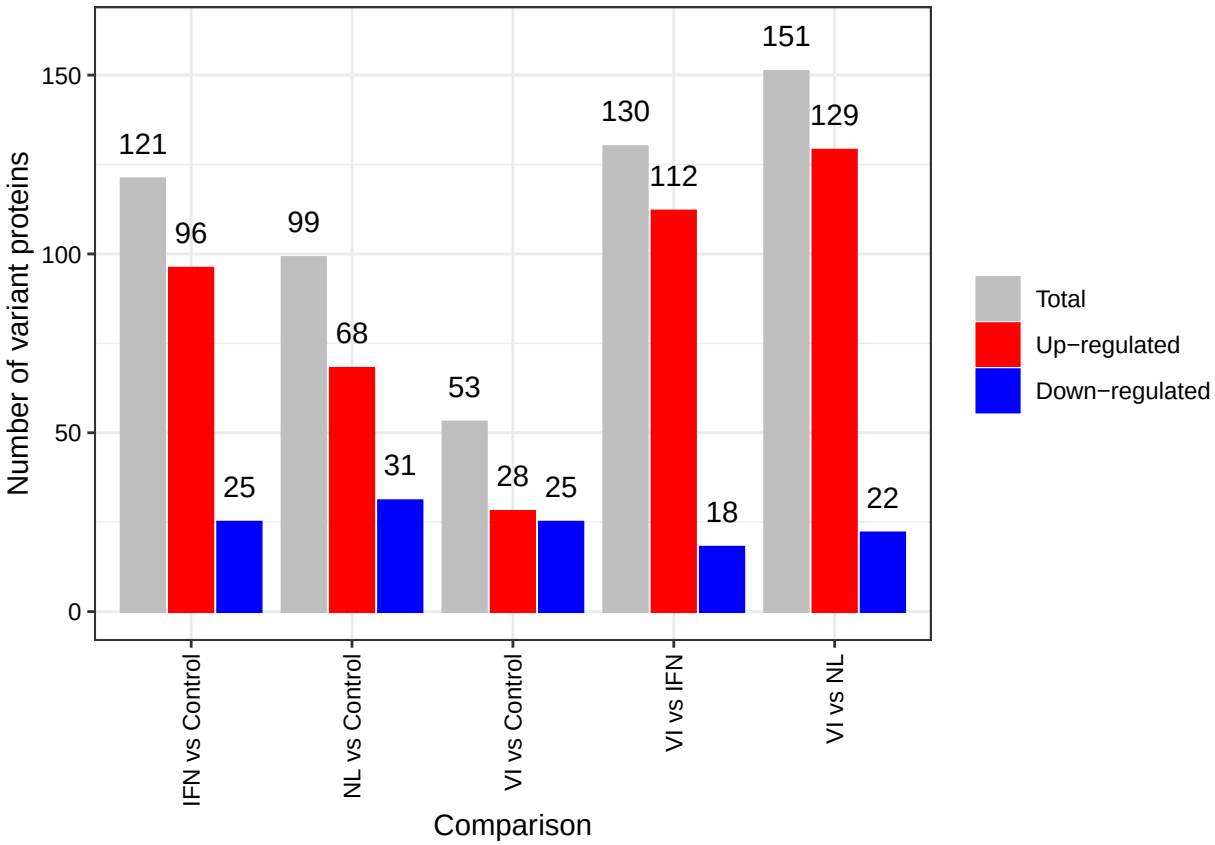
Graphs for Amita's paper - with data from U Laval

Karen Cristine Goncalves dos Santos

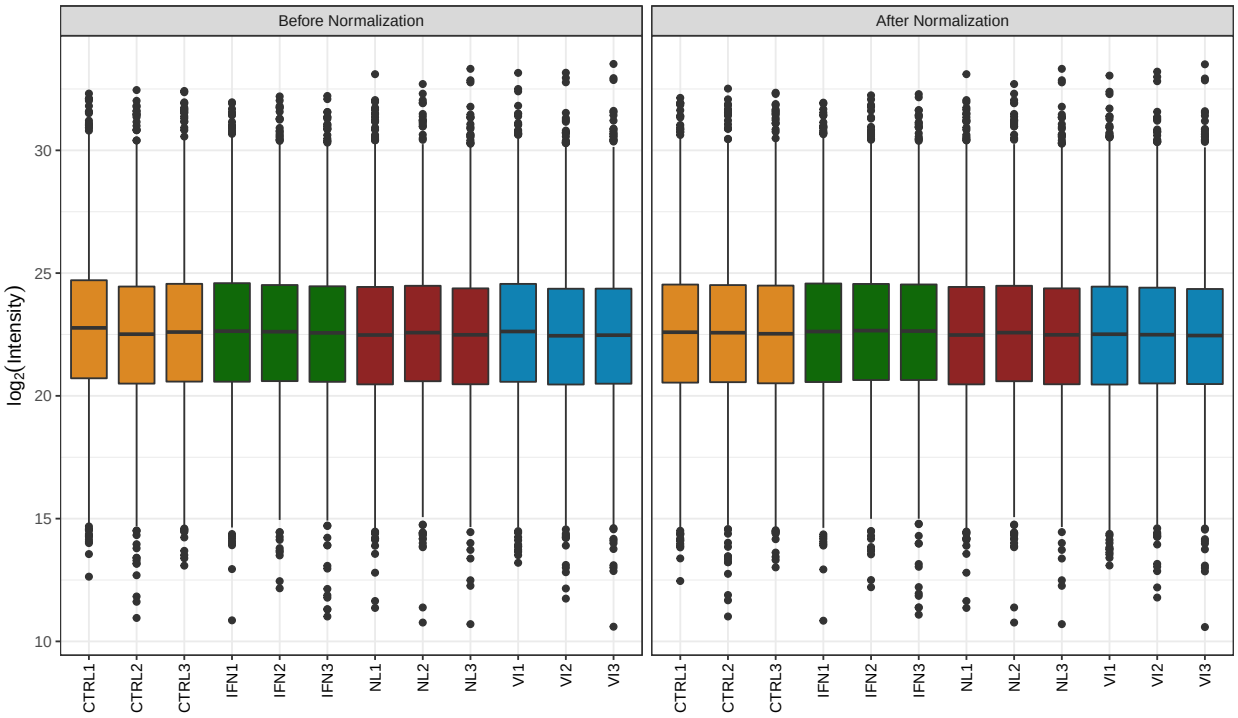
4/9/2020

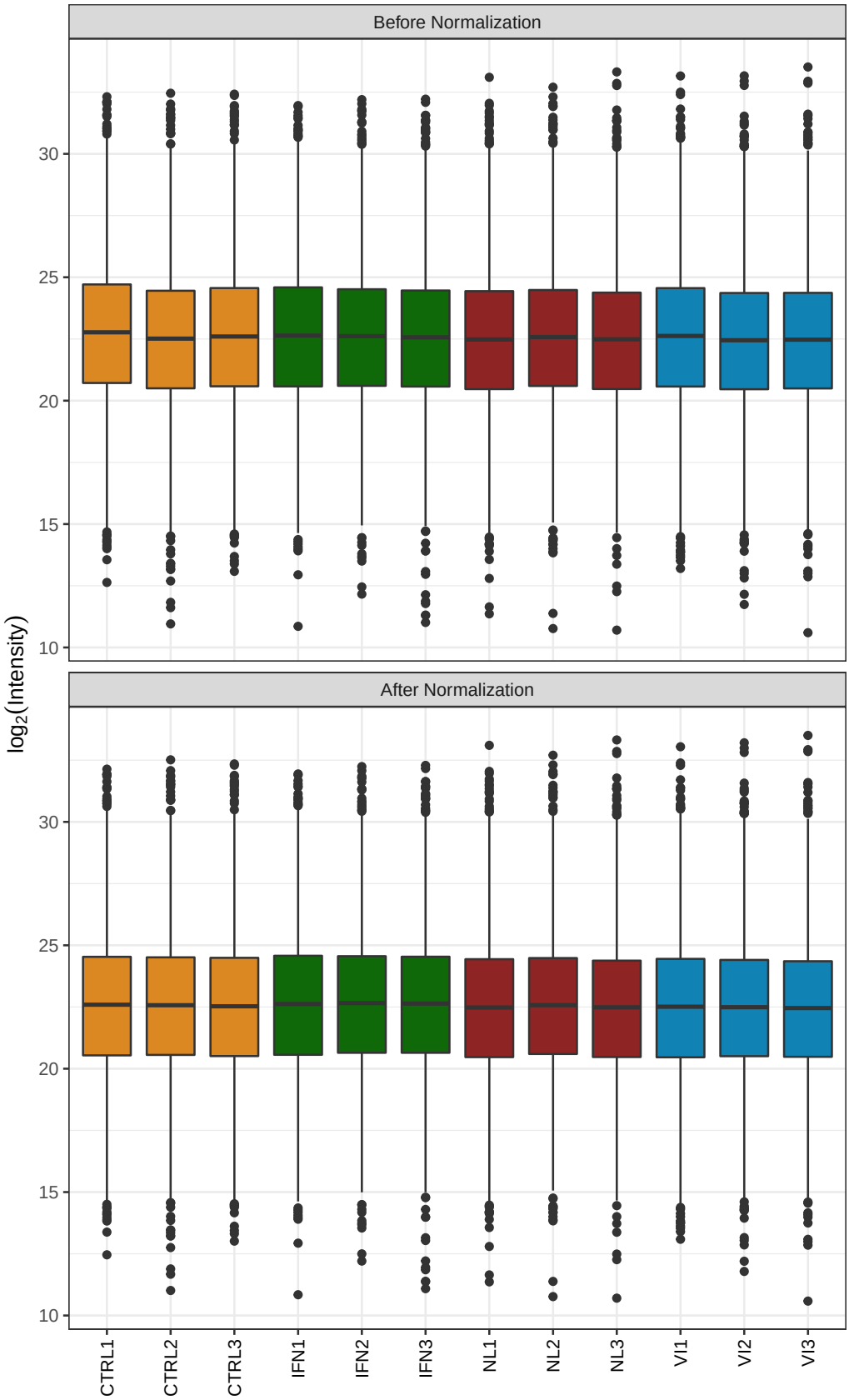


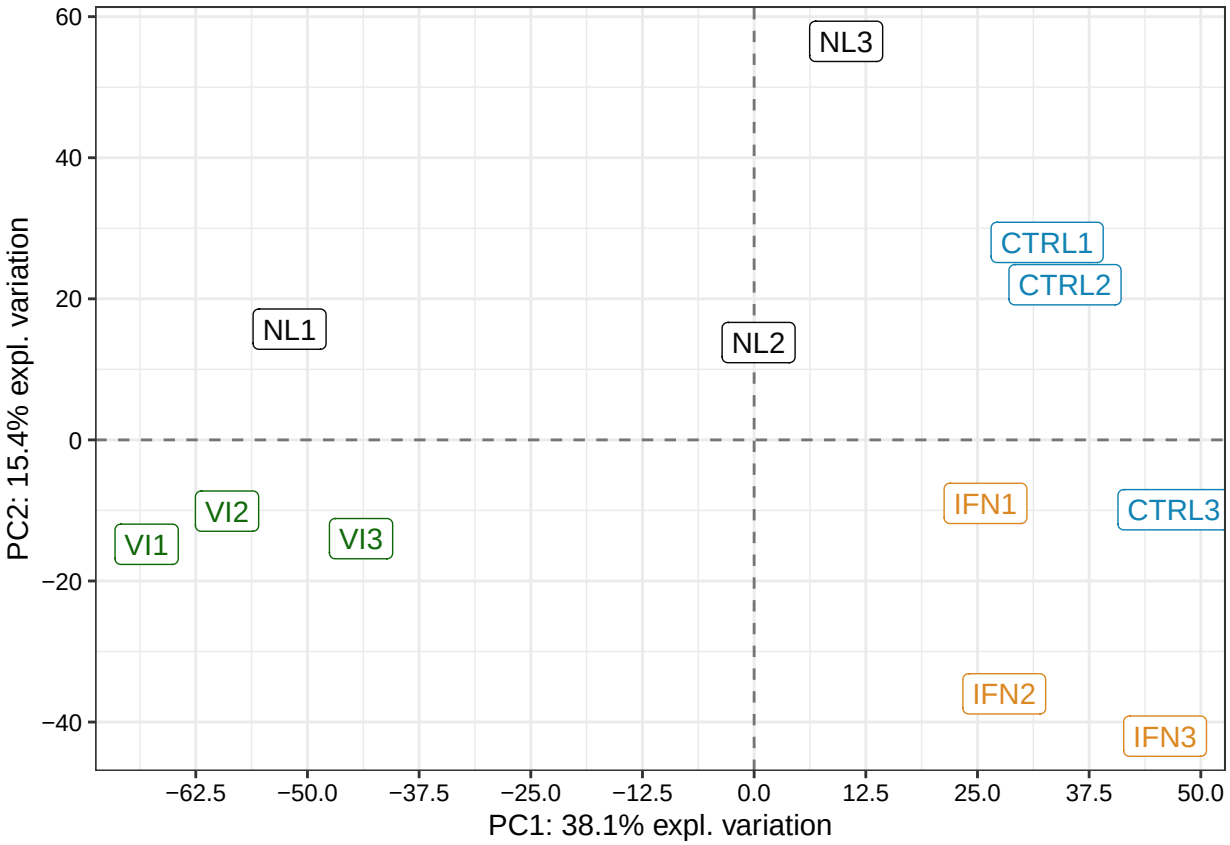
To do the boxplot of the data before normalization, I got the normalization factors from page 3 of the report as I do not have the actual data before normalization. However, as the data was re-analysed, maybe those are not the right normalization factors.

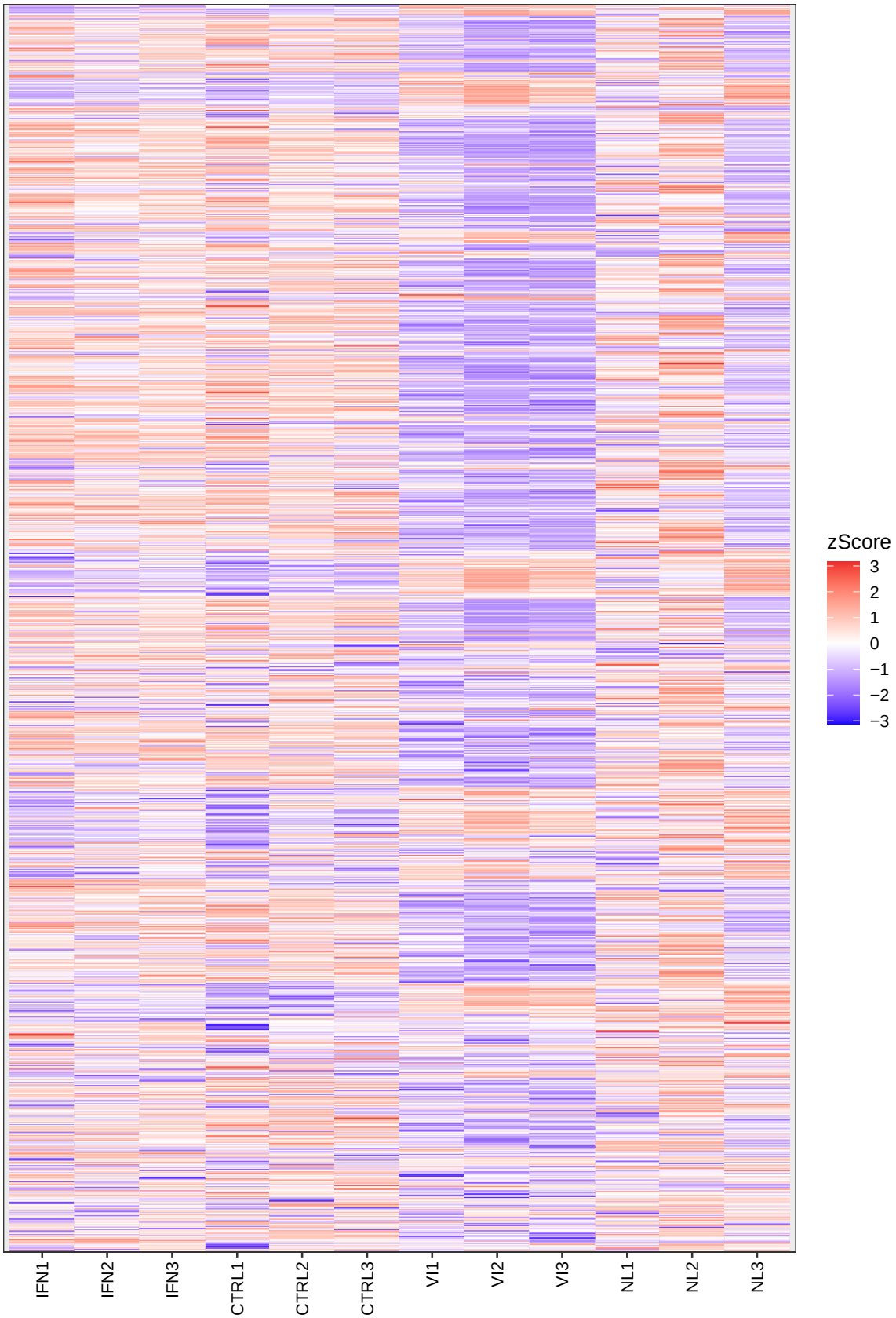
Sample	Normalization factors
CTRL1	1.13
CTRL2	0.96
CTRL3	1.05
IFN1	1.01
IFN2	0.97
IFN3	0.95
VI1	1.08
VI2	0.97

Sample	Normalization factors
VI3	1.01
NL1	1
NL2	1
NL3	1

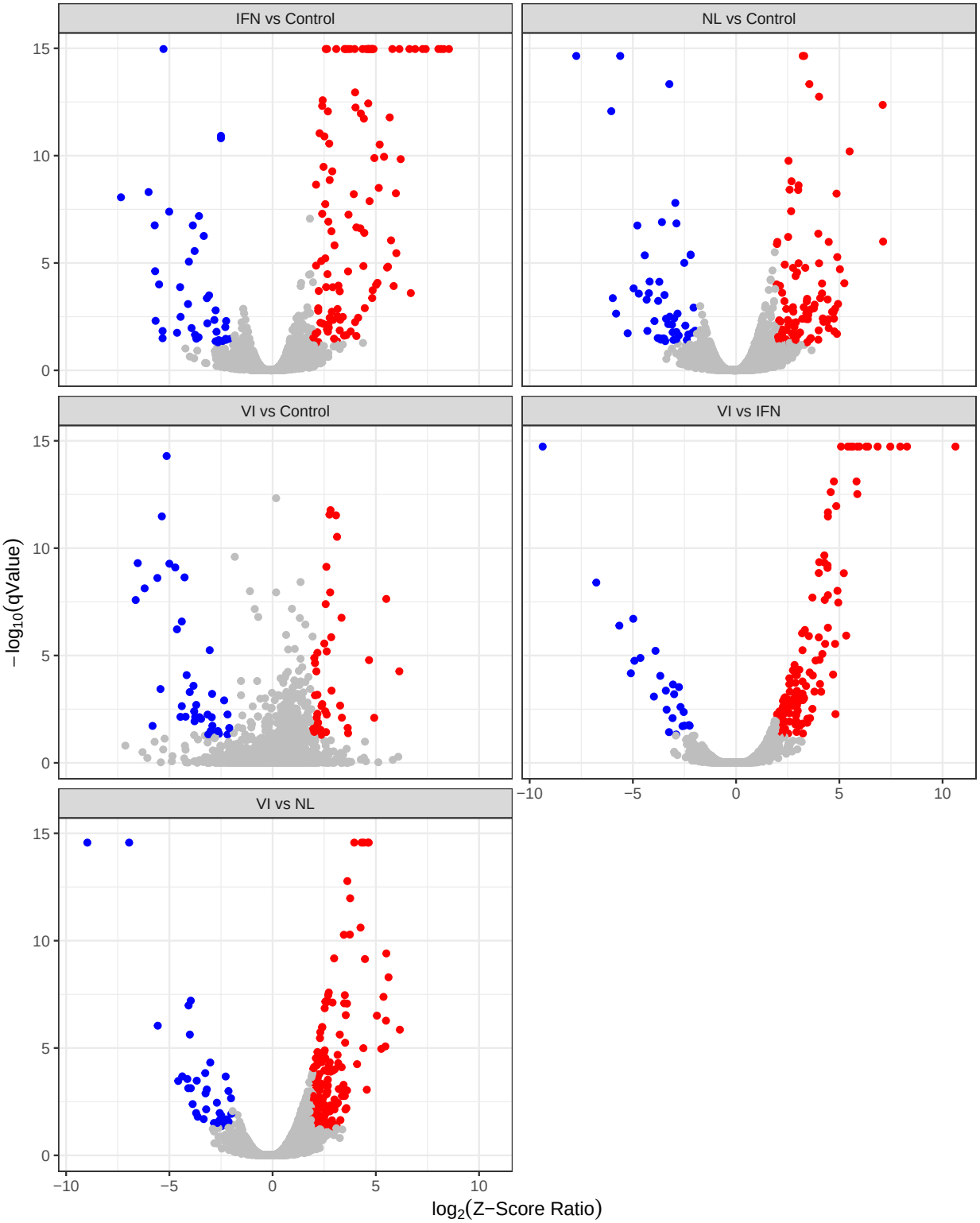


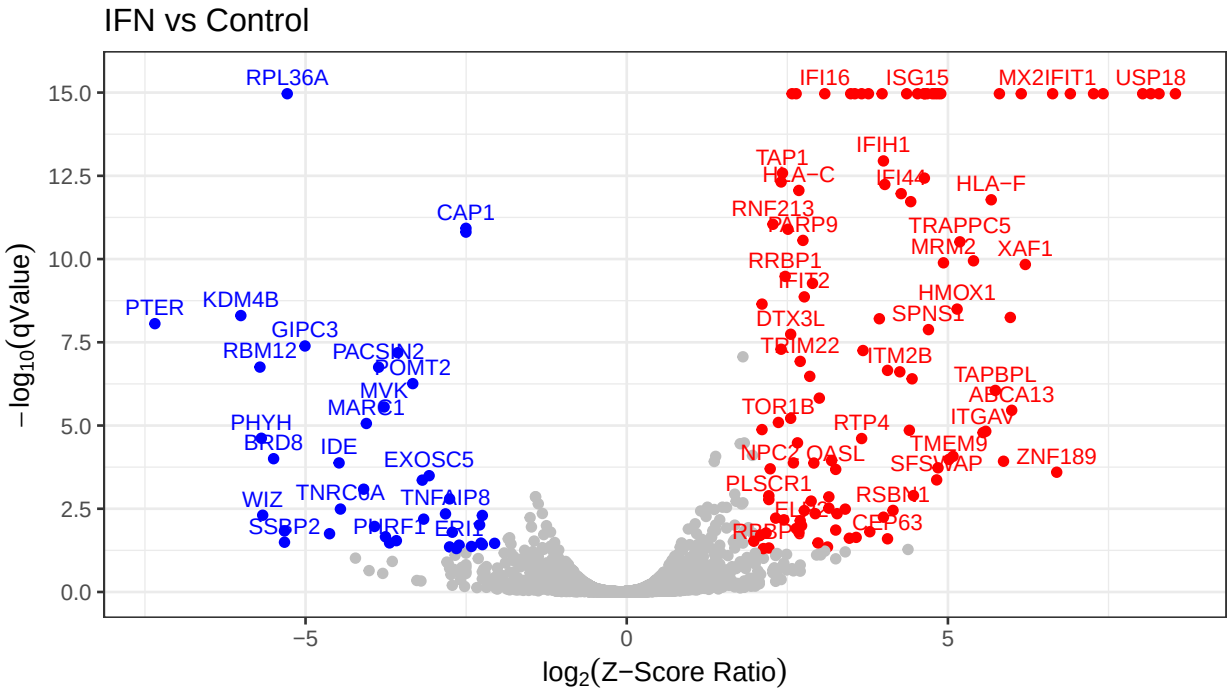

Before Normalization
After Normalization
log2(Intensity)
30
25
20
15
10
CTRL1
CTRL2
CTRL3
IFN1
IFN2
IFN3
NL1
NL2
NL3
VI1
VI2
VI3

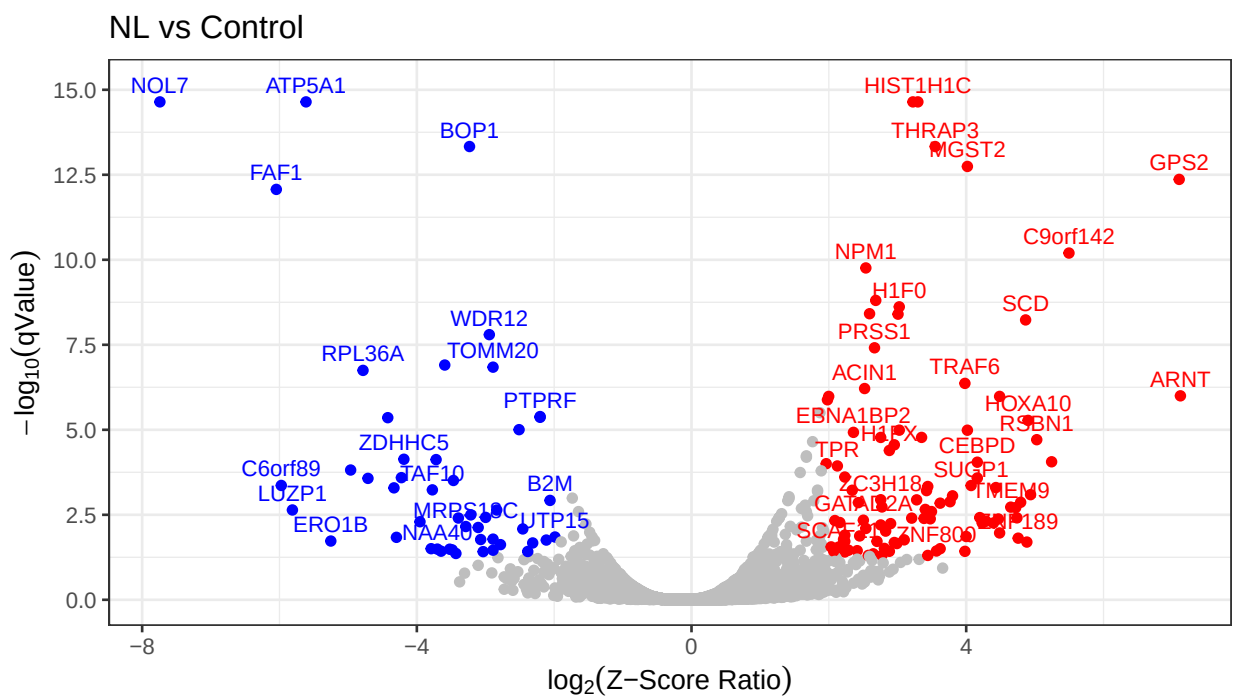

NL3
CTRL1
CTRL2
NL1
NL2
IFN1
CTRL3
VI2
VI1
VI3
IFN2
IFN3
60
40
20
0
−20
−40
−62.5
−50.0
−37.5
−25.0
−12.5
0.0
12.5
25.0
37.5
50.0
PC2: 15.4% expl. variation
PC1: 38.1% expl. variation

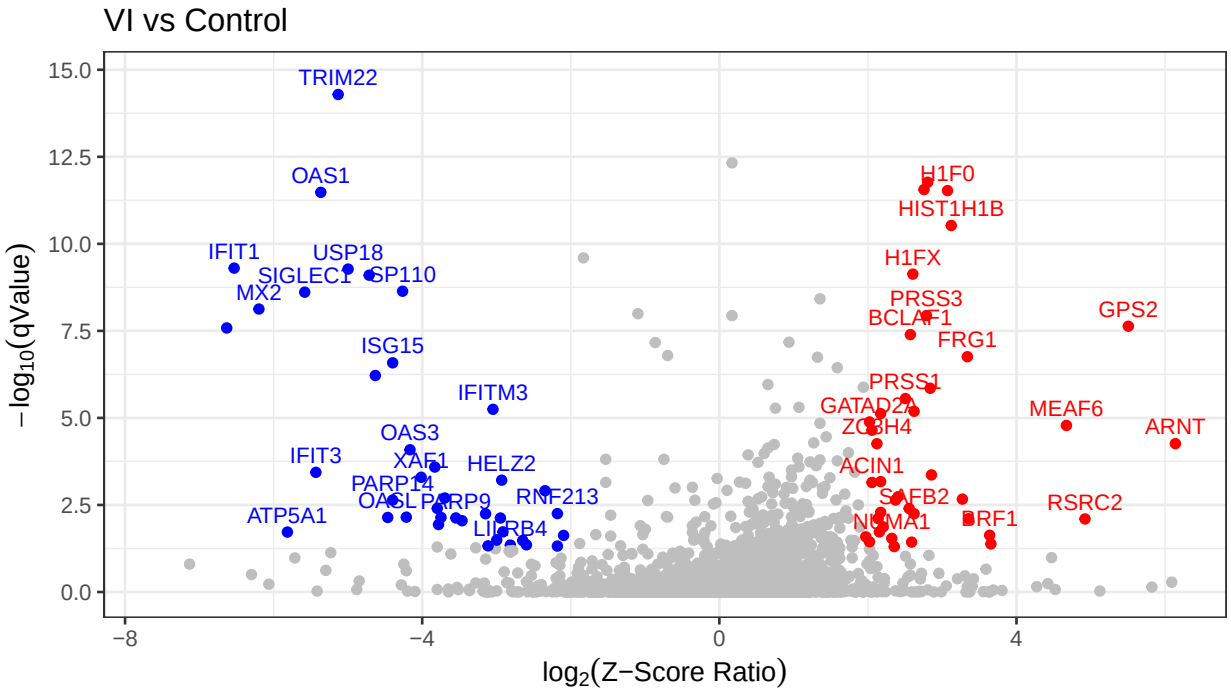

zScore
3
2
1
0
−1
−2
−3
IFN1
IFN2
IFN3
CTRL1
CTRL2
CTRL3
VI1
VI2
VI3
NL1
NL2
NL3

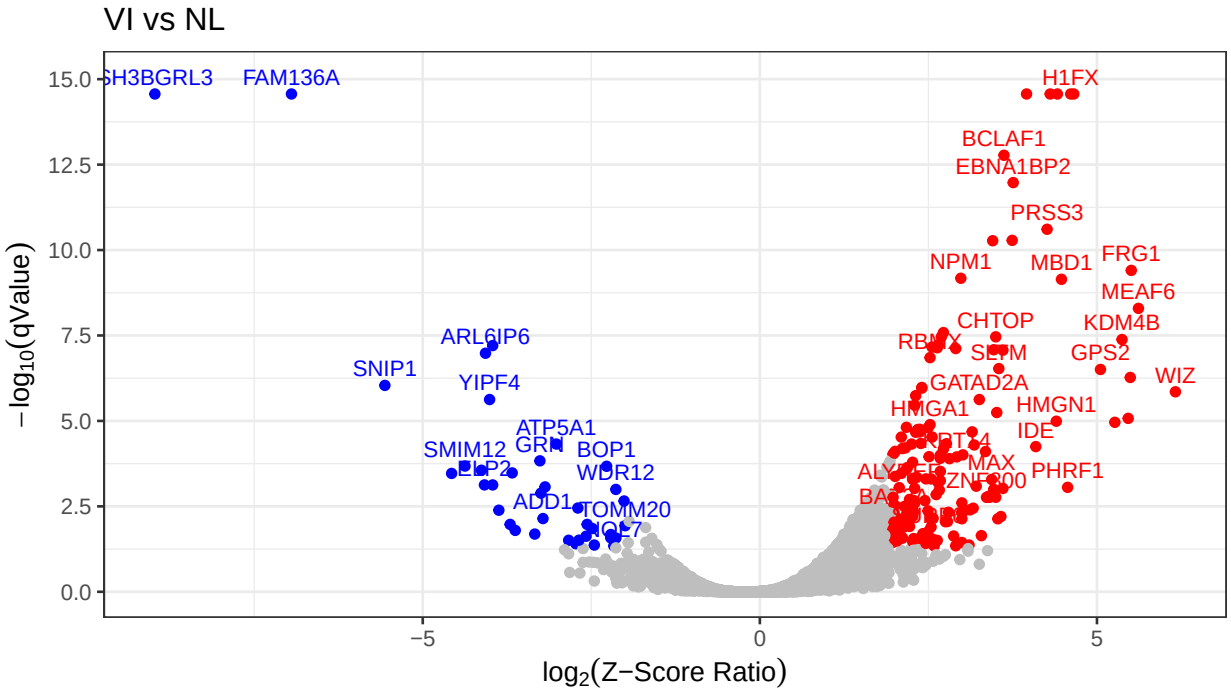
```
volcanos
```

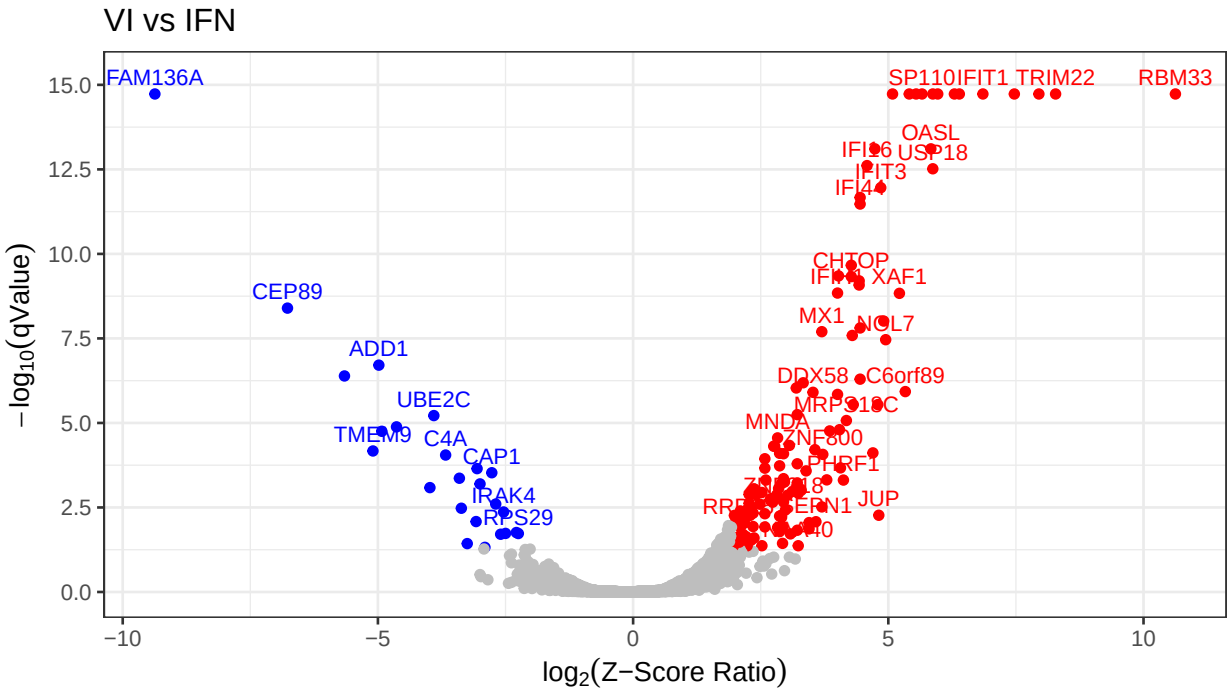

IFN vs Control
NL vs Control
VI vs Control
VI vs IFN
VI vs NL
15
10
5
0
−10
−5
0
5
10
−log10(qValue)
log2(Z−Score Ratio)


IFN vs Control
−log10(qValue)
log2(Z−Score Ratio)
RPL36A
CAP1
PTER
KDM4B
GIPC3
RBM12
PACSIN2
POMT2
MVK
MARC1
PHYH
BRD8
IDE
EXOSC5
WIZ
TNRC6A
TNFAIP8
SSBP2
PHRF1
ERI1
IFI16
ISG15
MX2
IFIT1
USP18
IFIH1
TAP1
HLA−C
IFI44
HLA−F
RNF213
PARP9
TRAPPC5
MRM2
XAF1
RRBP1
IFIT2
HMOX1
DTX3L
SPNS1
TRIM22
ITM2B
TAPBPL
ABCA13
TOR1B
RTP4
ITGAV
TMEM9
NPC2
OASL
SFSWAP
ZNF189
PLSCR1
RSBN1
ELK2
CEP63
RRBP1


NL vs Control
−log10(qValue)
log2(Z−Score Ratio)
NOL7
ATP5A1
BOP1
FAF1
WDR12
RPL36A
TOMM20
PTPRF
ZDHHC5
C6orf89
TAF10
LUZP1
B2M
MRPS10C
UTP15
ERO1B
NAA40
HIST1H1C
THRAP3
MGST2
GPS2
C9orf142
NPM1
H1F0
SCD
PRSS1
ACIN1
TRAF6
ARNT
HOXA10
EBNA1BP2
RSBN1
H1FX
TPR
CEBPD
SUGP1
ZC3H18
TMEM9
GATAD2A
ZNF189
SCAF11
ZNF800


VI vs Control
TRIM22
OAS1
IFIT1
USP18
SIGLEC1
CP110
MX2
ISG15
IFITM3
OAS3
IFIT3
XAF1
HELZ2
PARP14
OASL
PARP9
RNF213
ATP5A1
LIPB4
H1F0
HIST1H1B
H1FX
PRSS3
BCLAF1
FRG1
GPS2
PRSS1
GATAD2A
ZC3H4
MEAF6
ARNT
ACIN1
SAFB2
RSRC2
NPM1
BRF1
15.0
12.5
10.0
7.5
5.0
2.5
0.0
−8
−4
0
4
−log10(qValue)
log2(Z−Score Ratio)


VI vs NL
SH3BGRL3
FAM136A
ARL6IP6
SNIP1
YIPF4
ATP5A1
SMIM12
GRN
BOP1
WDR12
ADD1
TOMM20
H1FX
BCLAF1
EBNA1BP2
PRSS3
NPM1
MBD1
FRG1
MEAF6
CHTOP
KDM4B
GPS2
WIZ
GATAD2A
HMGA1
HMGN1
IDE
MAX
PHRF1
15.0
12.5
10.0
7.5
5.0
2.5
0.0
−5
0
5
−log10(qValue)
log2(Z−Score Ratio)


VI vs IFN
FAM136A
SP110
IFIT1
TRIM22
RBM33
OASL
IFI6
USP18
IFIT3
IFI44
CHTOP
IFI44L
XAF1
CEP89
MX1
NCL7
ADD1
DDX58
C6orf89
UBE2C
MRPS18C
TMEM9
C4A
MNDA
ZNF800
CAP1
PHRF1
IRAK4
JUP
RPS29
15.0
12.5
10.0
7.5
5.0
2.5
0.0
−10
−5
0
5
10
−log10(qValue)
log2(Z−Score Ratio)