

bad_ASSIGN_validation

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Reading datasets in... and calling assign..

Now correlating bad predictions with ICBP drugs..

```
drugs<-read.delim("~/Dropbox/ICBP/ICBP_drugs_1.txt", header=1, sep='\t',row.names=1)
pred_drug<-merge_drop(data,drugs,by=0)
#dim(pred_drug)
for(i in 1:length(colnames(data)))
{
  #print(colnames(data)[i])
  #print("correlation with Lapatinib..an EGFR/HER2 inhibitor")
  #print(cor(pred_drug[i],pred_drug$Lapatinib,use="na.or.complete"))
  #print("correlation with BEZ235..a pi3k/mtor inhibitor")
  #print(cor(pred_drug[i],pred_drug$BEZ235,use="na.or.complete"))
  #print("correlation with Everolimus..an mtor inhibitor")
  #print(cor(pred_drug[i],pred_drug$Everolimus,use="na.or.complete"))
  #print("correlation with Temsirolimus..an mtor inhibitor")
  #print(cor(pred_drug[i],pred_drug$Temsirolimus,use="na.or.complete"))
  print("correlation with Sigma AKT1/2..an akt inhibitor")
  print(cor(pred_drug[i],pred_drug$Sigma.AKT1.2.inhibitor,use="na.or.complete"))
  print("correlation with GSK2126458..an akt inhibitor")
  print(cor(pred_drug[i],pred_drug$GSK2126458,use="na.or.complete"))
  print("correlation with TRICiribine..an akt inhibitor")
  print(cor(pred_drug[i],pred_drug$Triciribine,use="na.or.complete"))
#
}
```

```
## [1] "correlation with Sigma AKT1/2..an akt inhibitor"
##                                [,1]
## adap150/pathway_activity_testset.csv 0.189496
## [1] "correlation with GSK2126458..an akt inhibitor"
##                                [,1]
## adap150/pathway_activity_testset.csv -0.08843339
## [1] "correlation with TRICiribine..an akt inhibitor"
##                                [,1]
## adap150/pathway_activity_testset.csv -0.08185587
## [1] "correlation with Sigma AKT1/2..an akt inhibitor"
##                                [,1]
## adap200/pathway_activity_testset.csv 0.01697696
## [1] "correlation with GSK2126458..an akt inhibitor"
##                                [,1]
## adap200/pathway_activity_testset.csv -0.2110013
## [1] "correlation with TRICiribine..an akt inhibitor"
##                                [,1]
## adap200/pathway_activity_testset.csv -0.1323297
## [1] "correlation with Sigma AKT1/2..an akt inhibitor"
##                                [,1]
```

```

## adap250/pathway_activity_testset.csv 0.05426207
## [1] "correlation with GSK2126458..an akt inhibitor"
## [1]
## adap250/pathway_activity_testset.csv -0.1949844
## [1] "correlation with TRICiribine..an akt inhibitor"
## [1]
## adap250/pathway_activity_testset.csv -0.1188466
## [1] "correlation with Sigma AKT1/2..an akt inhibitor"
## [1]
## adap300/pathway_activity_testset.csv 0.01347512
## [1] "correlation with GSK2126458..an akt inhibitor"
## [1]
## adap300/pathway_activity_testset.csv -0.2102047
## [1] "correlation with TRICiribine..an akt inhibitor"
## [1]
## adap300/pathway_activity_testset.csv -0.1163825
## [1] "correlation with Sigma AKT1/2..an akt inhibitor"
## [1]
## adap350/pathway_activity_testset.csv -0.1184475
## [1] "correlation with GSK2126458..an akt inhibitor"
## [1]
## adap350/pathway_activity_testset.csv -0.3056916
## [1] "correlation with TRICiribine..an akt inhibitor"
## [1]
## adap350/pathway_activity_testset.csv -0.1424638
## [1] "correlation with Sigma AKT1/2..an akt inhibitor"
## [1]
## adap_cov300/pathway_activity_testset.csv -0.2047324
## [1] "correlation with GSK2126458..an akt inhibitor"
## [1]
## adap_cov300/pathway_activity_testset.csv -0.4539177
## [1] "correlation with TRICiribine..an akt inhibitor"
## [1]
## adap_cov300/pathway_activity_testset.csv -0.4474299
## [1] "correlation with Sigma AKT1/2..an akt inhibitor"
## [1]
## nonadap150/pathway_activity_testset.csv 0.1873106
## [1] "correlation with GSK2126458..an akt inhibitor"
## [1]
## nonadap150/pathway_activity_testset.csv -0.09199032
## [1] "correlation with TRICiribine..an akt inhibitor"
## [1]
## nonadap150/pathway_activity_testset.csv -0.09665096
## [1] "correlation with Sigma AKT1/2..an akt inhibitor"
## [1]
## nonadap200/pathway_activity_testset.csv 0.01775411
## [1] "correlation with GSK2126458..an akt inhibitor"
## [1]
## nonadap200/pathway_activity_testset.csv -0.2111396
## [1] "correlation with TRICiribine..an akt inhibitor"
## [1]
## nonadap200/pathway_activity_testset.csv -0.1352021
## [1] "correlation with Sigma AKT1/2..an akt inhibitor"
## [1]

```

```

## nonadap250/pathway_activity_testset.csv 0.05203729
## [1] "correlation with GSK2126458..an akt inhibitor"
## [1]
## nonadap250/pathway_activity_testset.csv -0.1967173
## [1] "correlation with TRICiribine..an akt inhibitor"
## [1]
## nonadap250/pathway_activity_testset.csv -0.1241384
## [1] "correlation with Sigma AKT1/2..an akt inhibitor"
## [1]
## nonadap300/pathway_activity_testset.csv 0.01176586
## [1] "correlation with GSK2126458..an akt inhibitor"
## [1]
## nonadap300/pathway_activity_testset.csv -0.2133628
## [1] "correlation with TRICiribine..an akt inhibitor"
## [1]
## nonadap300/pathway_activity_testset.csv -0.1205835
## [1] "correlation with Sigma AKT1/2..an akt inhibitor"
## [1]
## nonadap350/pathway_activity_testset.csv -0.1219581
## [1] "correlation with GSK2126458..an akt inhibitor"
## [1]
## nonadap350/pathway_activity_testset.csv -0.308916
## [1] "correlation with TRICiribine..an akt inhibitor"
## [1]
## nonadap350/pathway_activity_testset.csv -0.1444688
## [1] "correlation with Sigma AKT1/2..an akt inhibitor"
## [1]
## nonadap_cov300/pathway_activity_testset.csv -0.2403516
## [1] "correlation with GSK2126458..an akt inhibitor"
## [1]
## nonadap_cov300/pathway_activity_testset.csv -0.4459386
## [1] "correlation with TRICiribine..an akt inhibitor"
## [1]
## nonadap_cov300/pathway_activity_testset.csv -0.3701054

```

If you are interested in signature gene matrix...

Now correlating with CNV data...

```

## [1] "pearson's correlation between bad1 CNV and adap150/pathway_activity_testset.csv"
## [1] 0.2712078
## [1] "pearson's correlation between bad1 CNV and adap200/pathway_activity_testset.csv"
## [1] 0.2362793
## [1] "pearson's correlation between bad1 CNV and adap250/pathway_activity_testset.csv"
## [1] 0.2350201
## [1] "pearson's correlation between bad1 CNV and adap300/pathway_activity_testset.csv"
## [1] 0.1876879
## [1] "pearson's correlation between bad1 CNV and adap350/pathway_activity_testset.csv"
## [1] 0.1472053
## [1] "pearson's correlation between bad1 CNV and adap_cov300/pathway_activity_testset.csv"
## [1] 0.1507188
## [1] "pearson's correlation between bad1 CNV and nonadap150/pathway_activity_testset.csv"
## [1] 0.2682127
## [1] "pearson's correlation between bad1 CNV and nonadap200/pathway_activity_testset.csv"

```

```
## [1] 0.2296864
## [1] "pearson's correlation between bad1 CNV and nonadap250/pathway_activity_testset.csv"
## [1] 0.2333745
## [1] "pearson's correlation between bad1 CNV and nonadap300/pathway_activity_testset.csv"
## [1] 0.1880942
## [1] "pearson's correlation between bad1 CNV and nonadap350/pathway_activity_testset.csv"
## [1] 0.1453275
## [1] "pearson's correlation between bad1 CNV and nonadap_cov300/pathway_activity_testset.csv"
## [1] 0.2495997
```

This analysis was run on Thu Dec 18 22:44:34 2014