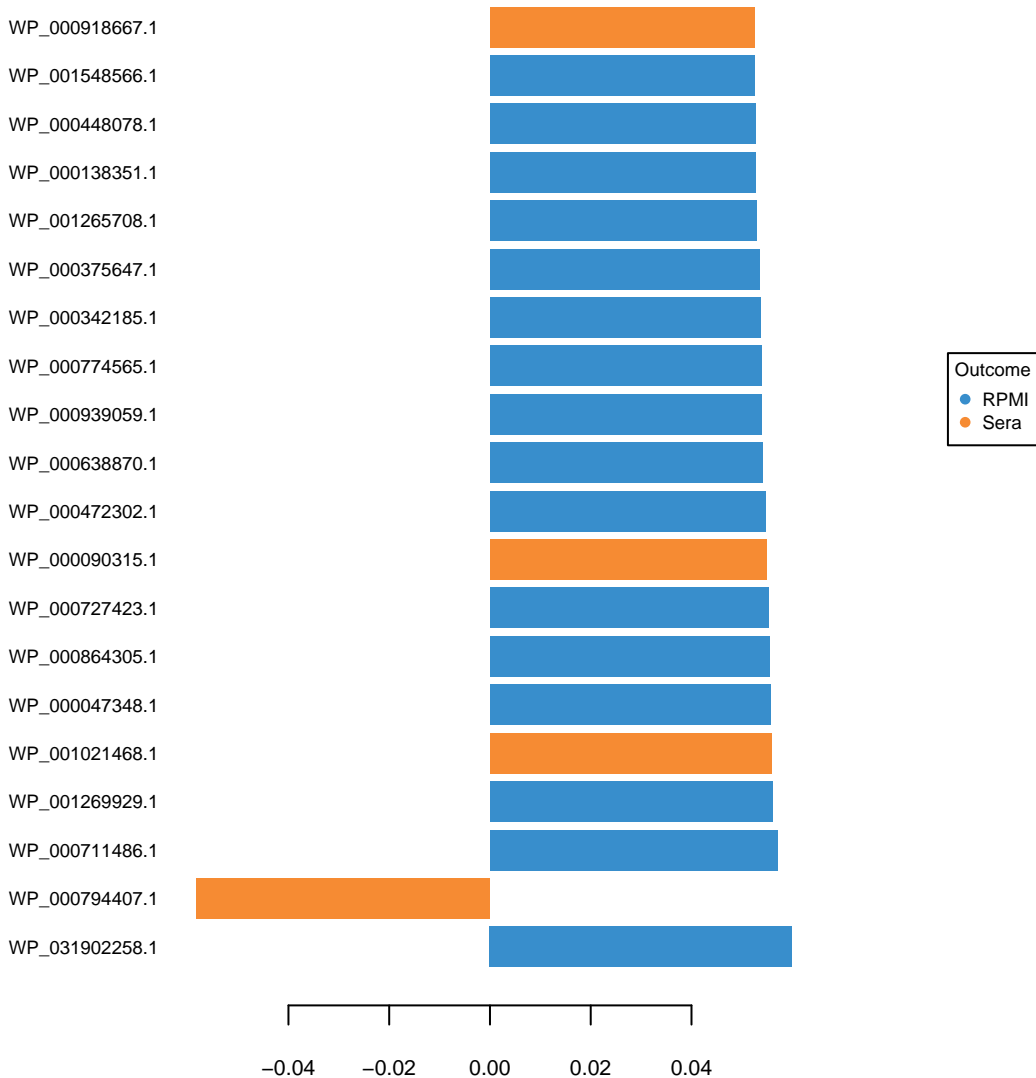
Status

RPMI

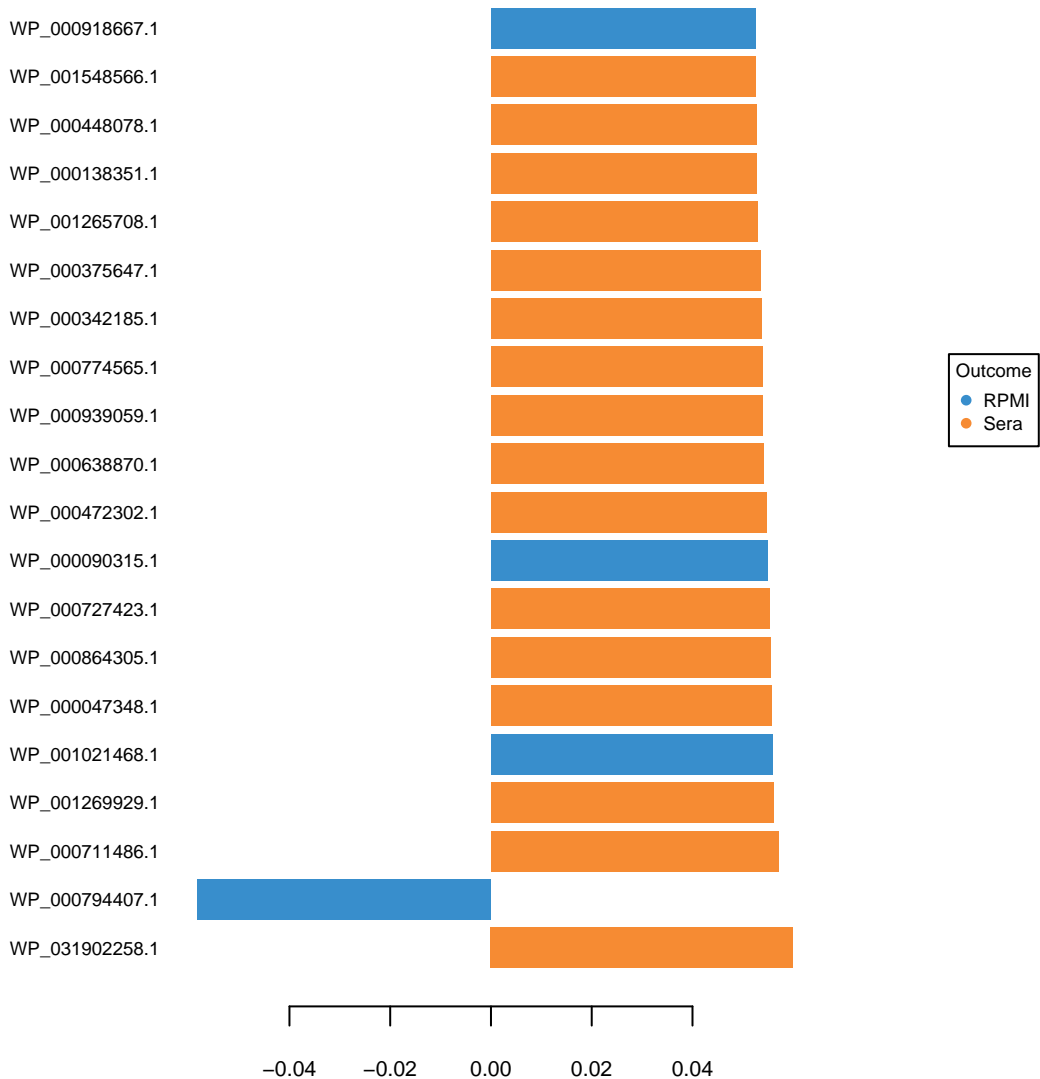
Sera



Proteomics 2 PLSDA max loadings

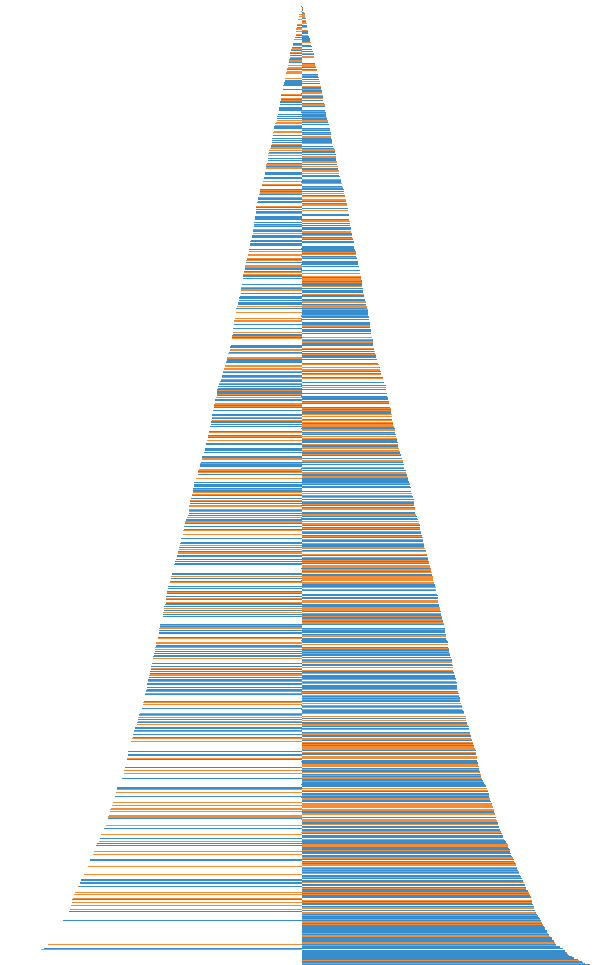


Proteomics 2 PLSDA min load



Contribution on comp 2

WP_000167867.1
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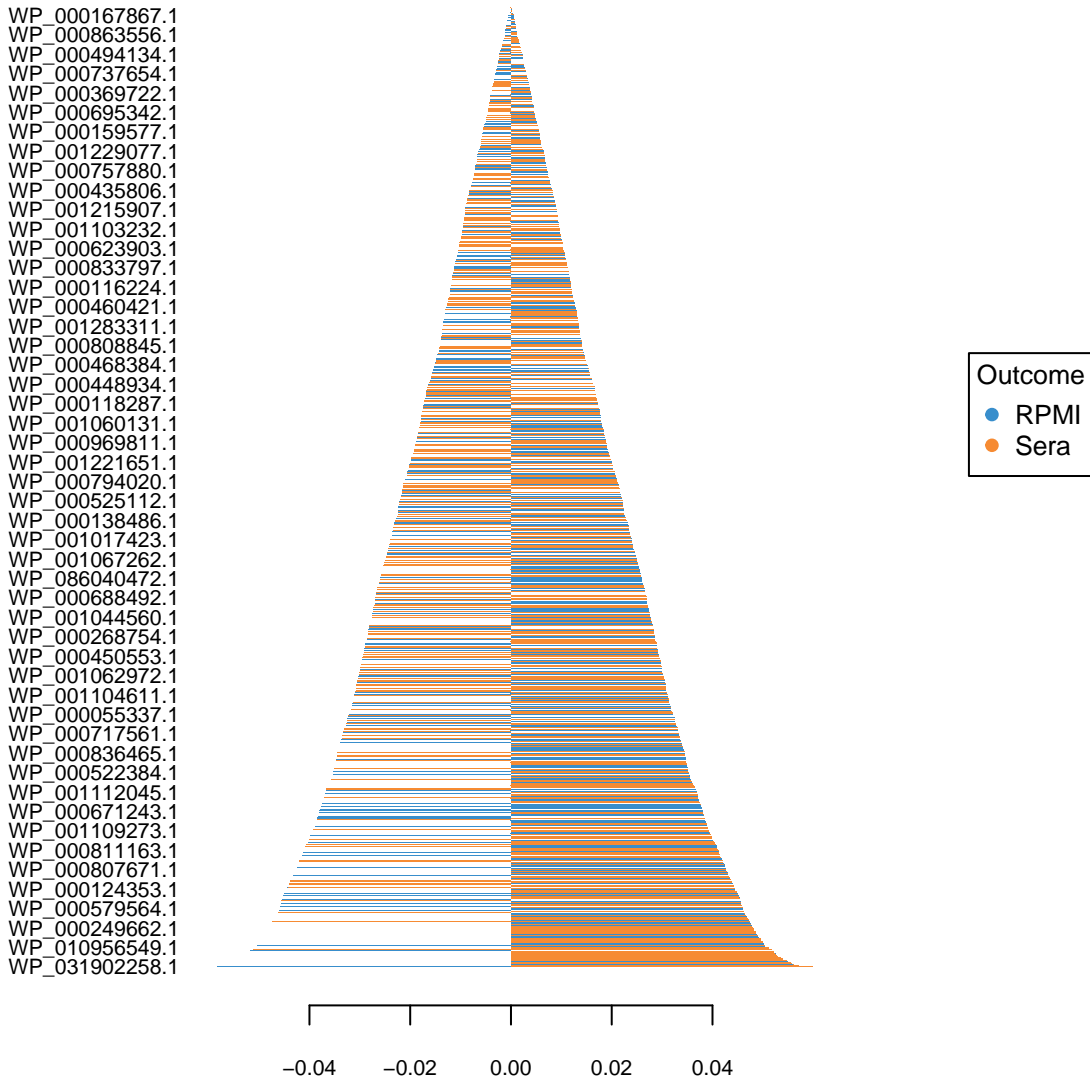


Outcome

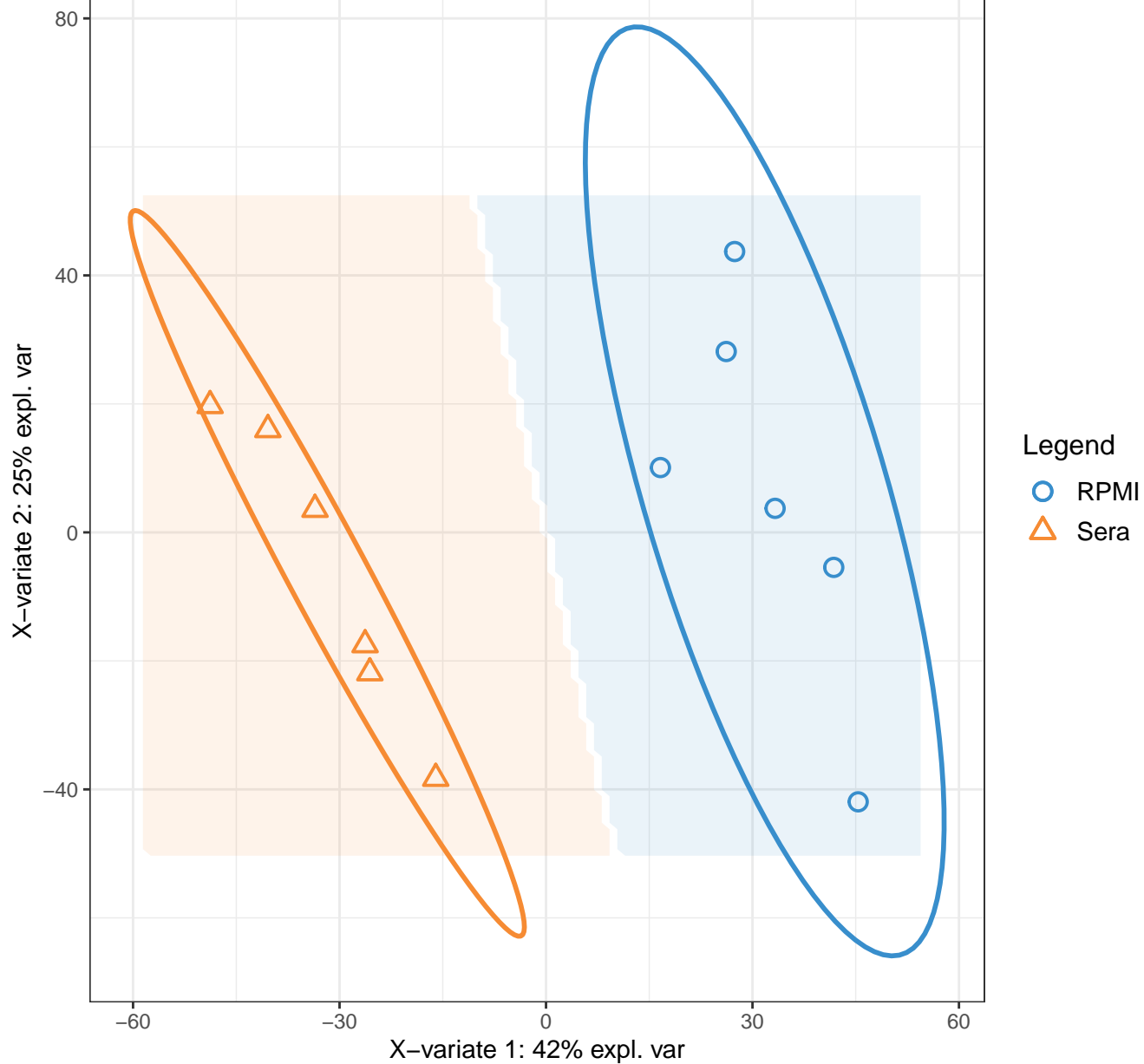
- RPMI
- Sera

-0.04 -0.02 0.00 0.02 0.04

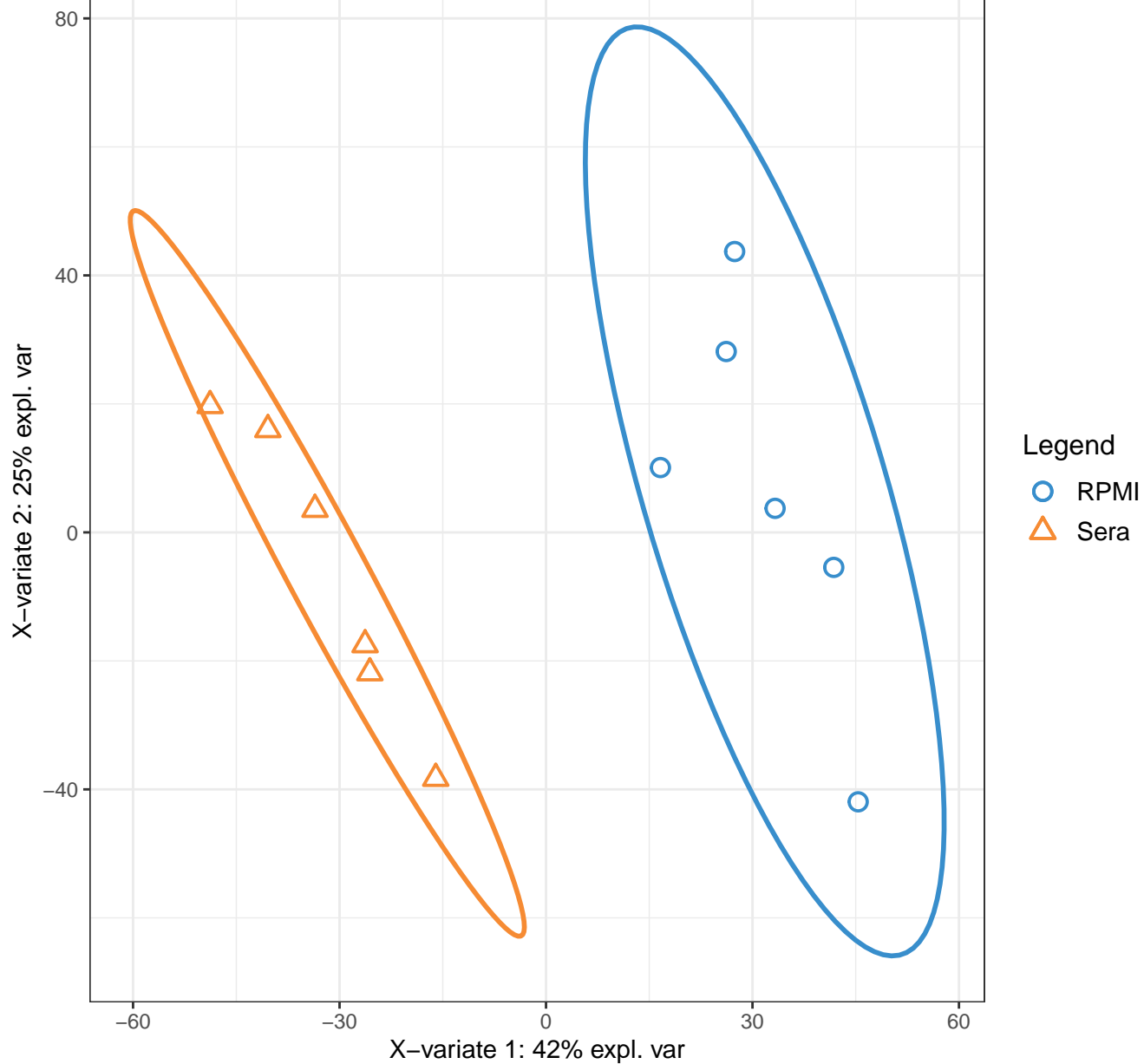
Contribution on comp 2



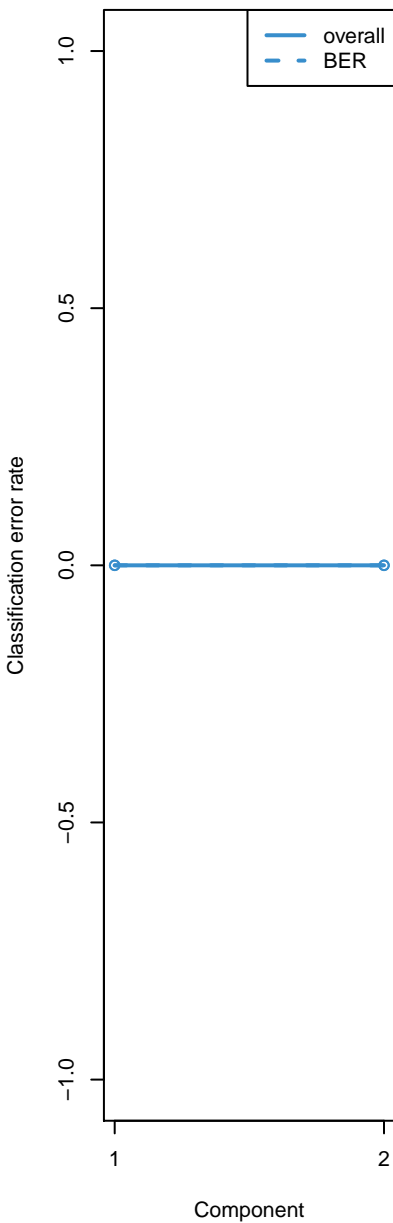
RNA_Seq PLSDA single 1/2



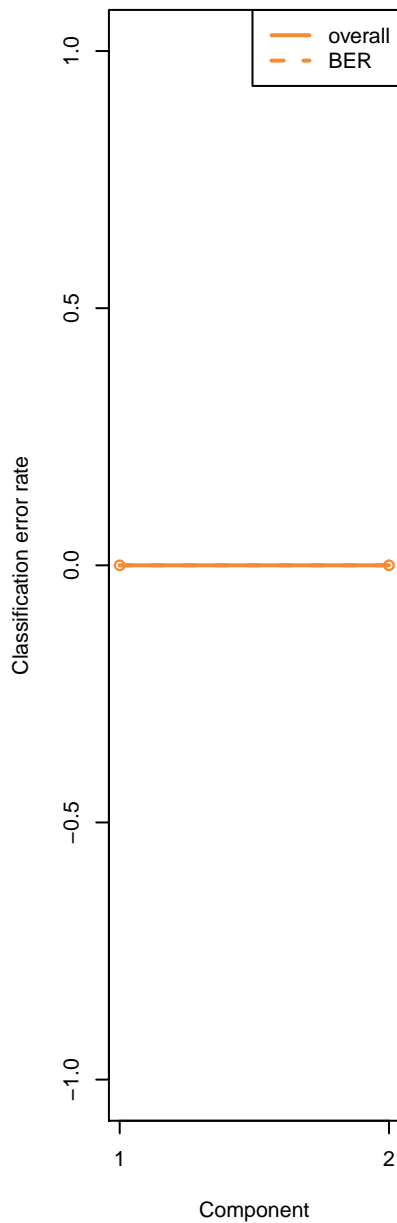
RNA_Seq PLSDA single 1/2



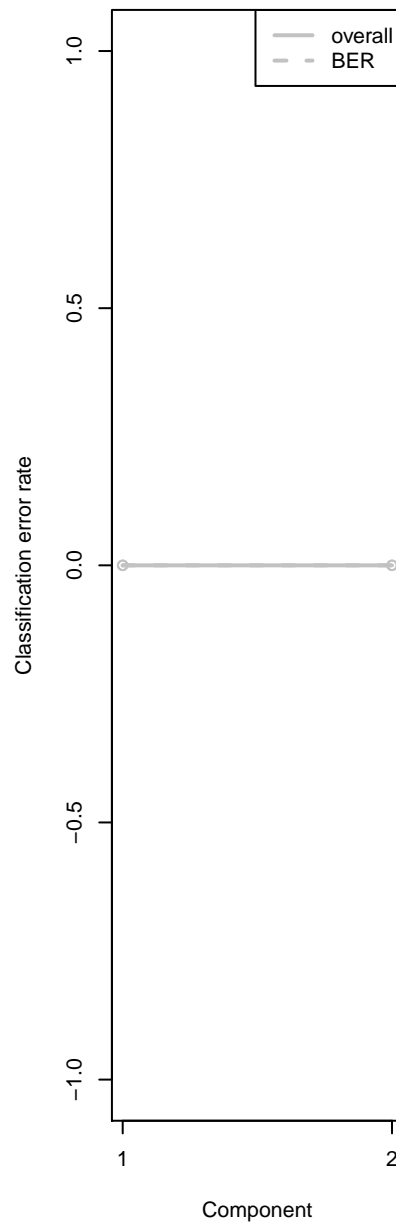
max.dist



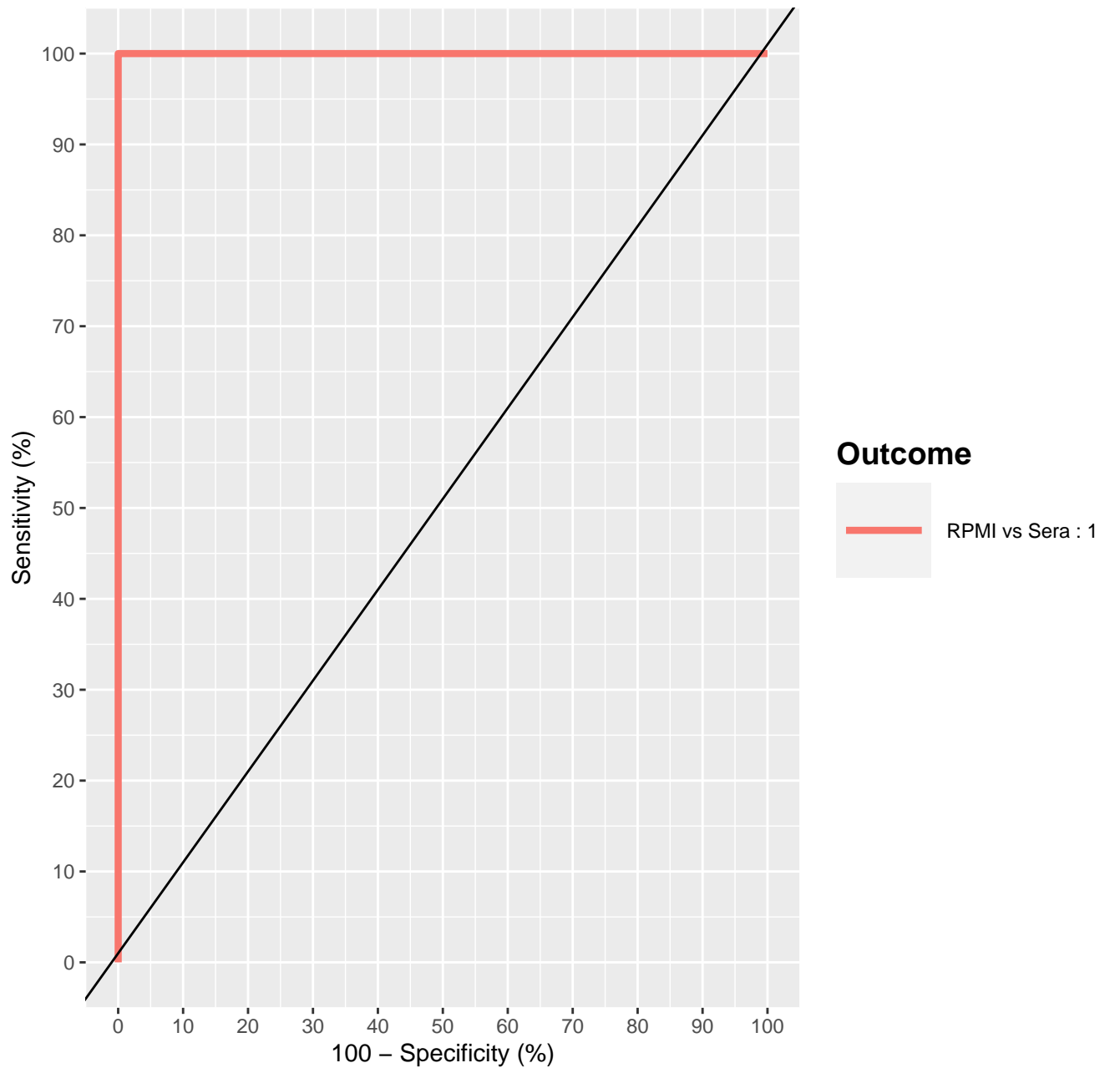
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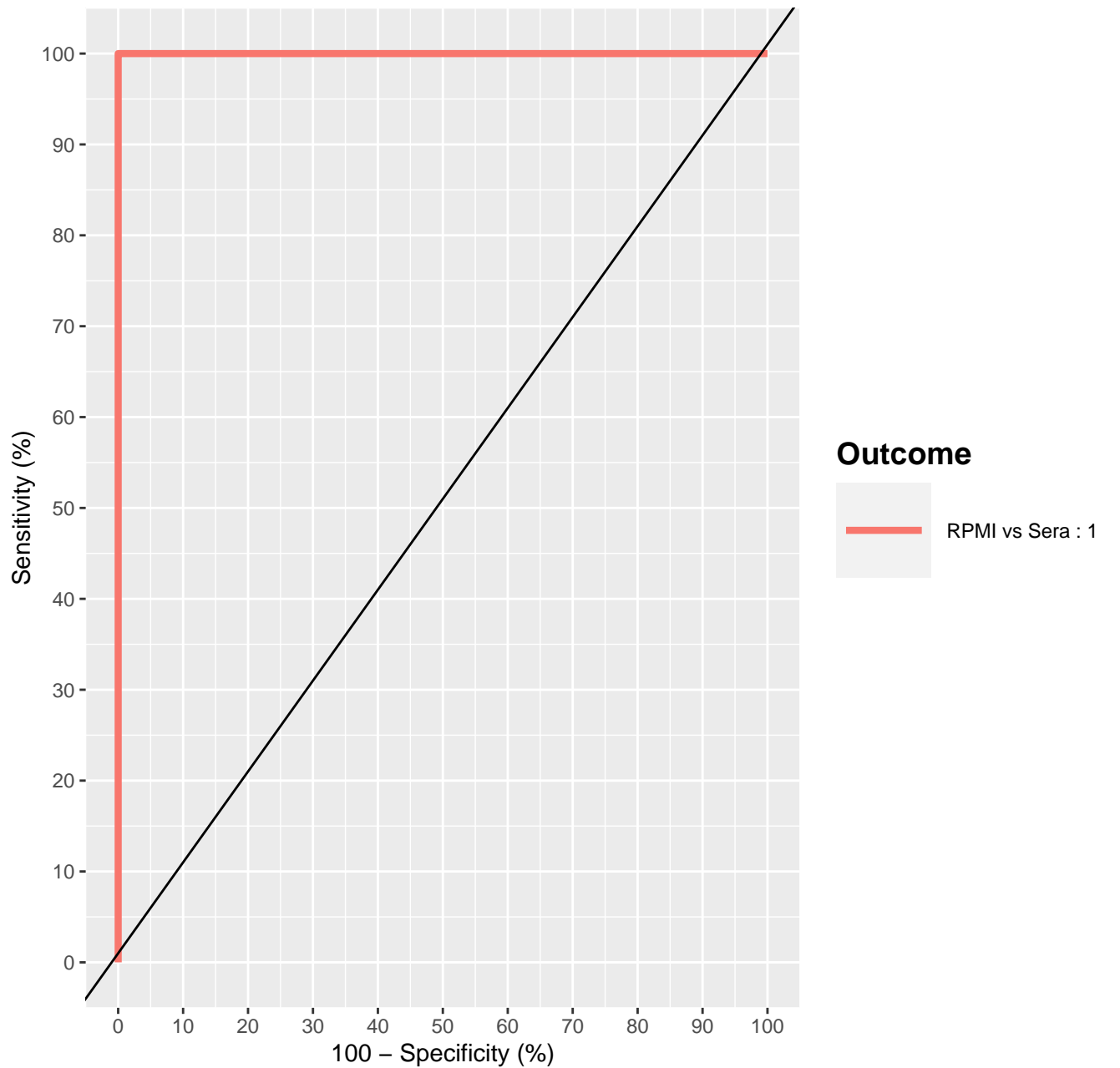
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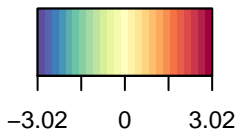
ROC Curve Comp 1



ROC Curve Comp 2



Color key

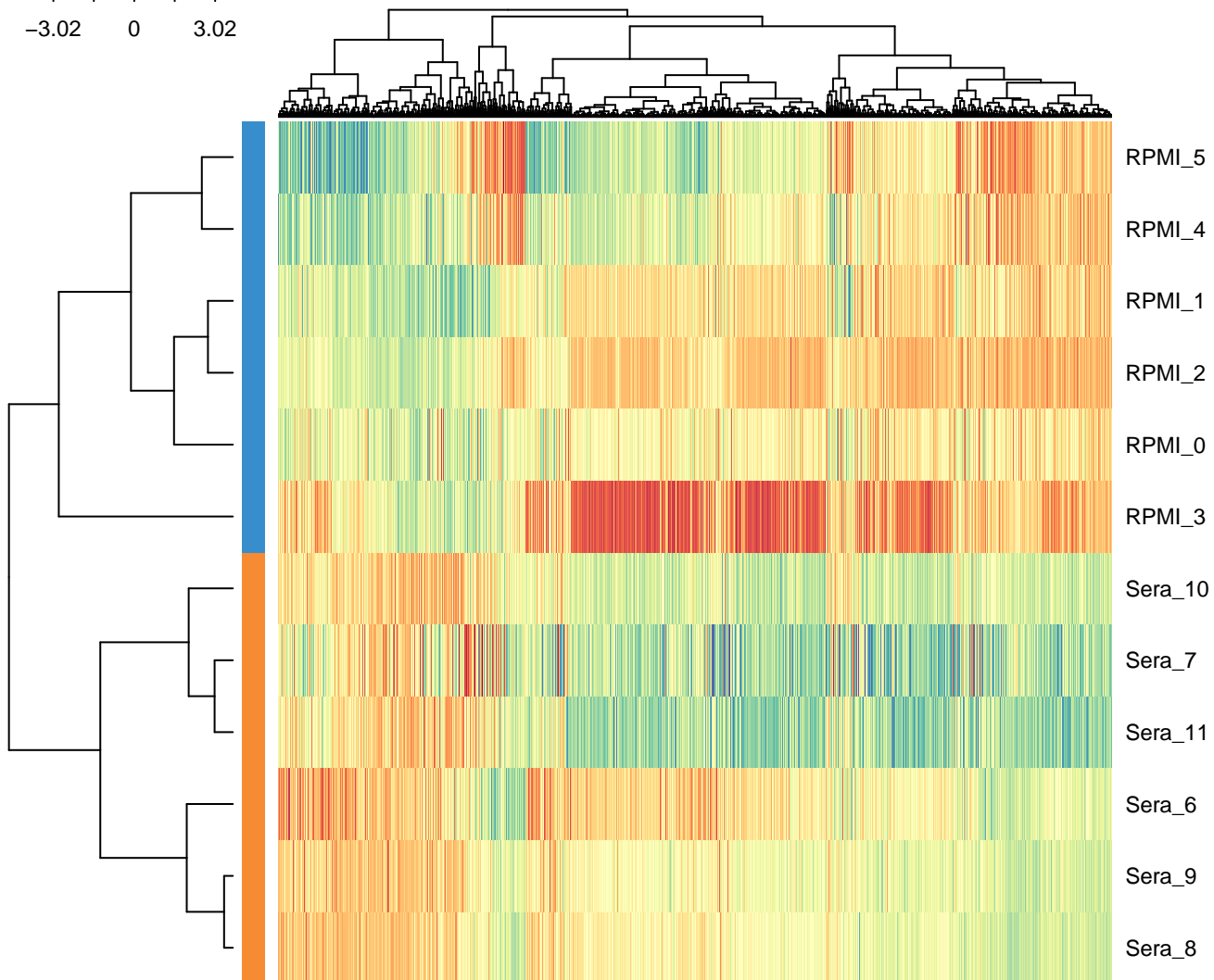


PLSDA

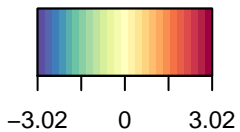
Status

■ RPMI

■ Sera



Color key

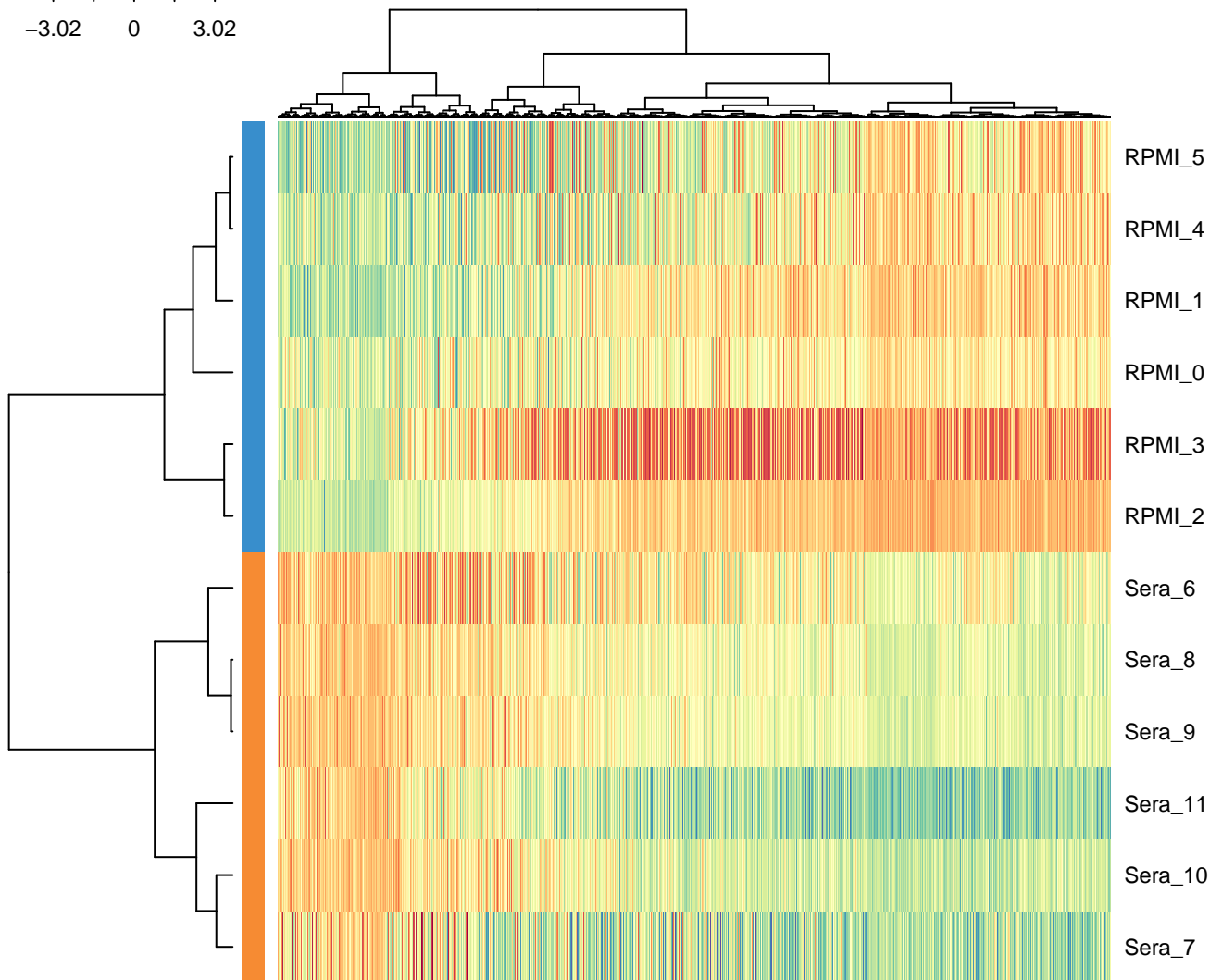


PLSDA Component 1

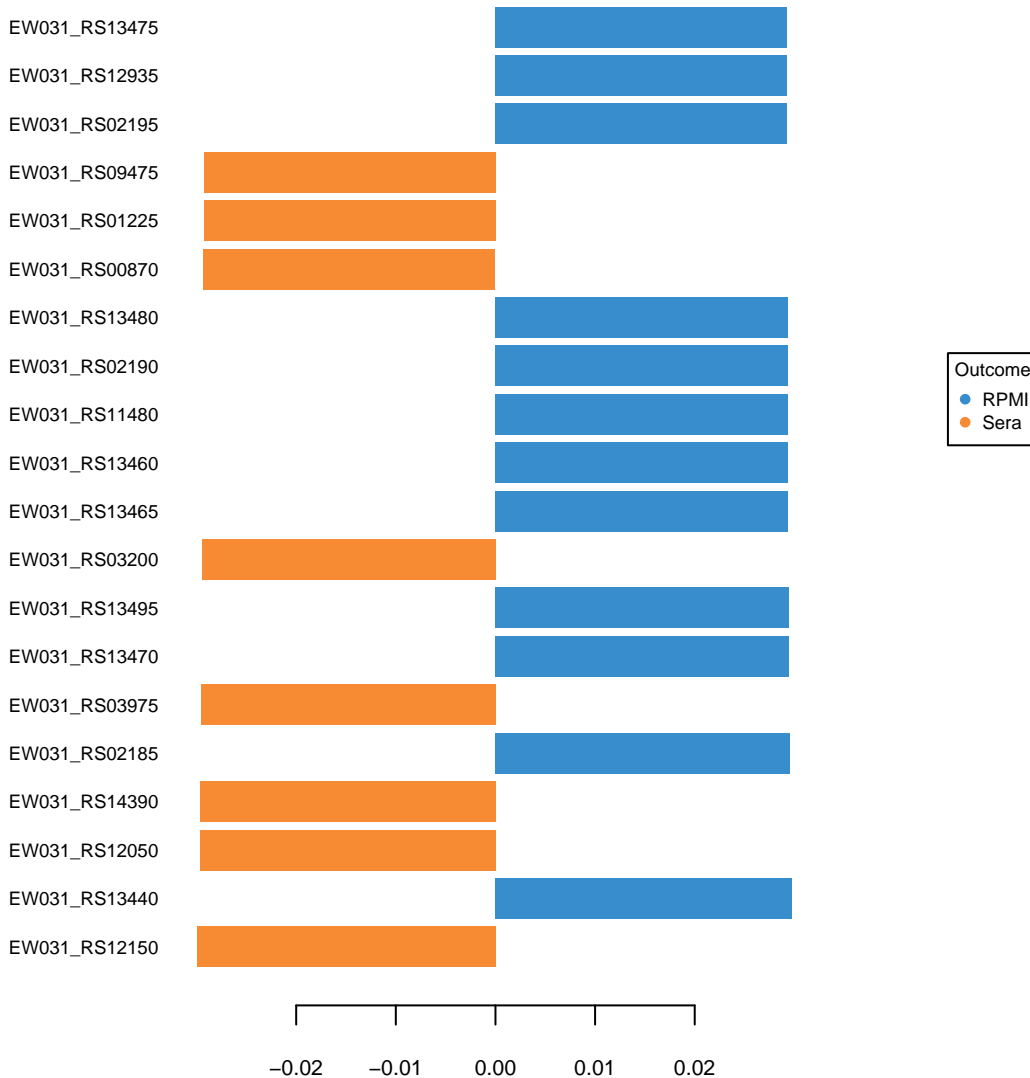
Status

RPMI

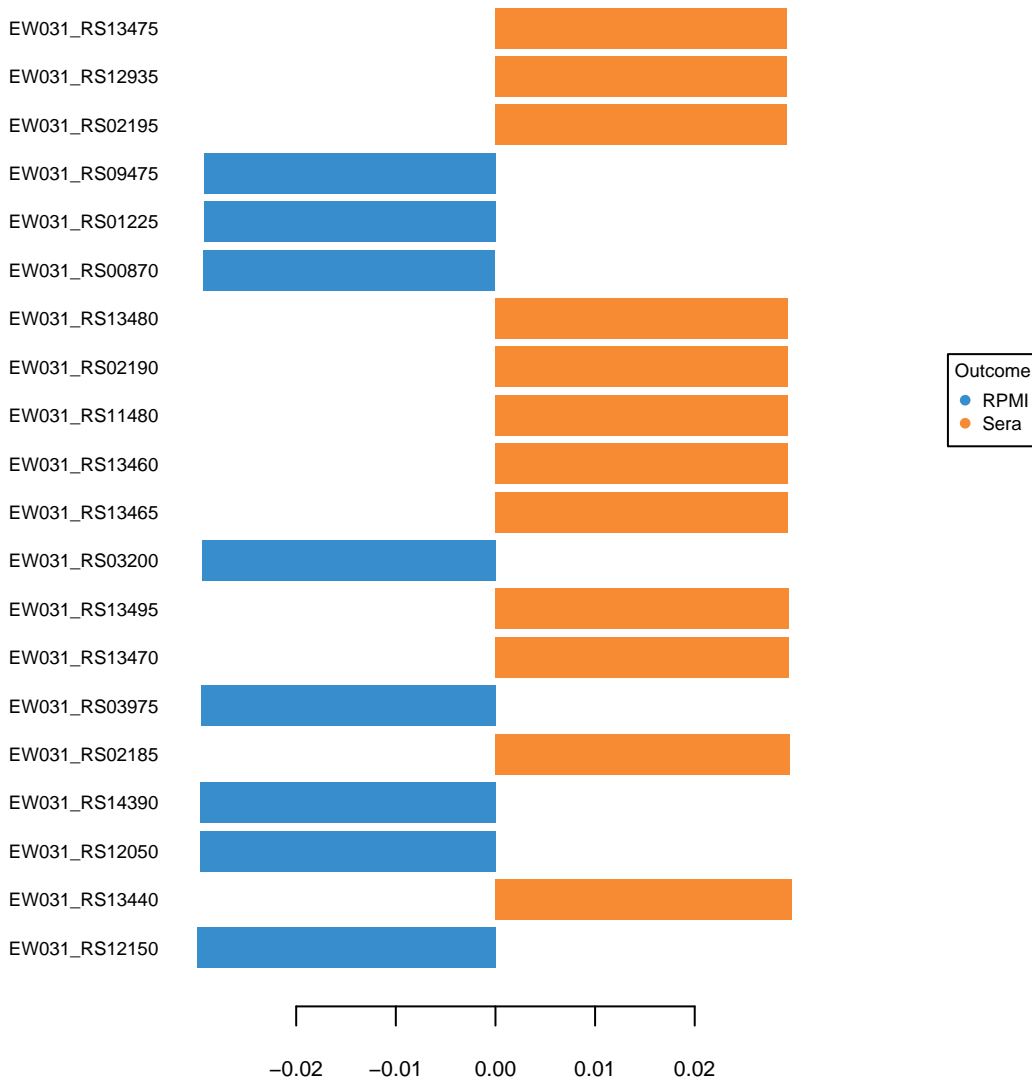
Sera



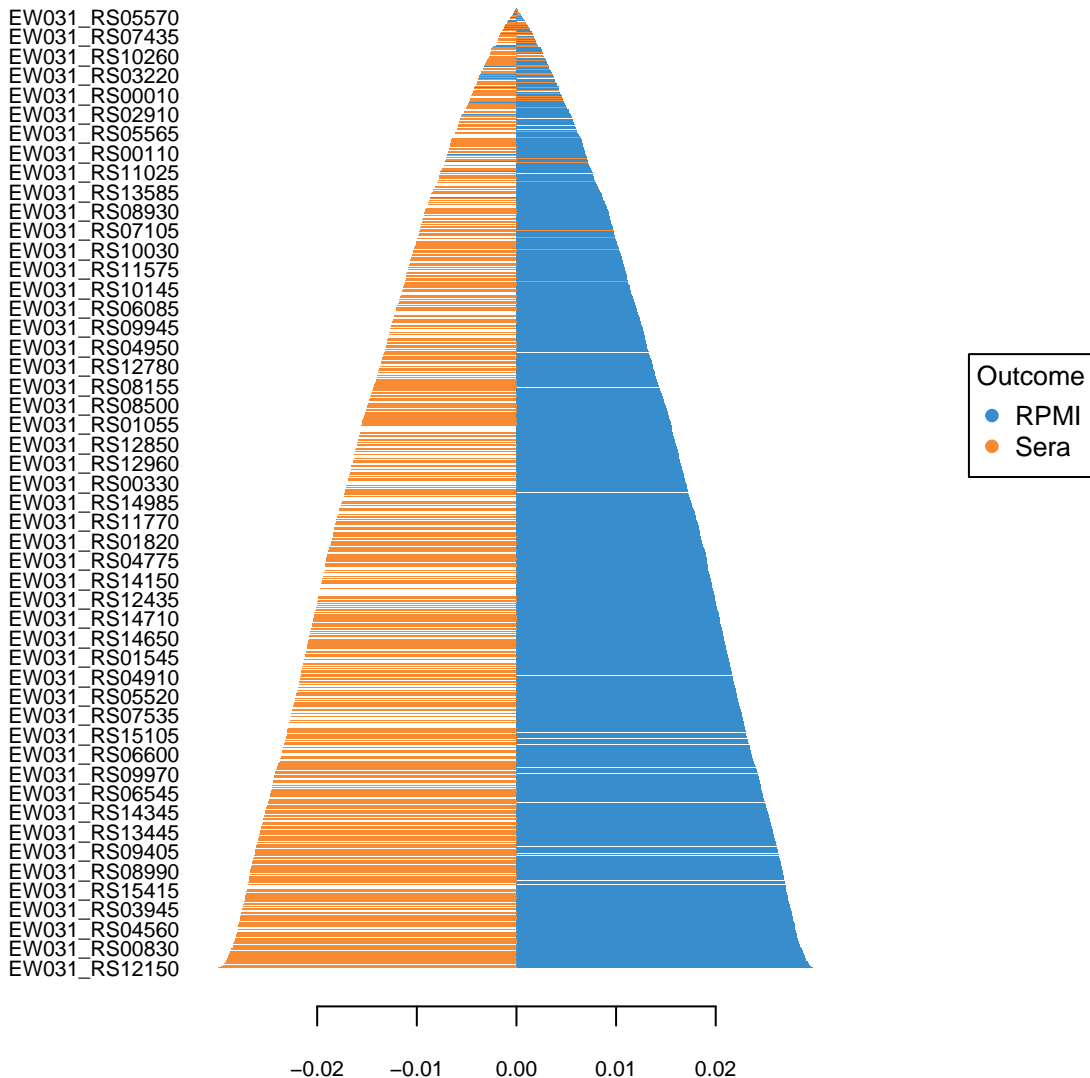
RNA_Seq 1 PLSDA max loadir



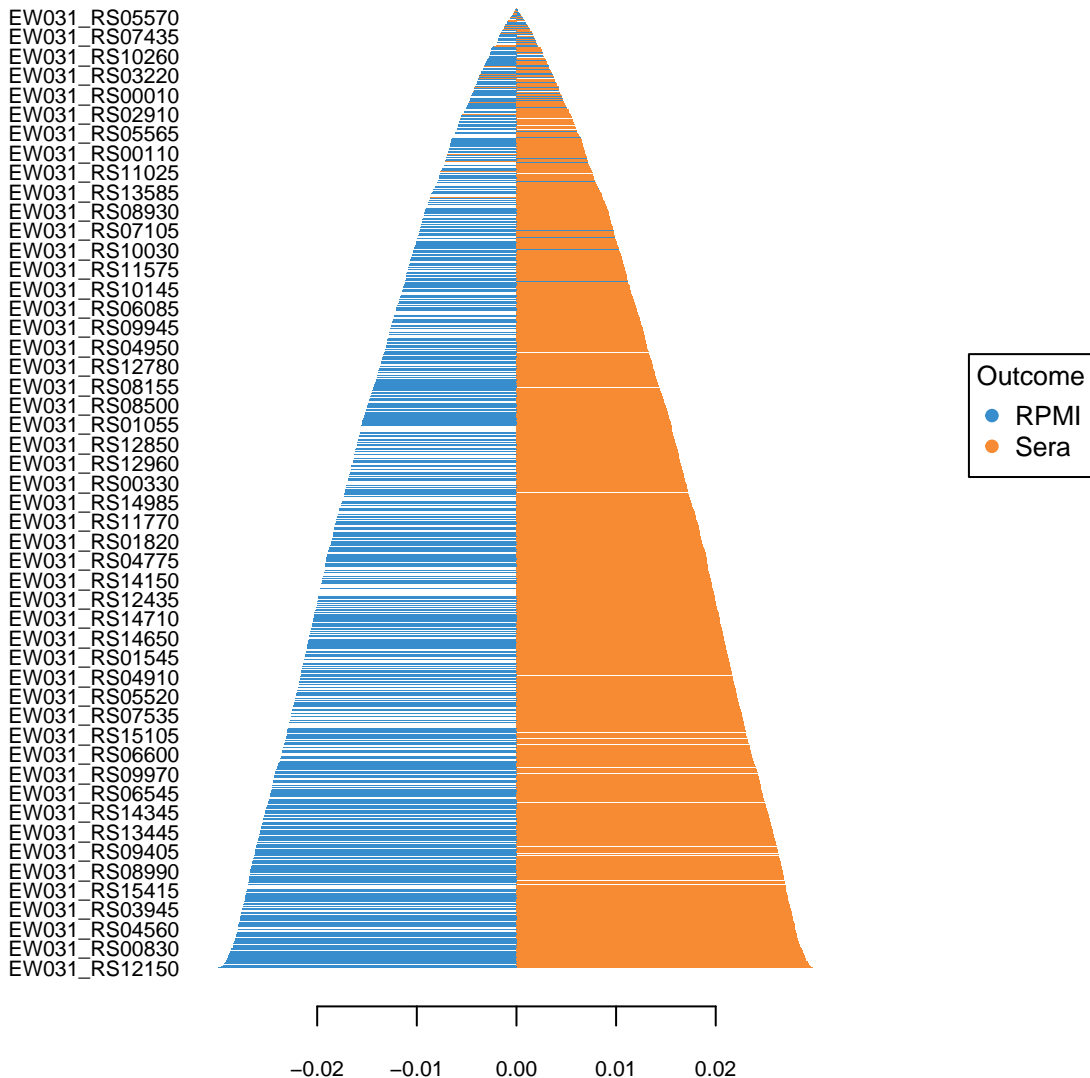
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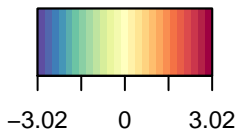
Contribution on comp 1



Contribution on comp 1



Color key

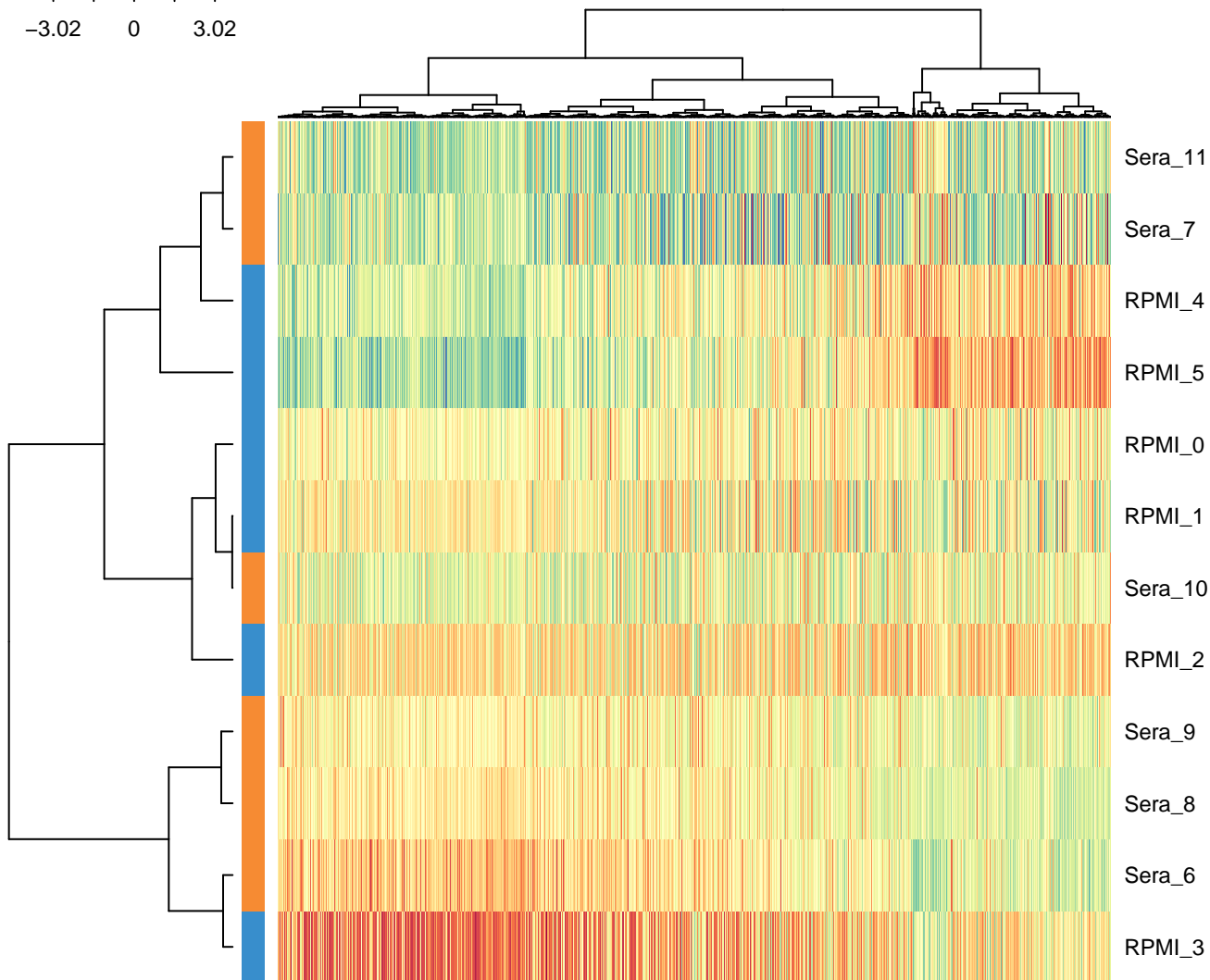


PLSDA Component 2

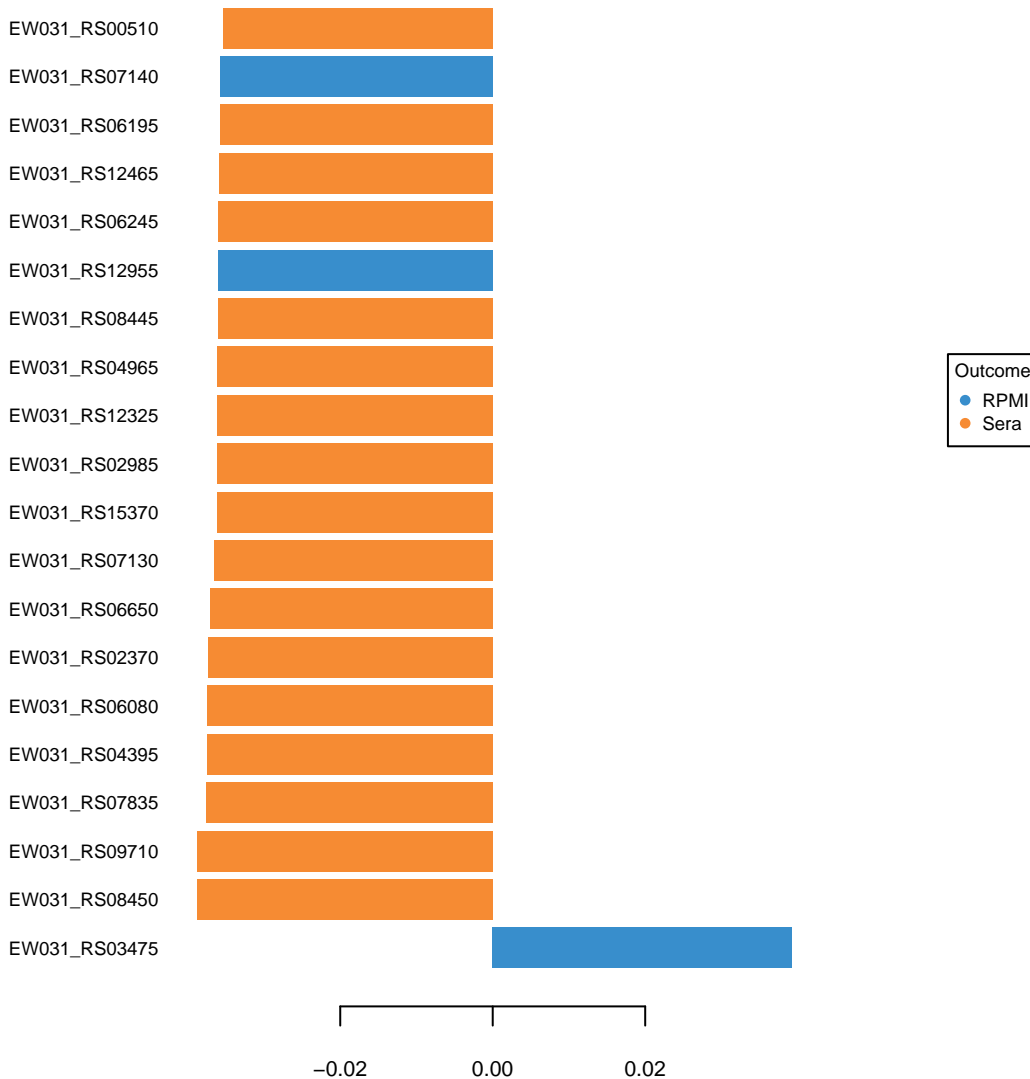
Status

■ RPMI

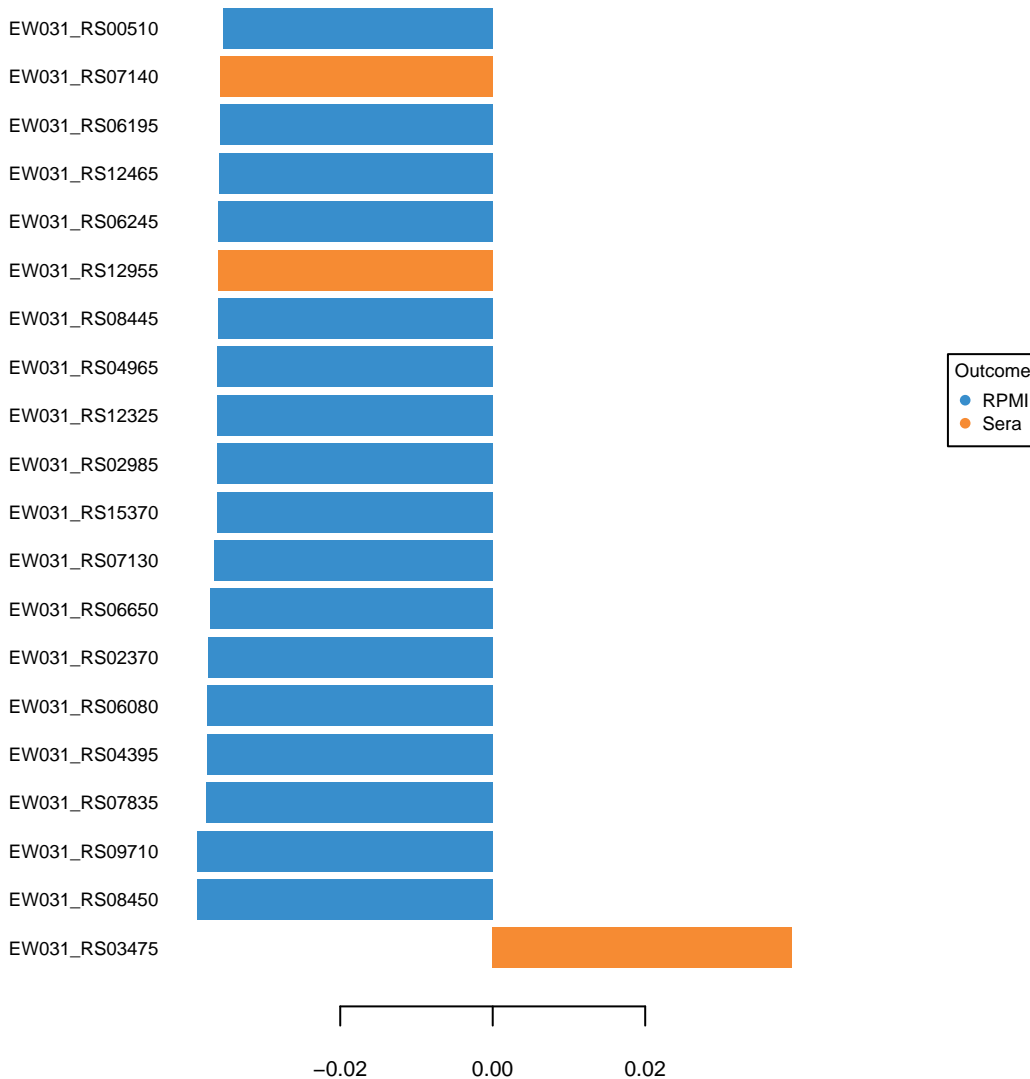
■ Sera



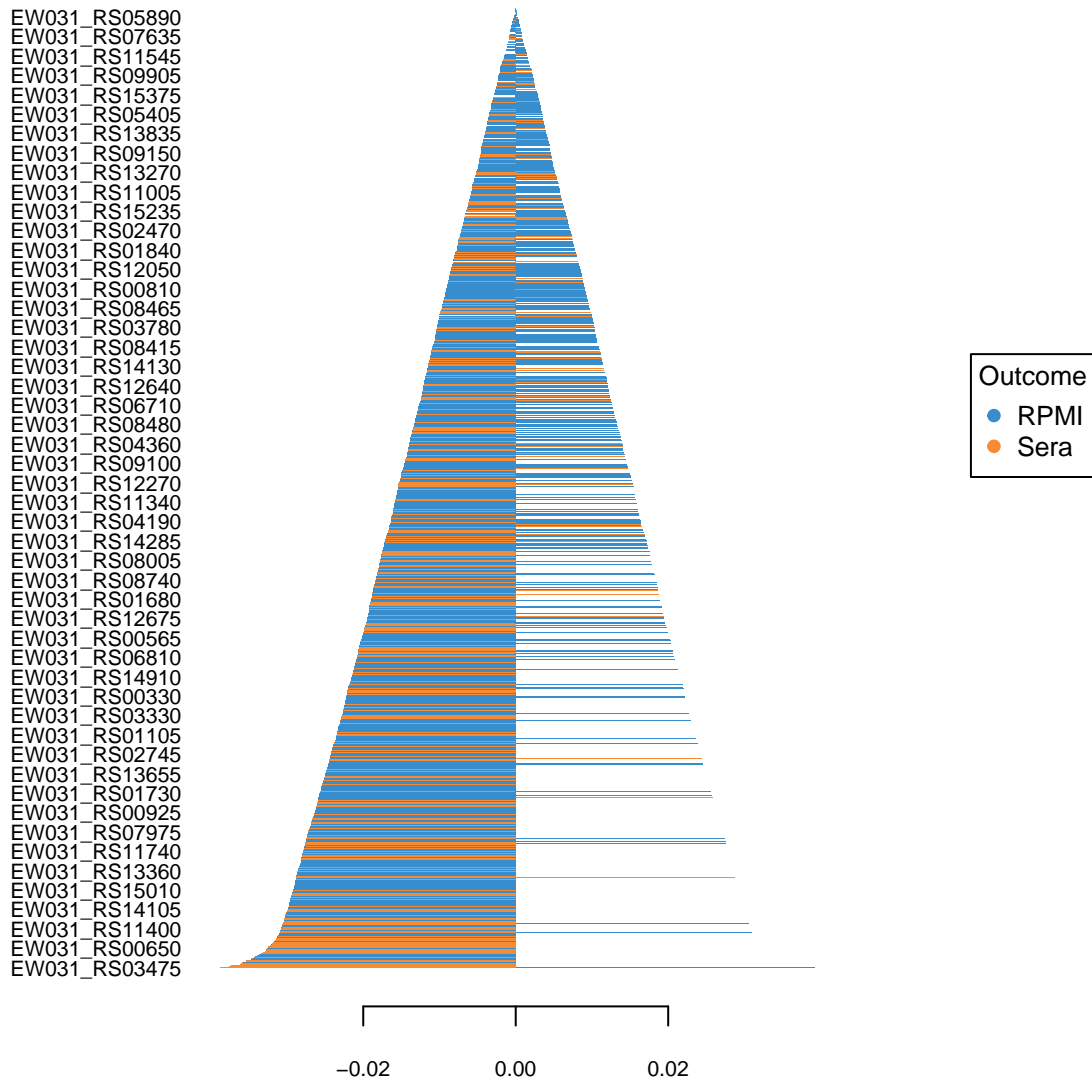
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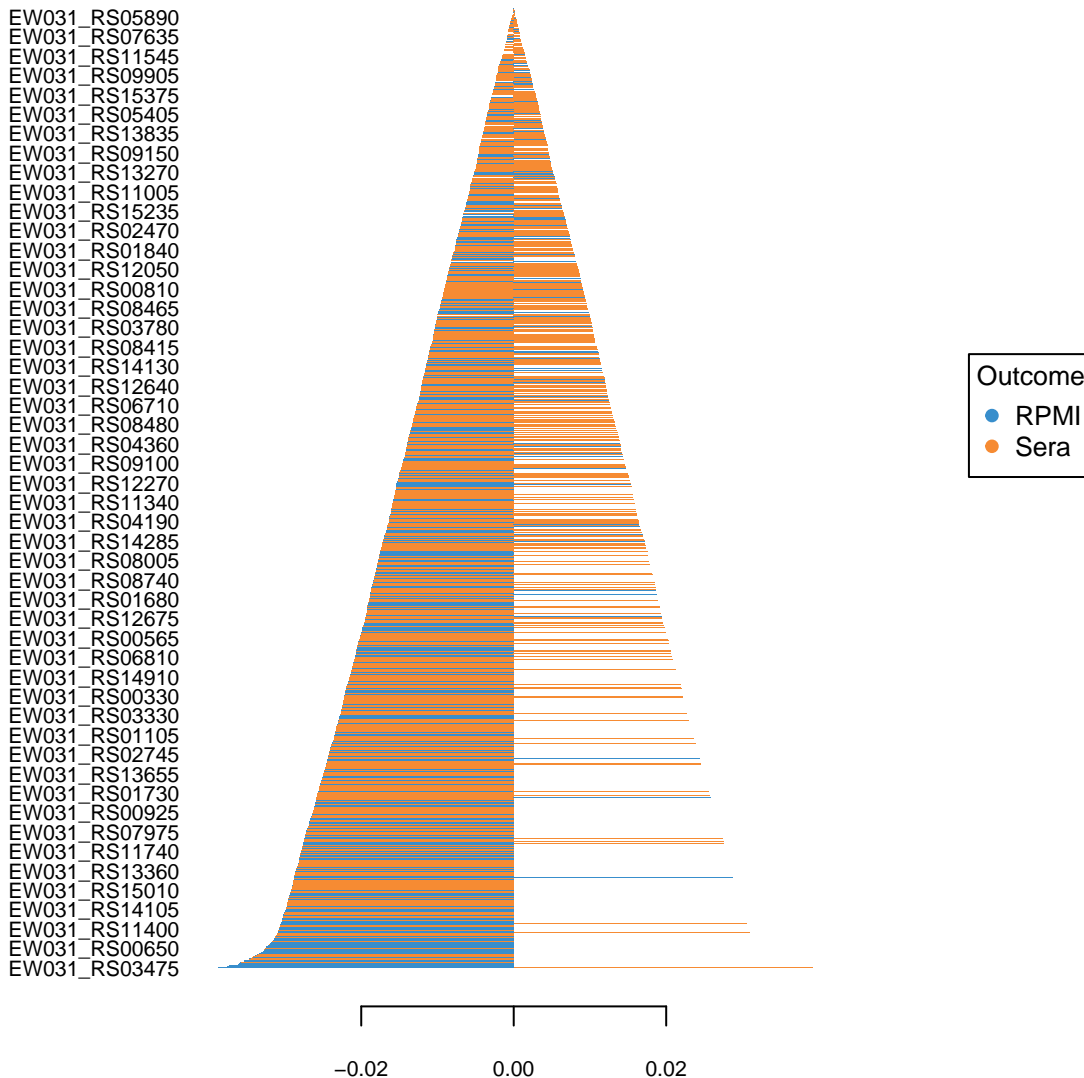
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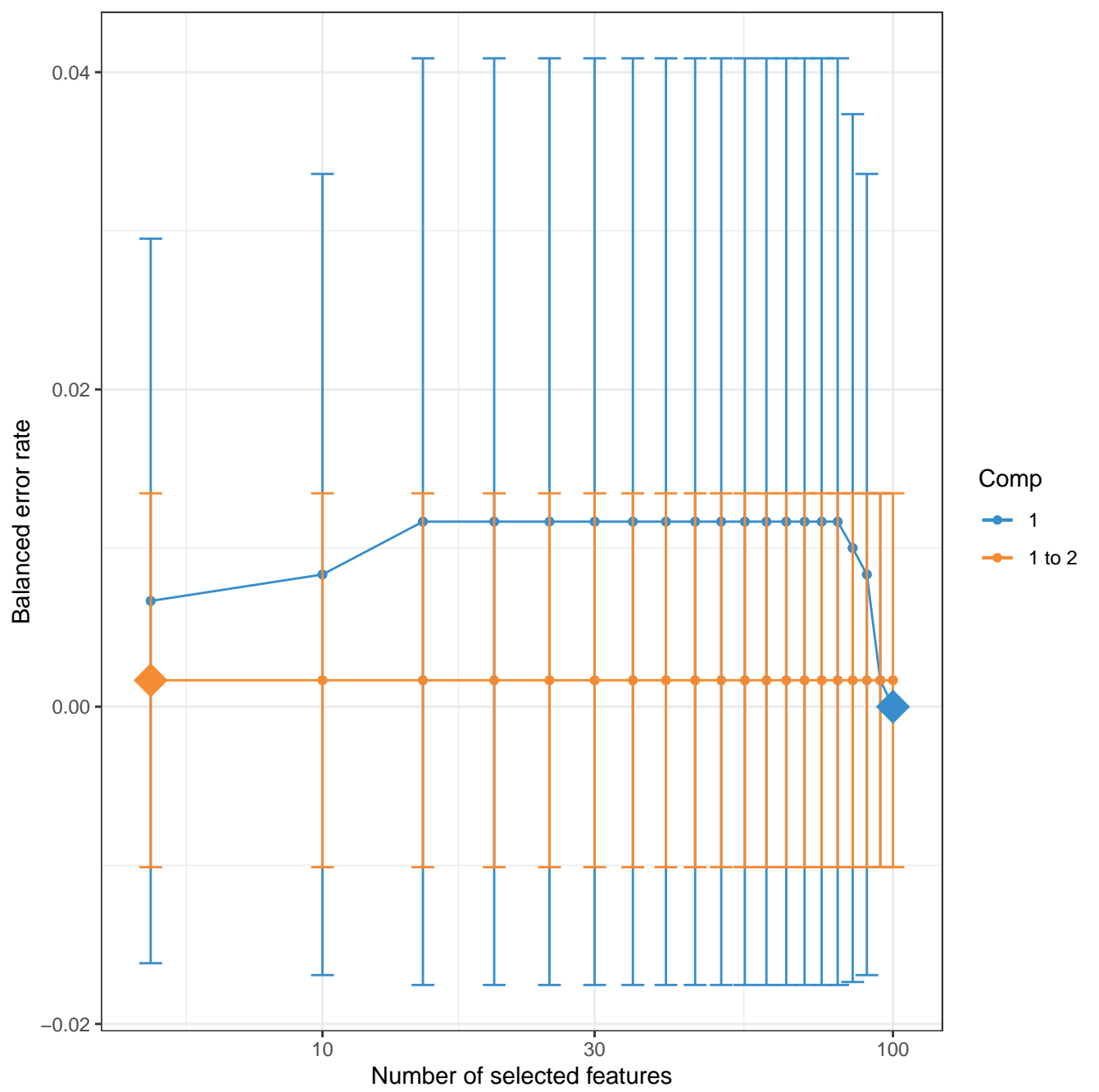


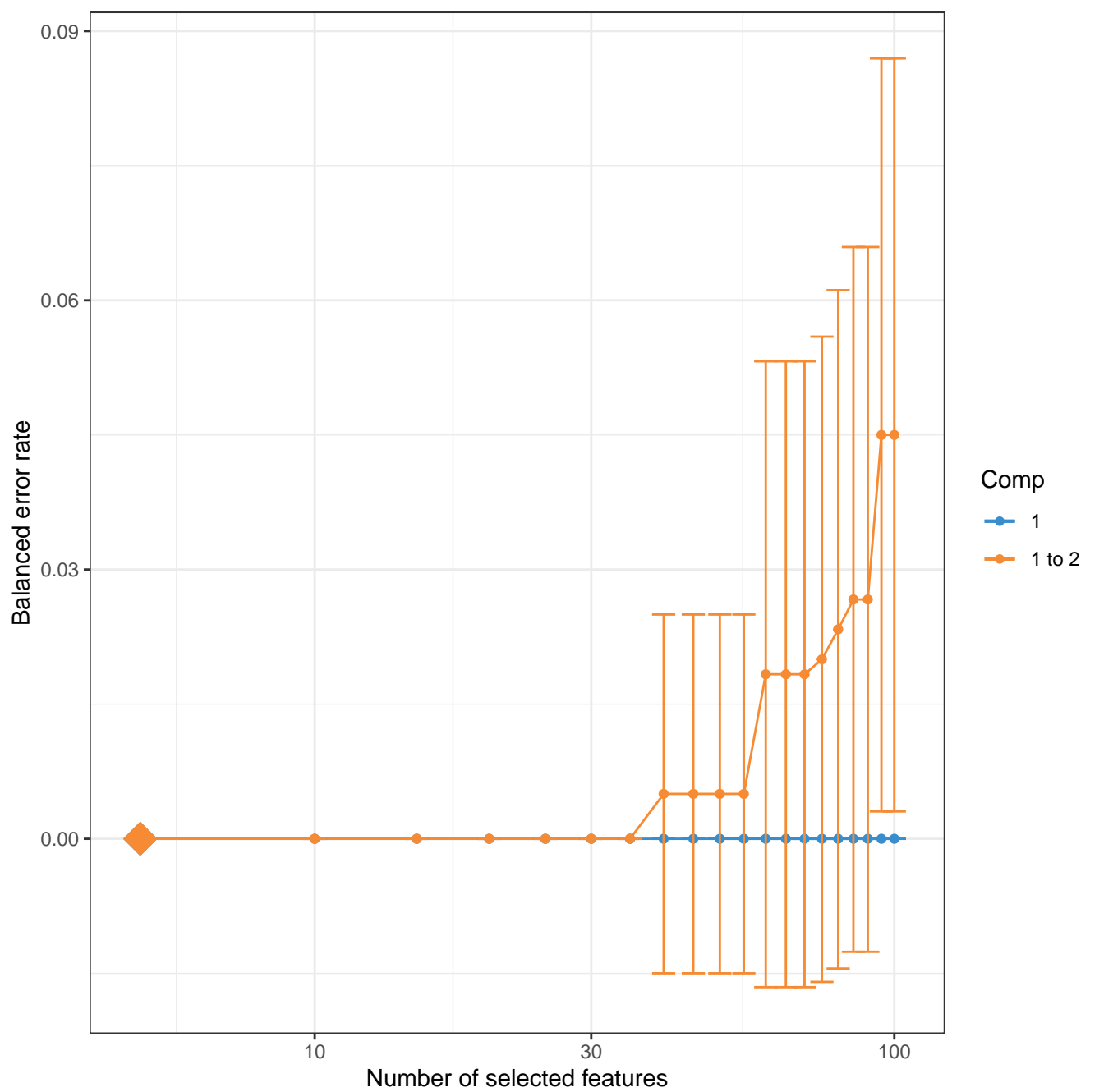
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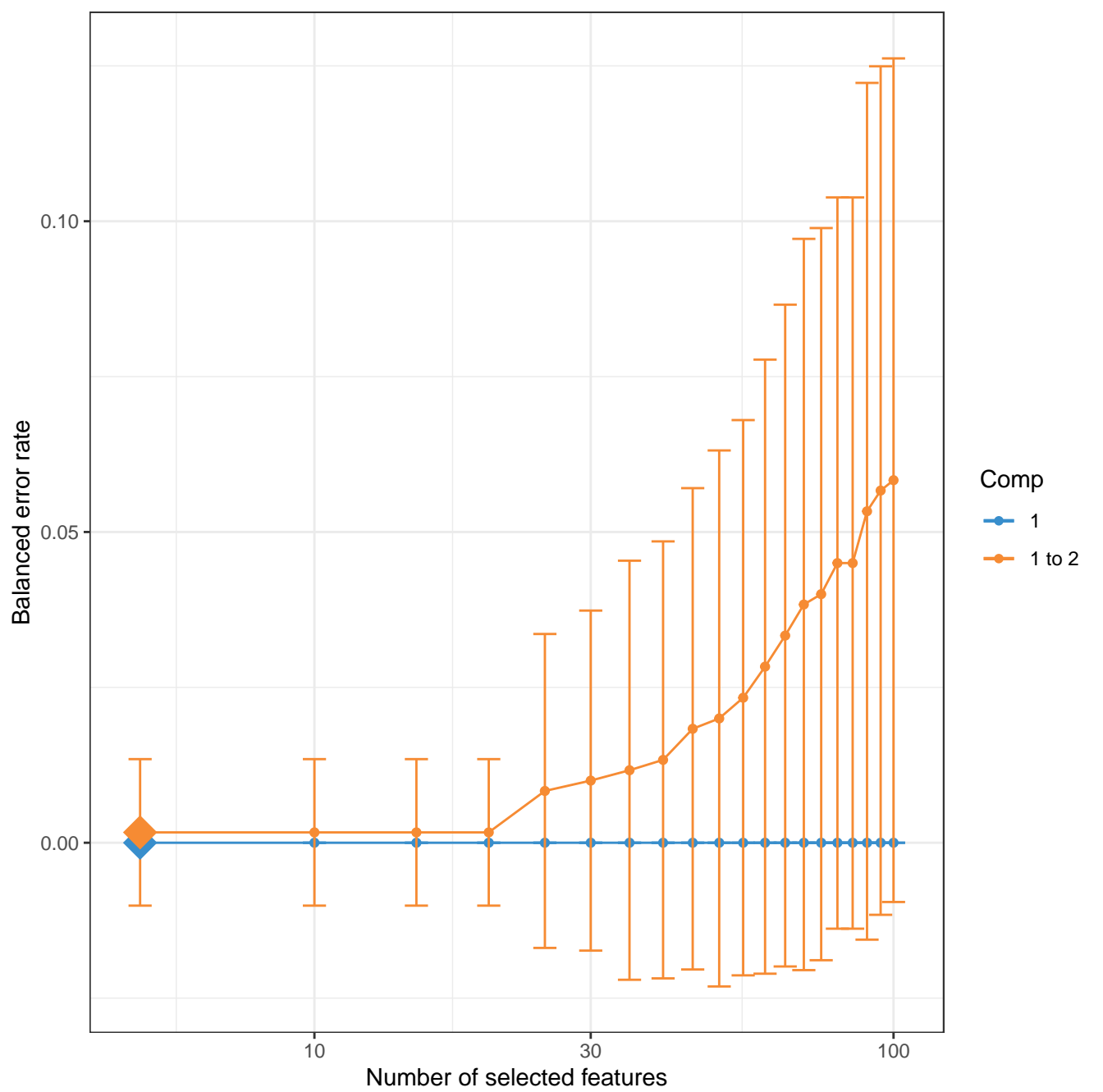


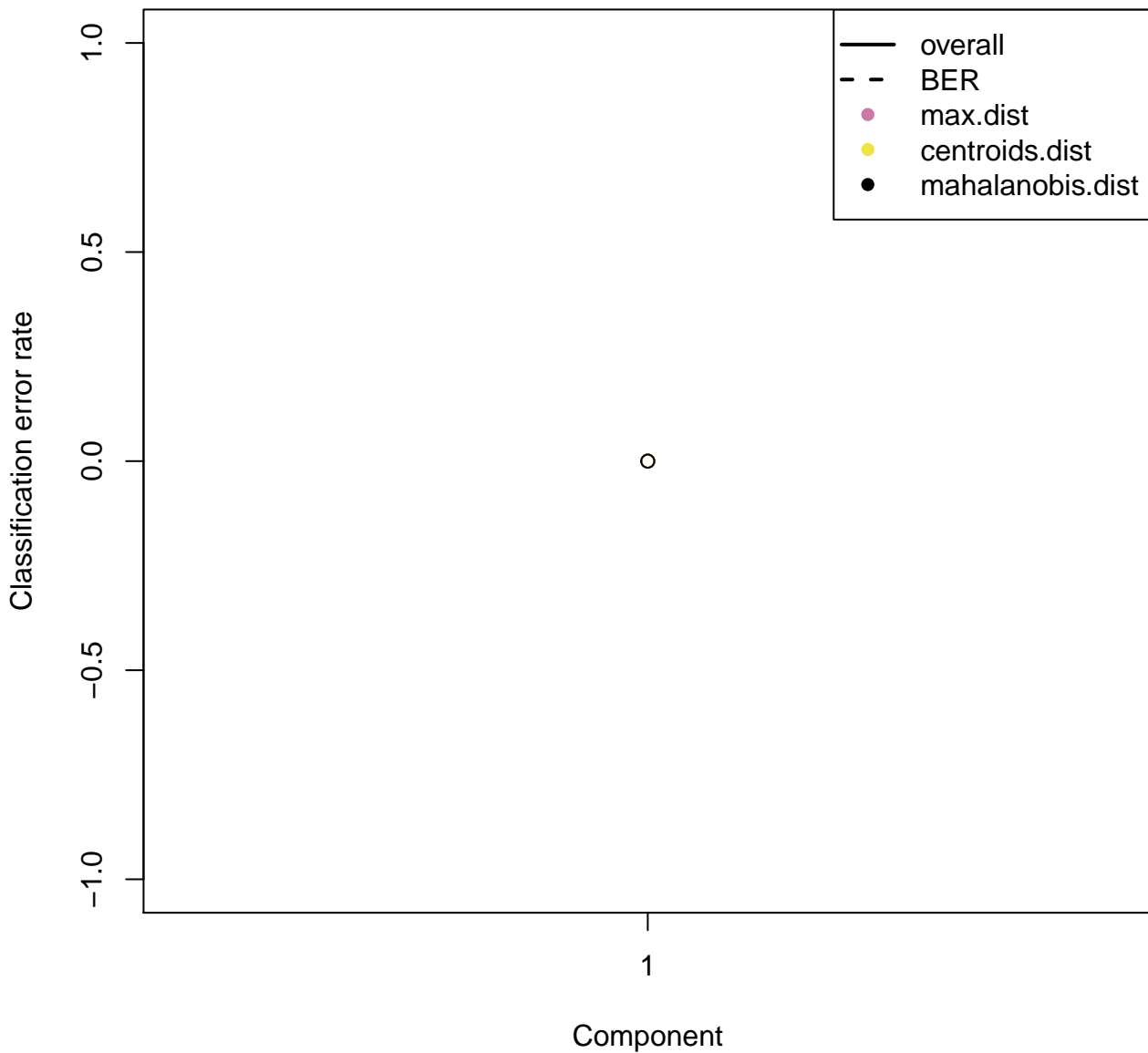
Contribution on comp 2



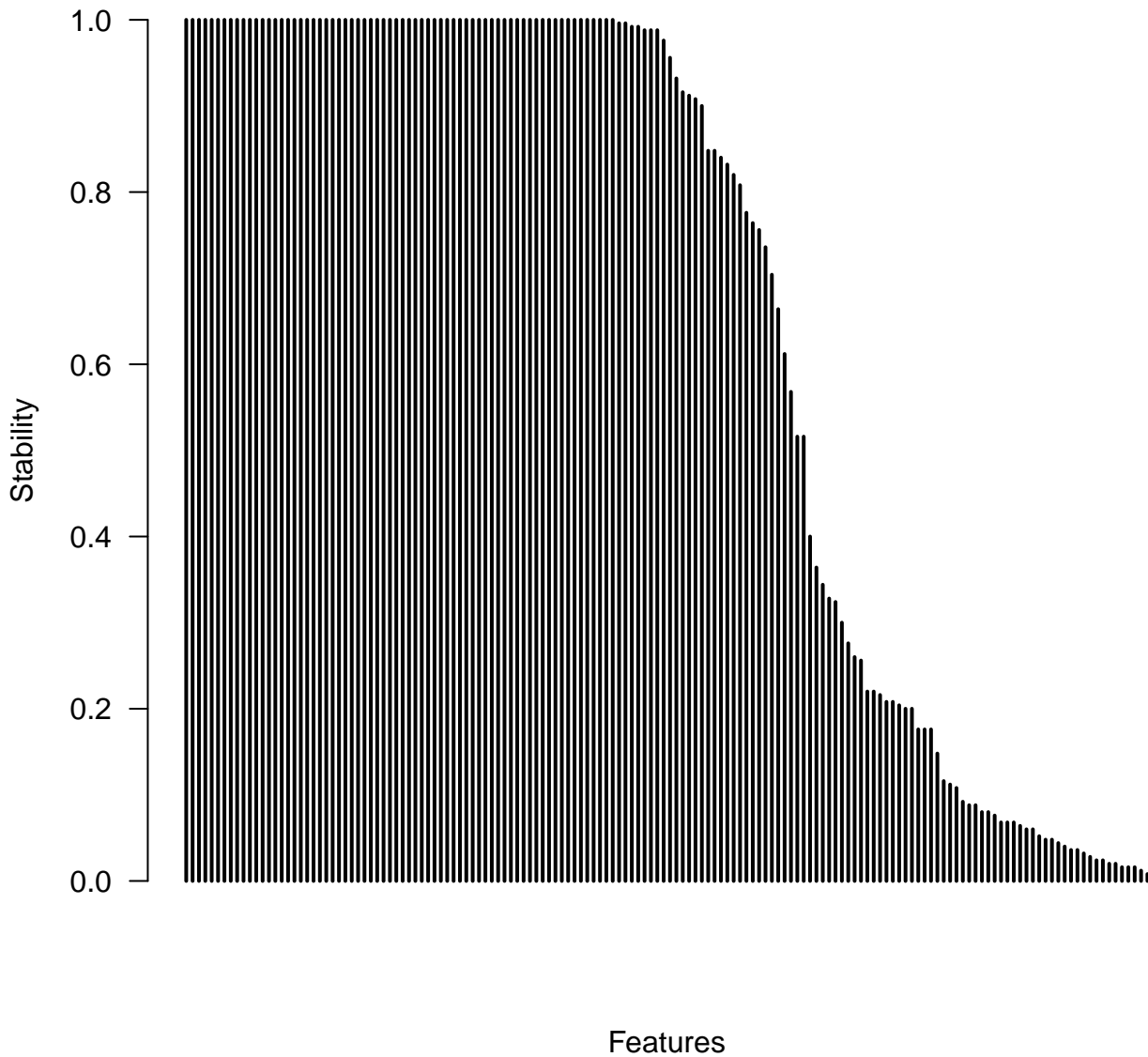




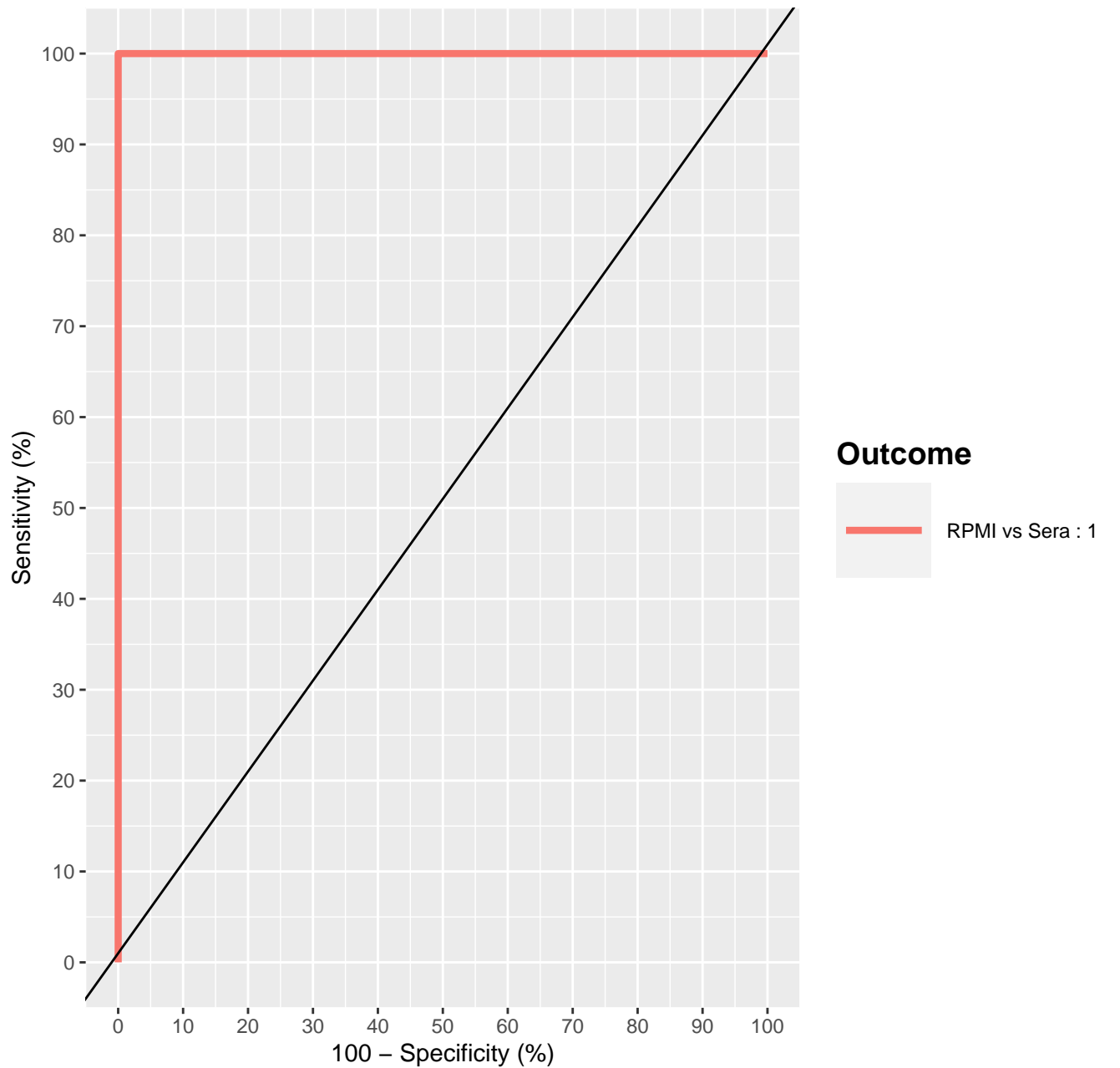




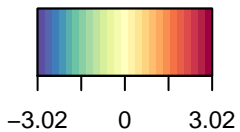
Comp 1



ROC Curve Comp 1



Color key

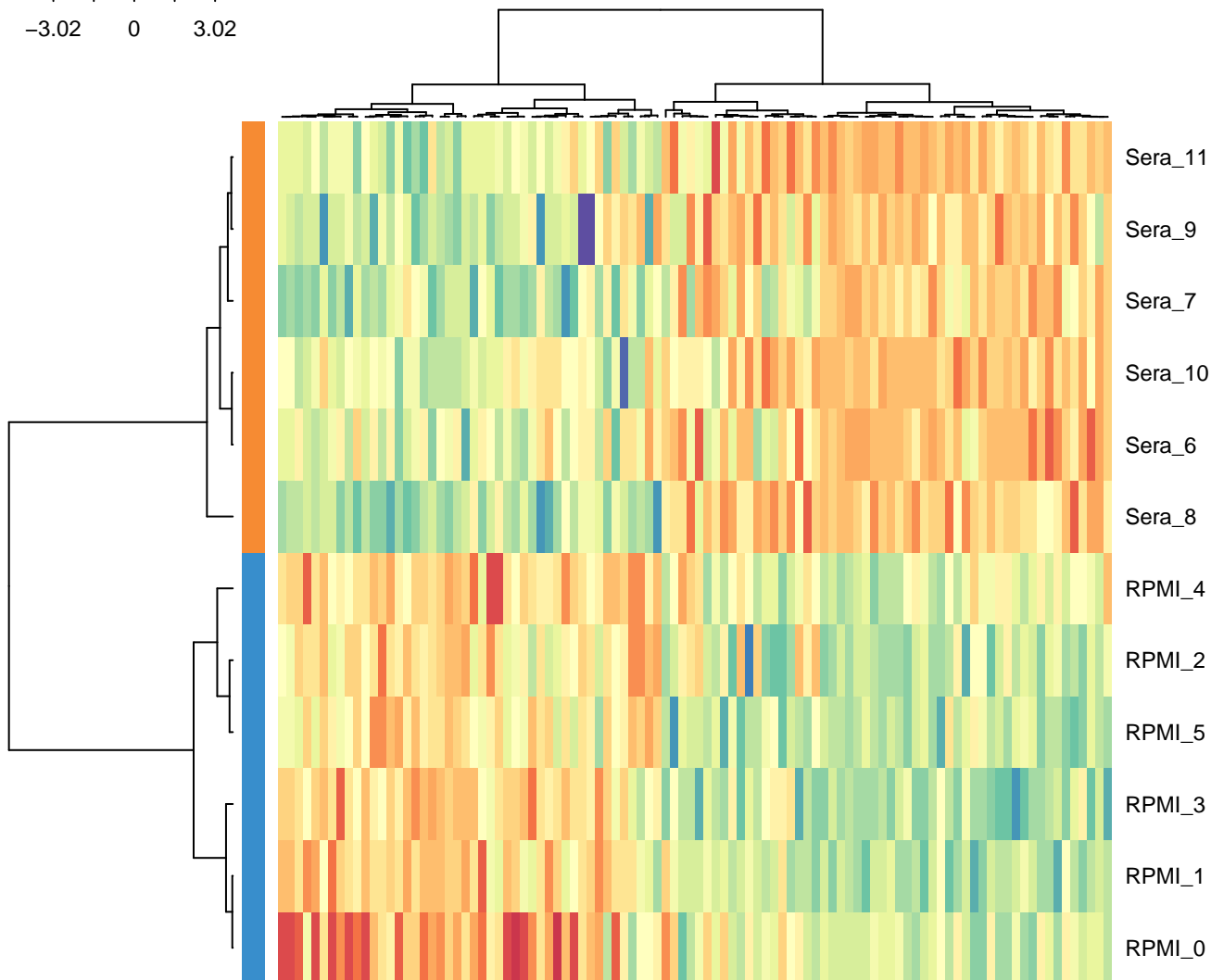


sPLSDA

Status

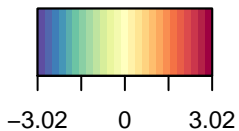
RPMI

Sera



sPLSDA Component 1

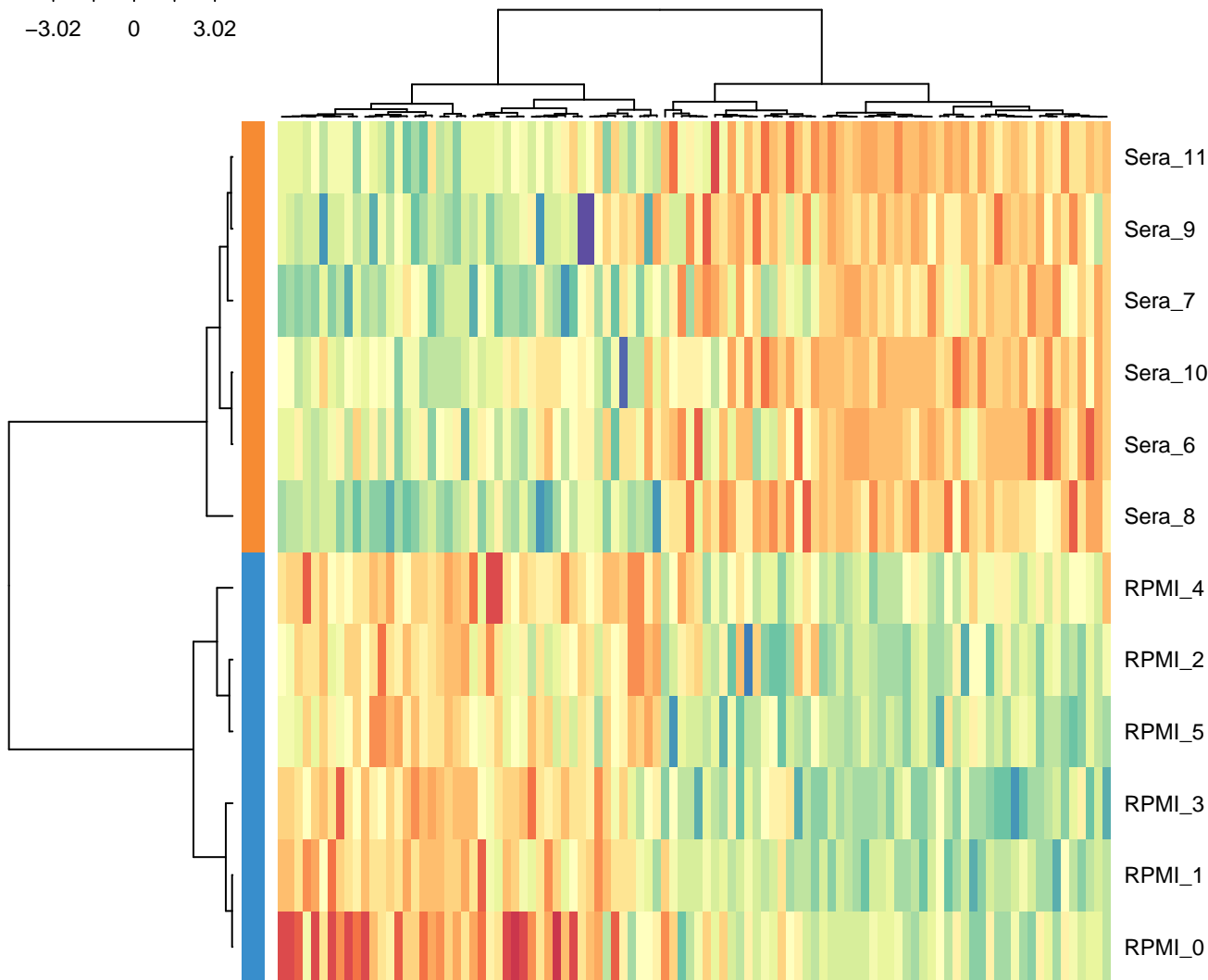
Color key



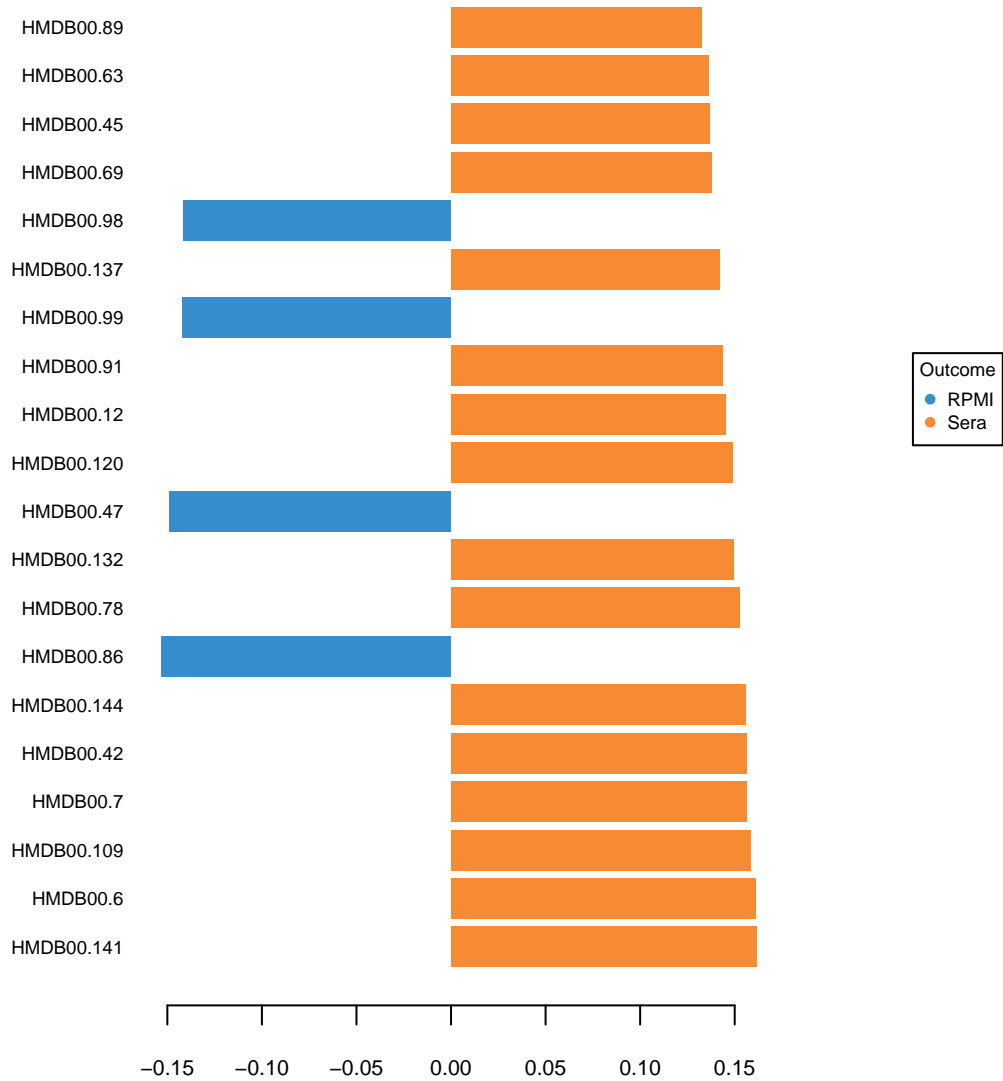
Status

RPMI

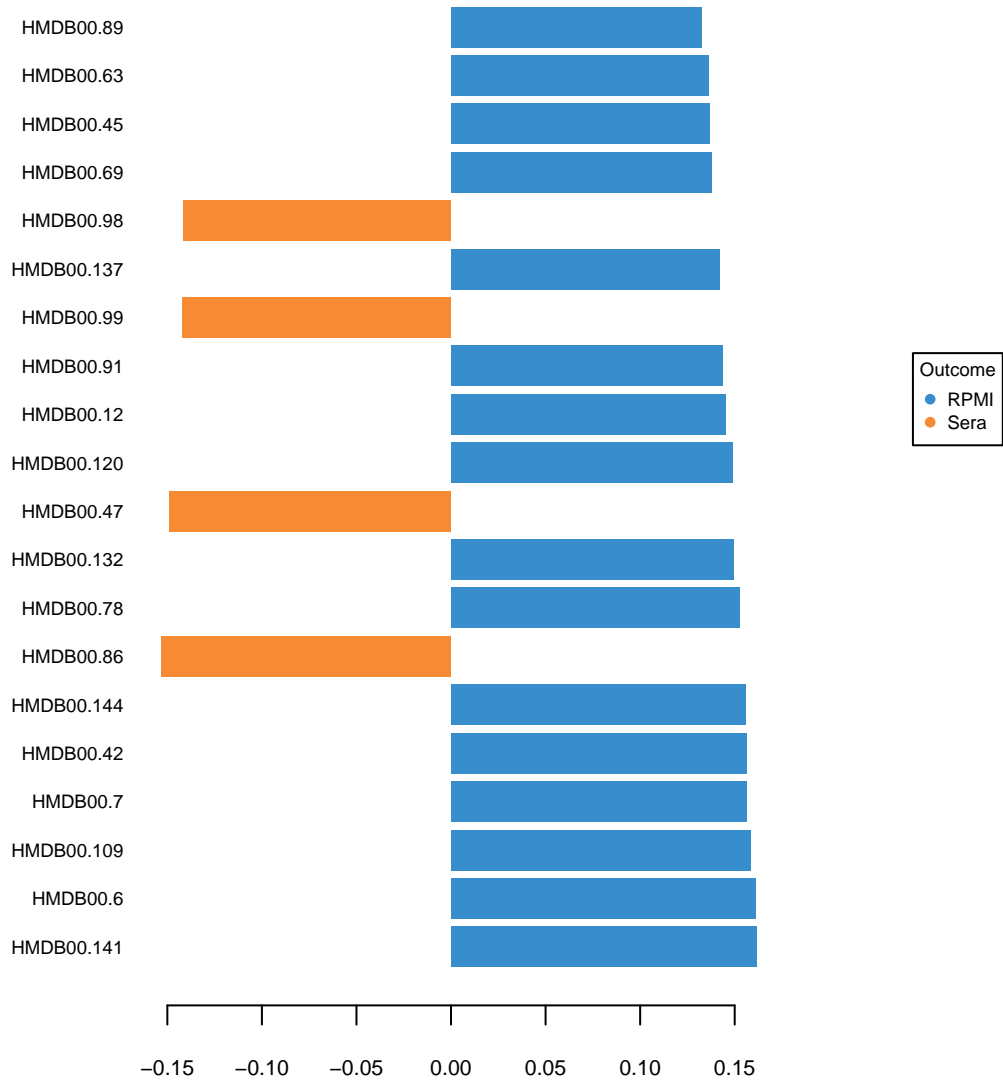
Sera



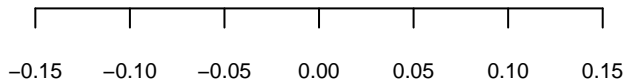
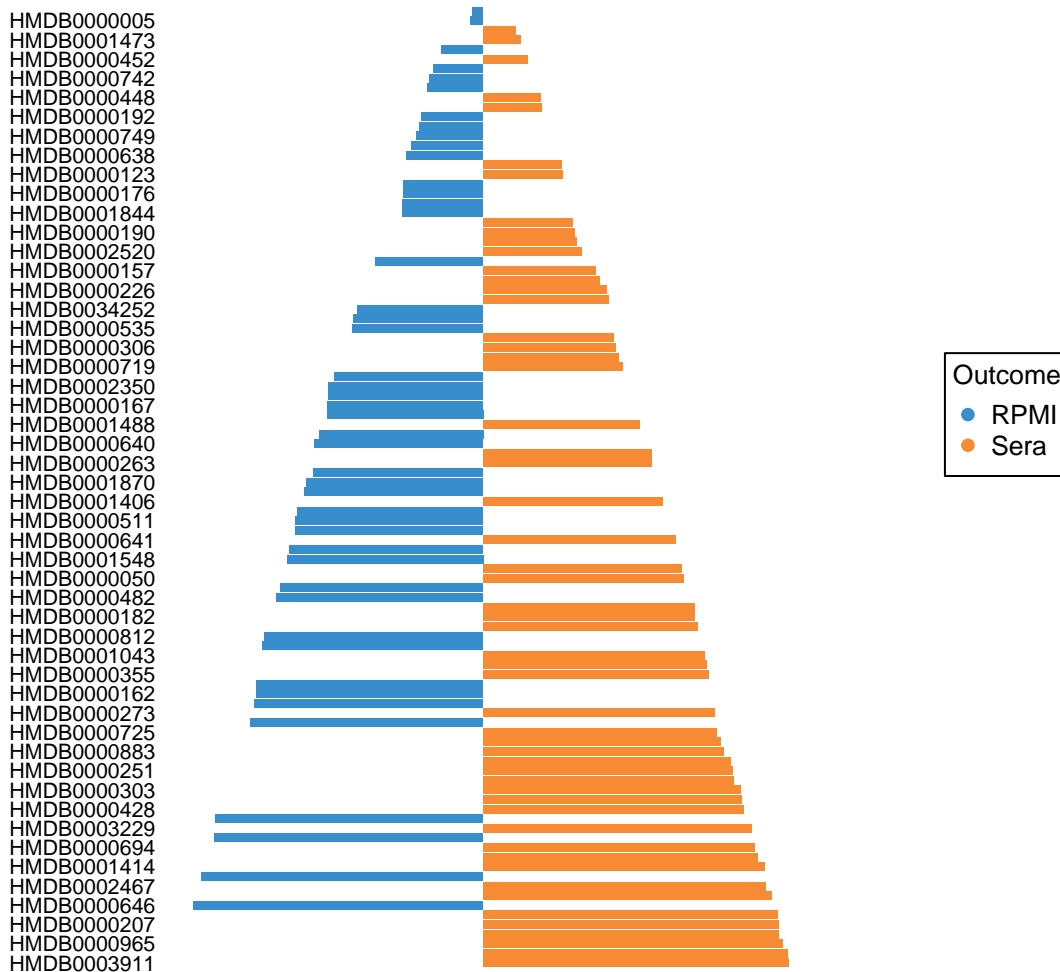
Metabolomics 1 sPLSDA max loa



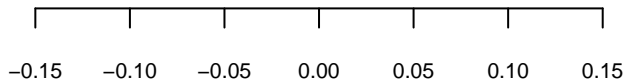
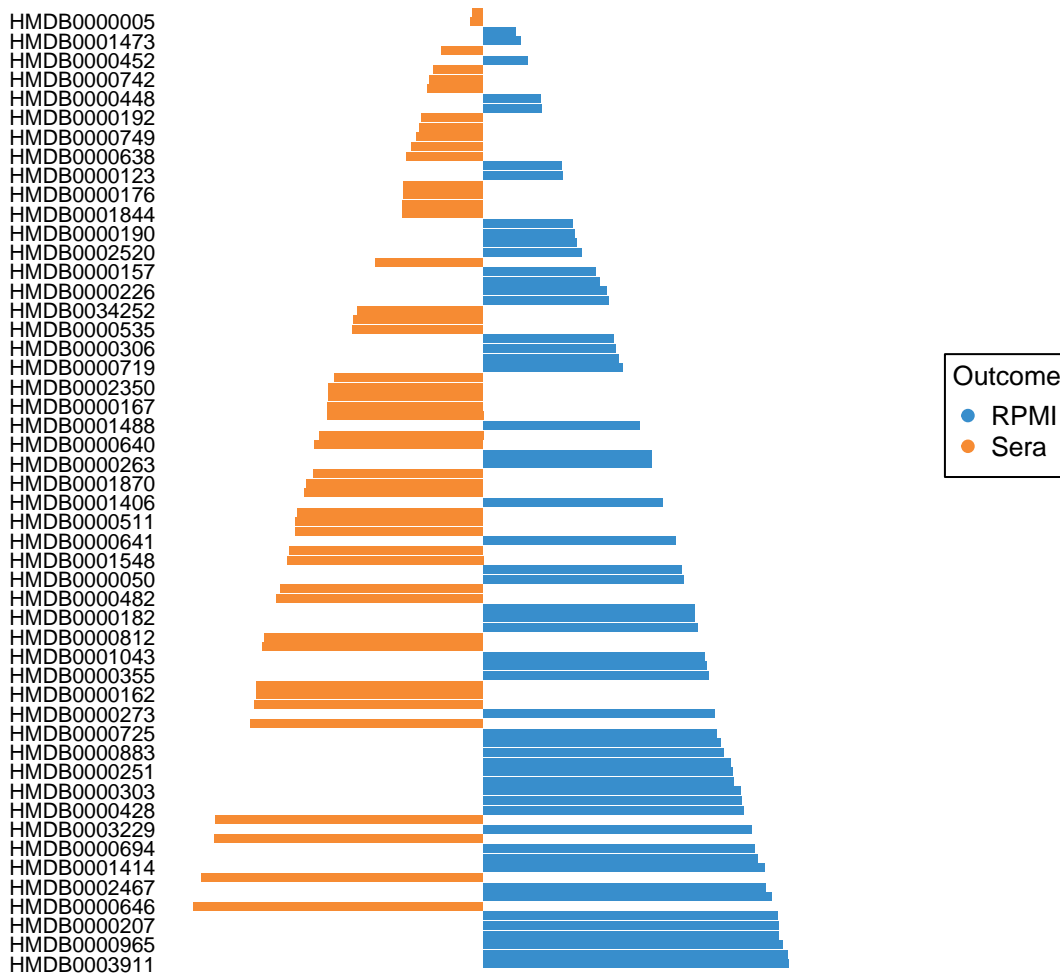
Metabolomics 1 sPLSDA min loa

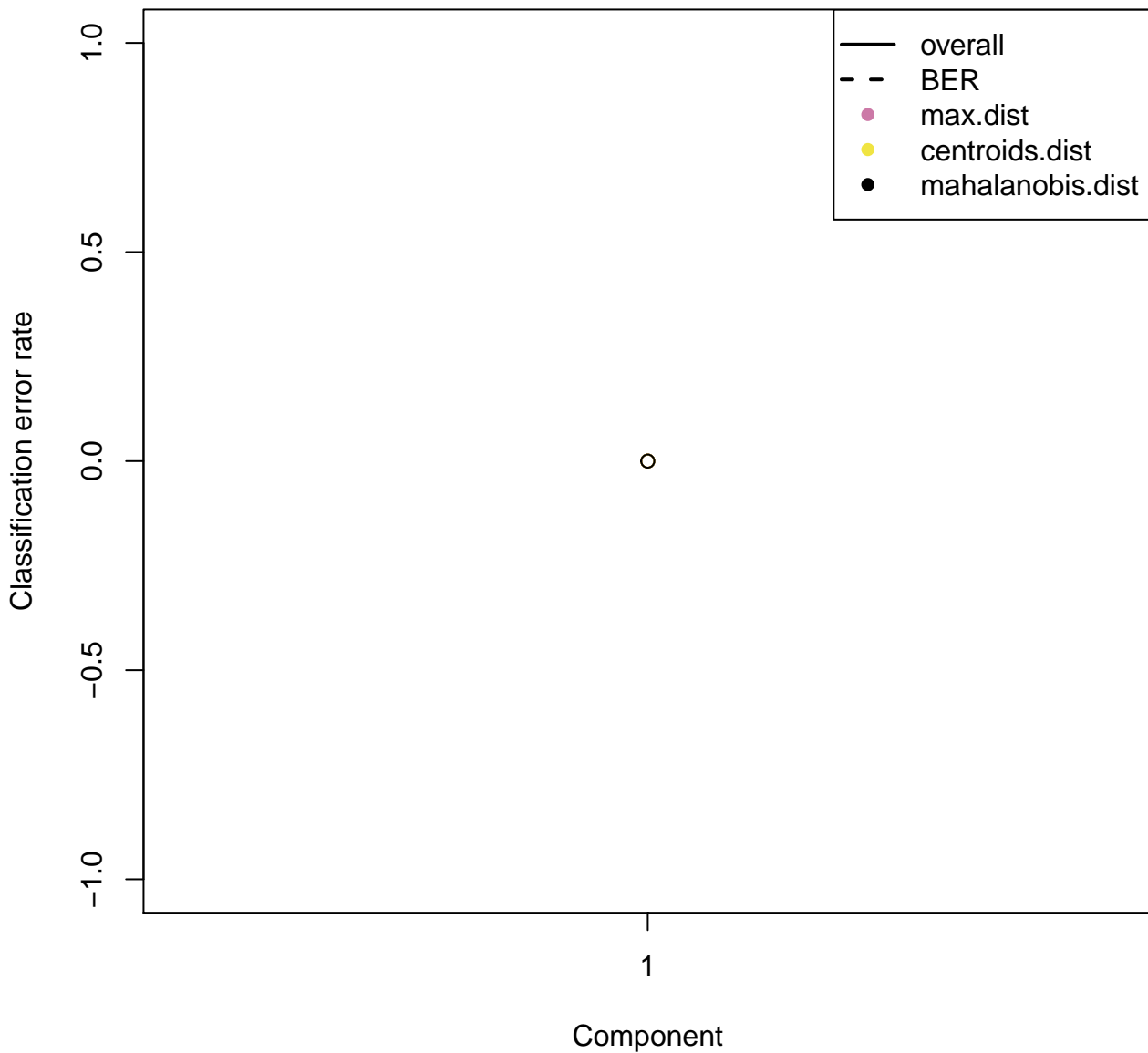


Contribution on comp 1

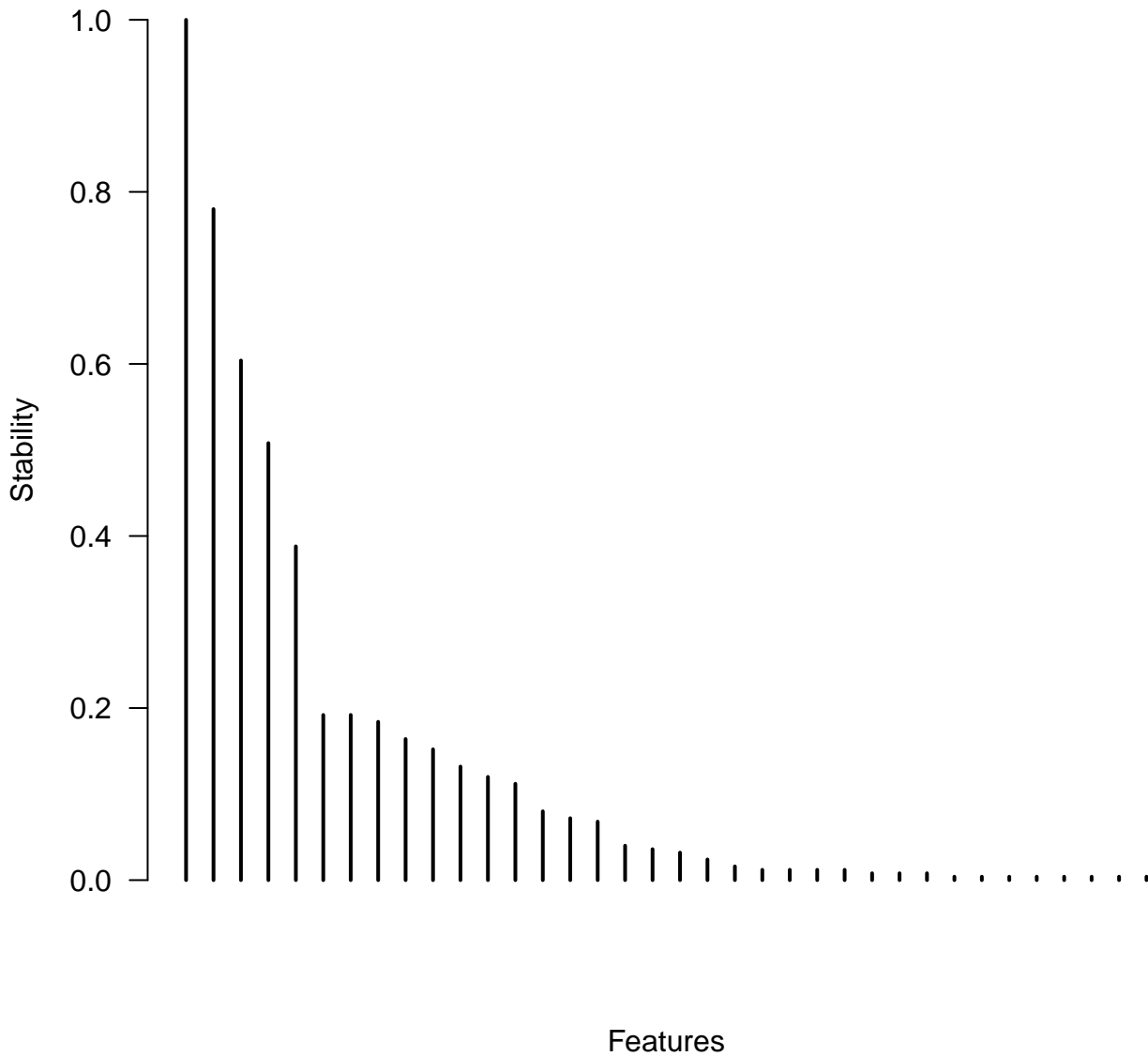


Contribution on comp 1

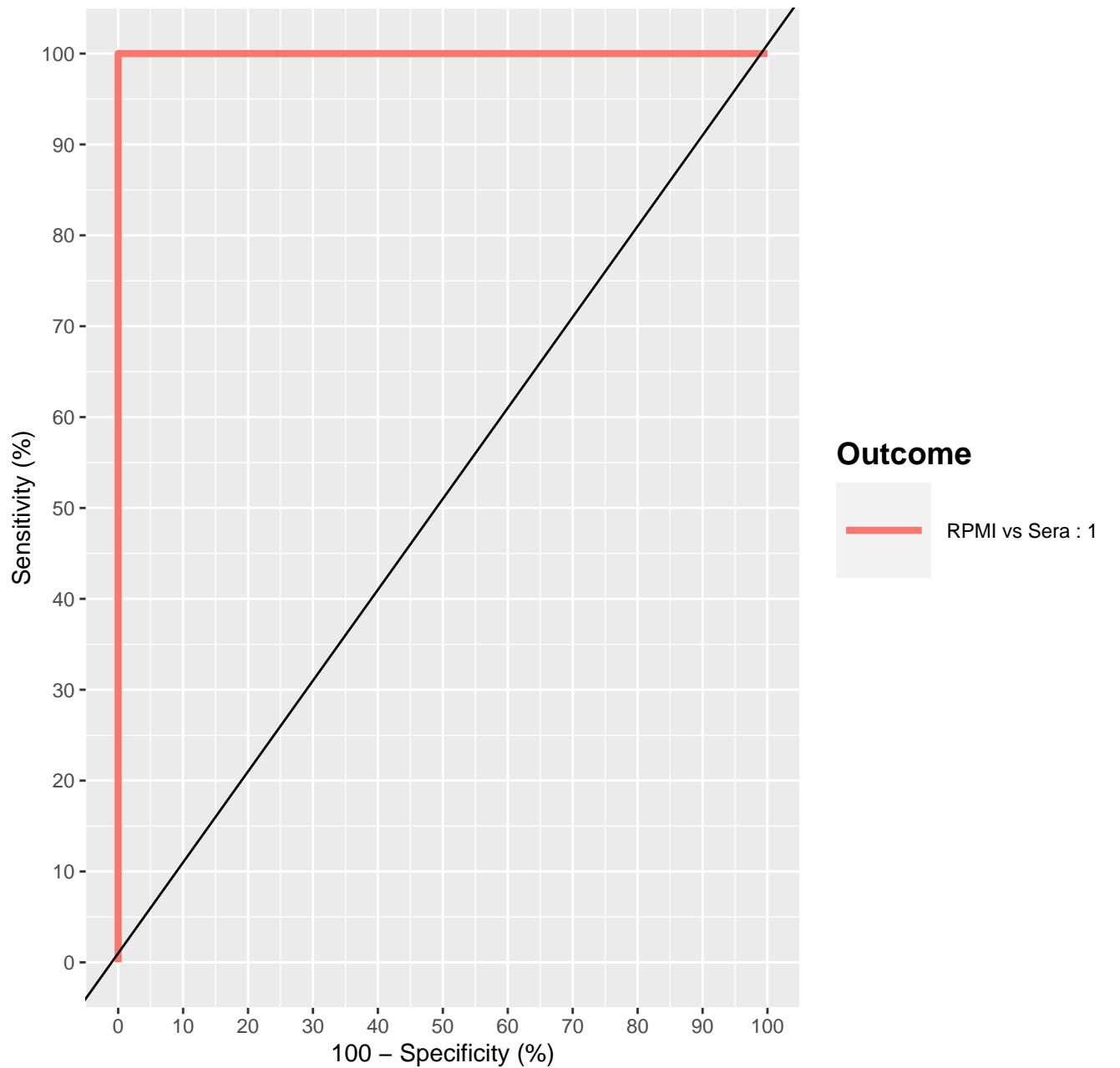




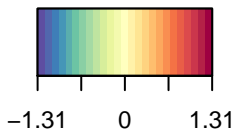
Comp 1



ROC Curve Comp 1



Color key

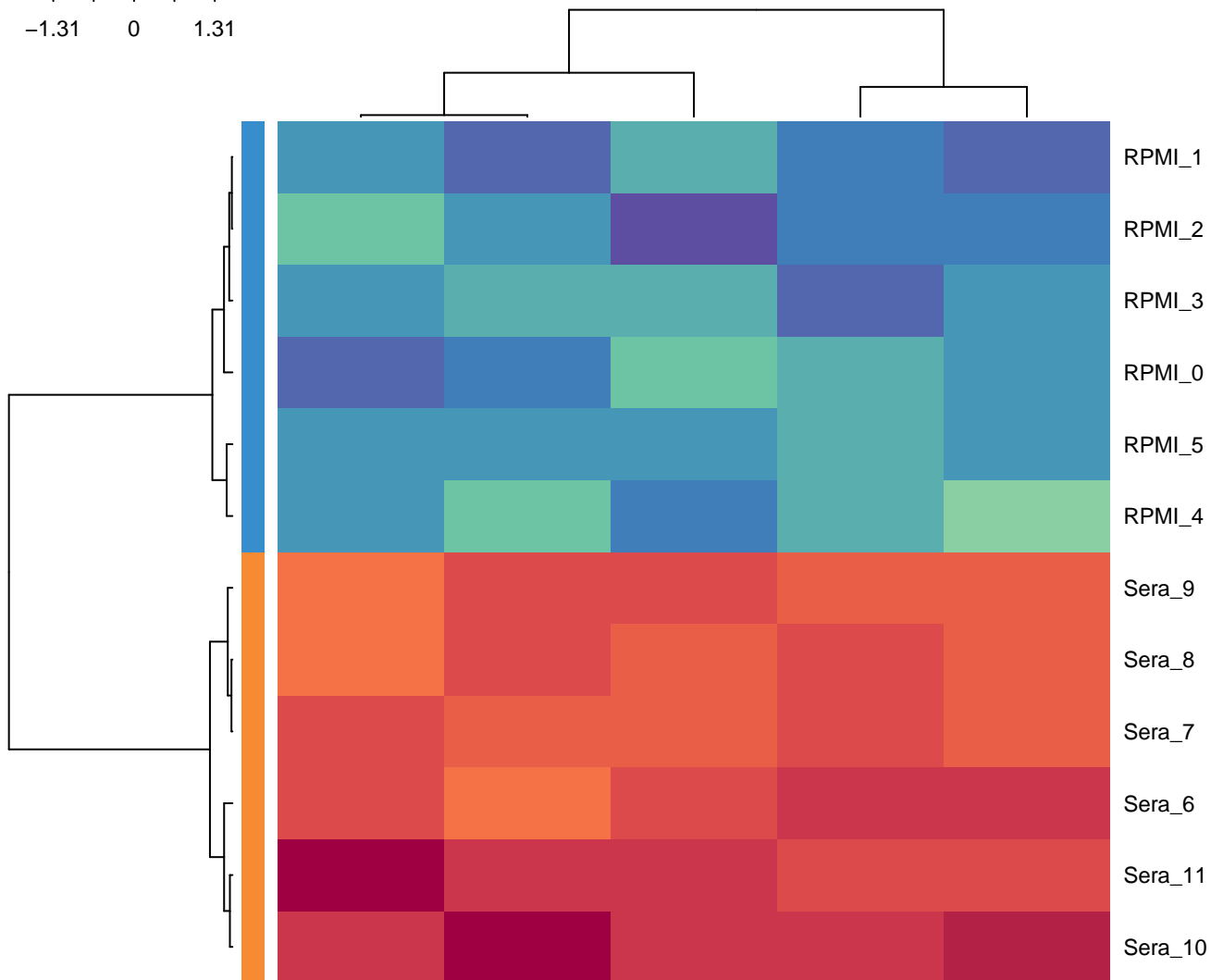


sPLSDA

Status

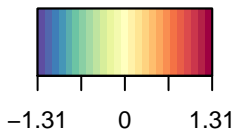
RPMI

Sera



sPLSDA Component 1

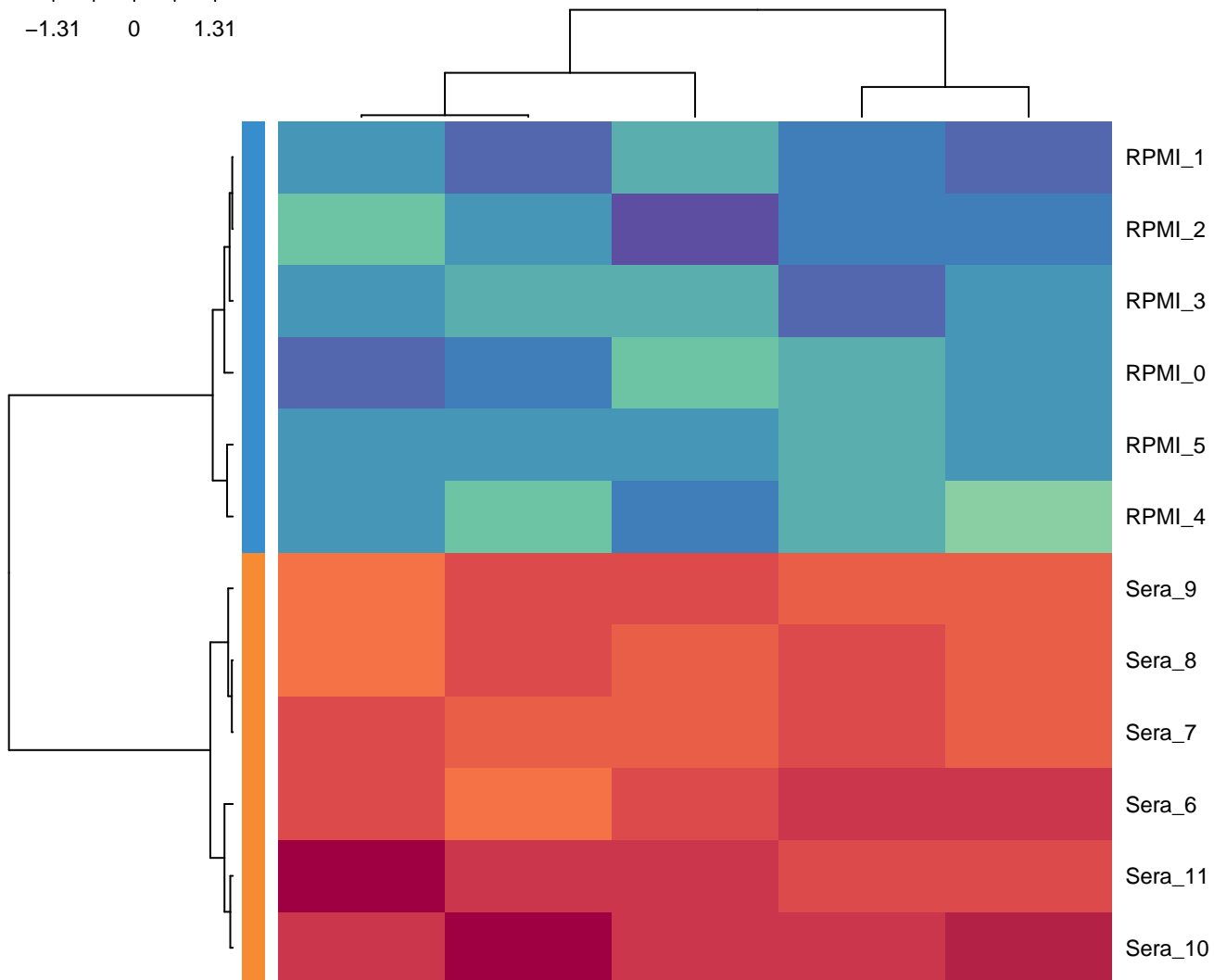
Color key



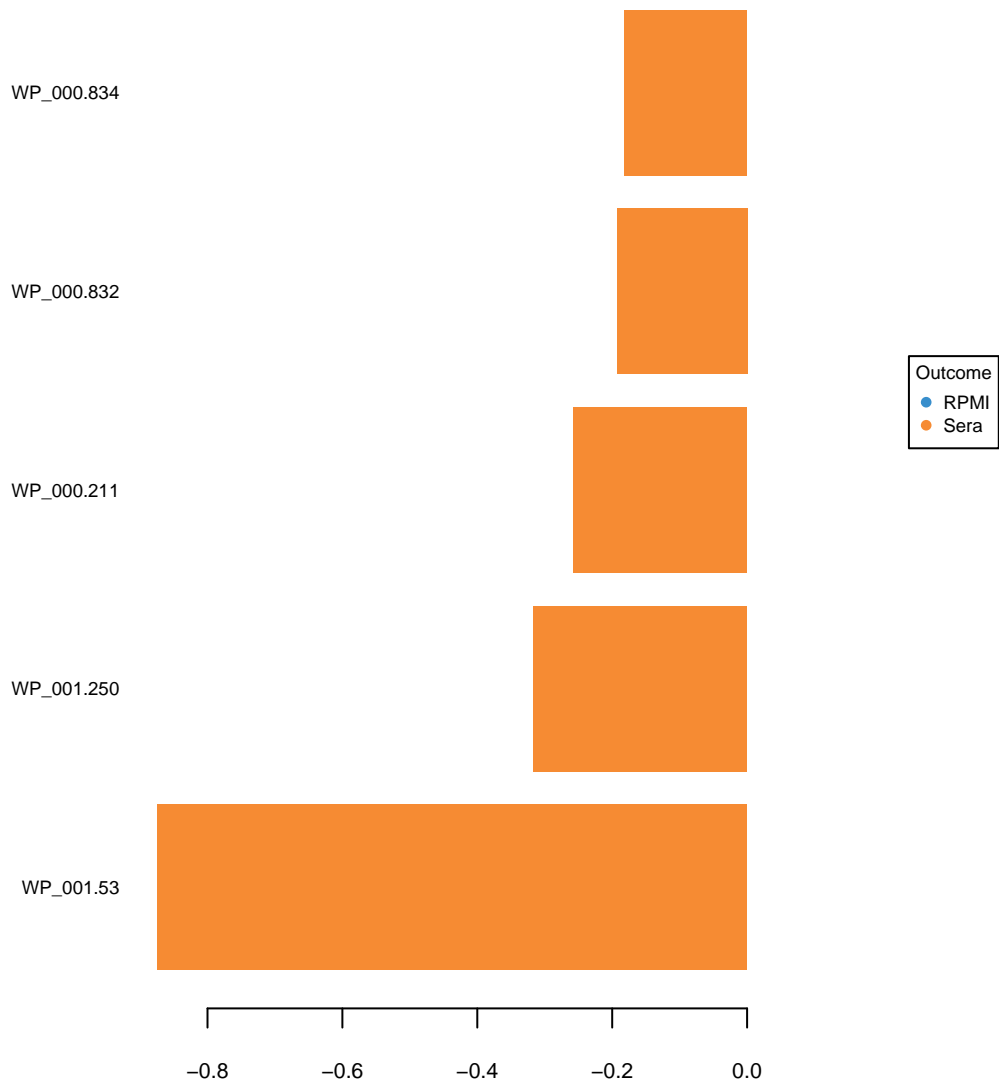
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RPMI

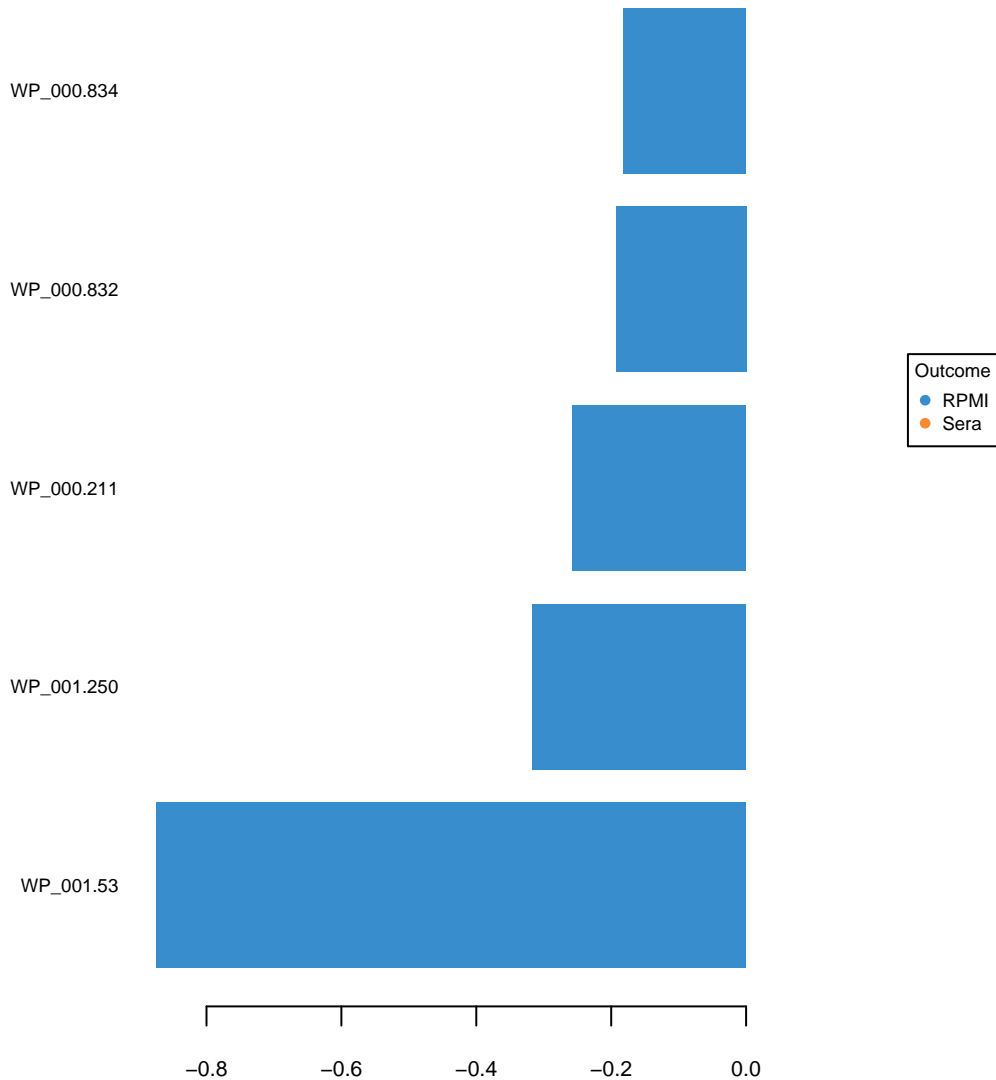
Sera



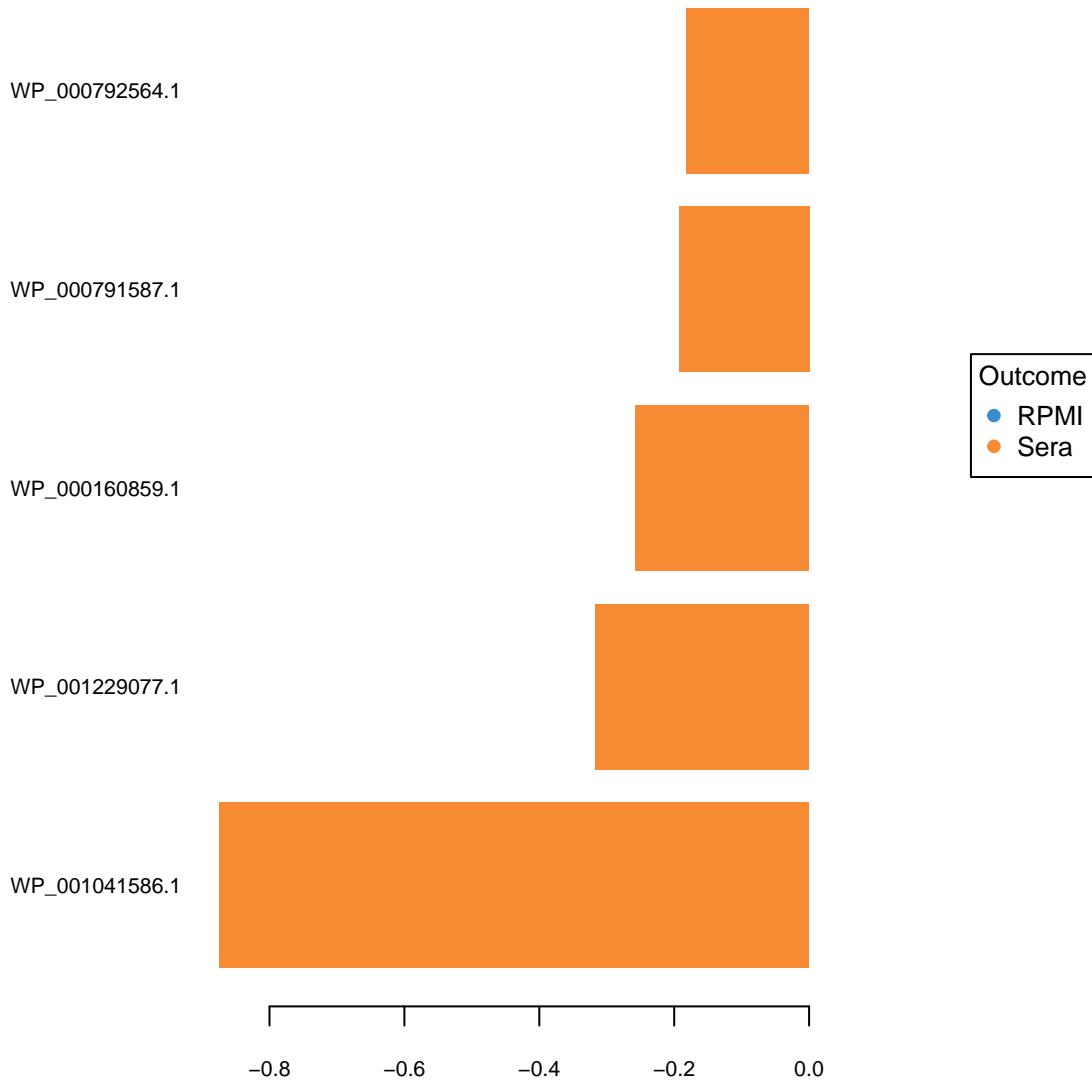
Proteomics 1 sPLSDA max load



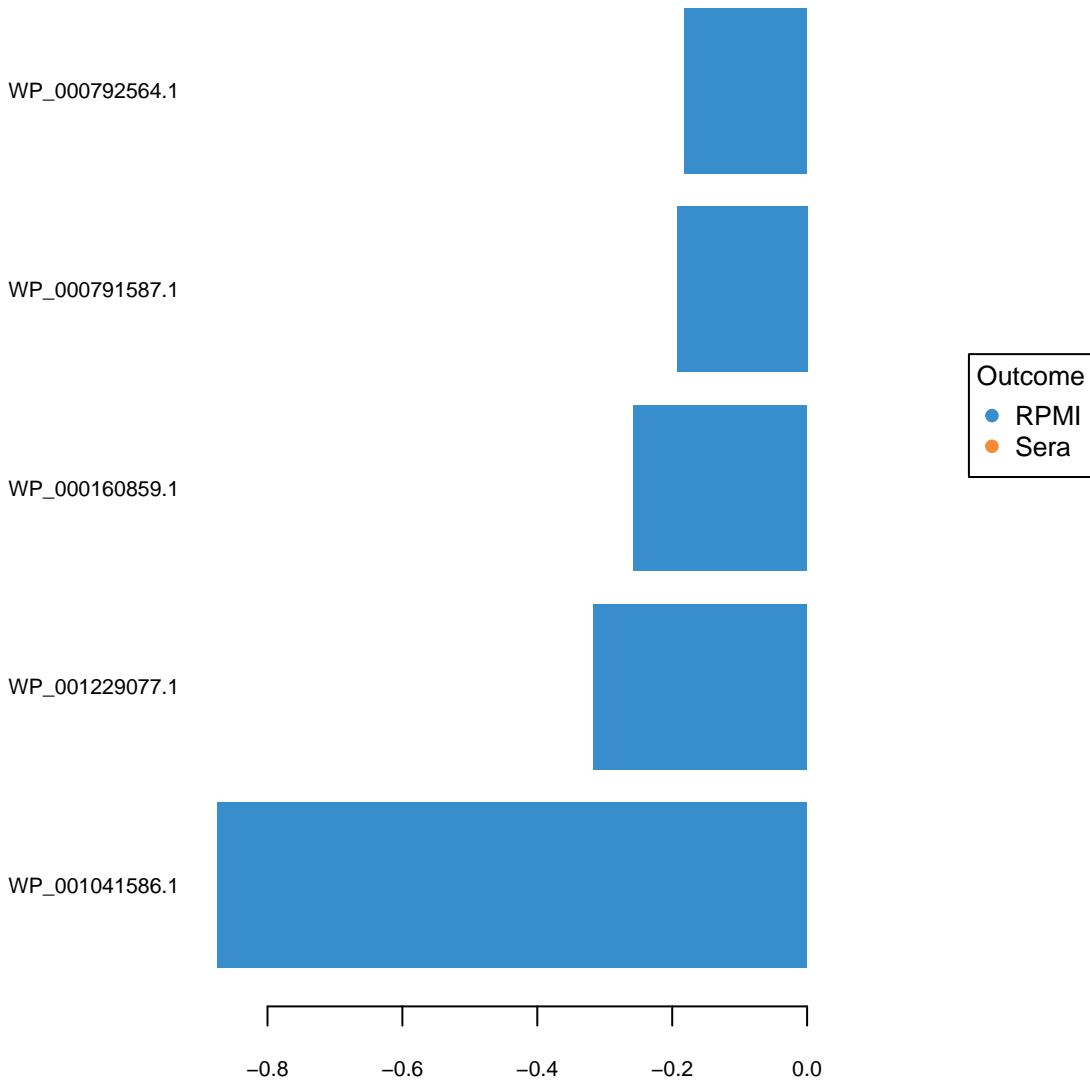
Proteomics 1 sPLSDA min load

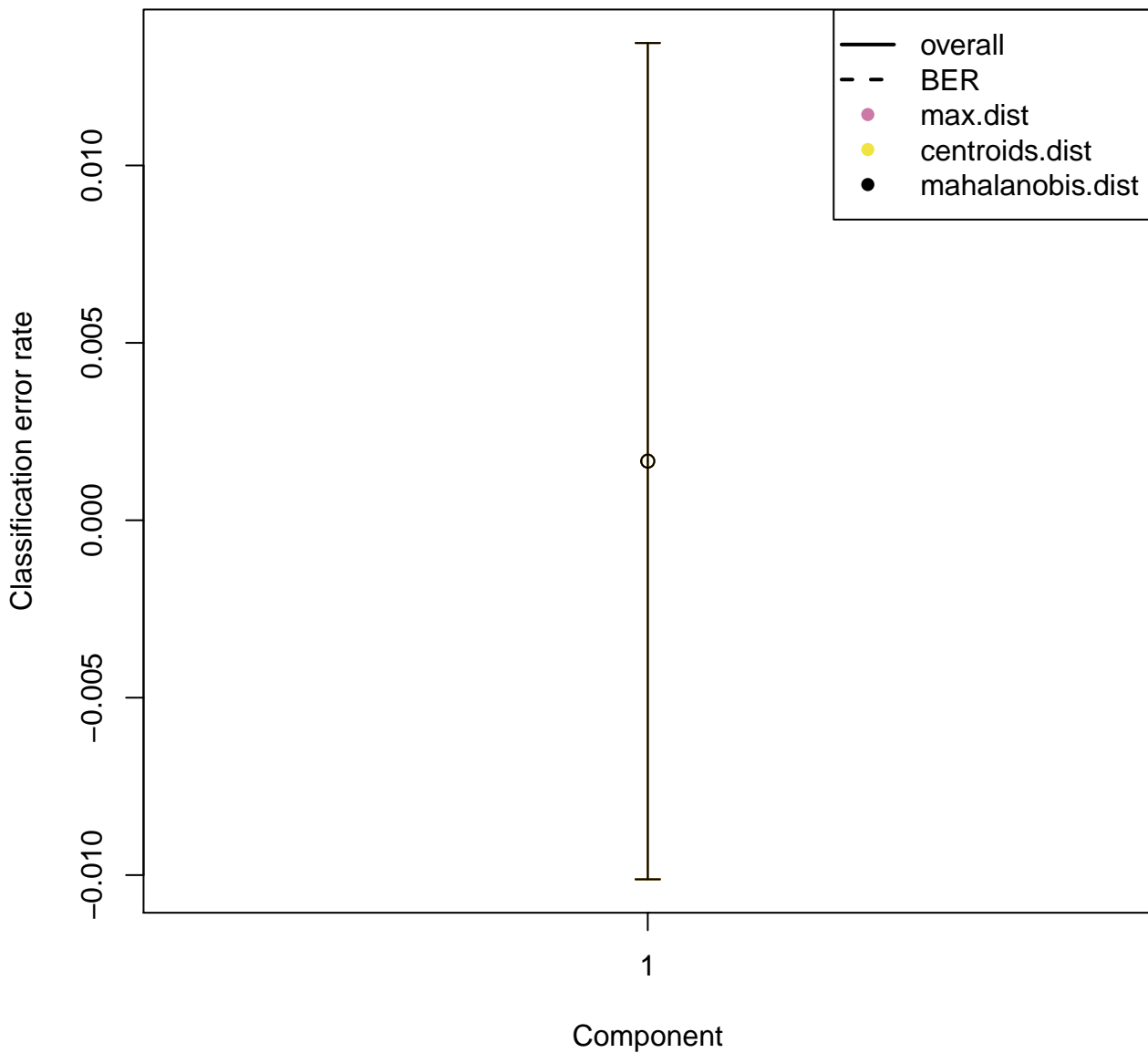


Contribution on comp 1

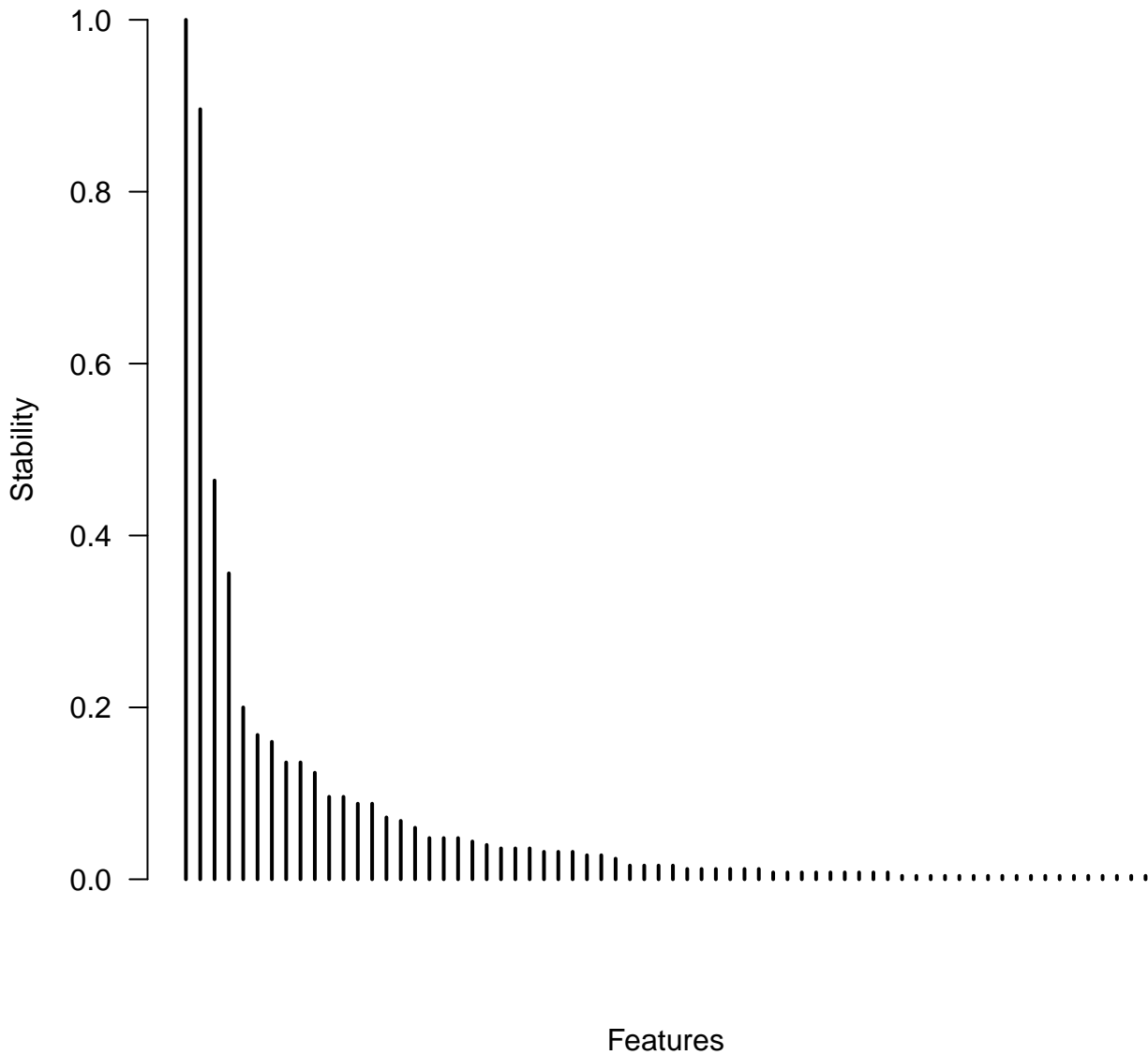


Contribution on comp 1

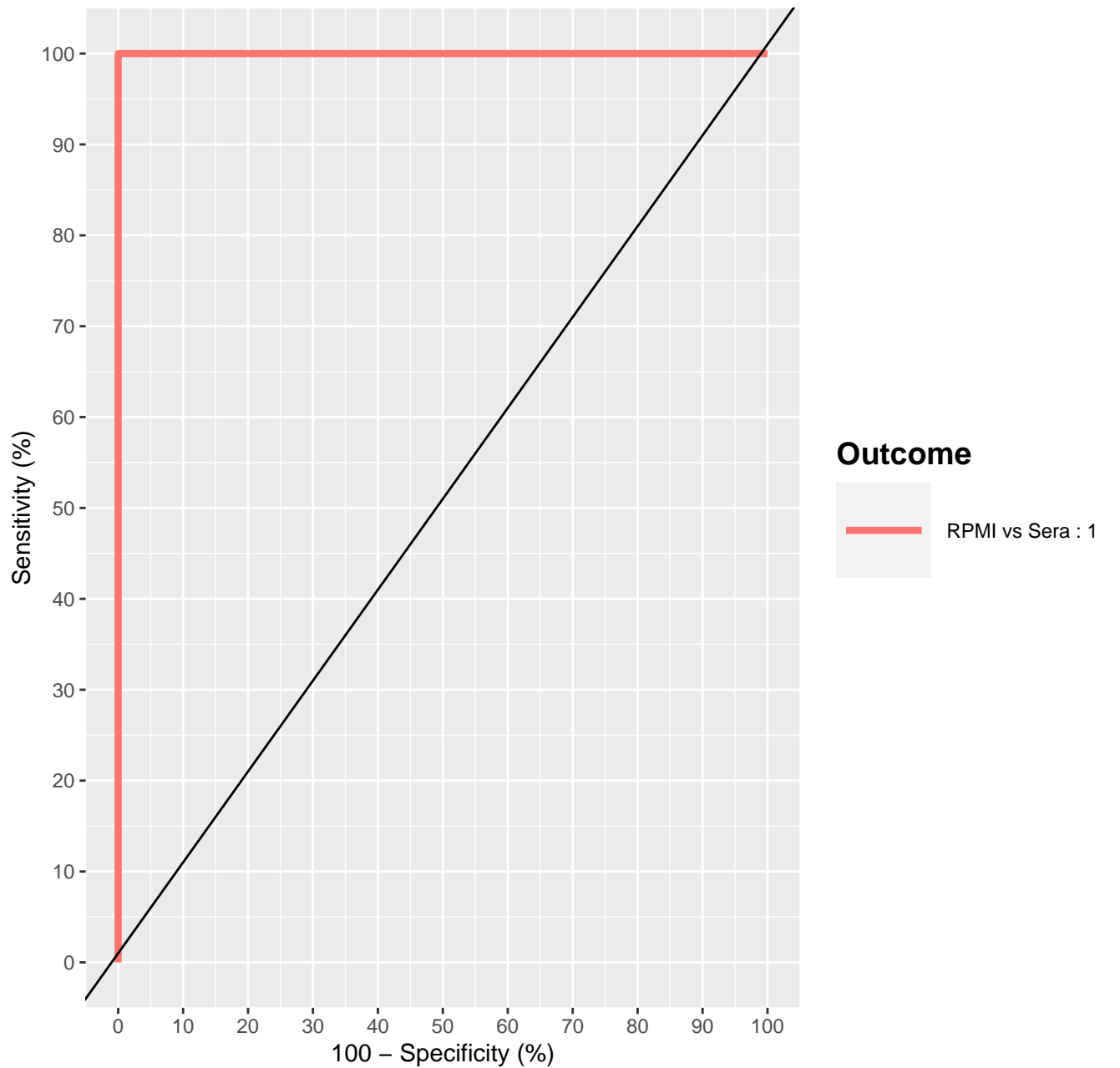




Comp 1

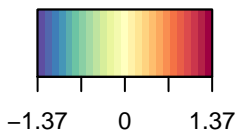


ROC Curve Comp 1



sPLSDA

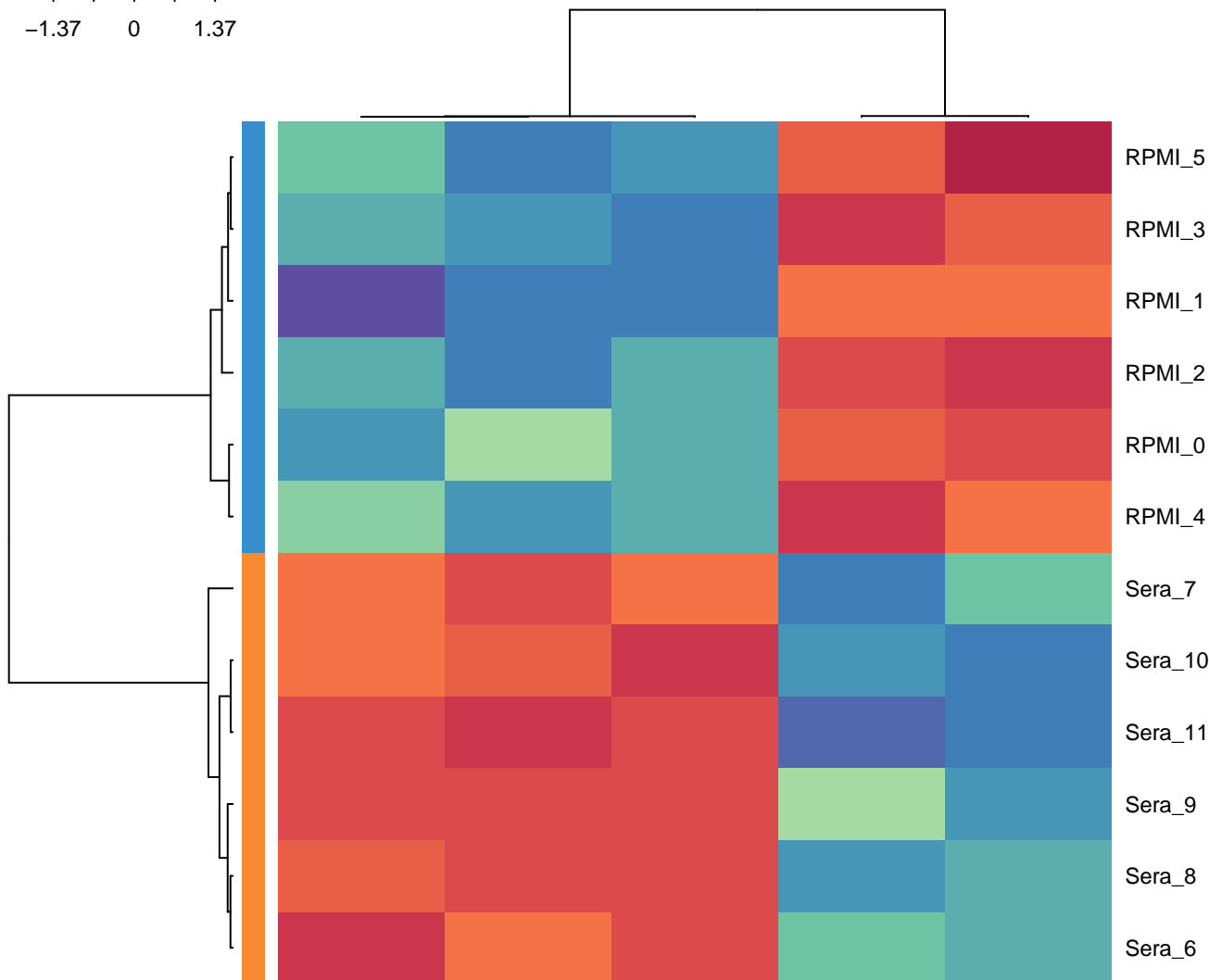
Color key



Status

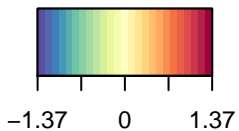
RPMI

Sera



sPLSDA Component 1

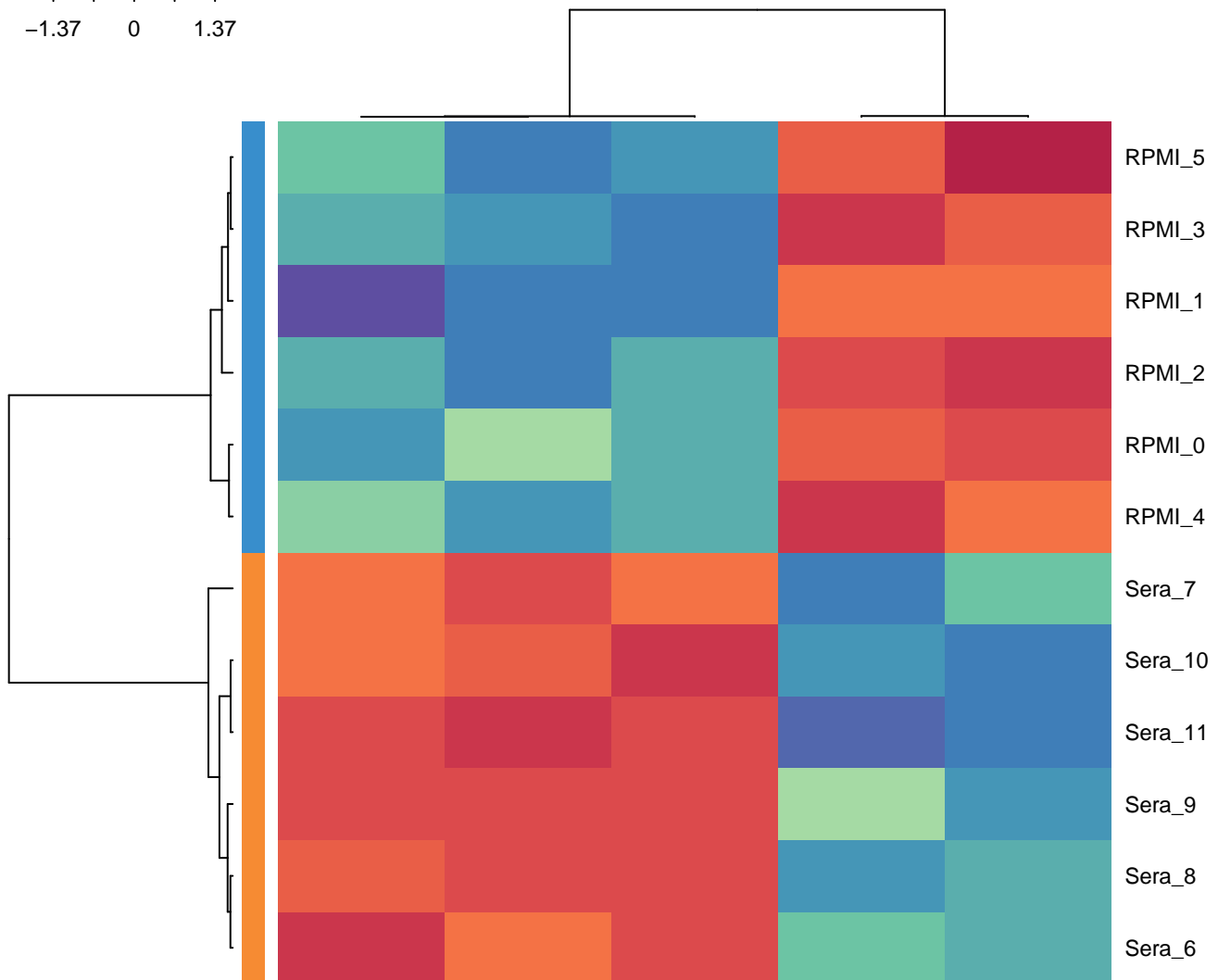
Color key



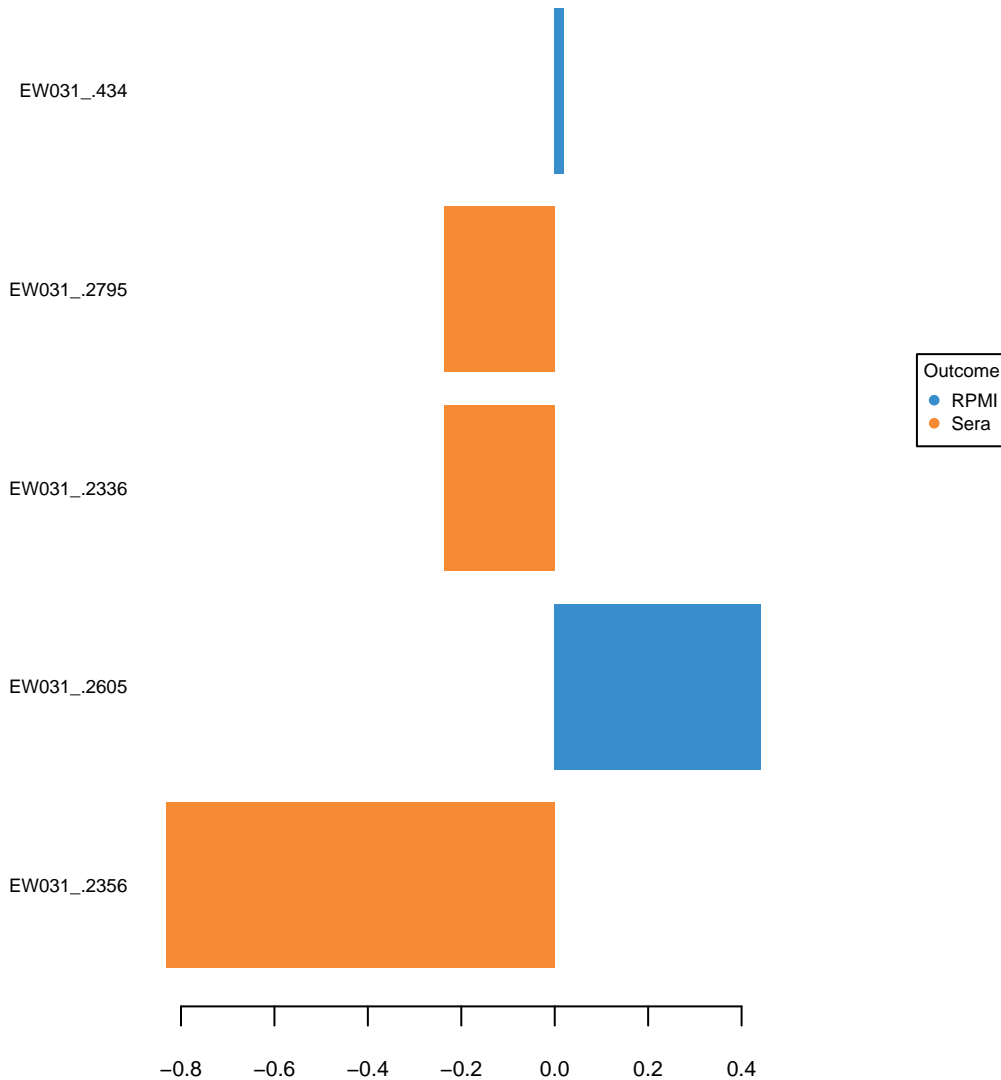
Status

RPMI

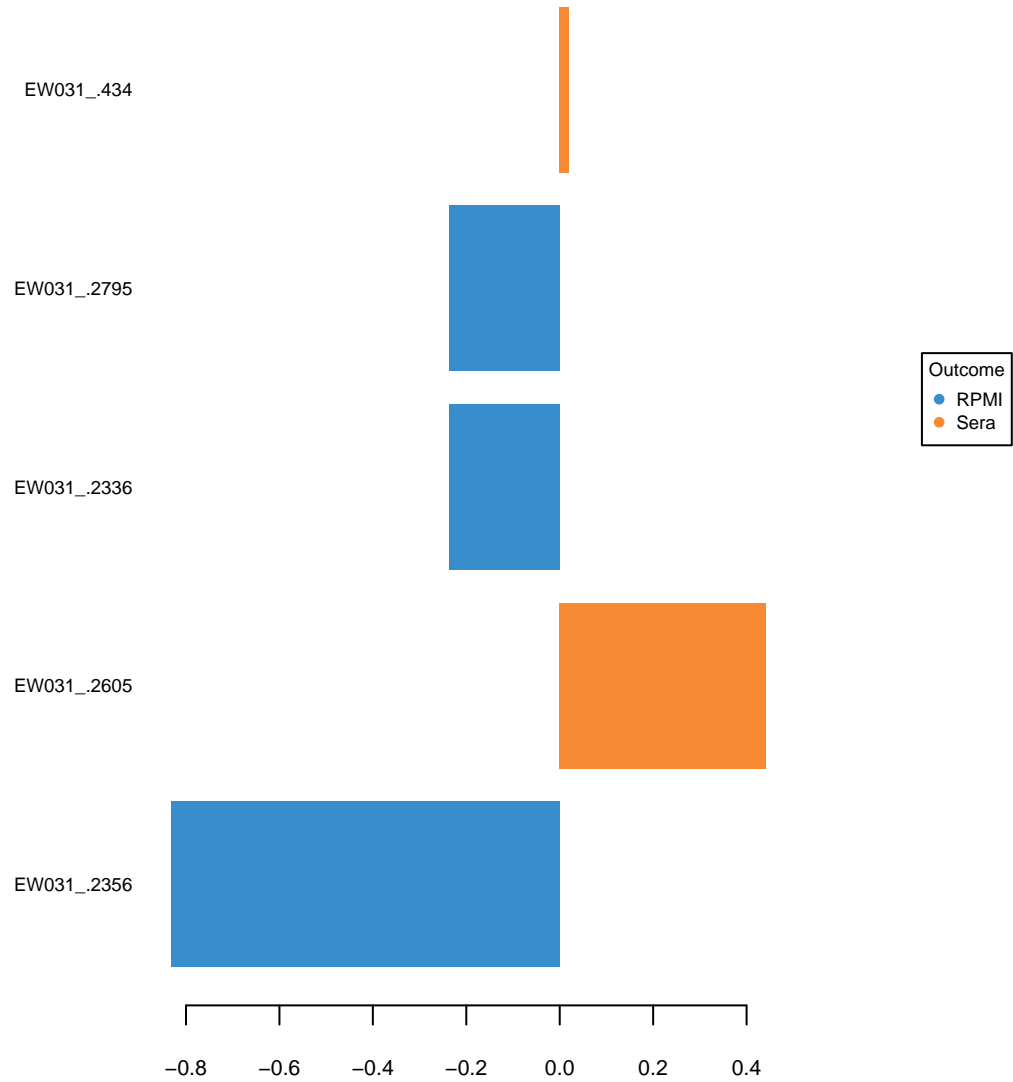
Sera



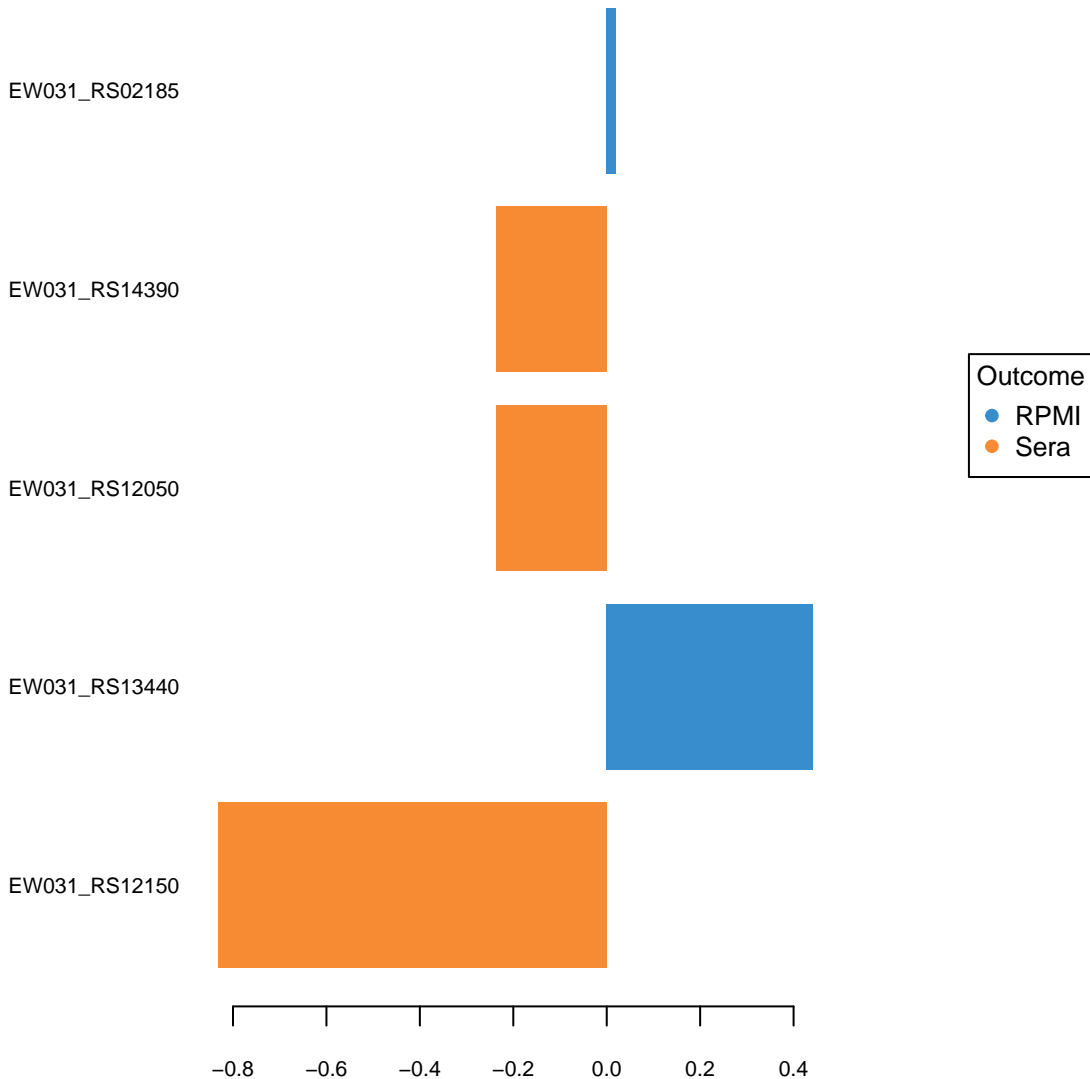
RNA_Seq 1 sPLSDA max loadings



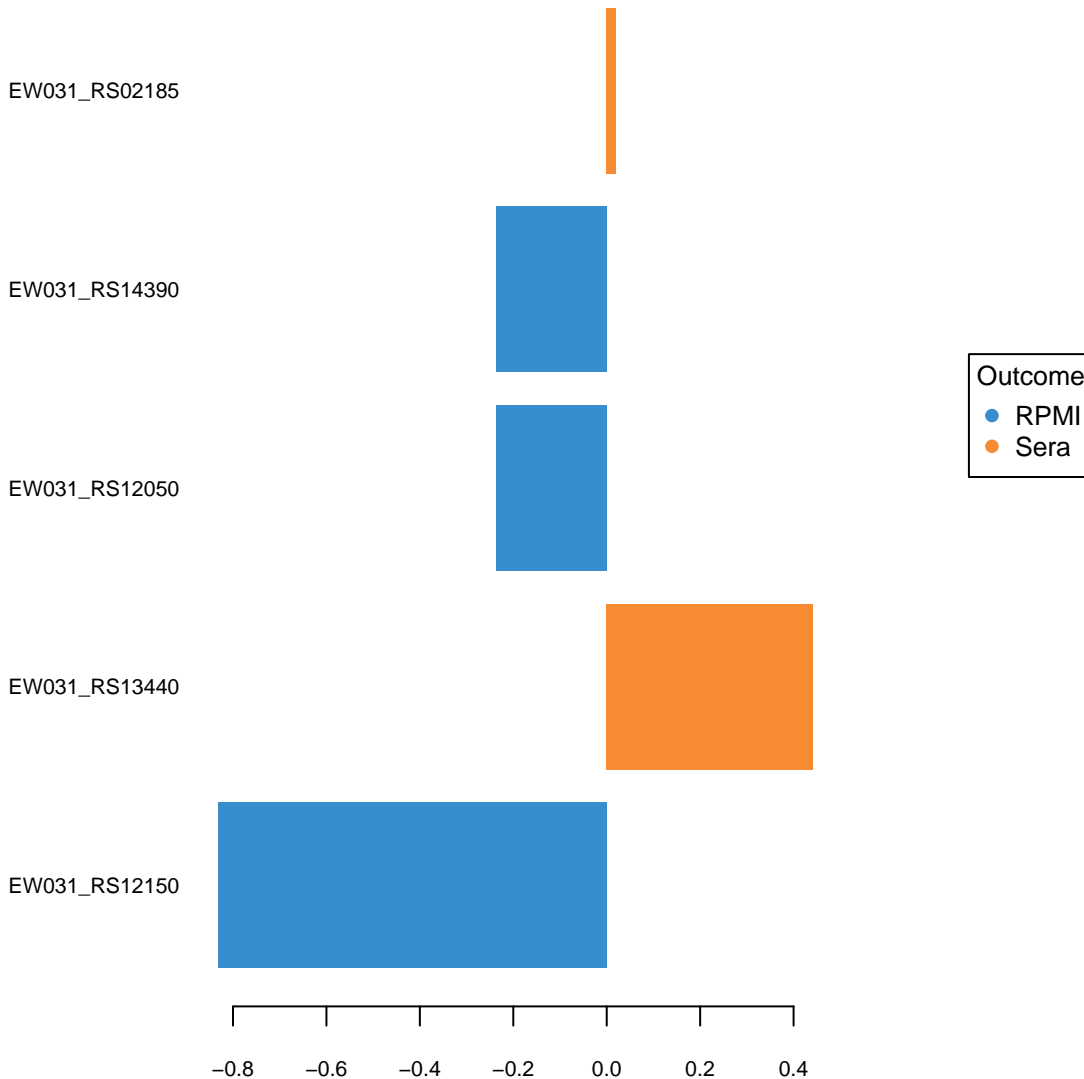
RNA_Seq 1 sPLSDA min loadings

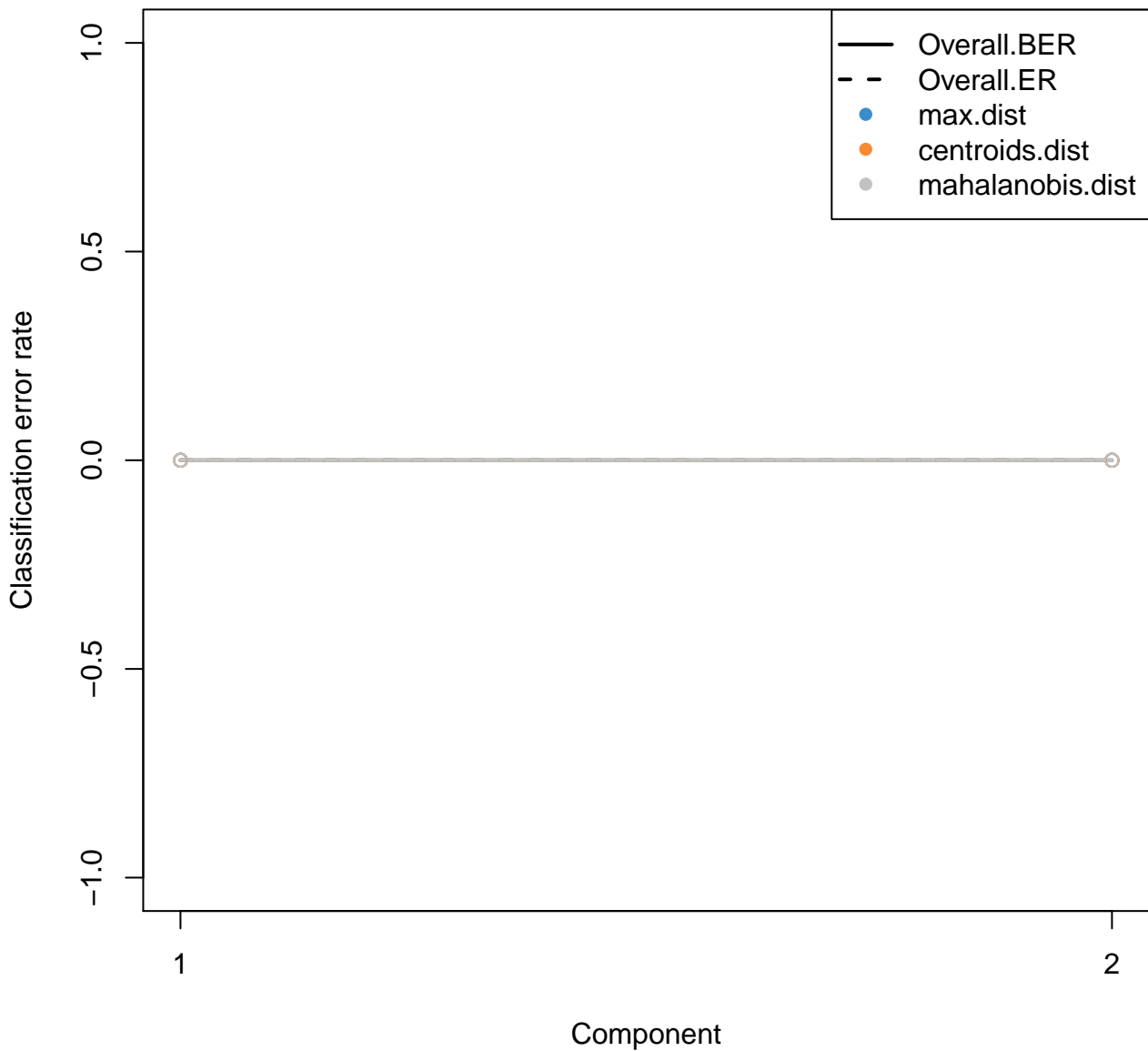


Contribution on comp 1

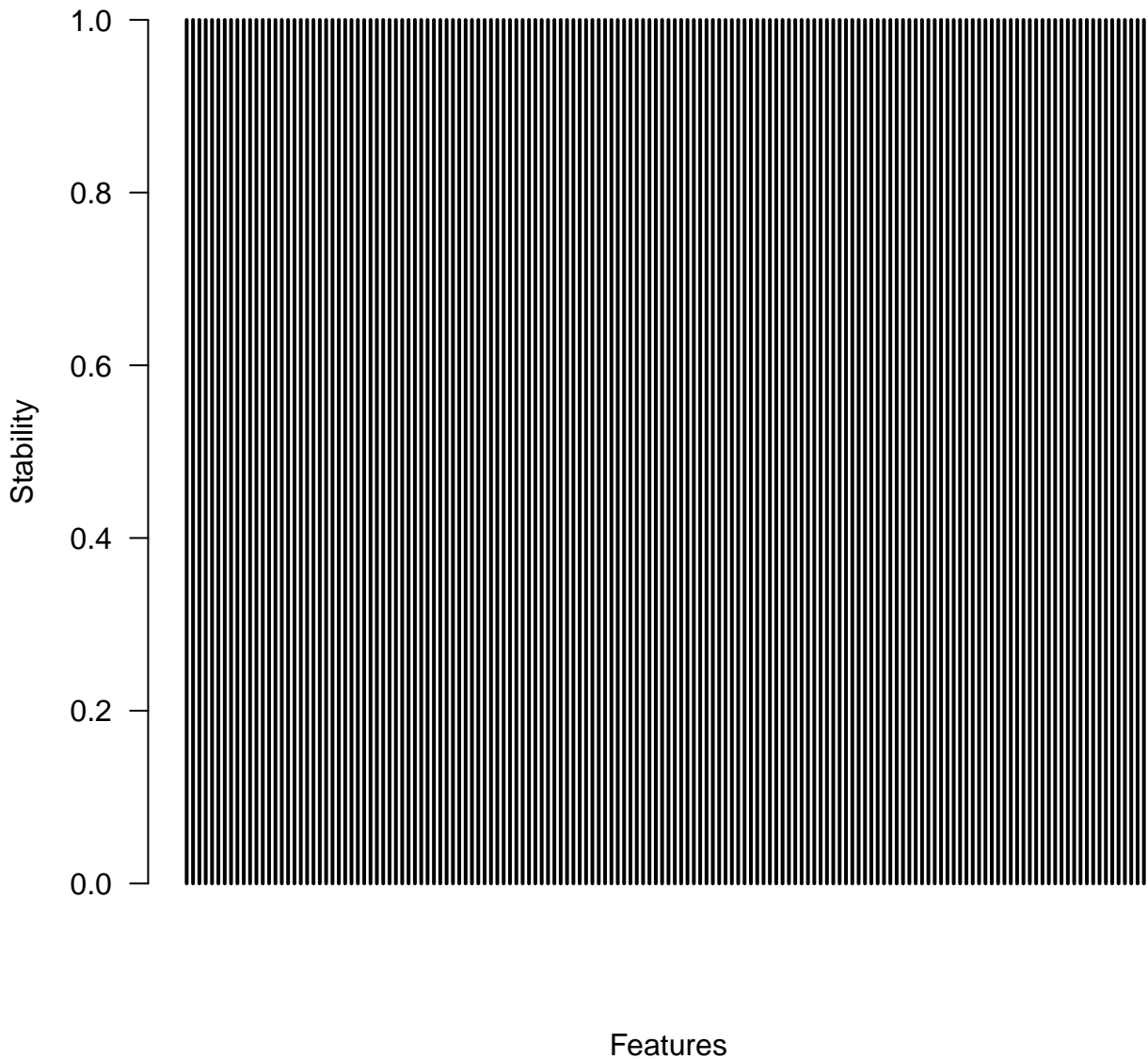


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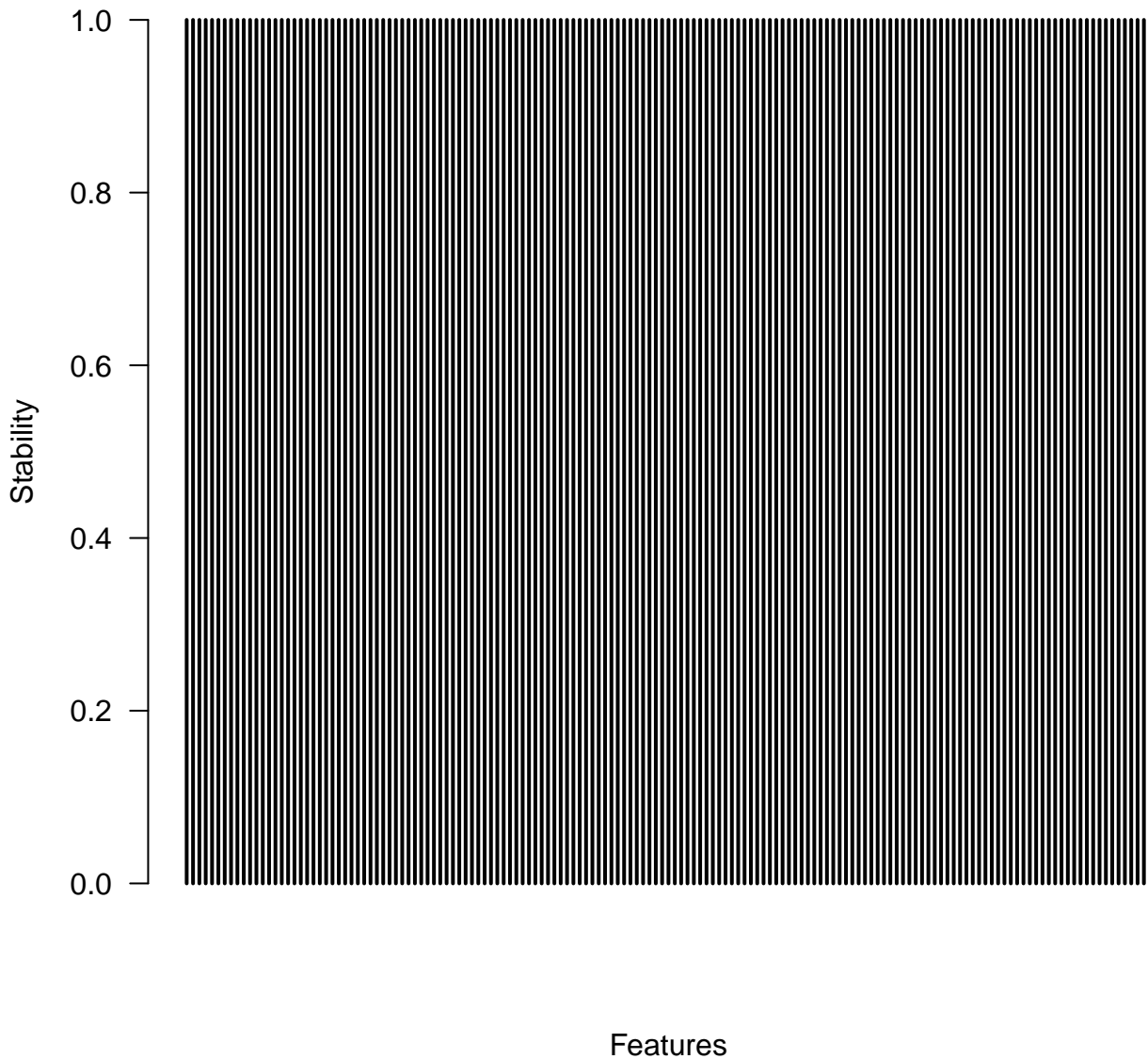




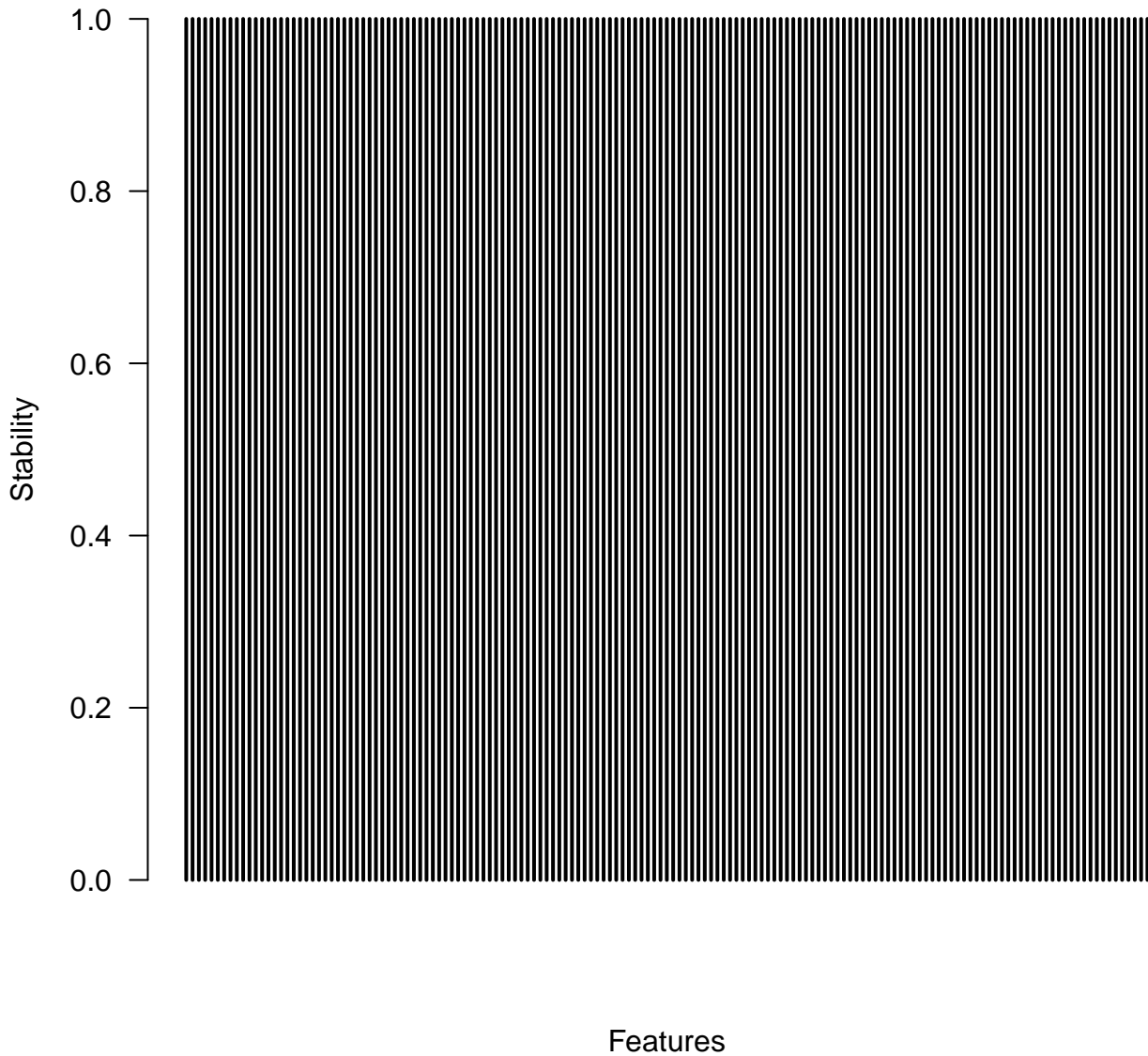
Metabolomics Comp 1



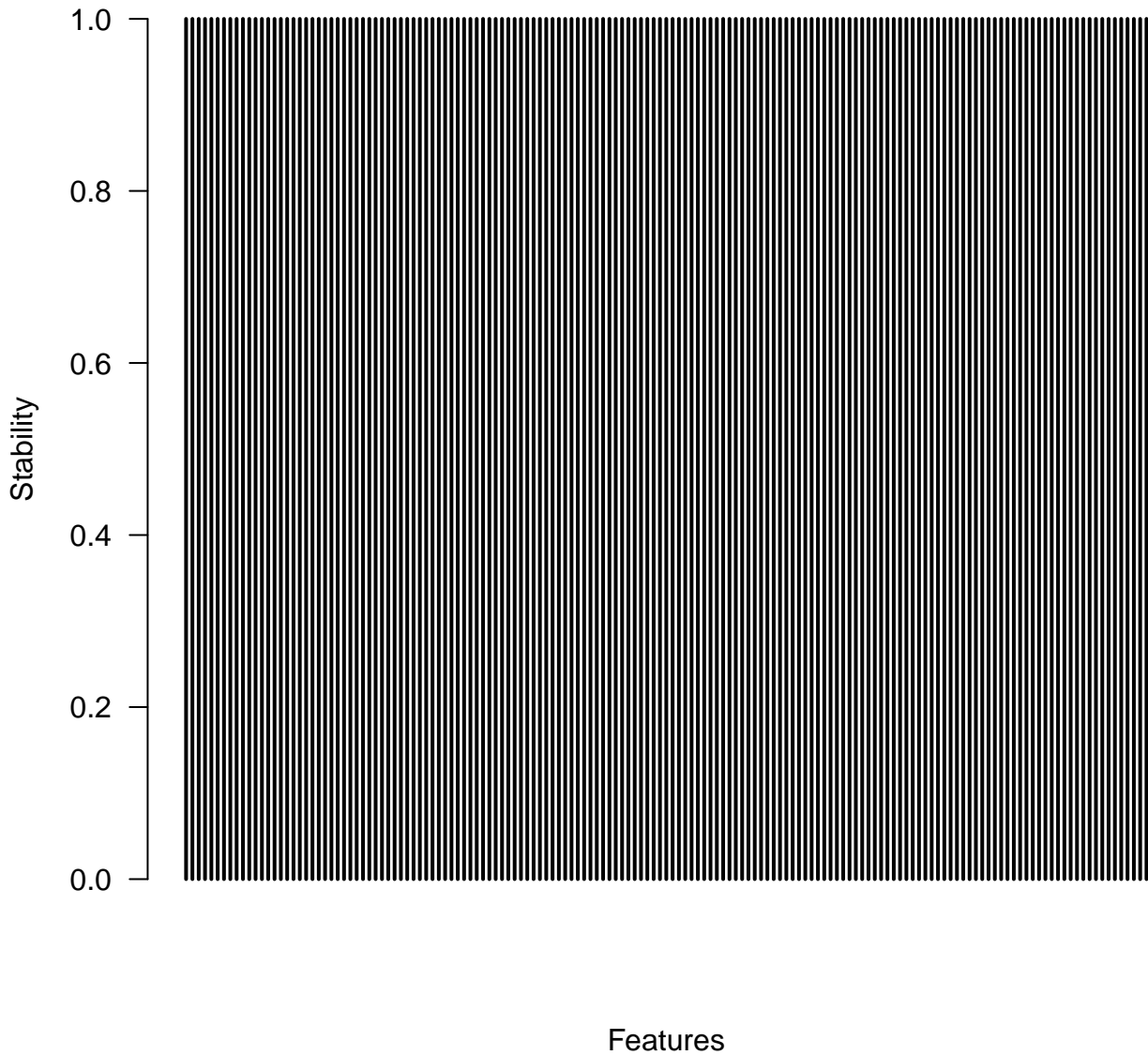
Metabolomics Comp 2



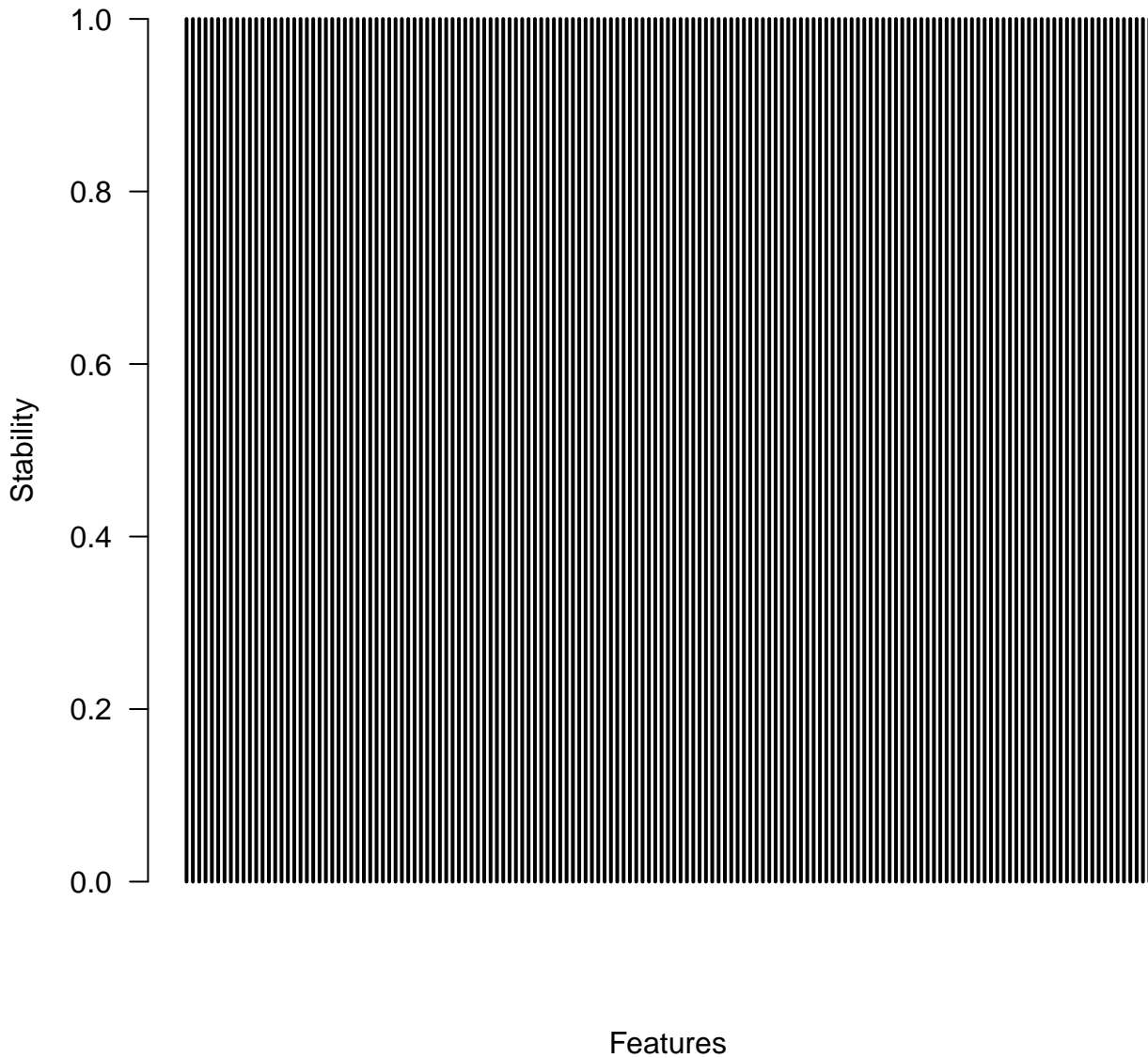
Proteomics Comp 1



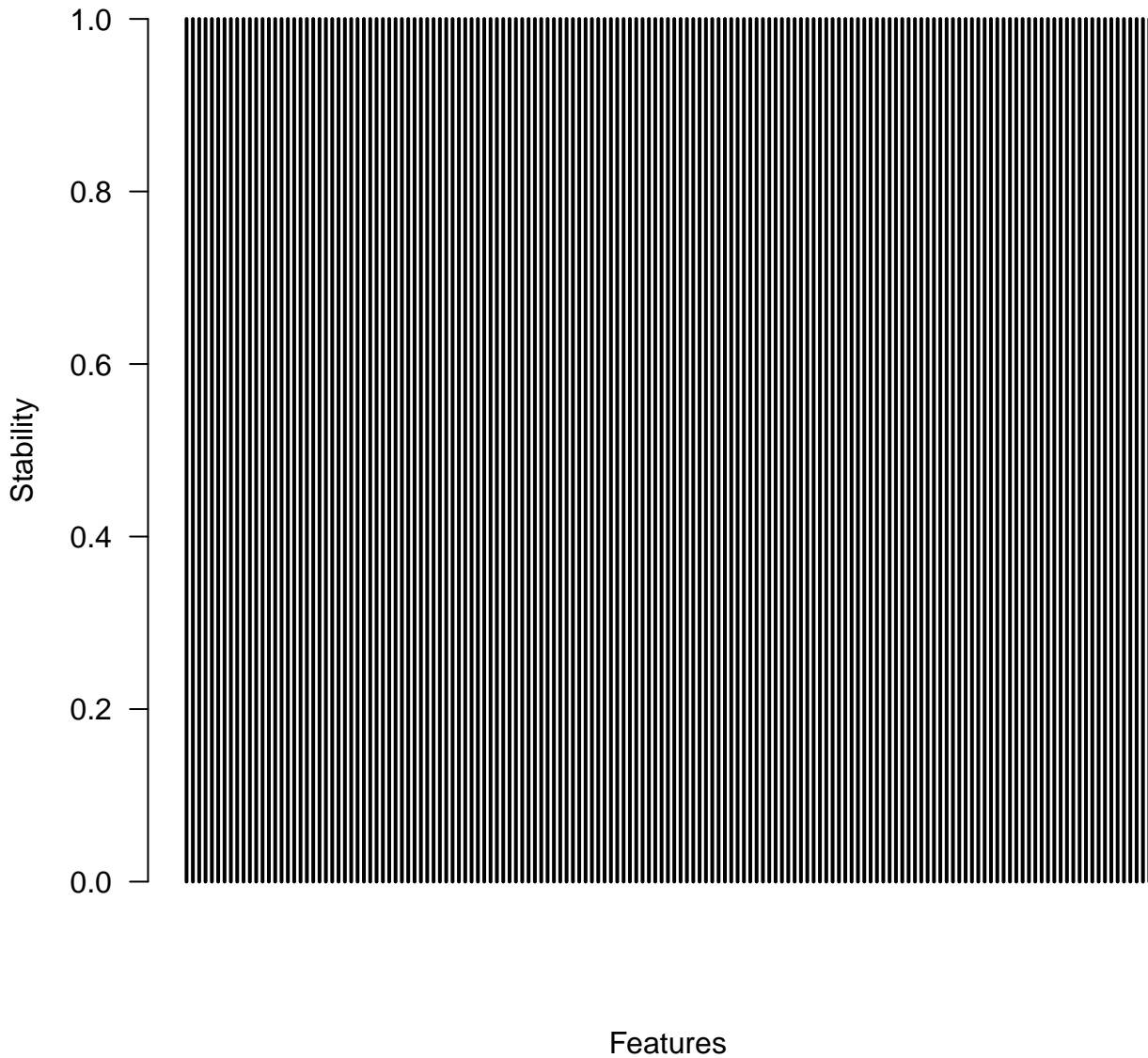
Proteomics Comp 2



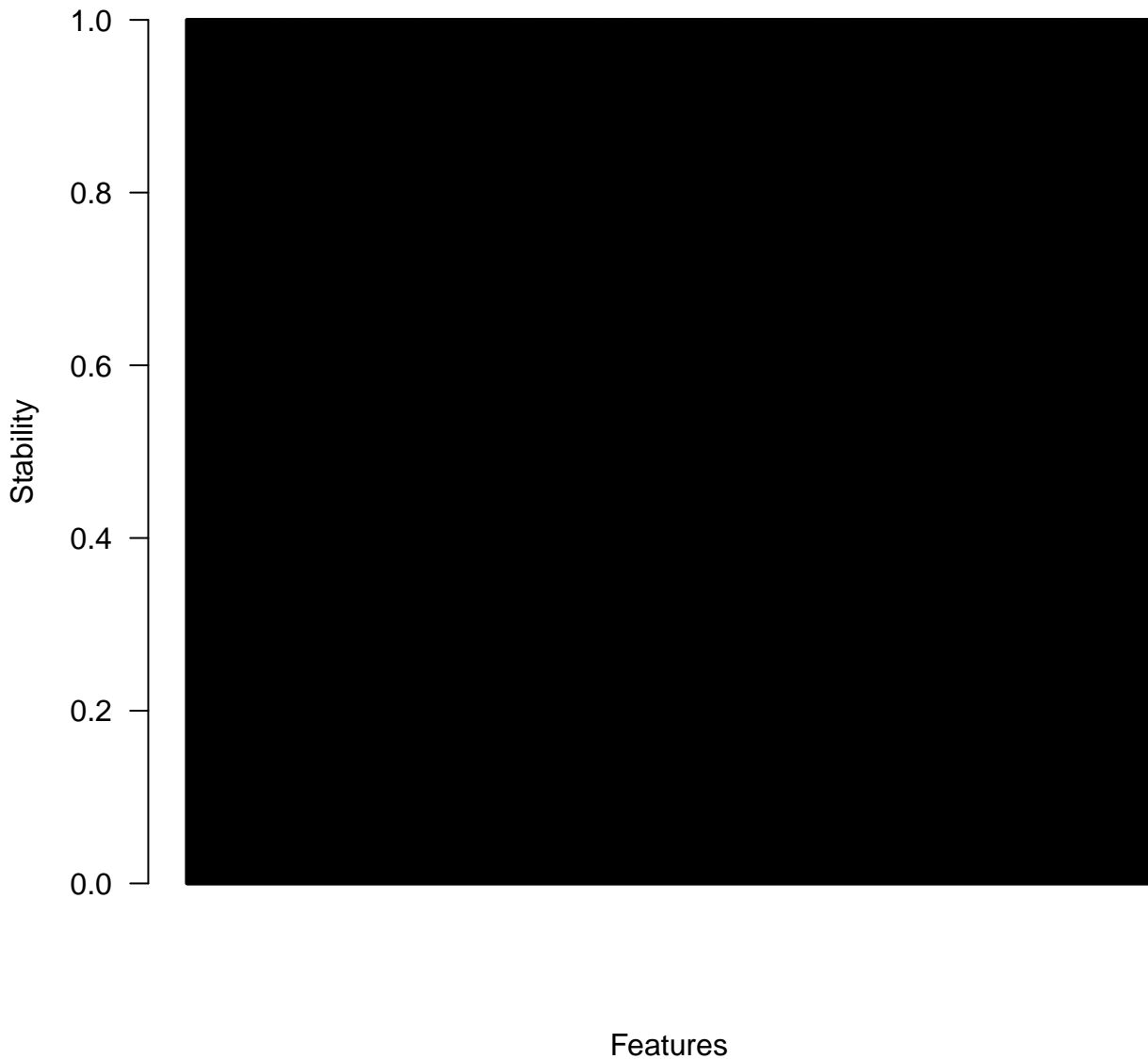
RNA_Seq Comp 1



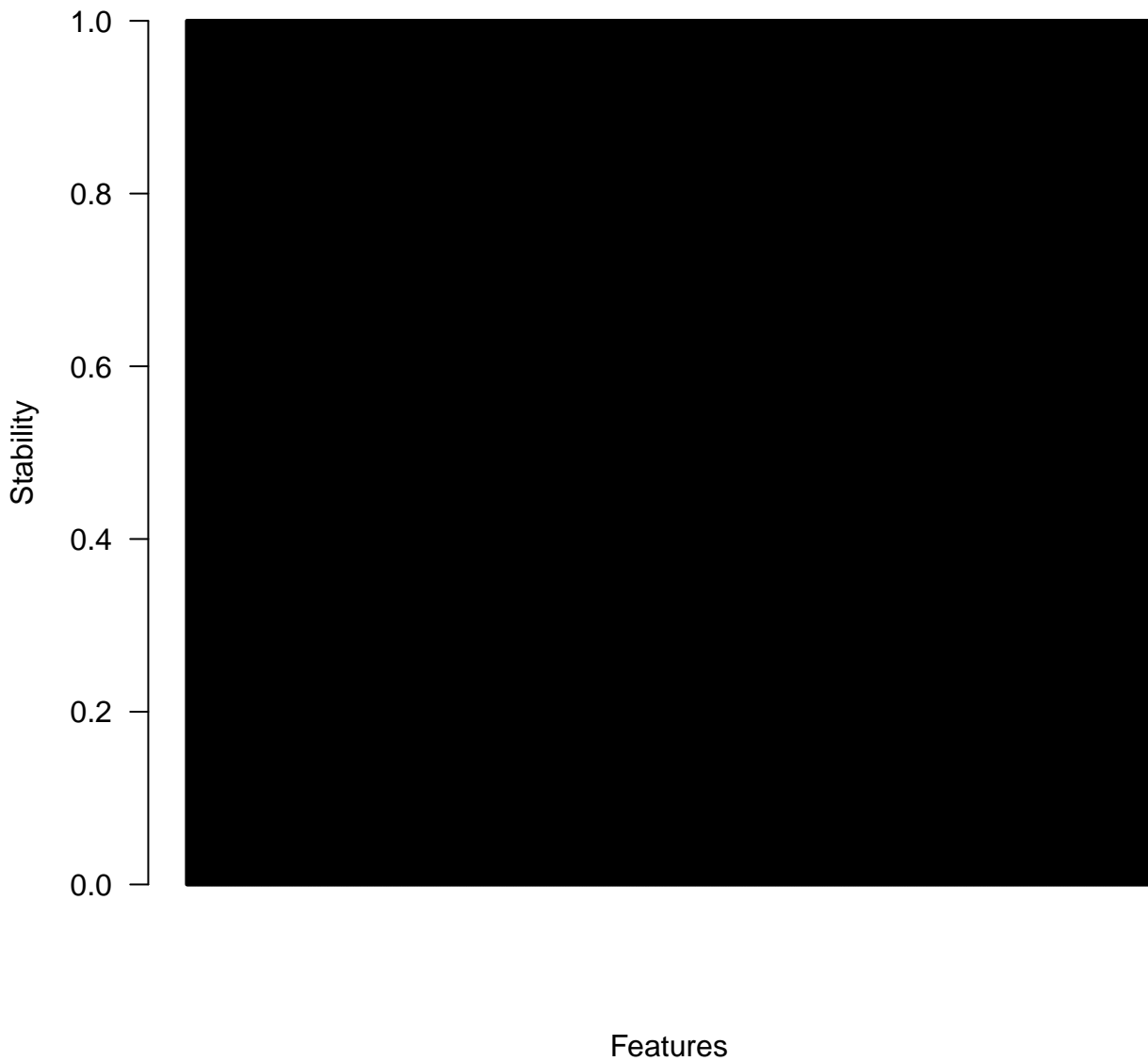
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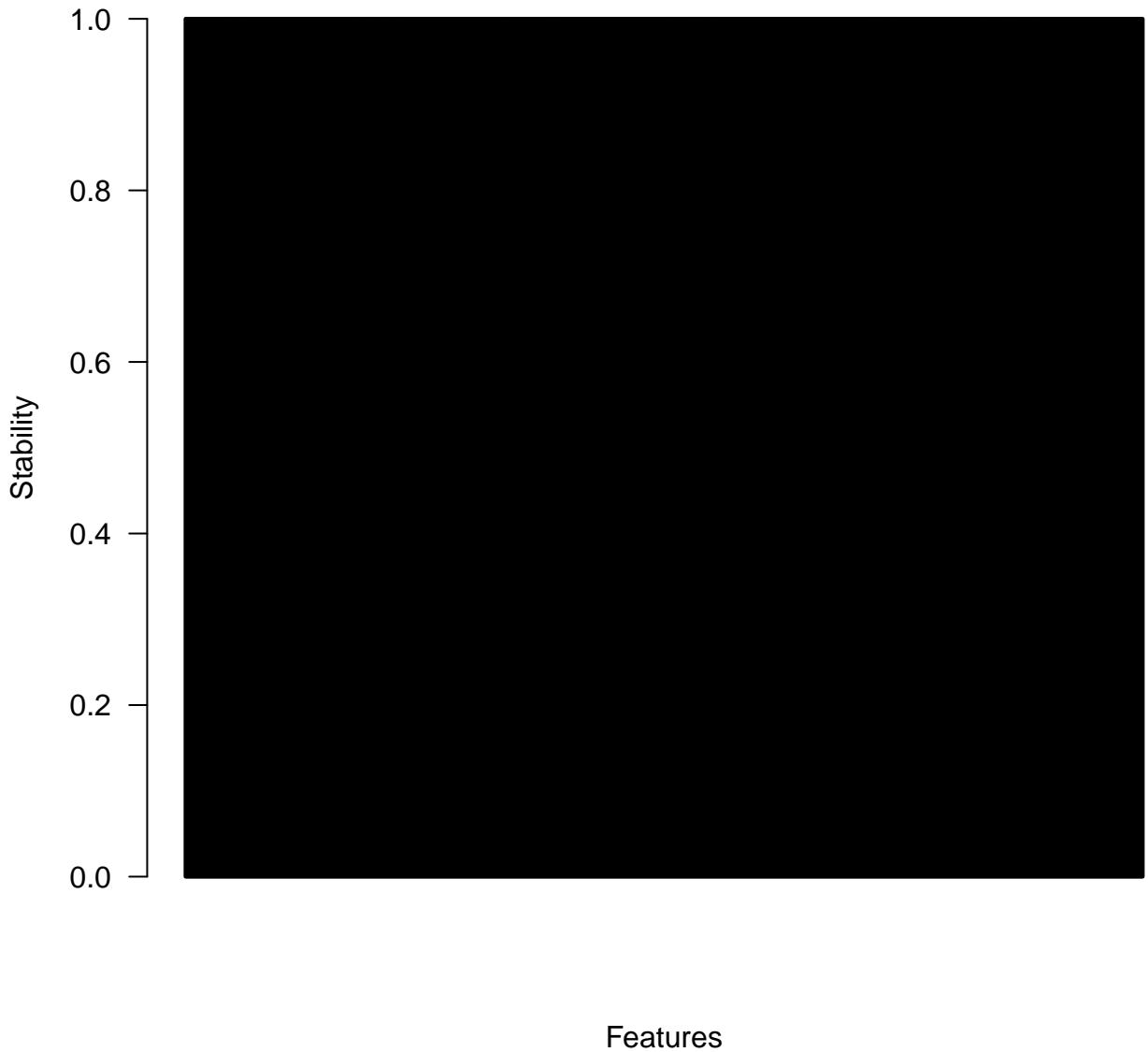
Metabolomics Comp 1



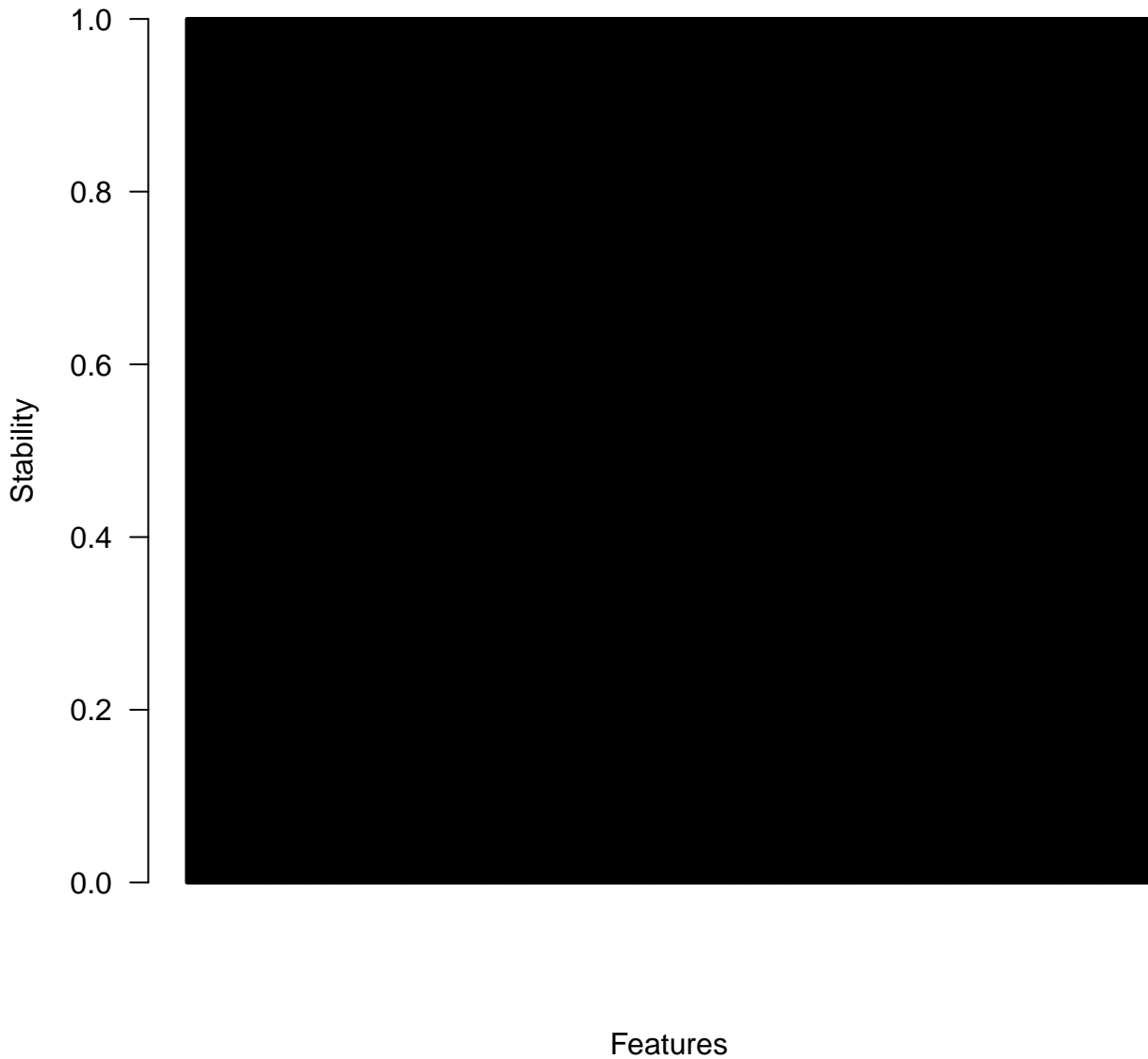
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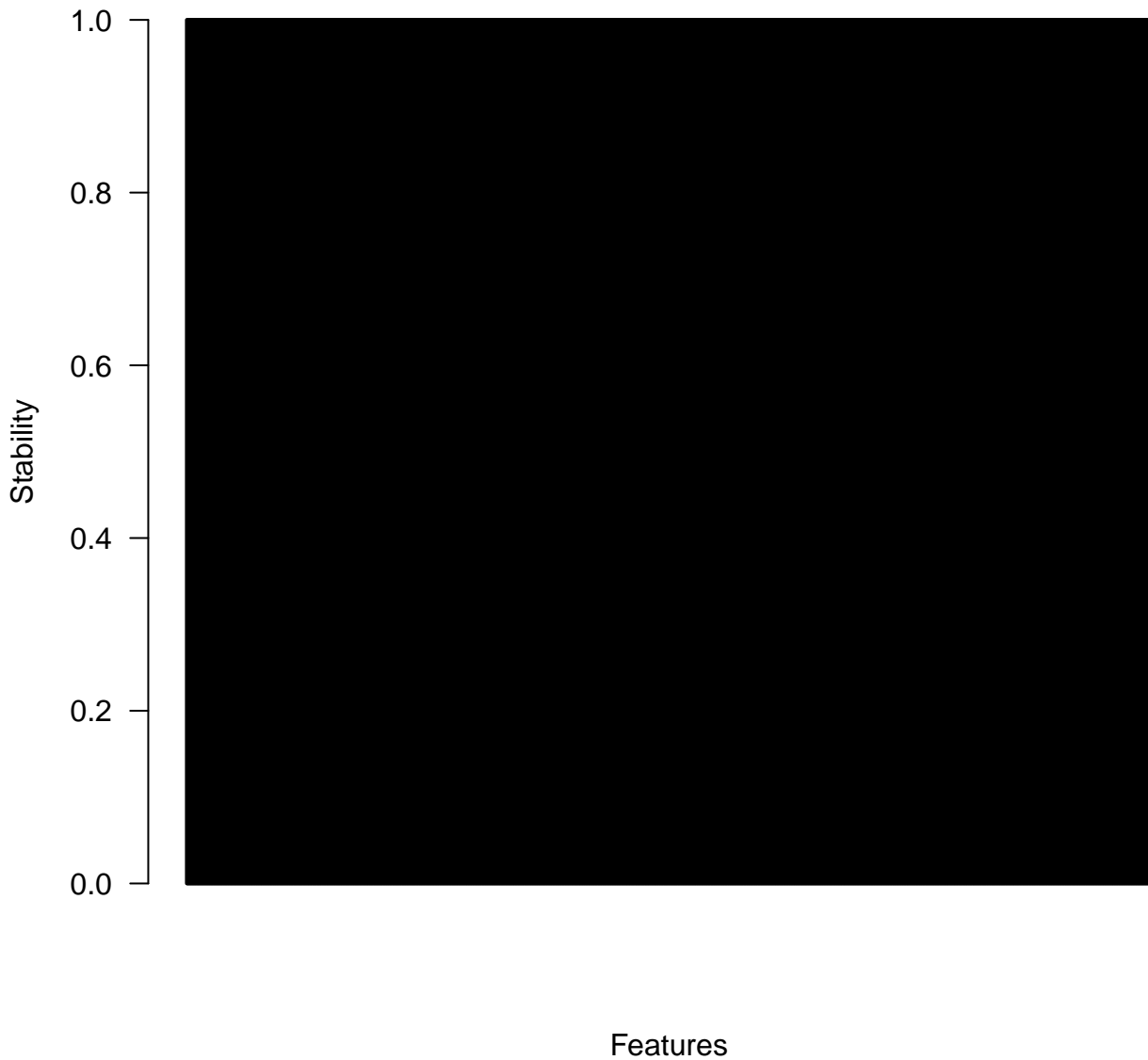
Proteomics Comp 1



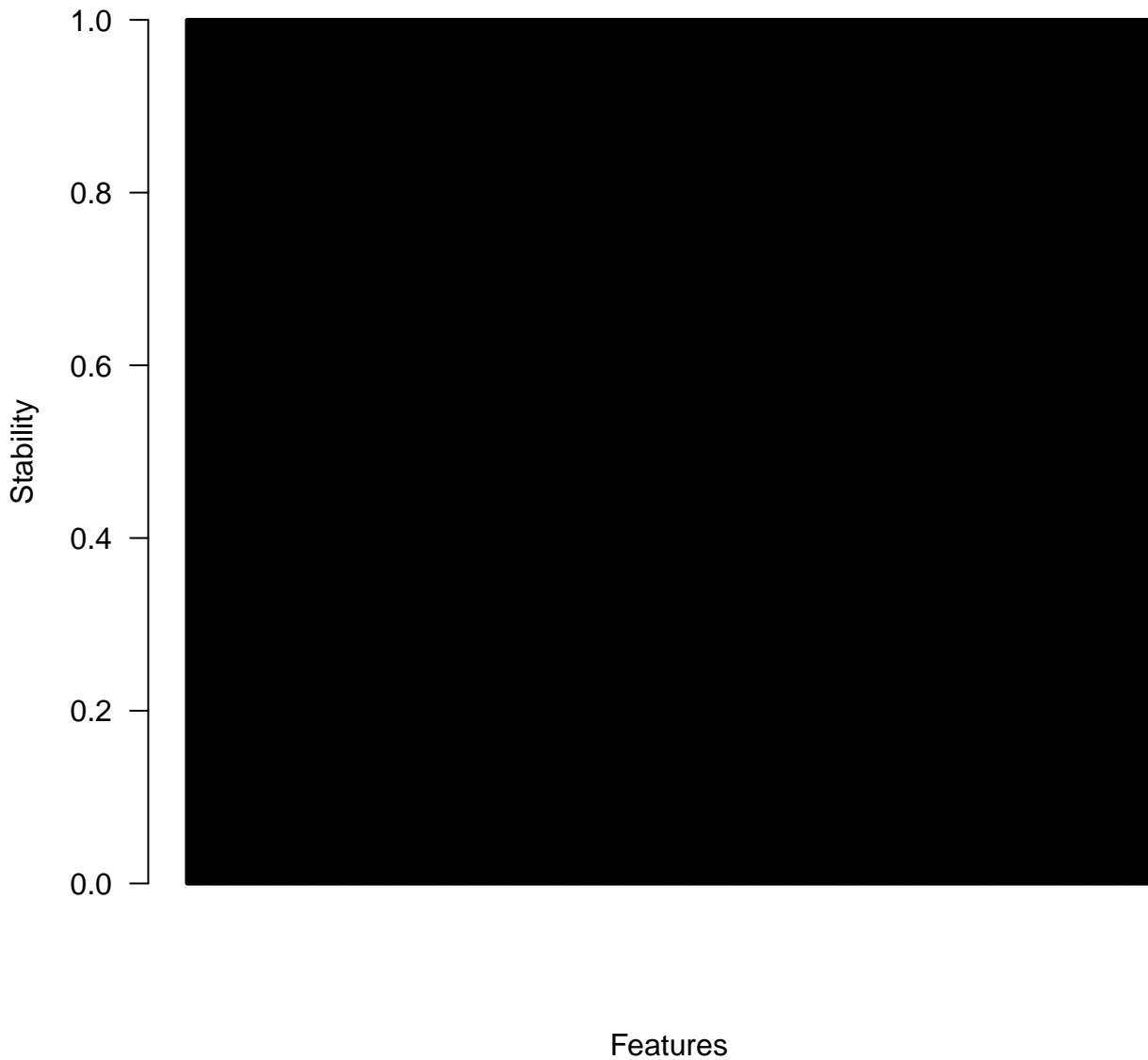
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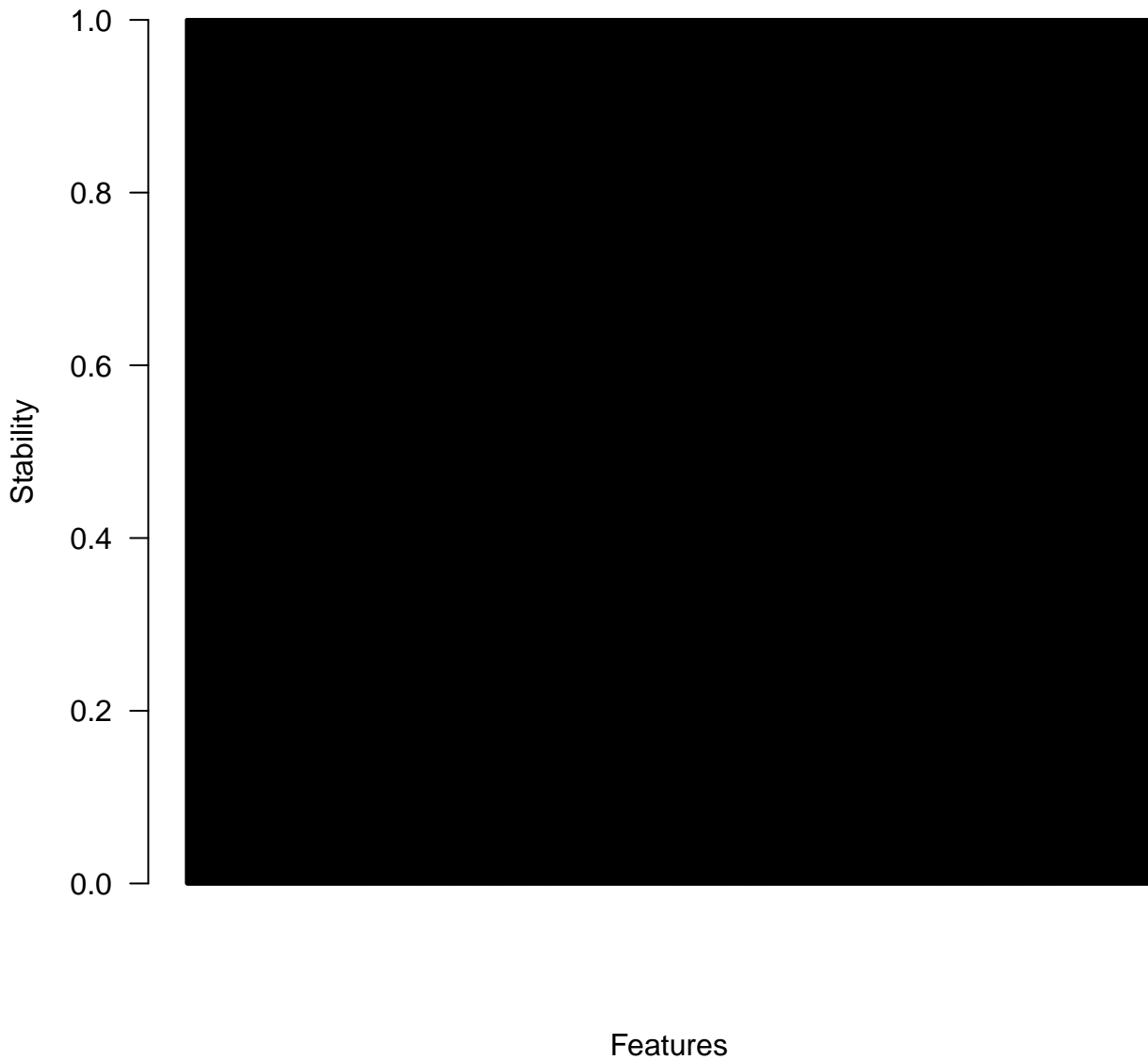
RNA_Seq Comp 1



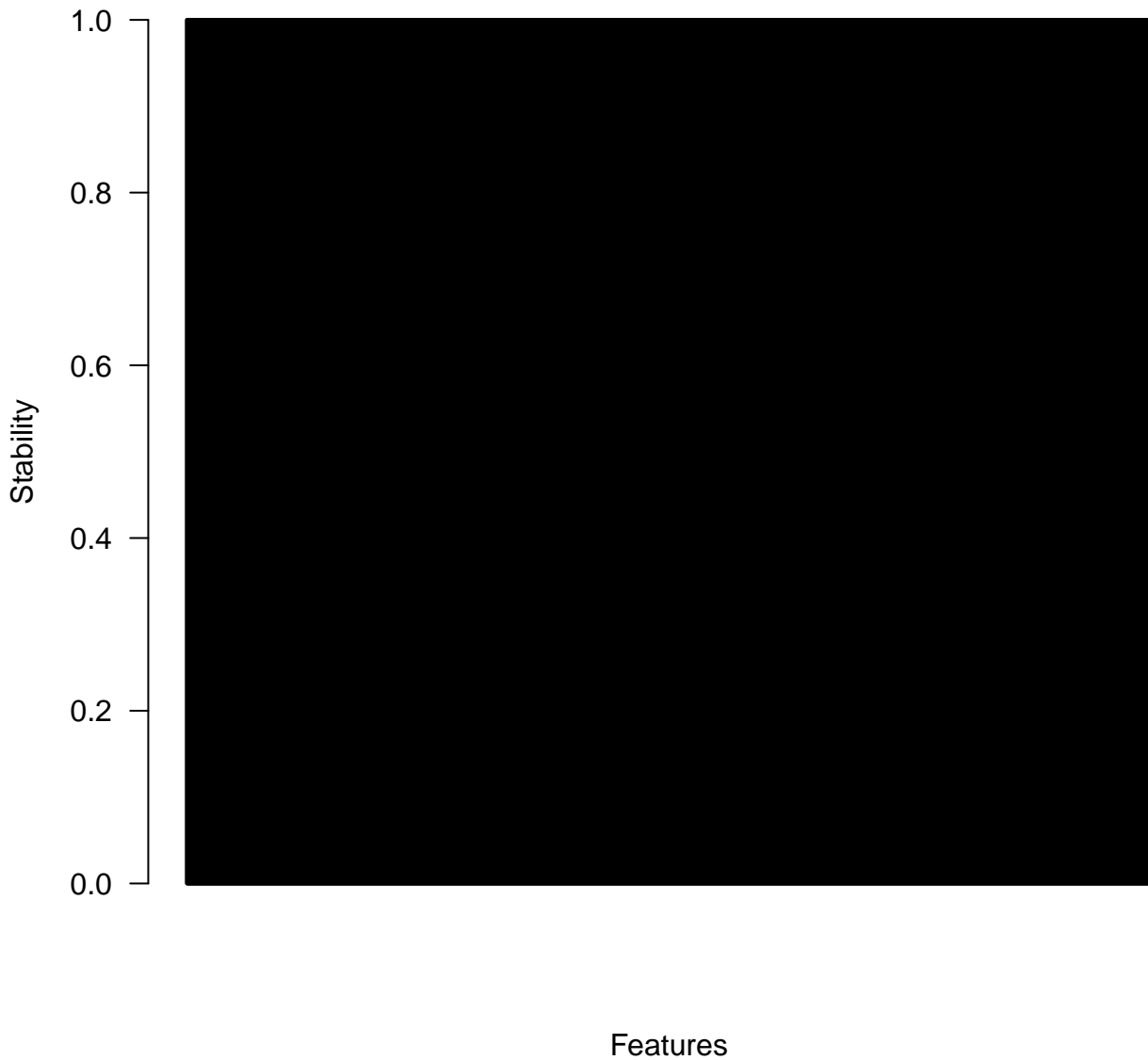
RNA_Seq Comp 2



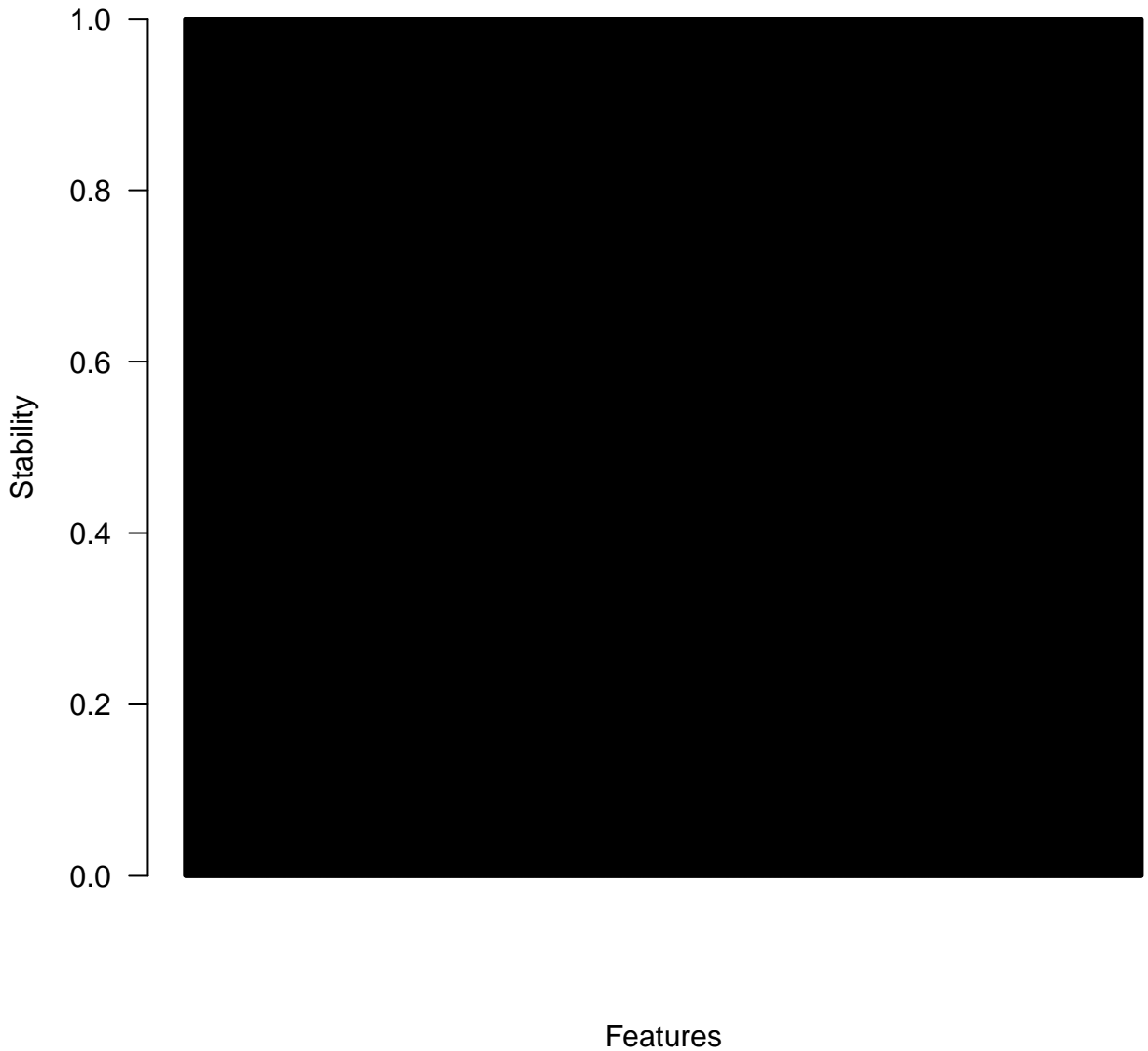
Metabolomics Comp 1



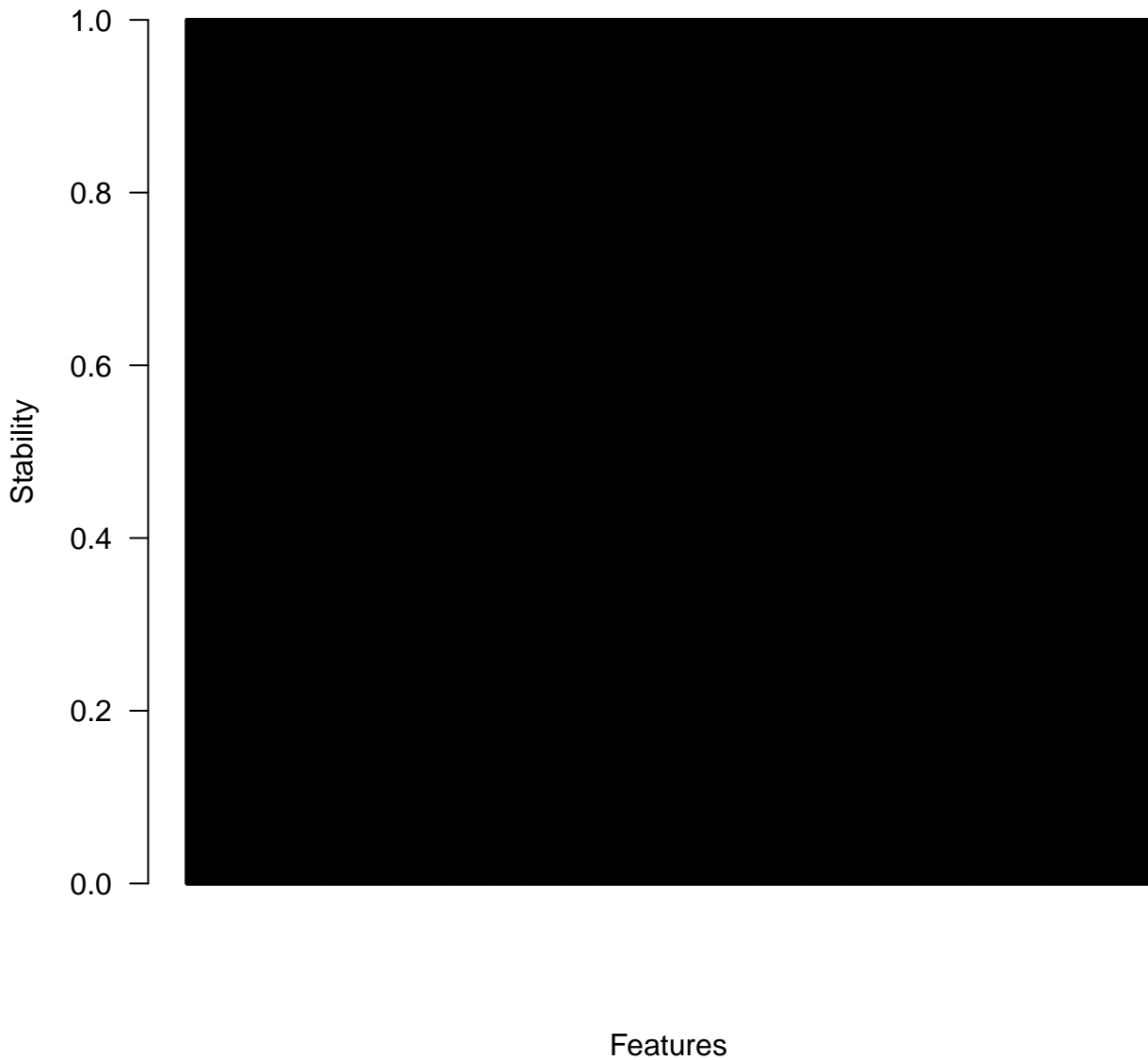
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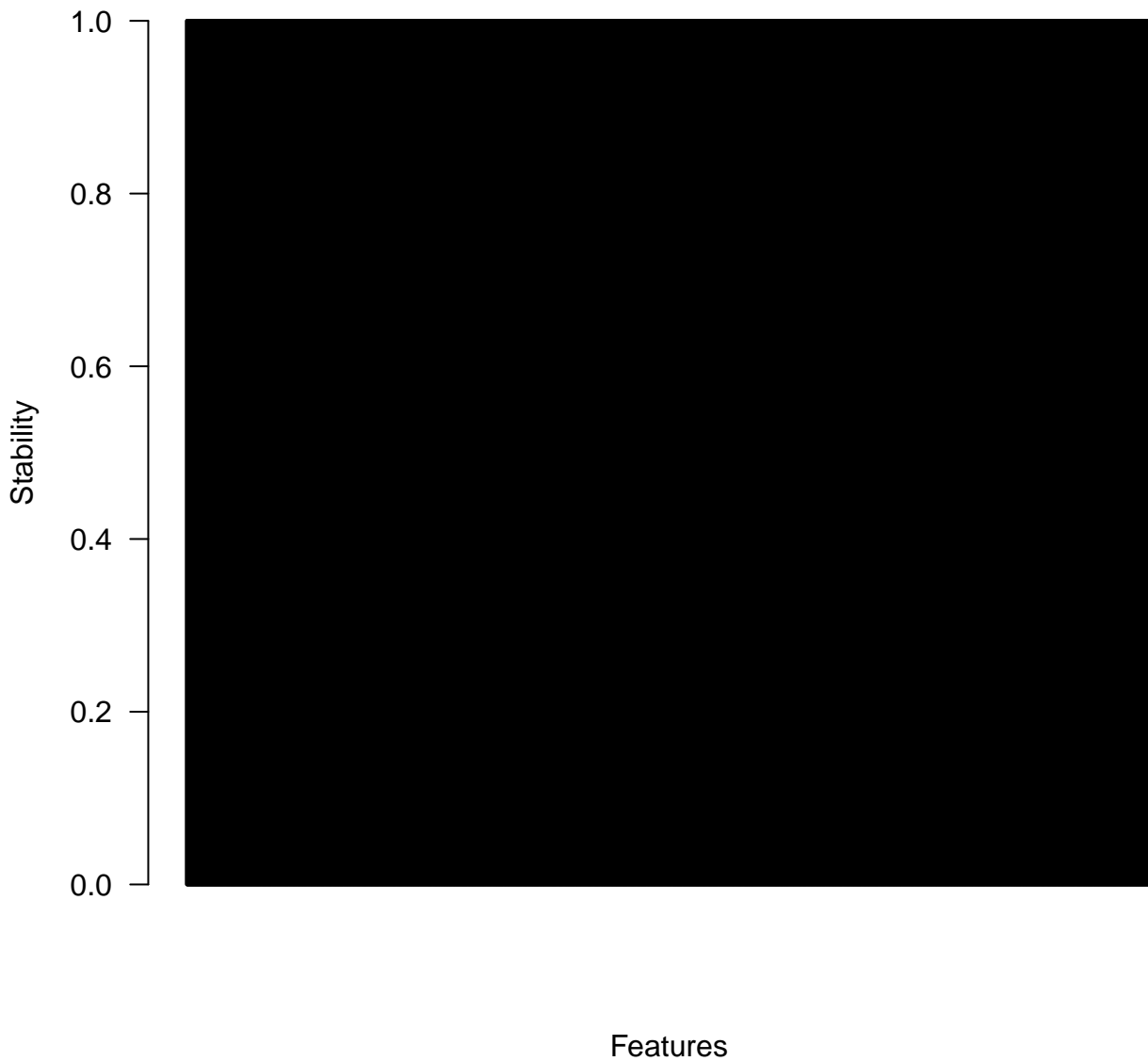
Proteomics Comp 1



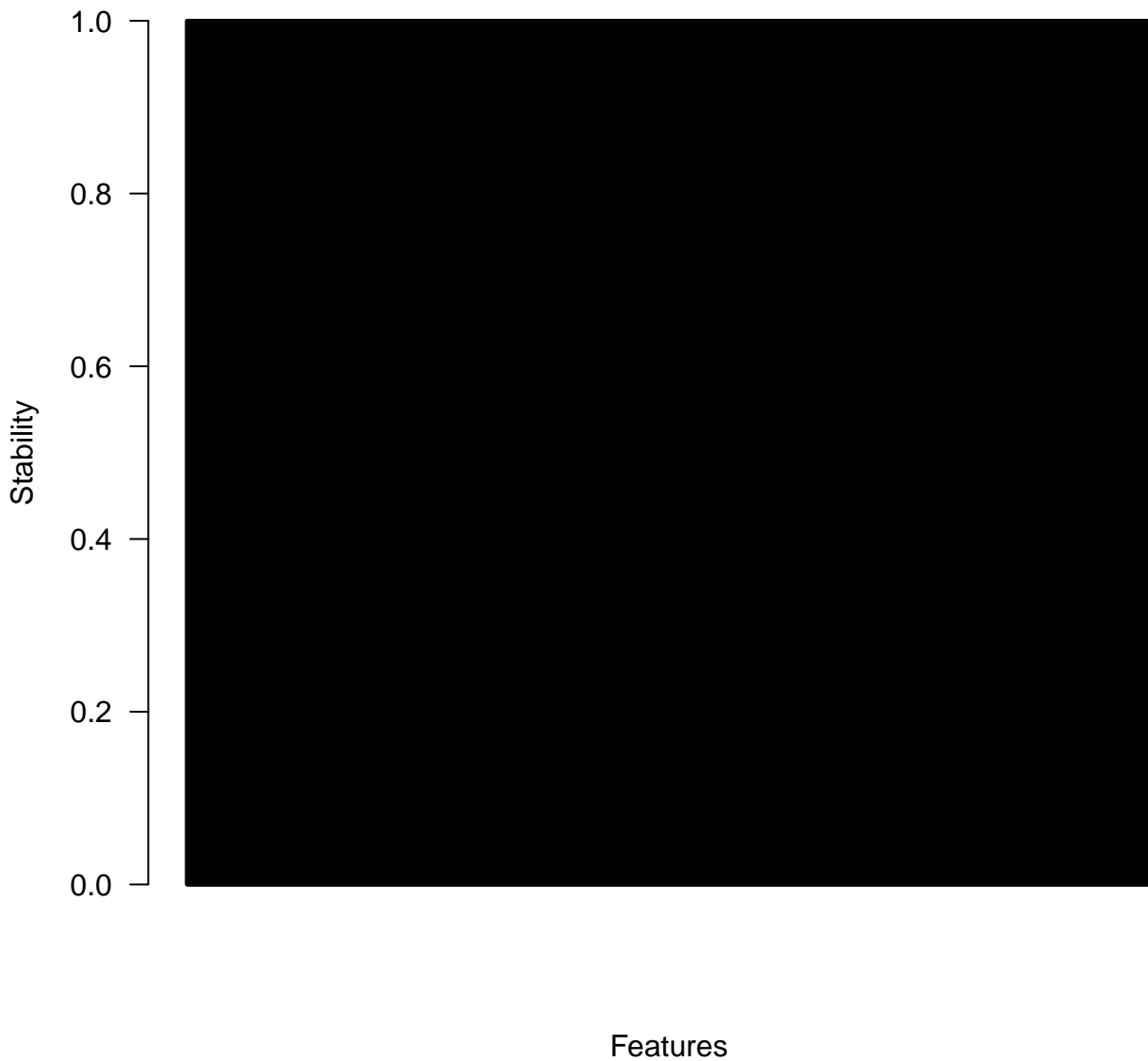
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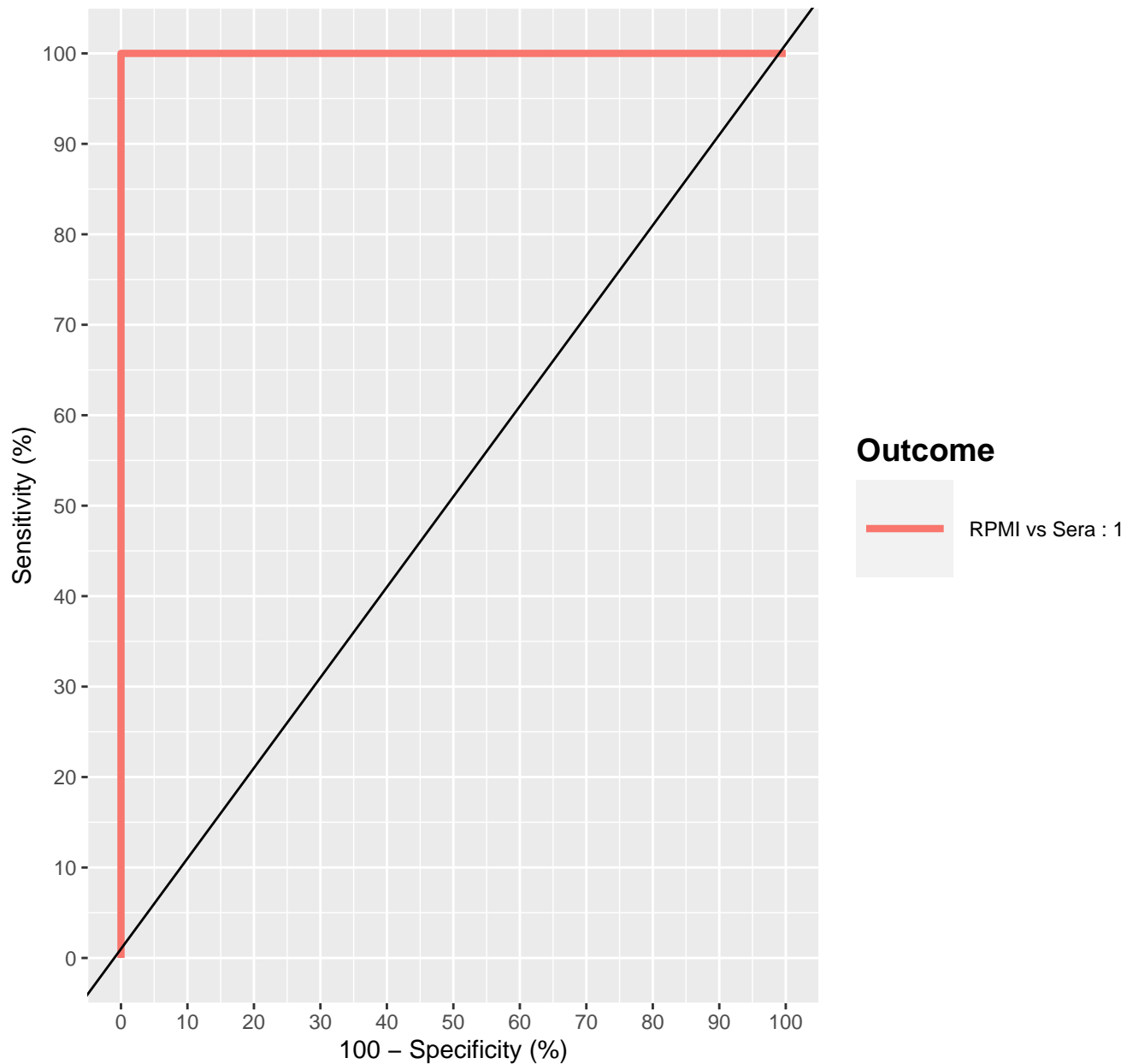
RNA_Seq Comp 1



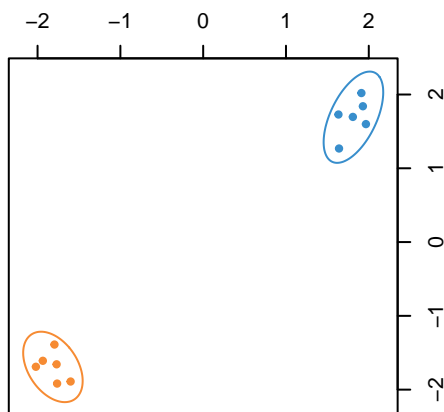
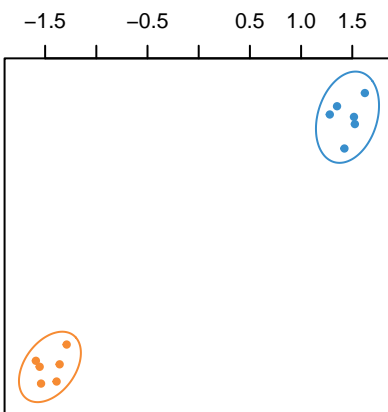
RNA_Seq Comp 2



ROC Curve
Block: Metabolomics, comp: 1

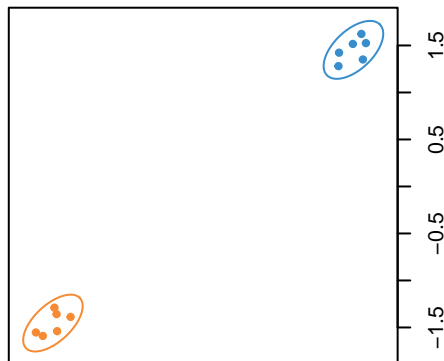


Metabolomics



0.99

Proteomics



0.99

1

RNA_Seq

● RPMI ● Sera

Comp 1

Correlation cut-off
 $r=0.1$

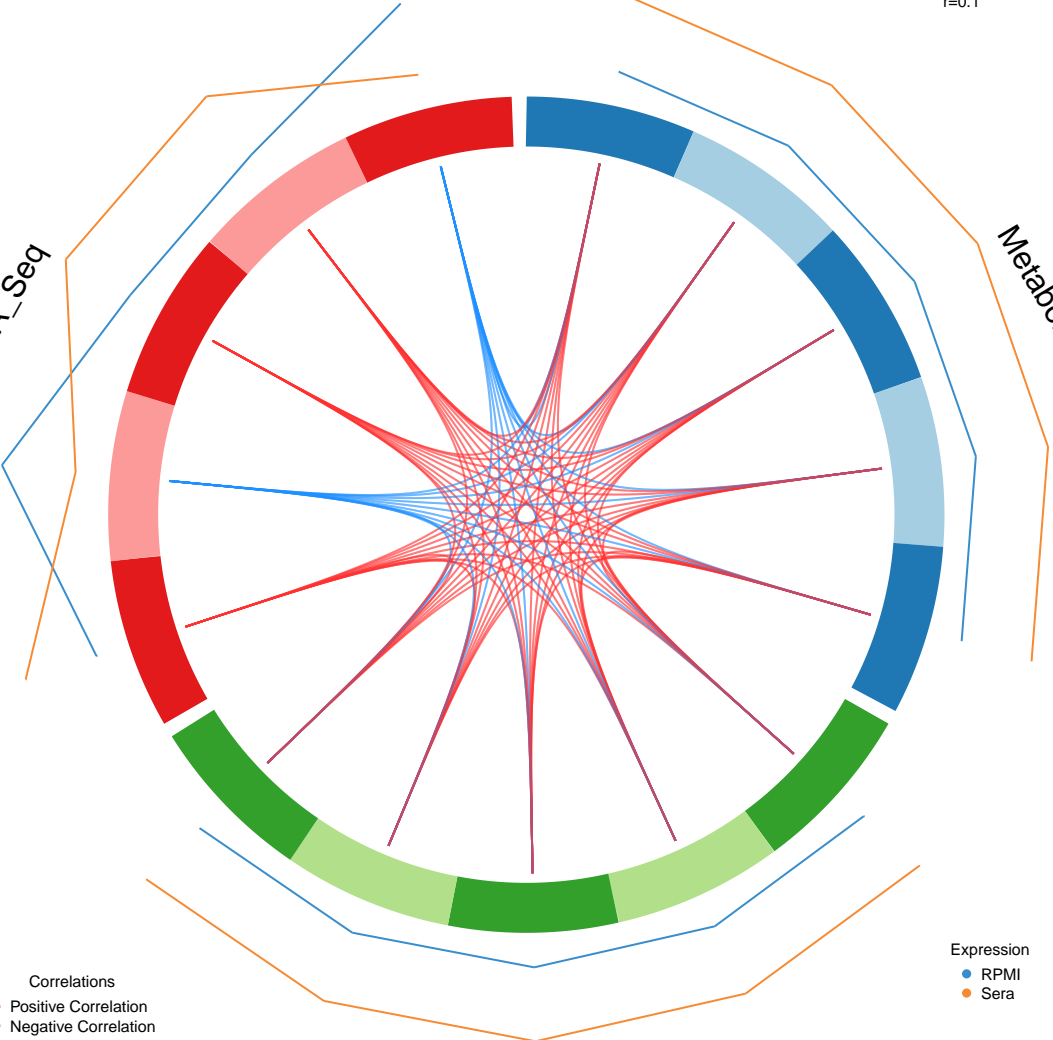
RNA_Seq

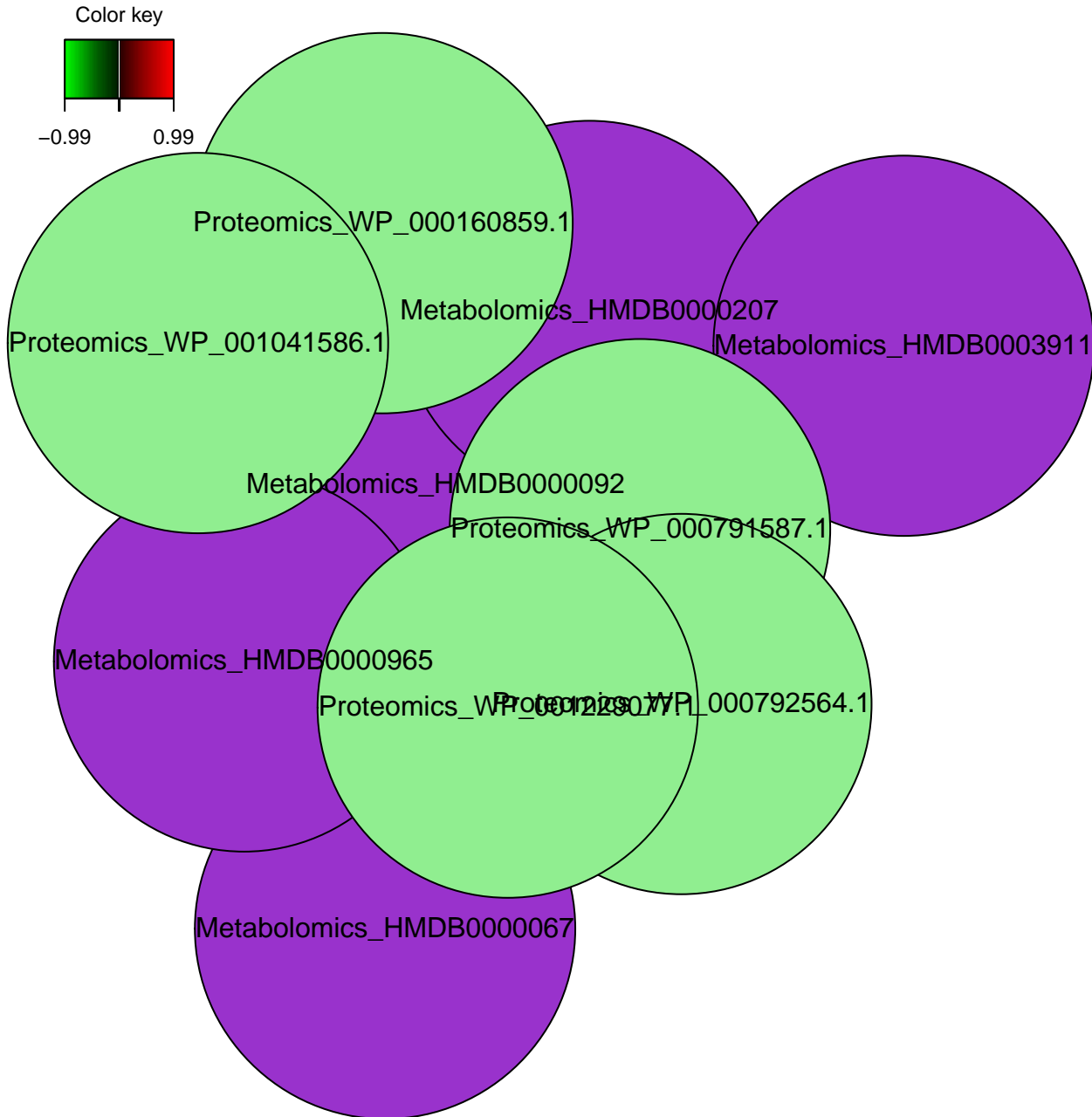
Metabolomics

Proteomics

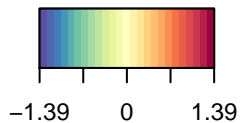
- Correlations
- Positive Correlation
 - Negative Correlation

- Expression
- RPMI
 - Sera





Color key

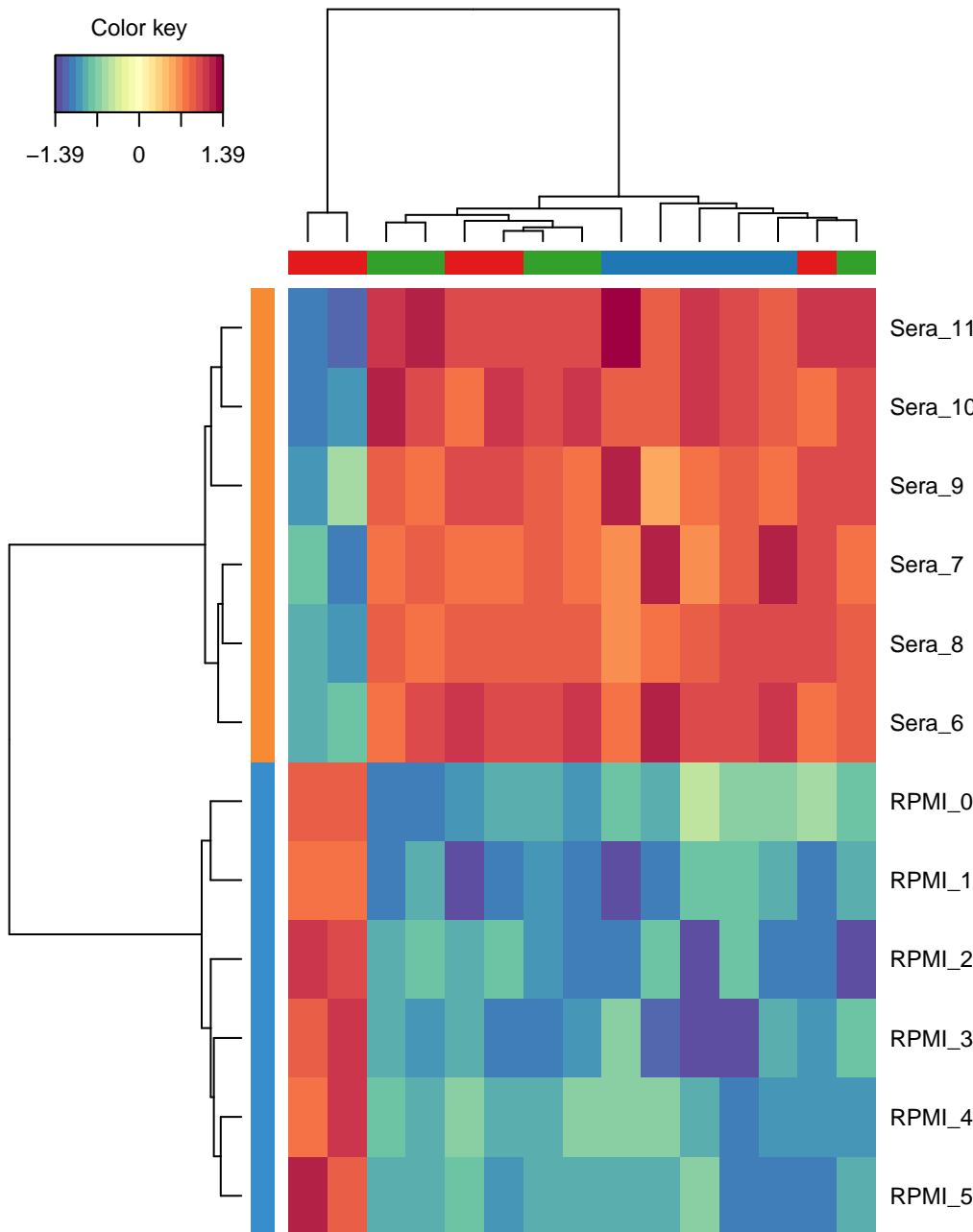


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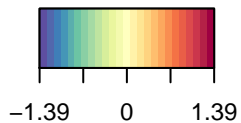
- RPMI
- Sera

Columns

- Metabolomics
- Proteomics
- RNA_Seq



Color key

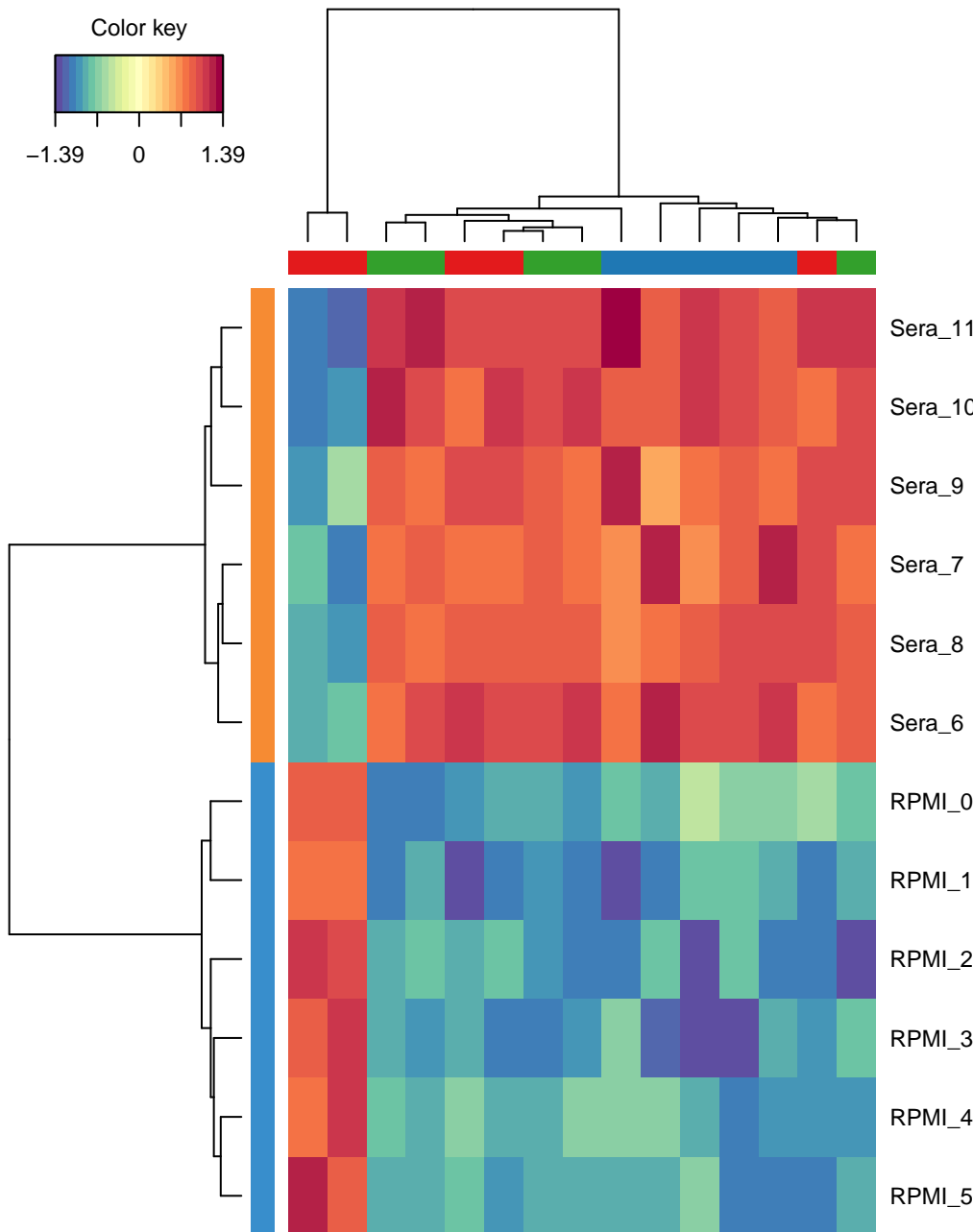


Rows

- RPMI
- Sera

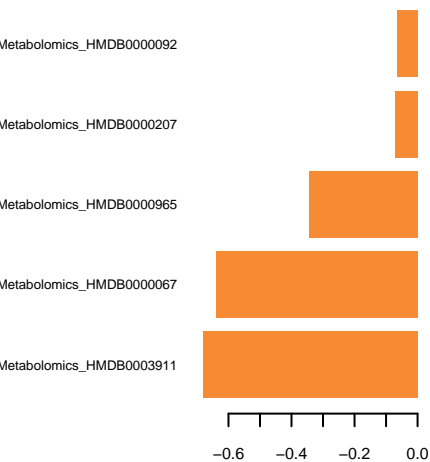
Columns

- Metabolomics
- Proteomics
- RNA_Seq

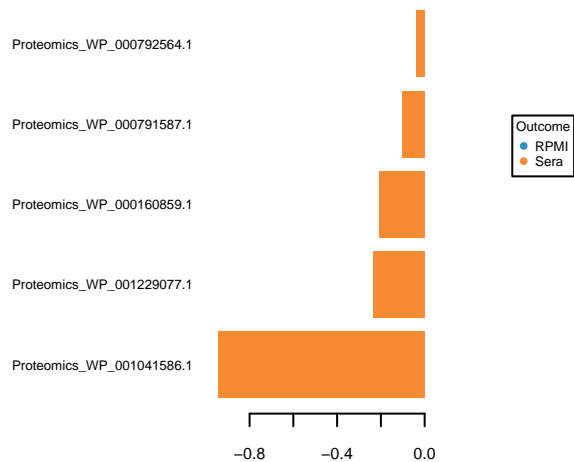


1 DIABLO max loadings

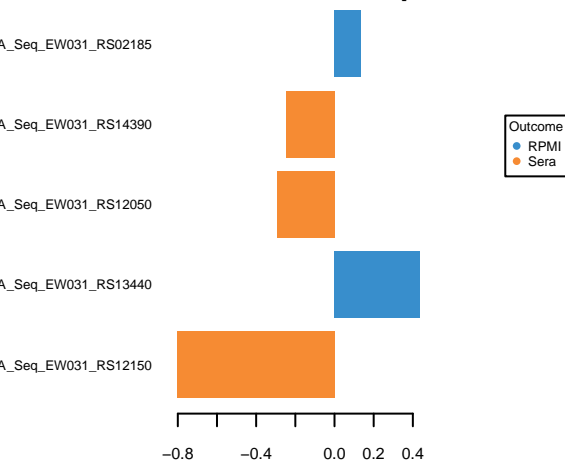
Contribution on comp 1
Block 'Metabolomics'



Contribution on comp 1
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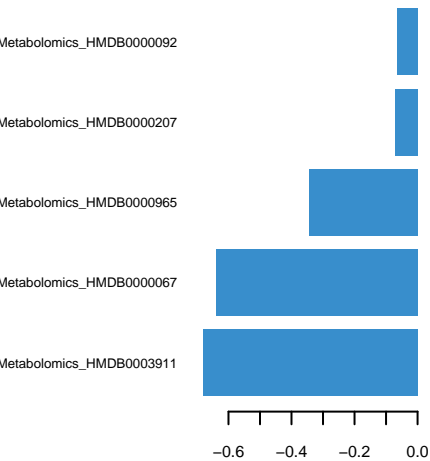


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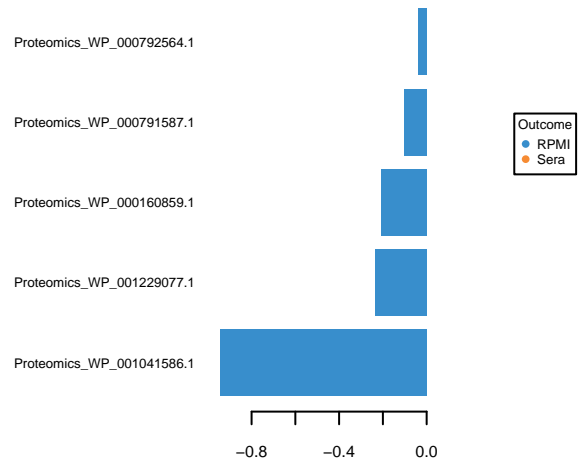


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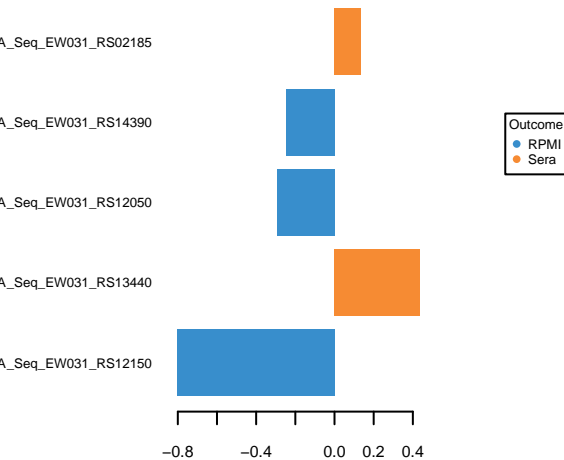
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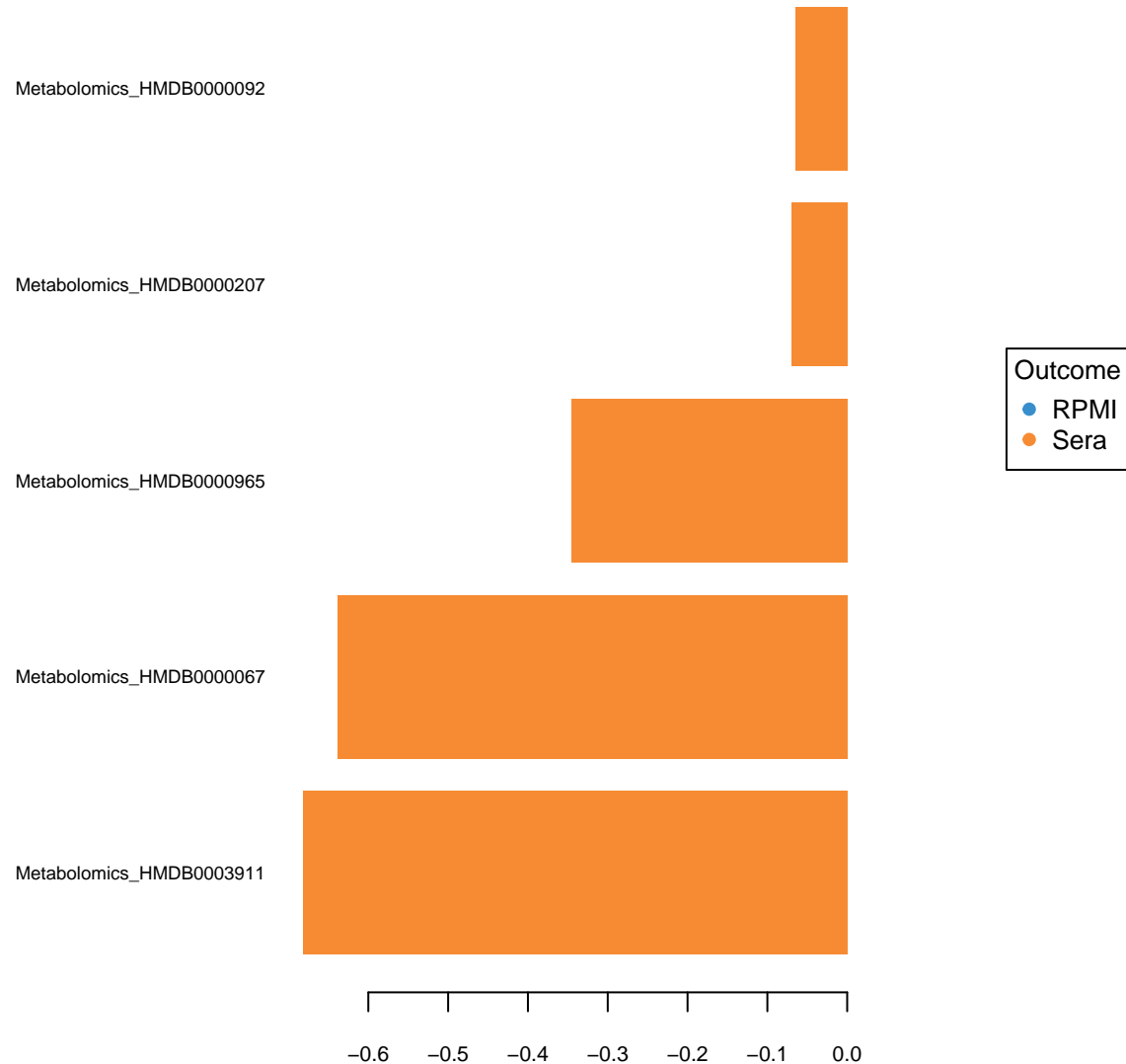
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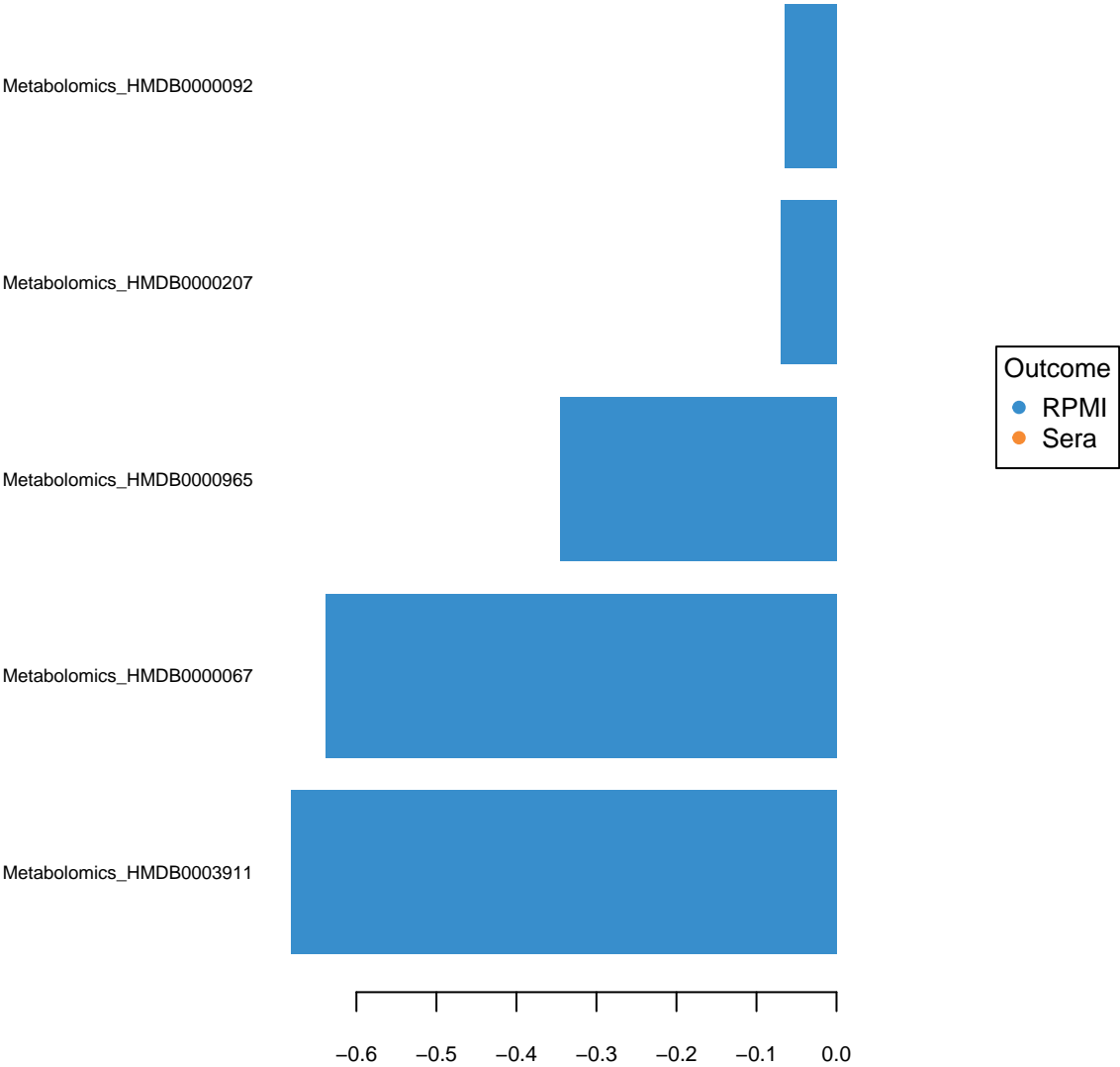
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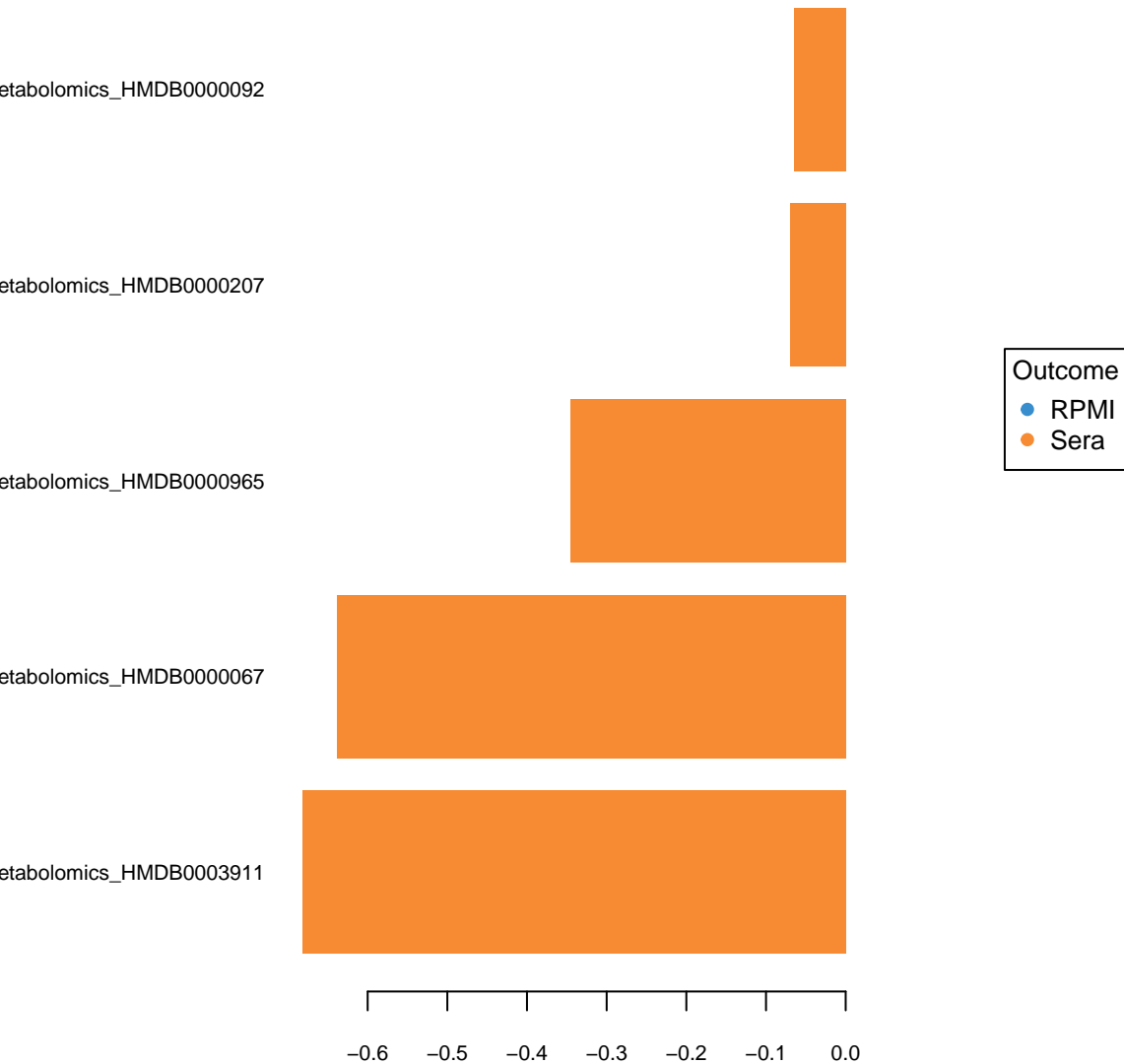
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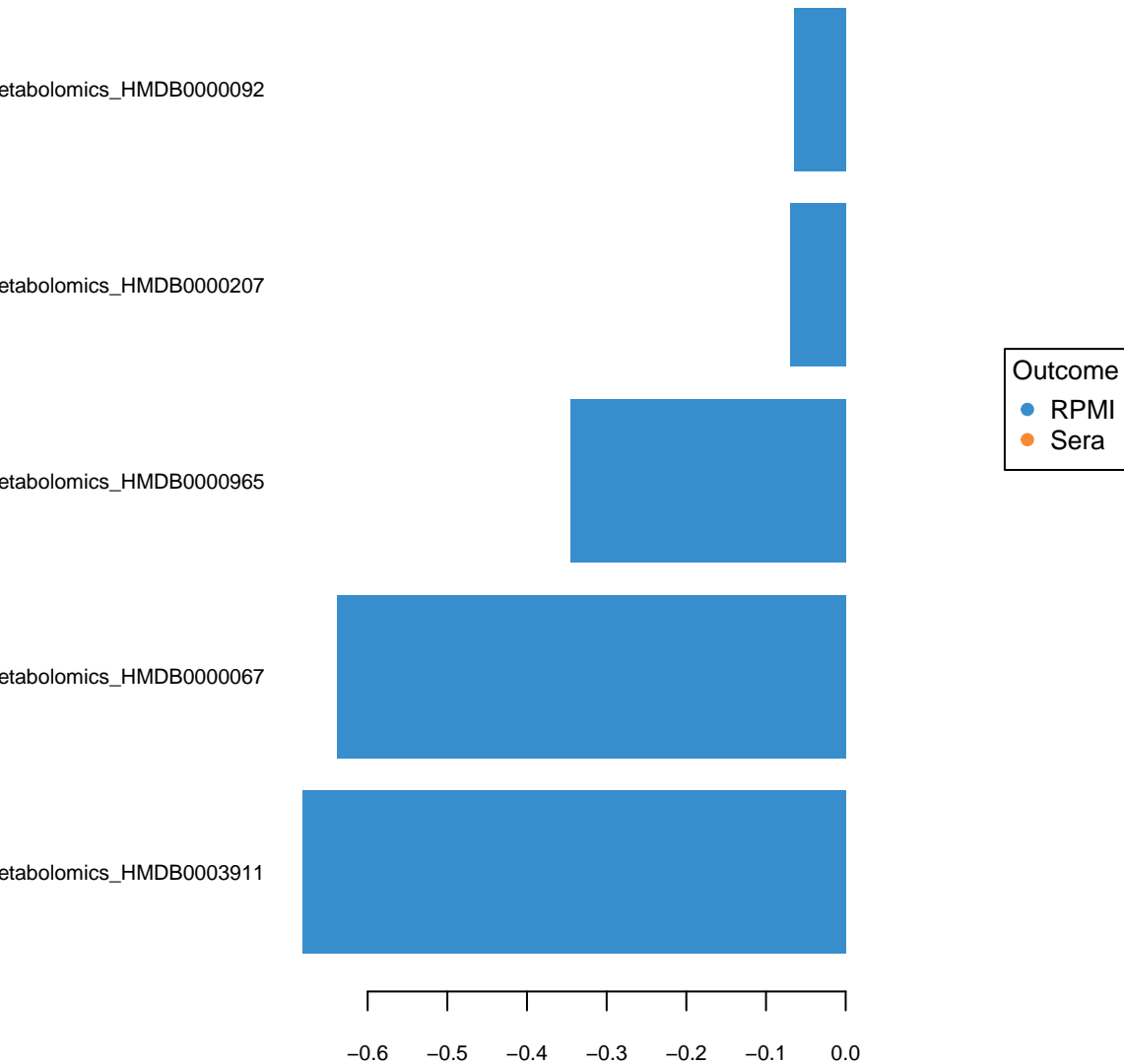
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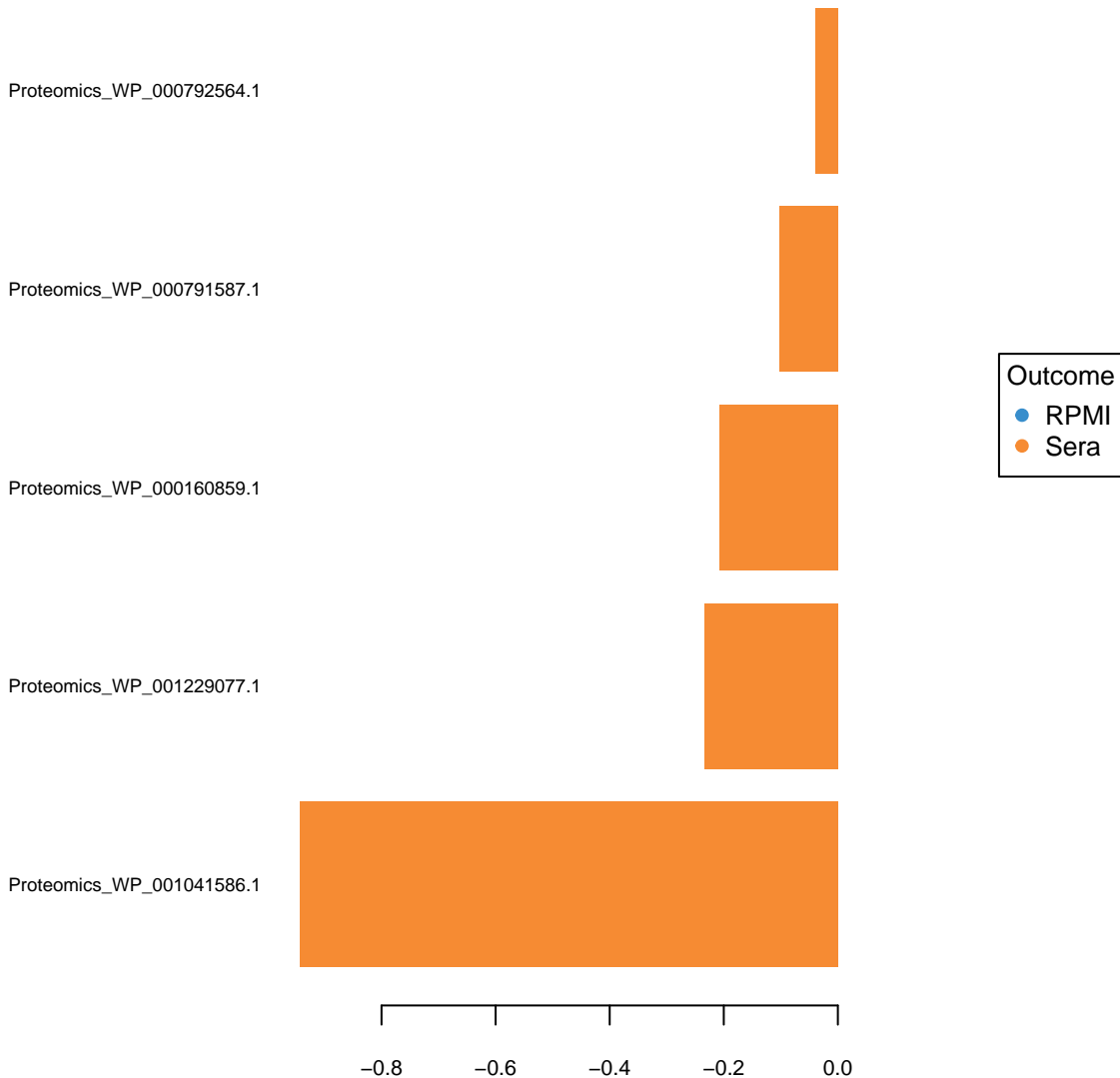
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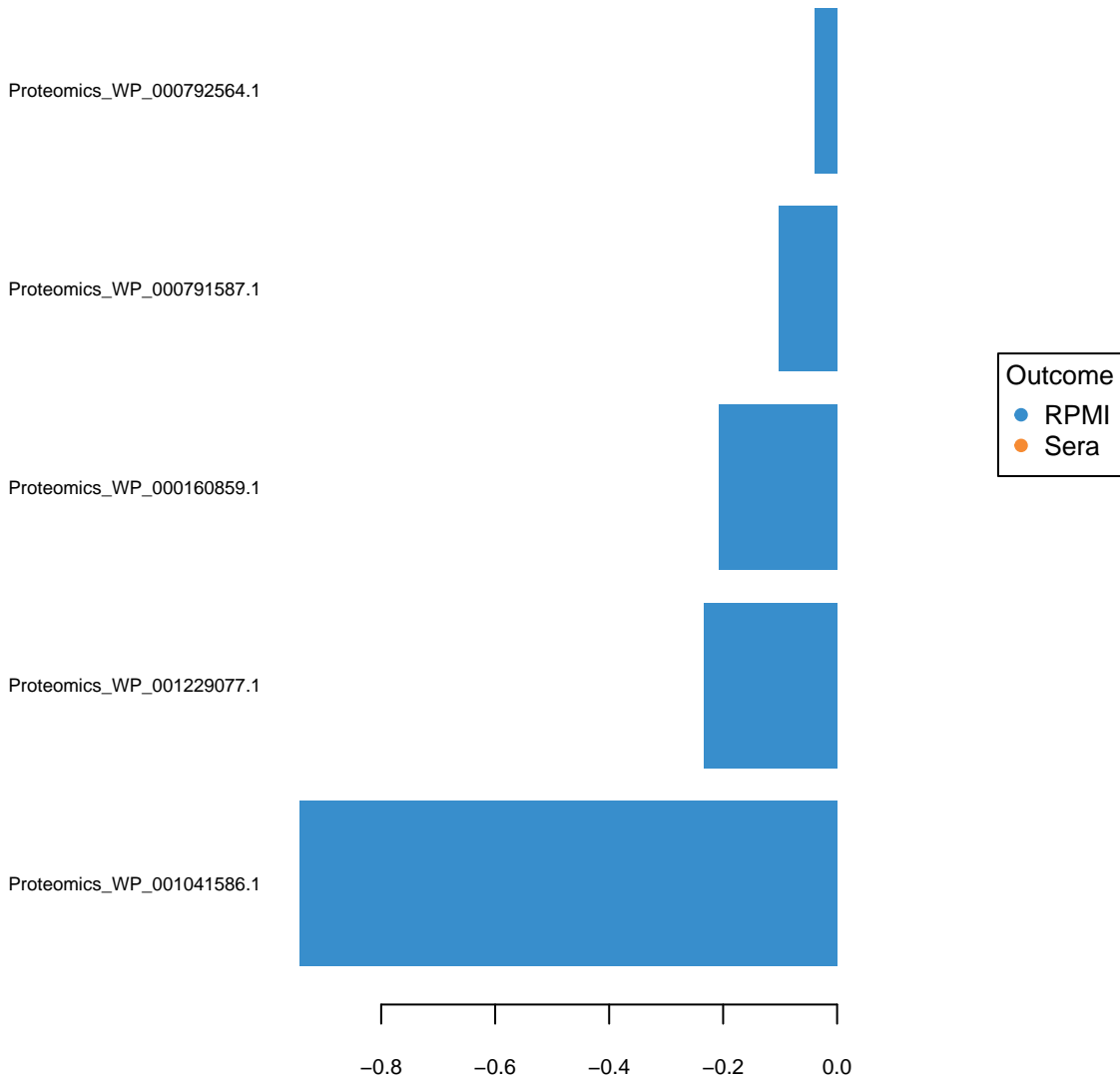
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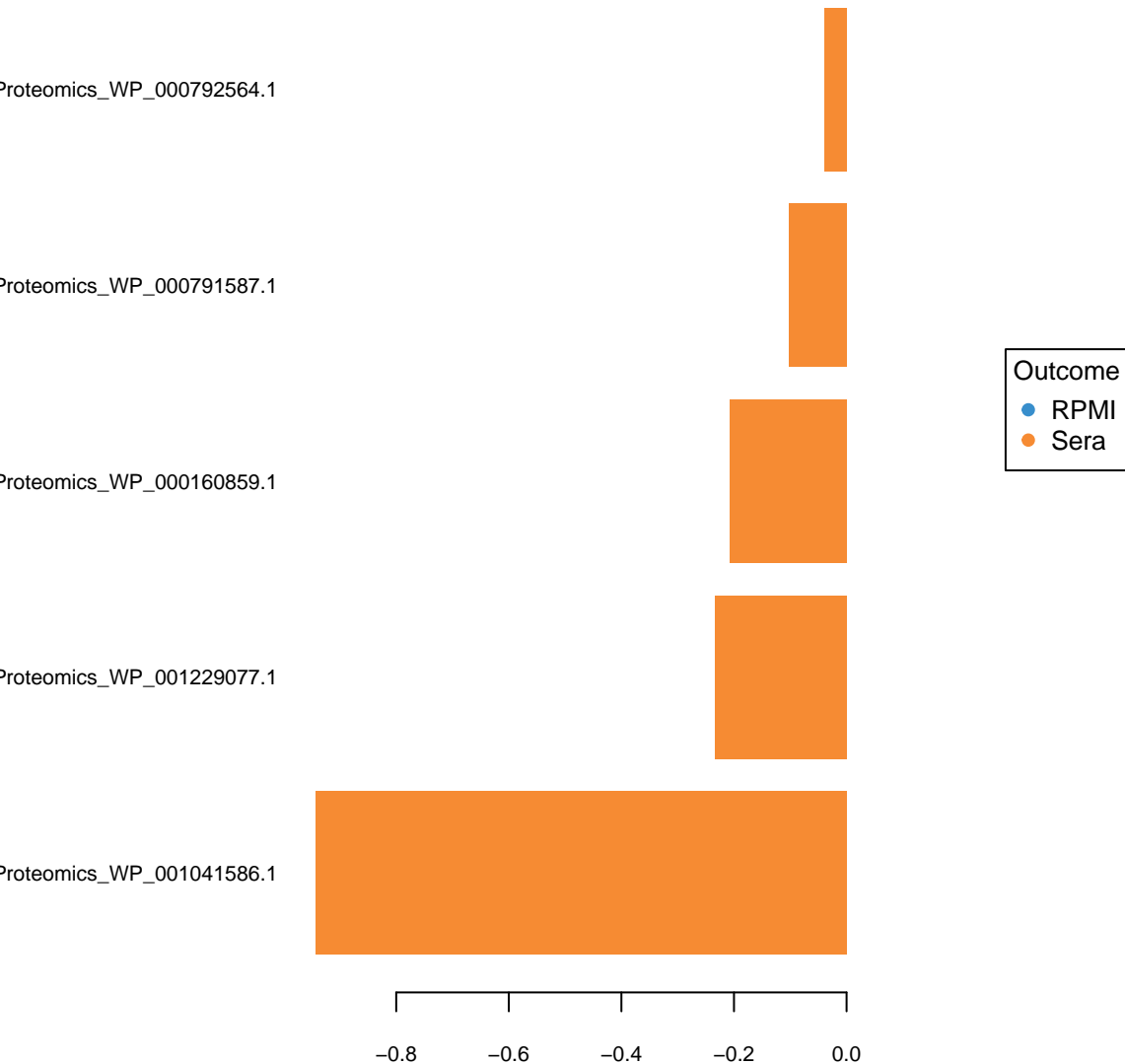
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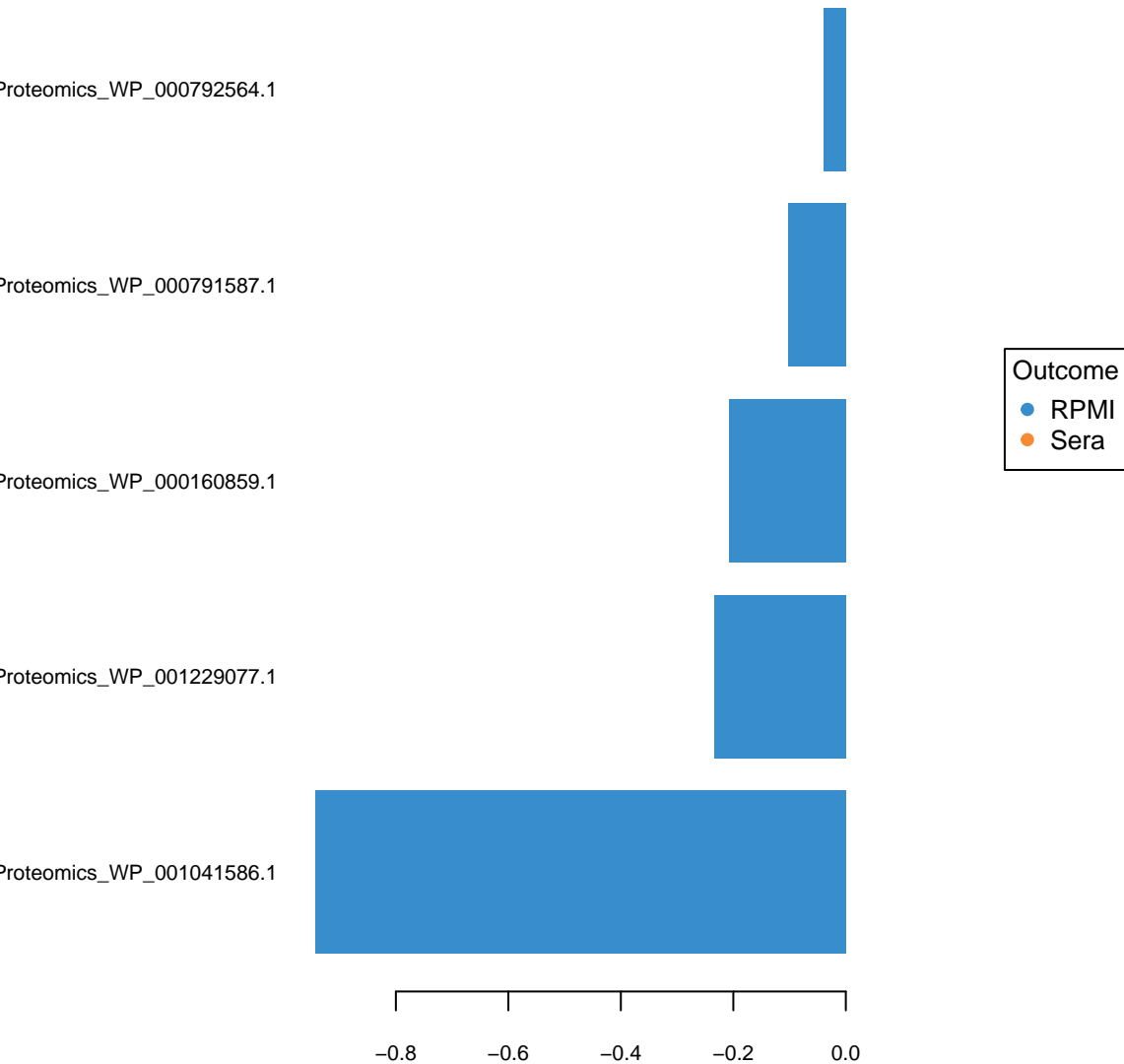
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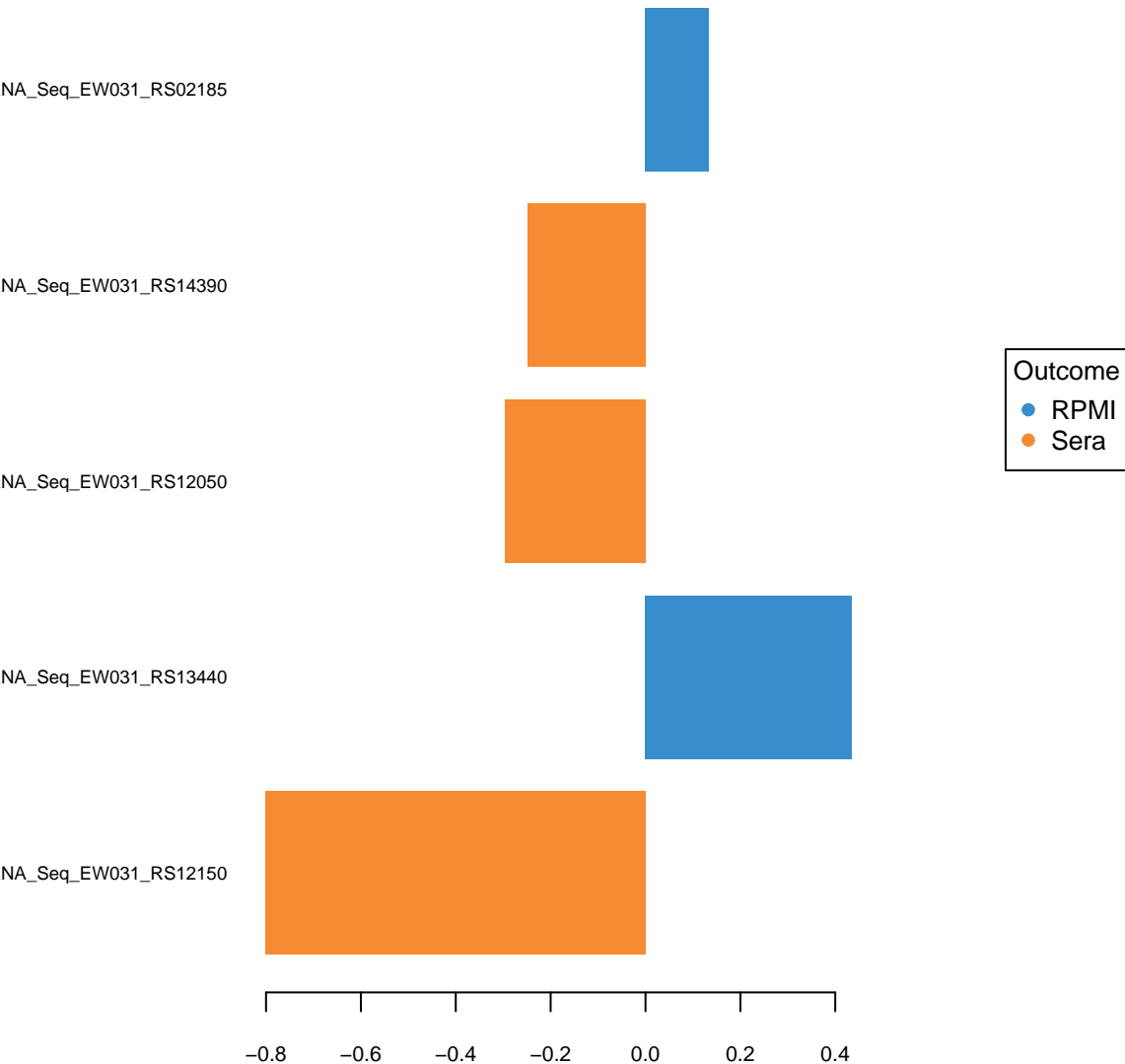
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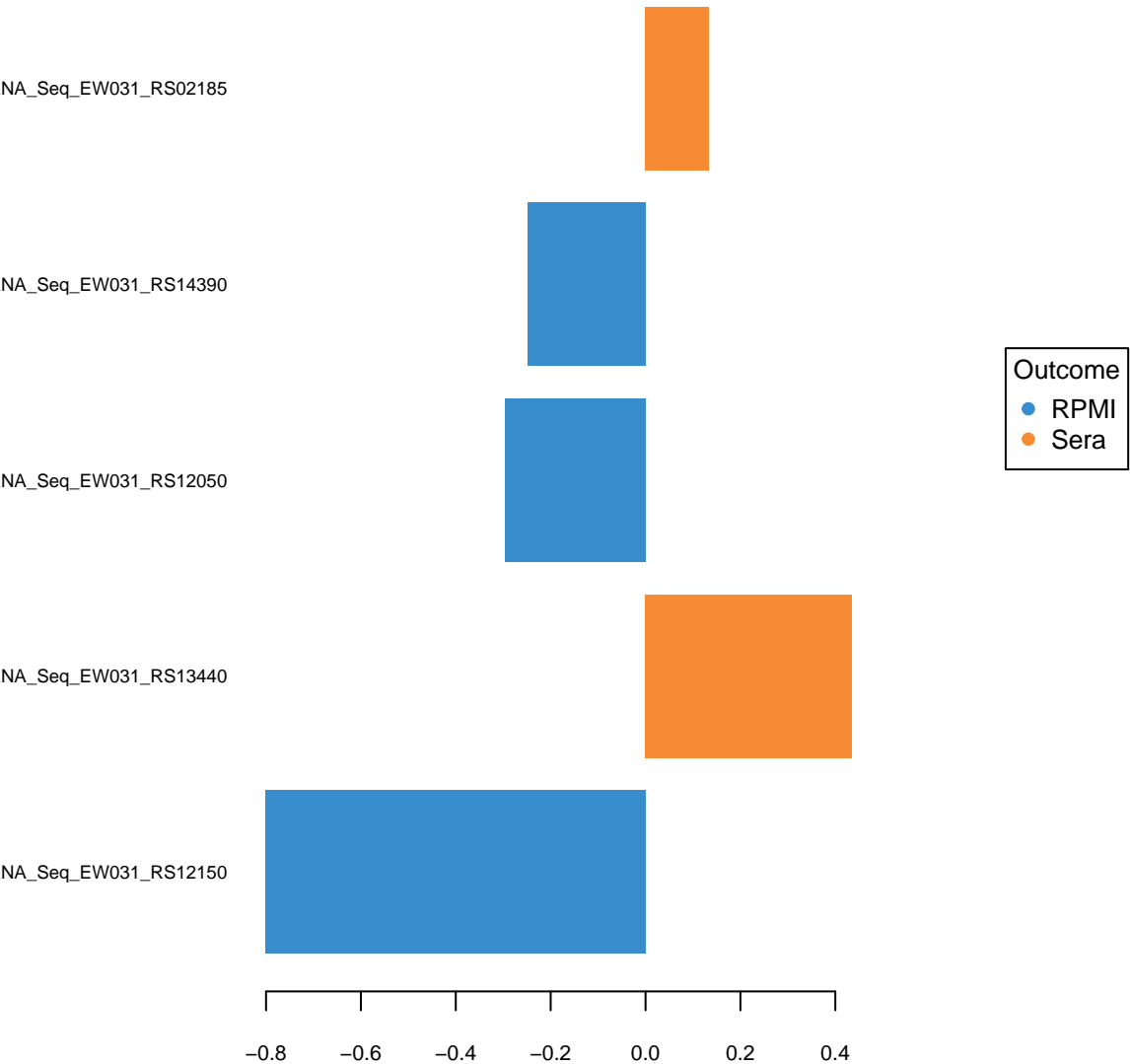
Contribution on comp 1



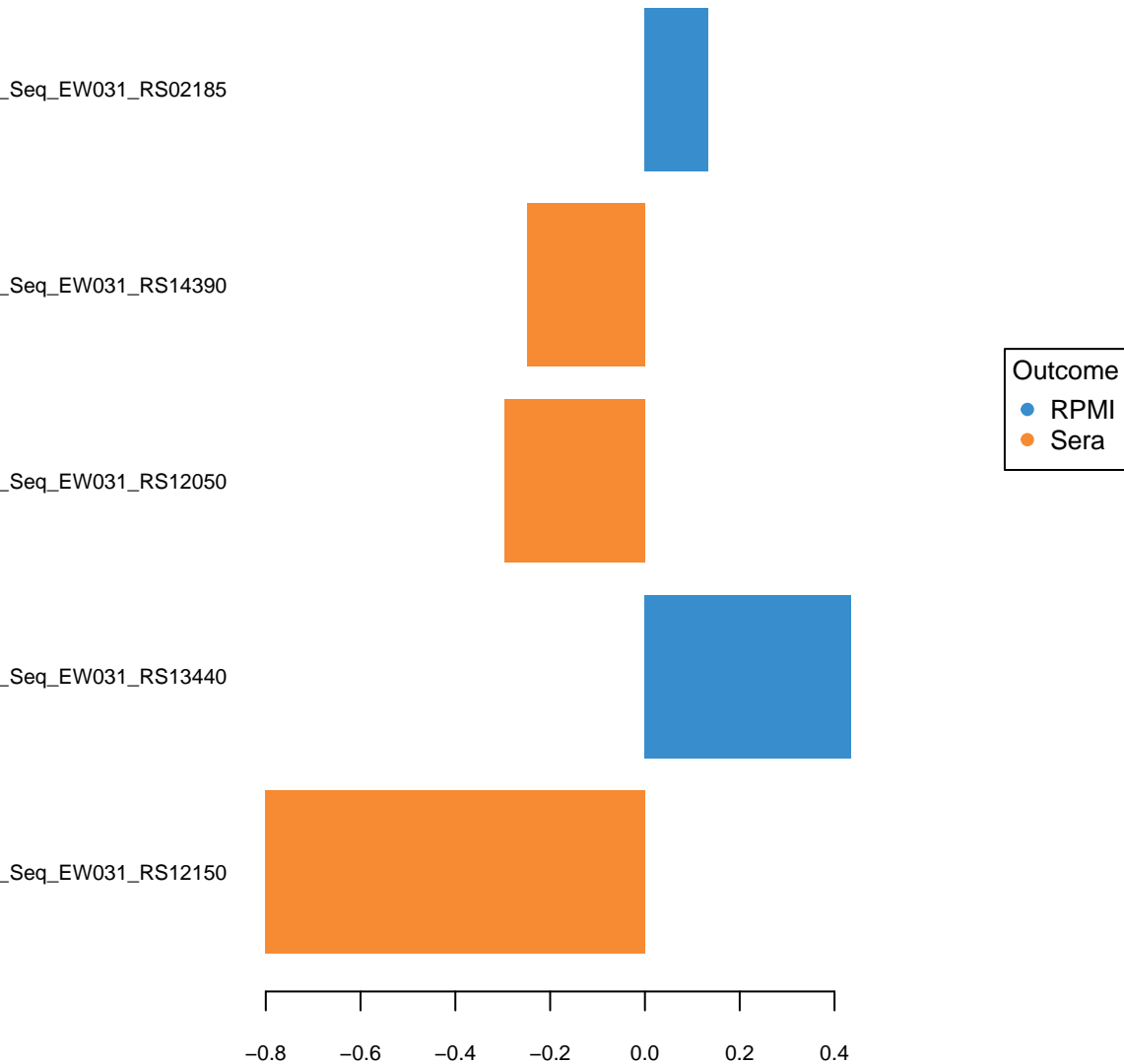
1 RNA_Seq DIABLO max load1



1 RNA_Seq DIABLO min load



Contribution on comp 1



Contribution on comp 1

