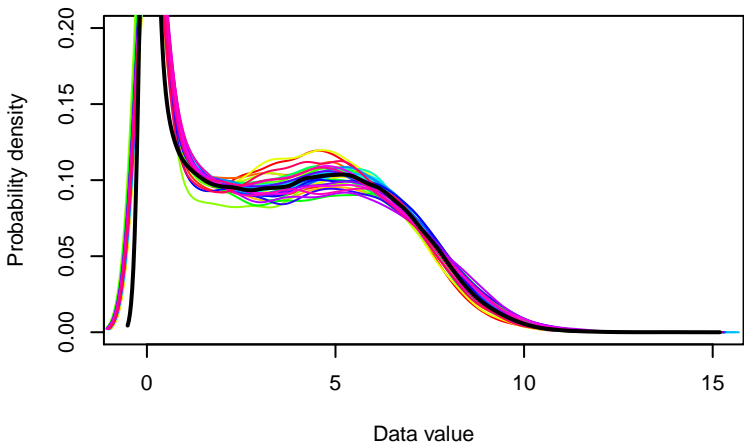


Comparative analysis of NGS and Affymetrix data

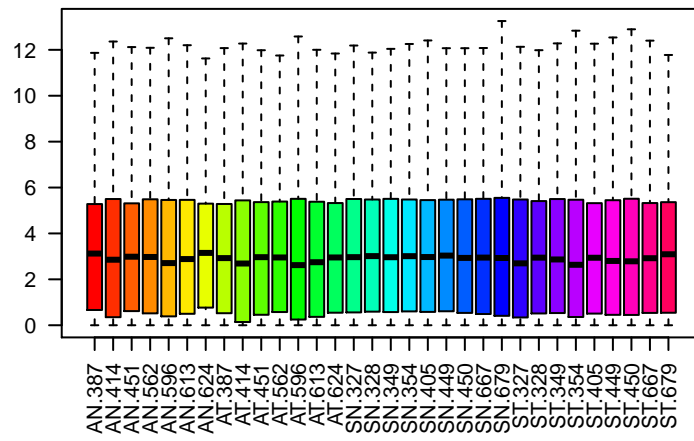
Parameter	NGS.Icpm	NGS.Ic	HuEx	HTA
Samples:	32			
Features:	19050			
mean:	3.22	6.56	6	5.56
median:	2.91	7.16	5.75	5.38
st.dev.:	2.72	4.06	1.6	1.46
m.a.d.:	3.64	4.57	1.79	1.64

	Type	State	Patient	Group	Sample	col
AN.387	AC	Normal	387	AN	AN1	green
AN.414	AC	Normal	414	AN	AN2	green
AN.451	AC	Normal	451	AN	AN3	green
AN.562	AC	Normal	562	AN	AN5	green
AN.596	AC	Normal	596	AN	AN15	green
AN.613	AC	Normal	613	AN	AN6	green
AN.624	AC	Normal	624	AN	AN7	green
AT.387	AC	Tumor	387	AT	AC1	orange
AT.414	AC	Tumor	414	AT	AC2	orange
AT.451	AC	Tumor	451	AT	AC3	orange
AT.562	AC	Tumor	562	AT	AC5	orange
AT.596	AC	Tumor	596	AT	AC15	orange
AT.613	AC	Tumor	613	AT	AC6	orange
AT.624	AC	Tumor	624	AT	AC7	orange
SN.327	SCC	Normal	327	SN	SN11	skyblue
SN.328	SCC	Normal	328	SN	SN12	skyblue
SN.349	SCC	Normal	349	SN	SN13	skyblue
SN.354	SCC	Normal	354	SN	SN14	skyblue
SN.405	SCC	Normal	405	SN	SN1	skyblue
SN.449	SCC	Normal	449	SN	SN15	skyblue
SN.450	SCC	Normal	450	SN	SN16	skyblue
SN.667	SCC	Normal	667	SN	SN7	skyblue
SN.679	SCC	Normal	679	SN	SN10	skyblue
ST.327	SCC	Tumor	327	ST	SC11	red
ST.328	SCC	Tumor	328	ST	SC12	red
ST.349	SCC	Tumor	349	ST	SC13	red
ST.354	SCC	Tumor	354	ST	SC14	red
ST.405	SCC	Tumor	405	ST	SC1	red
ST.449	SCC	Tumor	449	ST	SC15	red
ST.450	SCC	Tumor	450	ST	SC16	red
ST.667	SCC	Tumor	667	ST	SC7	red
ST.679	SCC	Tumor	679	ST	SC10	red

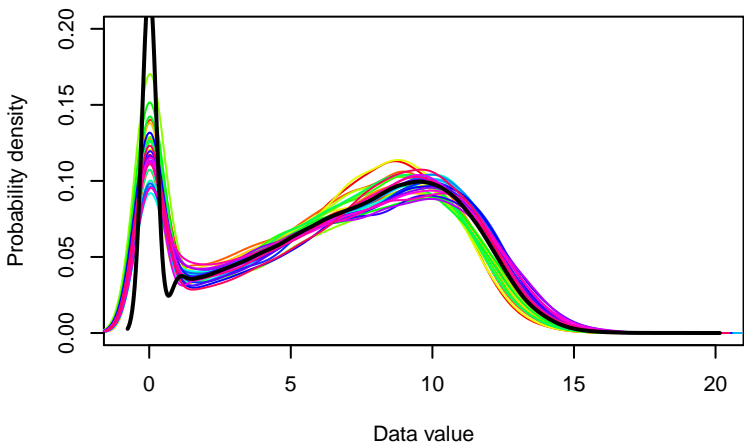
NGS:log CPM (edgeR)



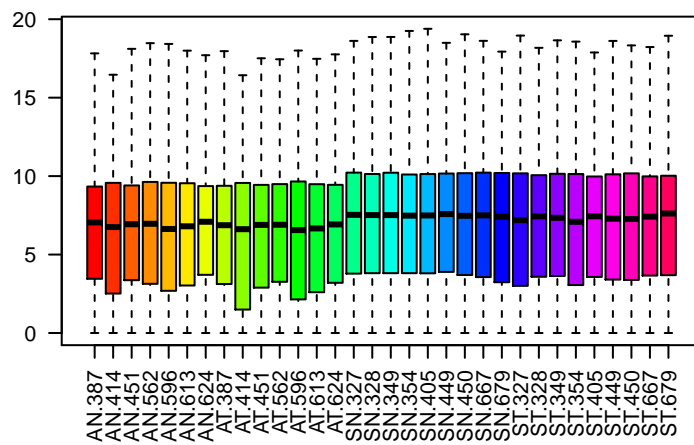
NGS:log CPM (edgeR)



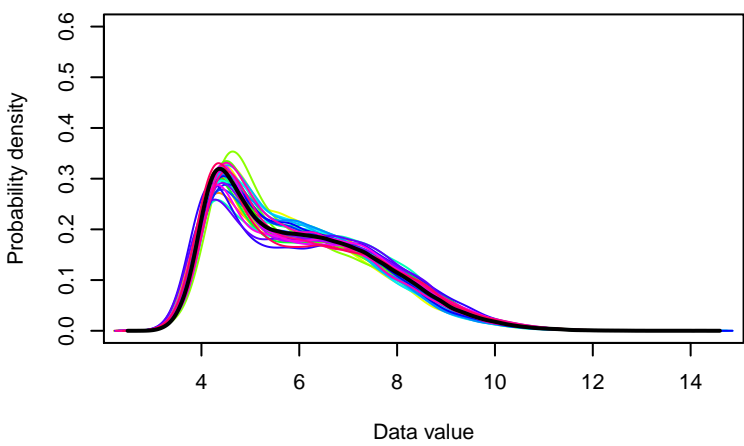
NGS:log Counts (DESeq)



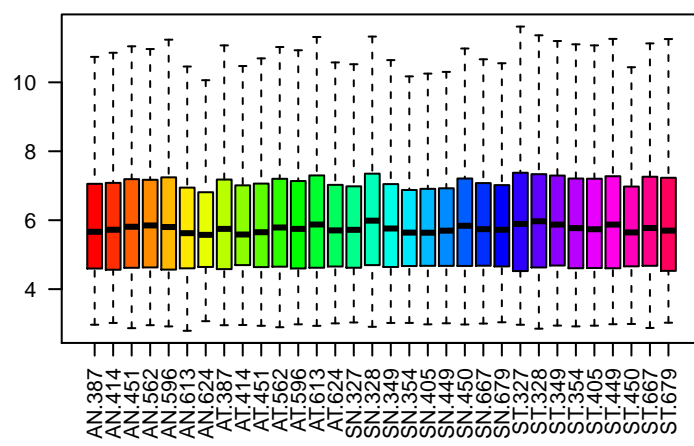
NGS:log Counts (DESeq)



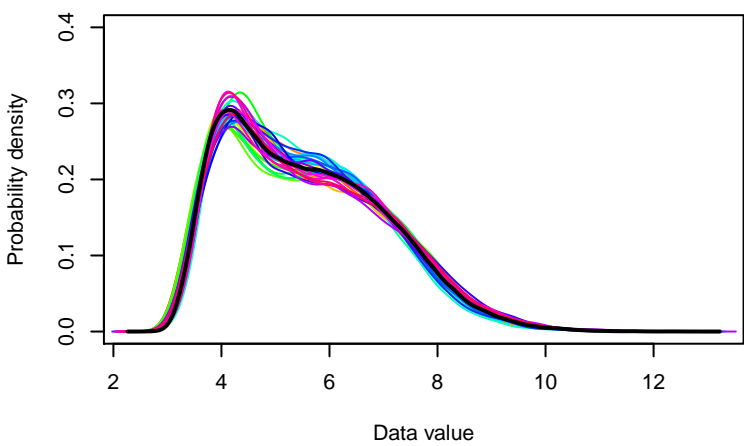
HuEx:log Expression



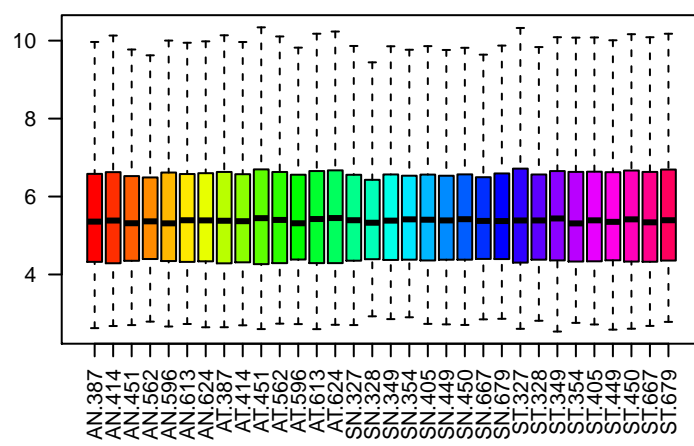
HuEx:log Expression



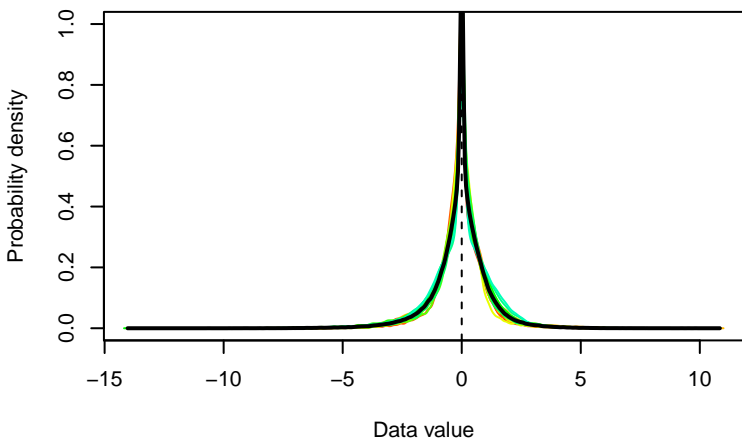
HTA:log Expression



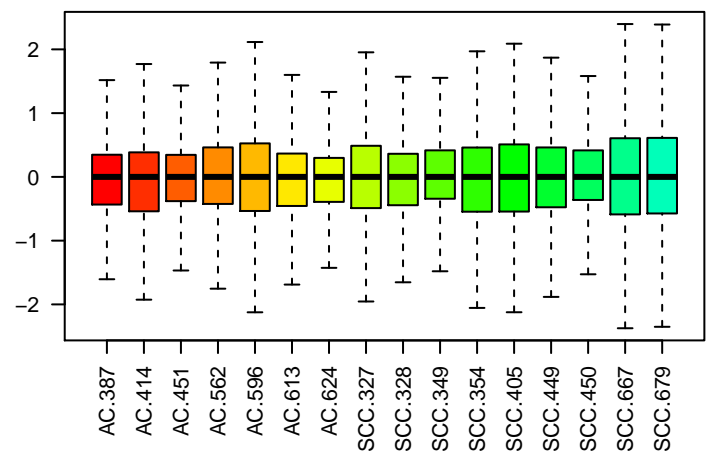
HTA:log Expression



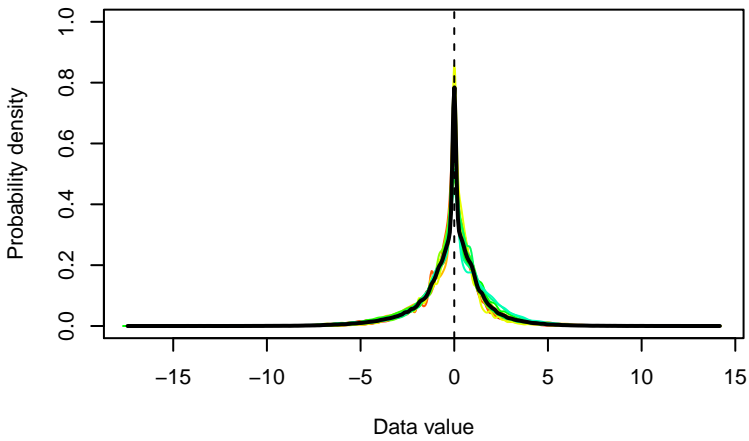
NGS:logFC CPM (edgeR)



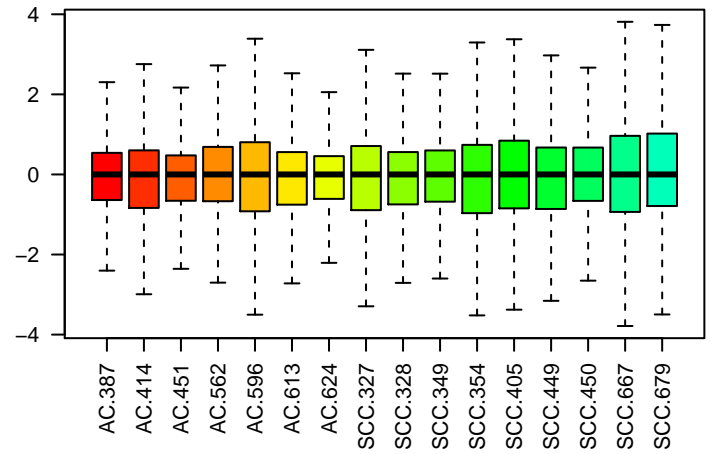
NGS:logFC CPM (edgeR)



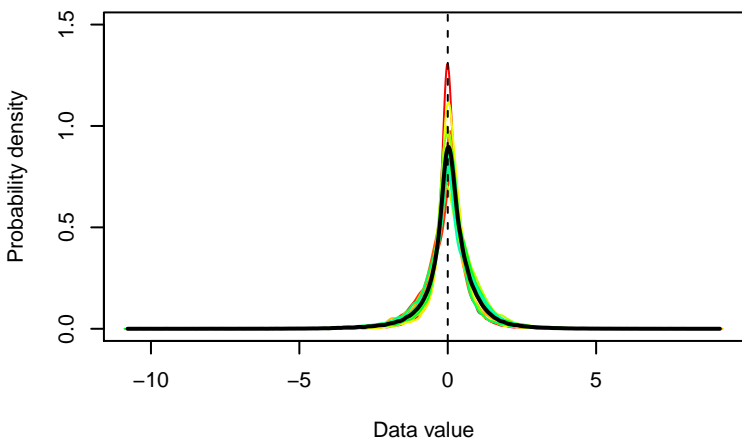
NGS:logFC Counts (DESeq)



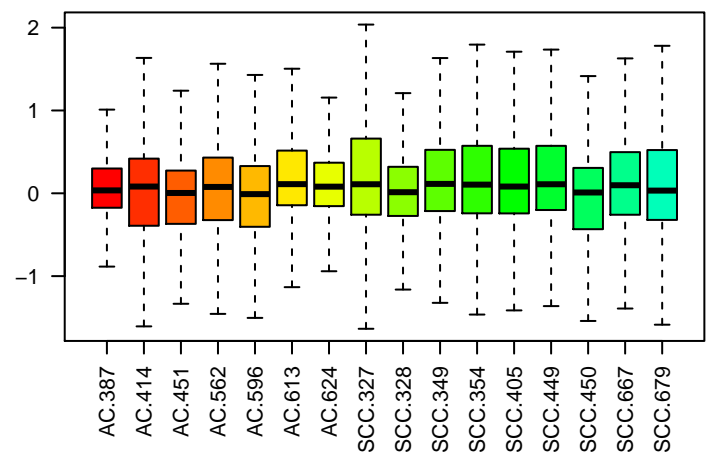
NGS:logFC Counts (DESeq)



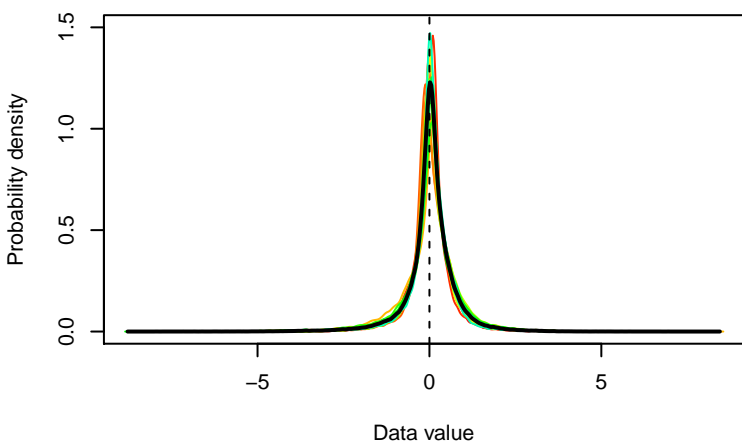
HuEx:logFC



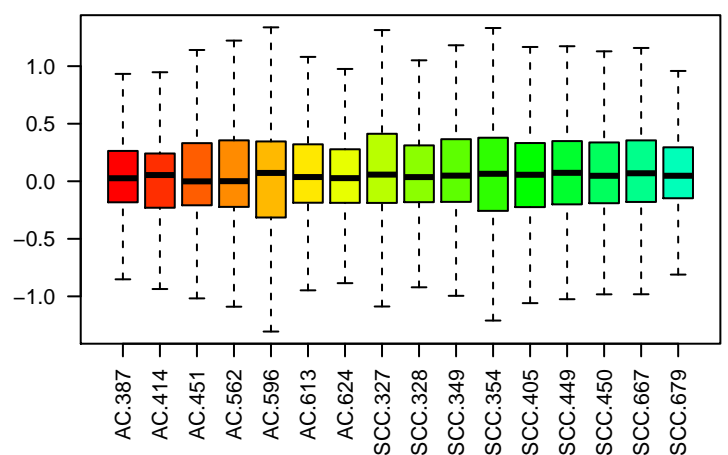
HuEx:logFC



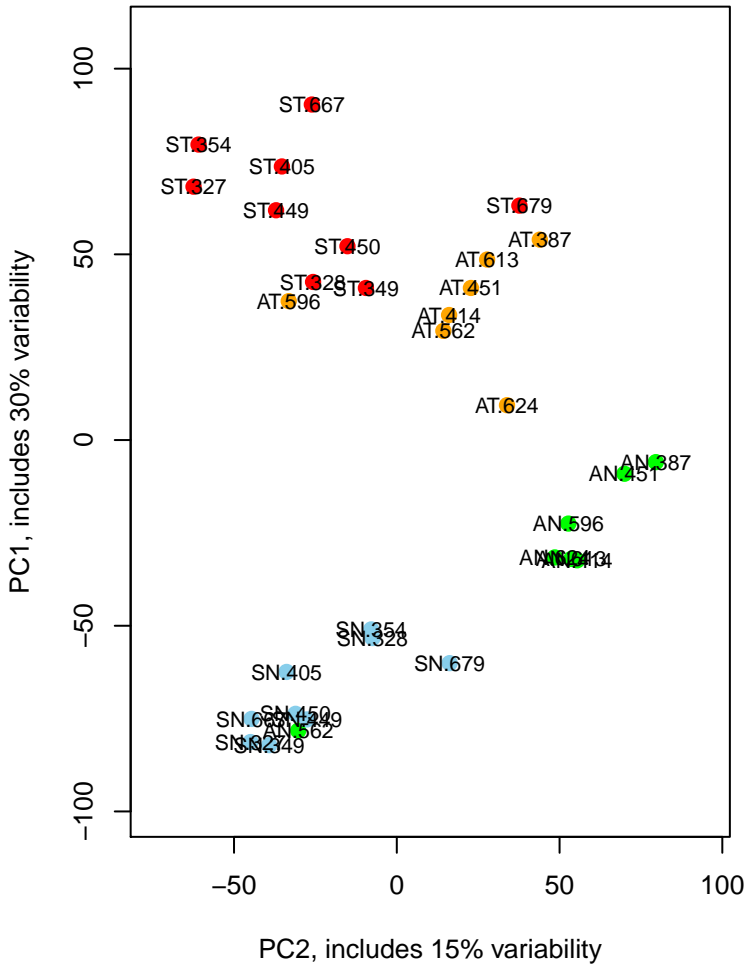
HTA:logFC



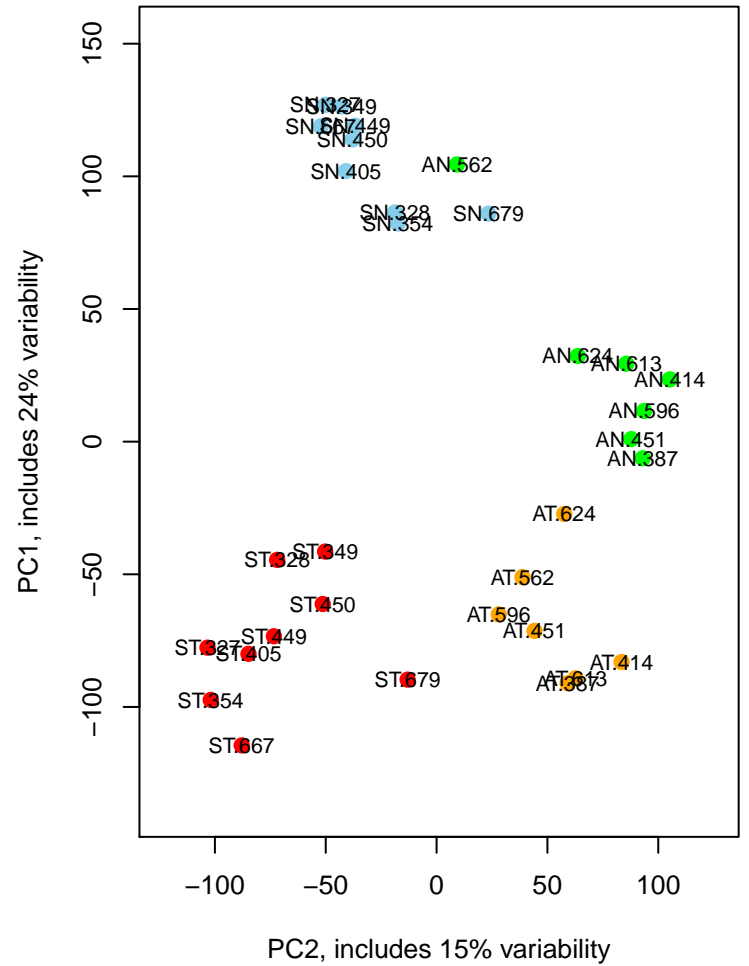
HTA:logFC



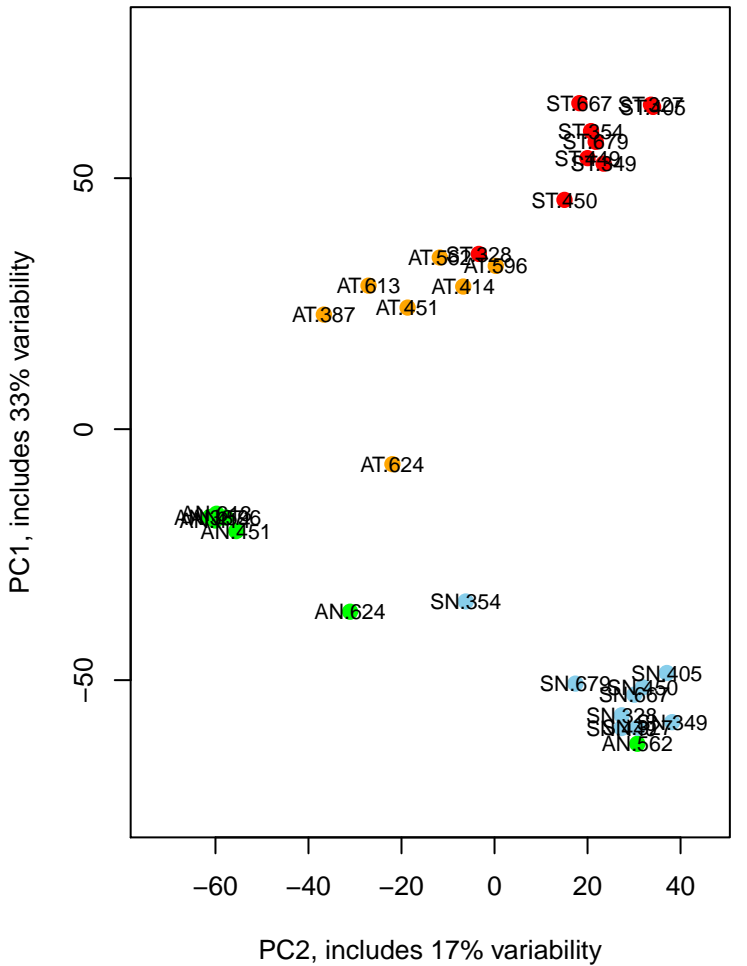
**PCA for samples by NGS:logCPM
(45% variability)**



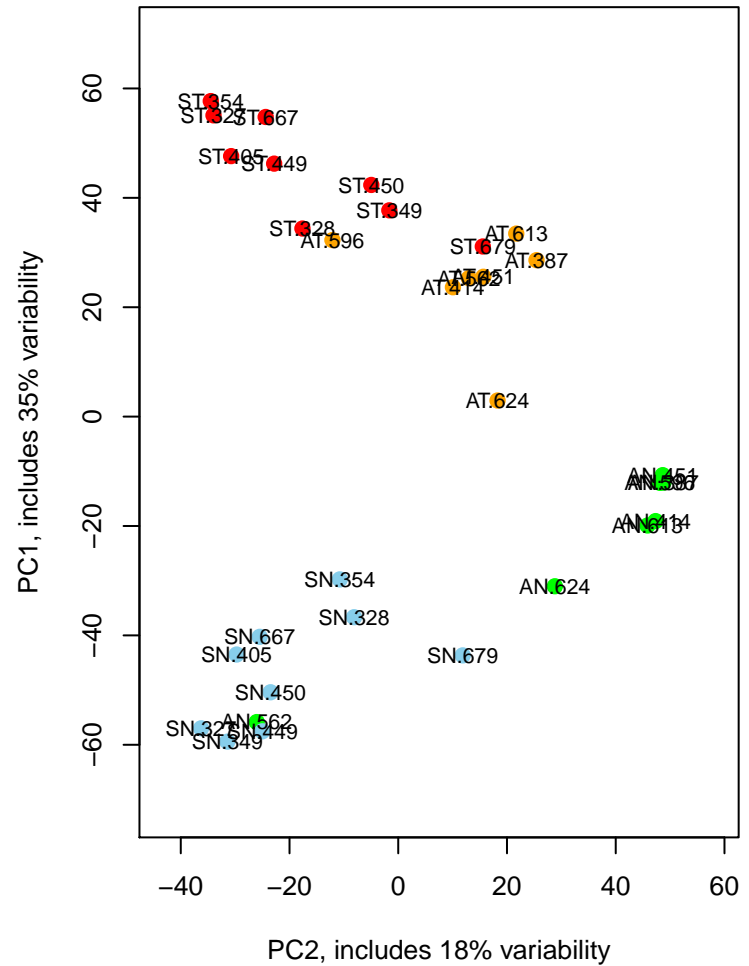
**PCA for samples by NGS:logCounts
(40% variability)**



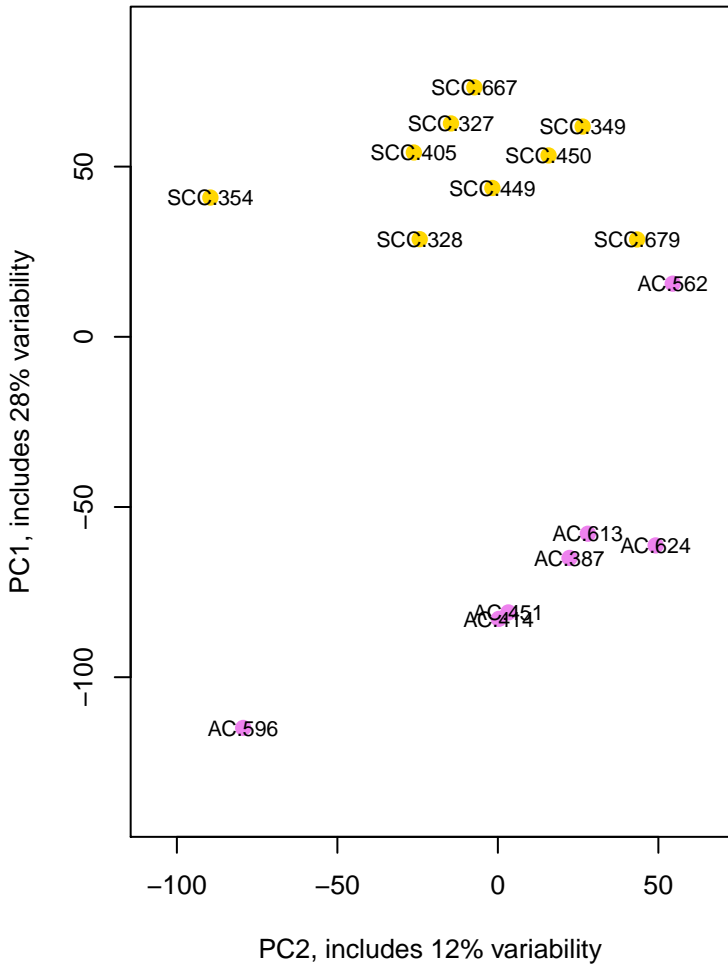
**PCA for samples by HuEx: logExpr
(50% variability)**



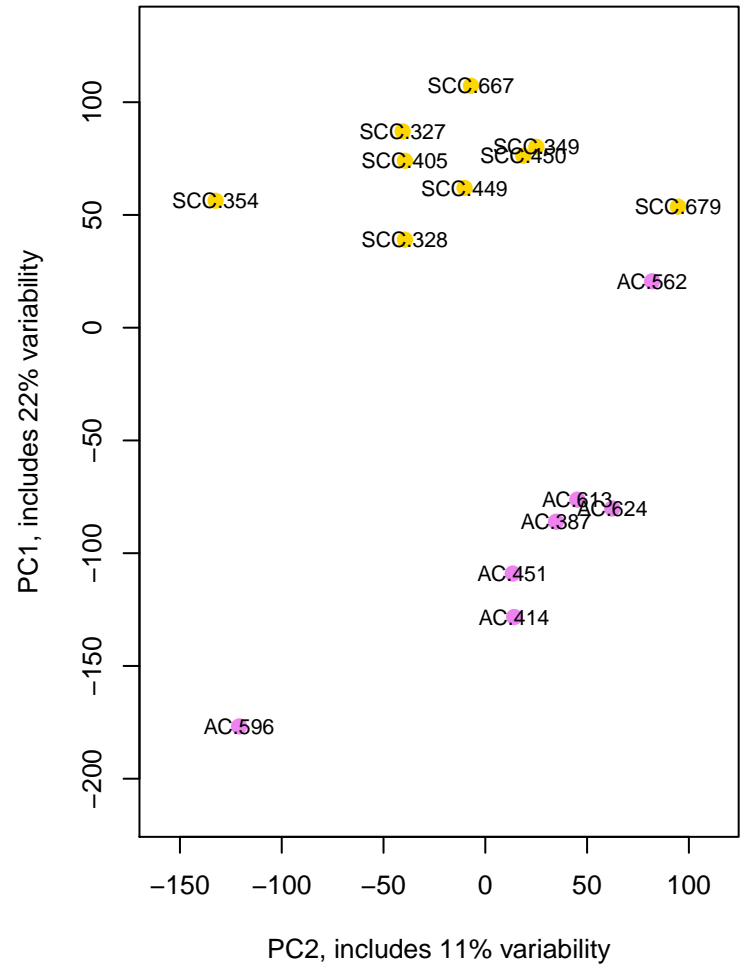
**PCA for samples by HTA: logExpr
(53% variability)**



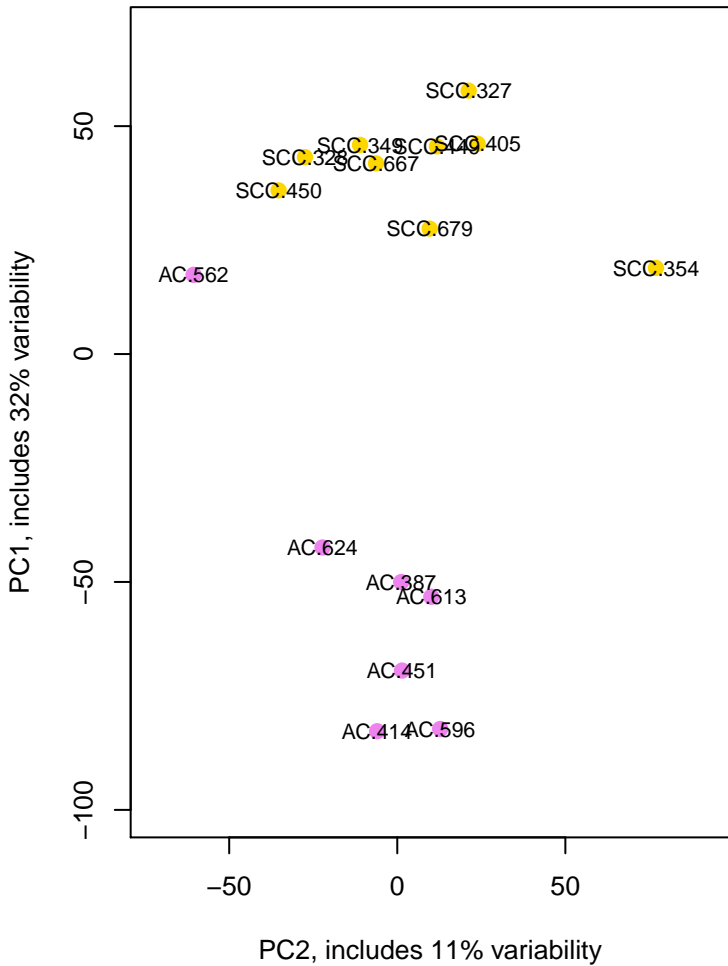
PCA for samples by NGS:logFC (CPM)
(40% variability)



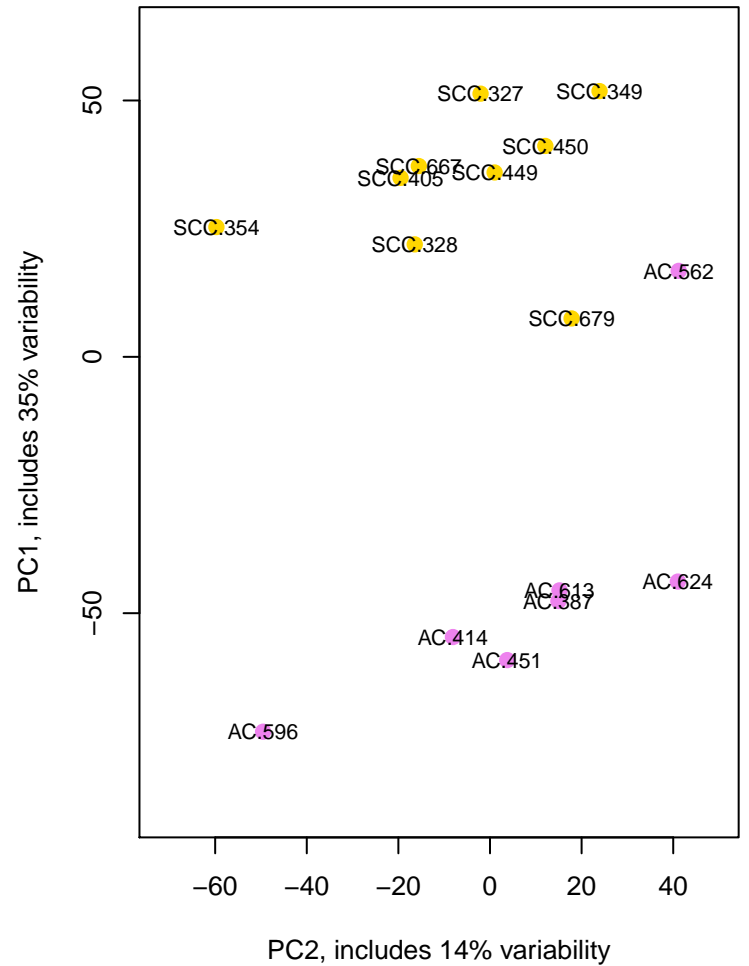
PCA for samples by NGS:logFC (Counts)
(33% variability)



PCA for samples by HuEx: logFC
(42% variability)



PCA for samples by HTA: logFC
(49% variability)



Mean Pearson correlation: Signal sample-vs-sample

	lcpm	lcounts	he.expr	hta.expr
lcpm	1	0.964	0.708	0.797
lcounts	0.964	1	0.682	0.757
he.expr	0.708	0.682	1	0.854
hta.expr	0.797	0.757	0.854	1

Mean Spearman correlation: Signal sample-vs-sample

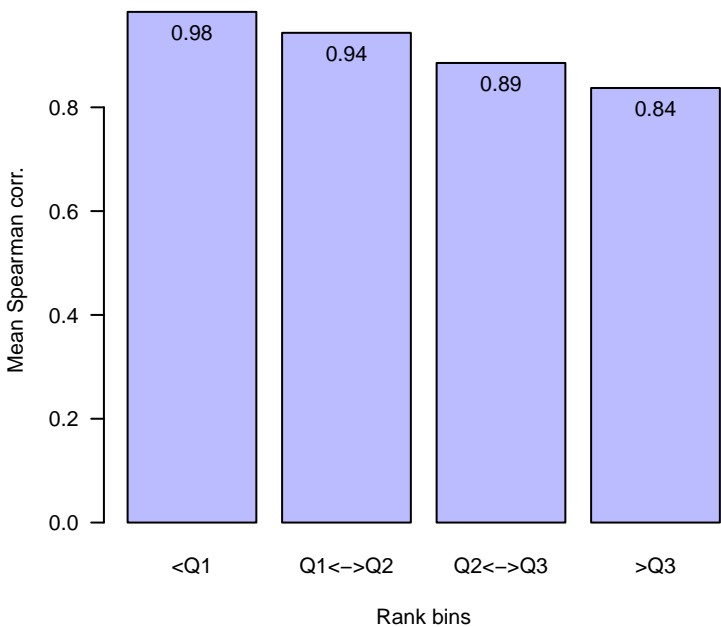
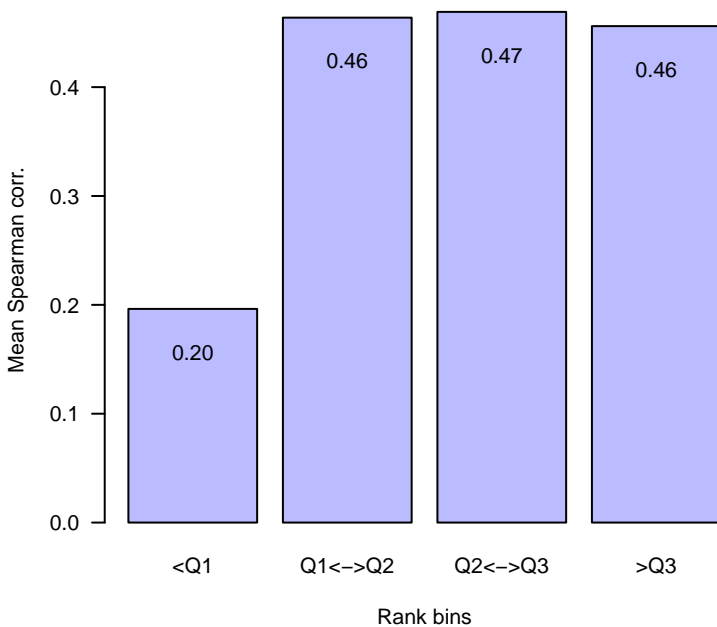
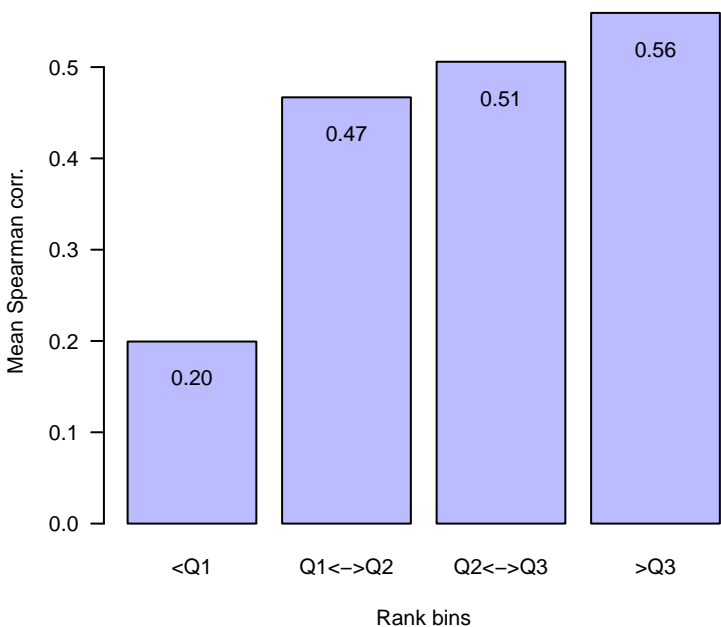
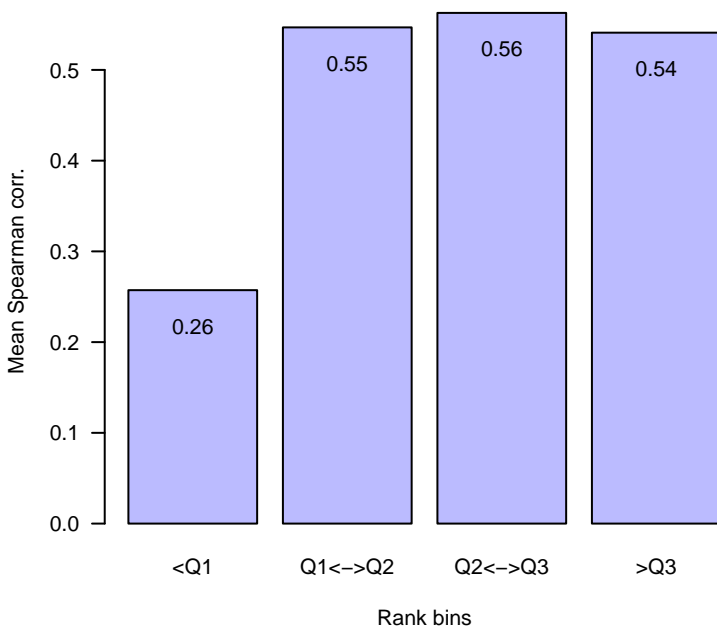
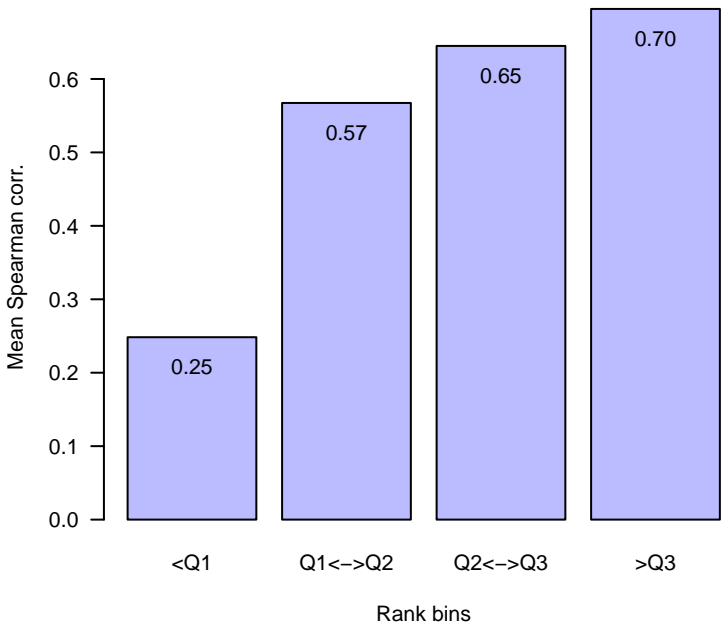
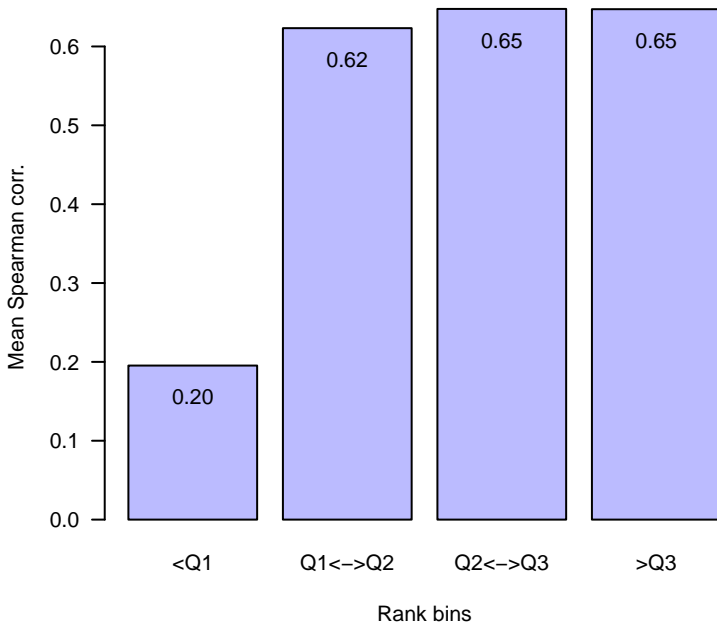
	lcpm	lcounts	he.expr	hta.expr
lcpm	1	1	0.717	0.789
lcounts	1	1	0.717	0.789
he.expr	0.717	0.717	1	0.863
hta.expr	0.789	0.789	0.863	1

Mean Pearson correlation: logFC pair-vs-pair

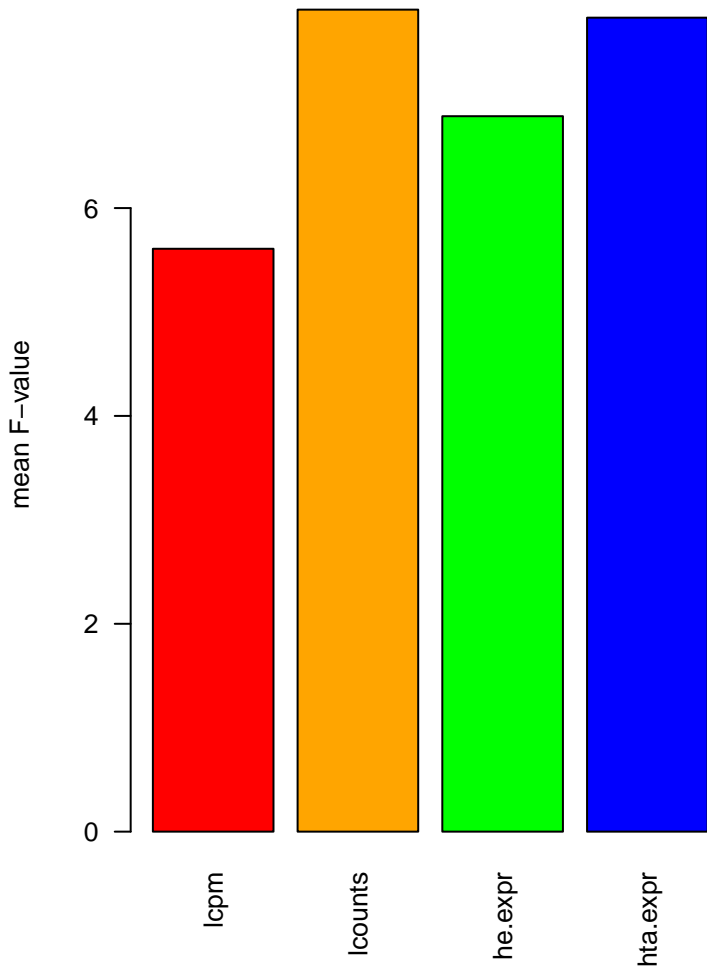
	lr.cpm	lr.counts	lr.he	lr.hta
lr.cpm	1	0.891	0.713	0.819
lr.counts	0.891	1	0.609	0.682
lr.he	0.713	0.609	1	0.831
lr.hta	0.819	0.682	0.831	1

Mean Spearman correlation: logFC pair-vs-pair

	lr.cpm	lr.counts	lr.he	lr.hta
lr.cpm	1	0.960	0.613	0.741
lr.counts	0.960	1	0.574	0.684
lr.he	0.613	0.574	1	0.722
lr.hta	0.741	0.684	0.722	1

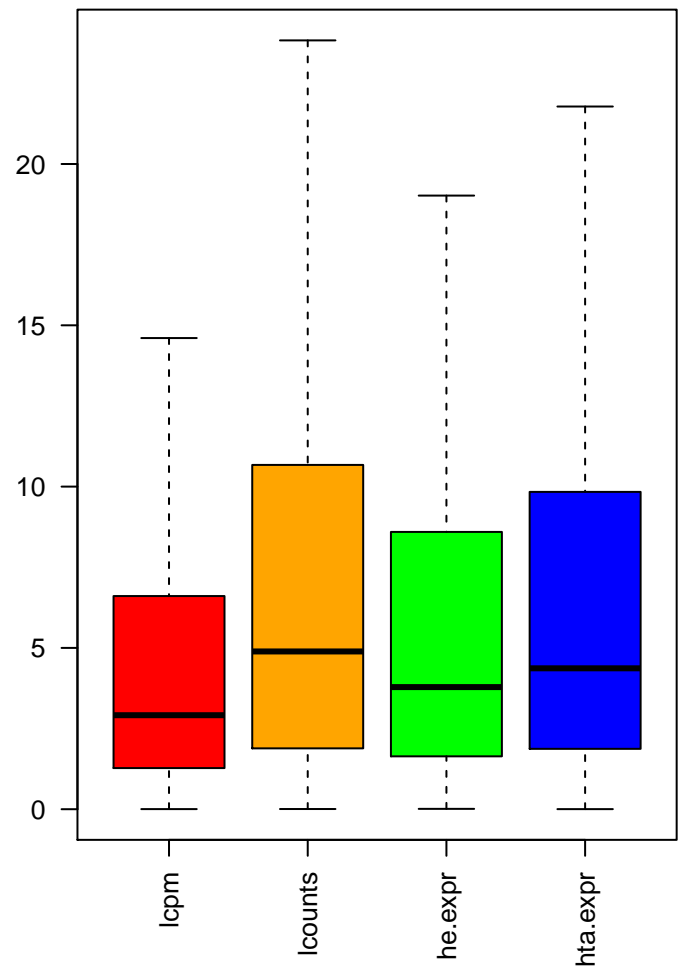
lcpm - lcounts**lcounts - he.expr****lcpm - he.expr****lcounts - hta.expr****lcpm - hta.expr****he.expr - hta.expr**

Variance ratio



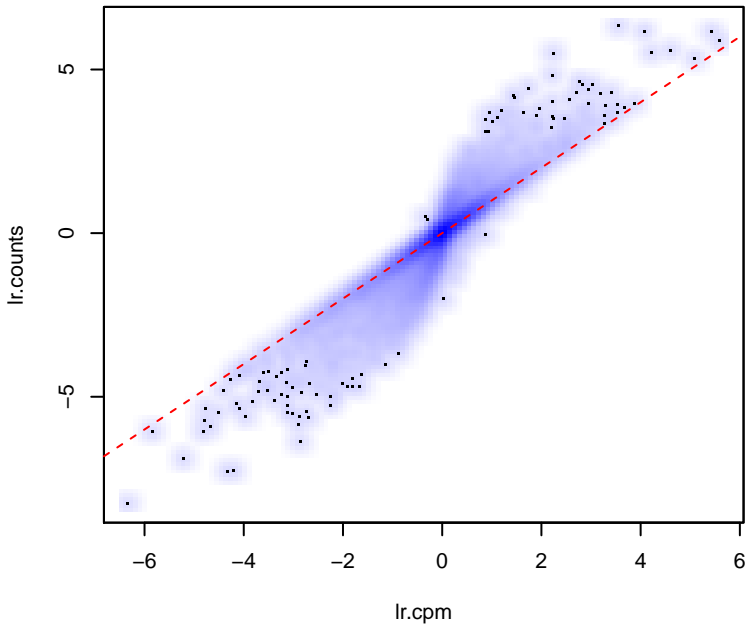
Higher values show more consistent grouping

F-values(outliers removed)

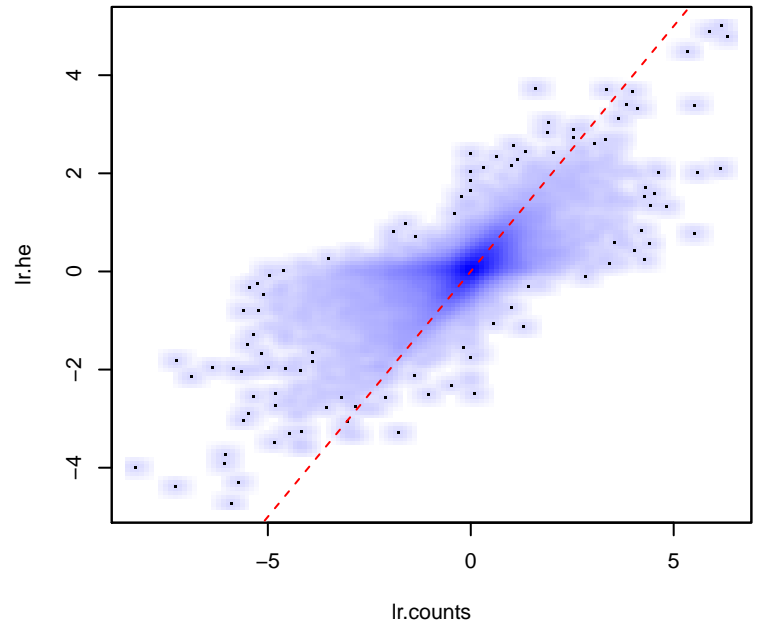


Mean LogFC: AC

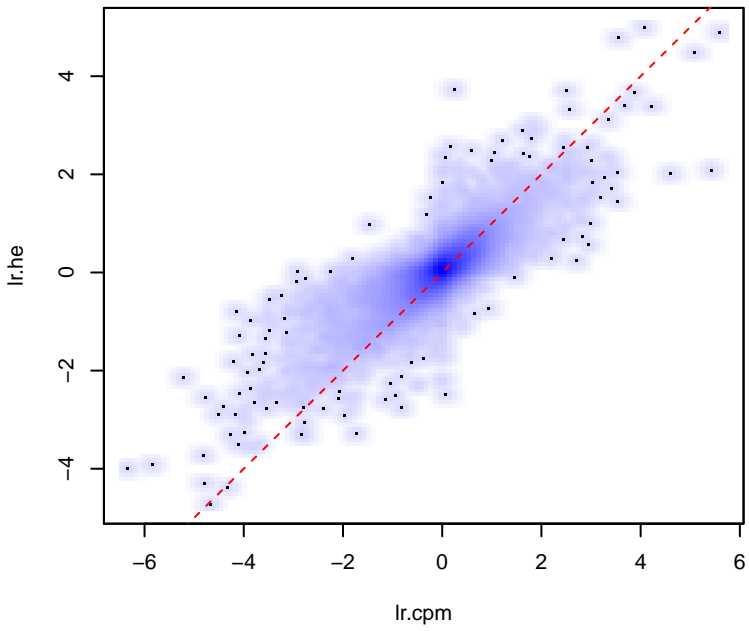
lr.cpm-lr.counts
rs=0.9546



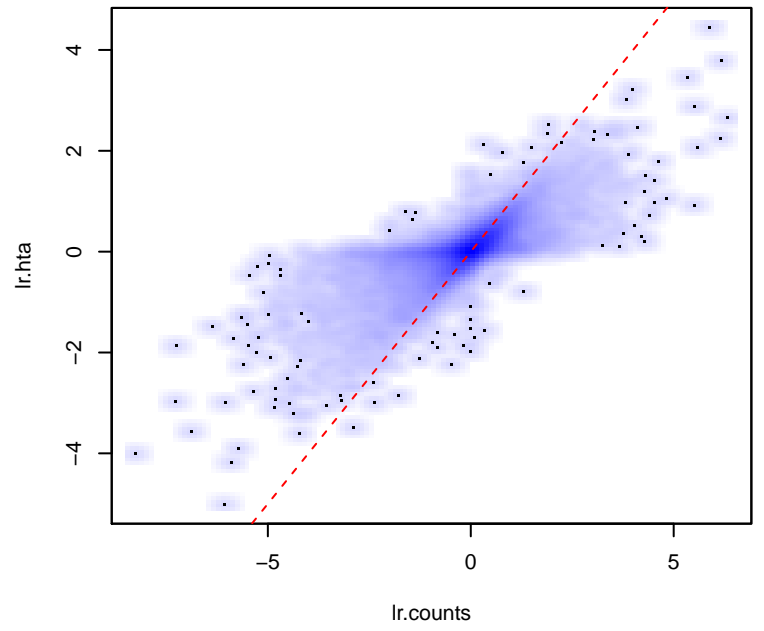
lr.counts-lr.he
rs=0.7010



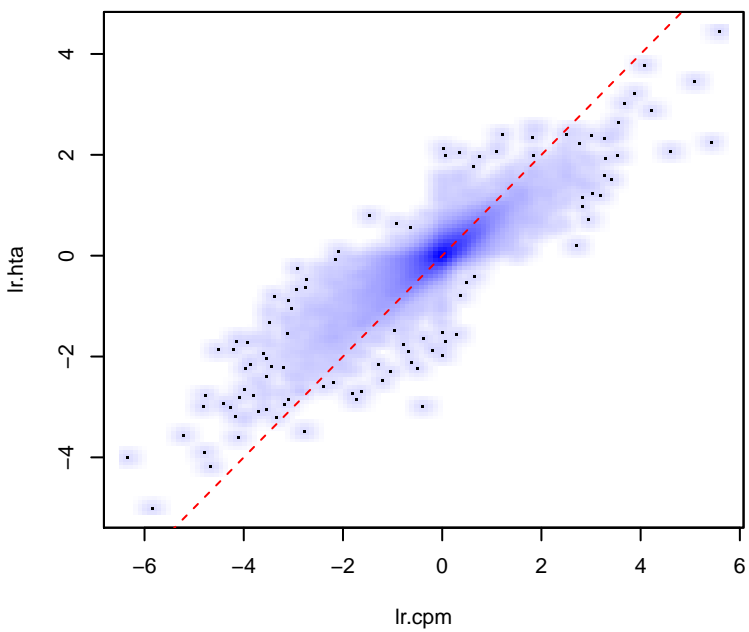
lr.cpm-lr.he
rs=0.7547



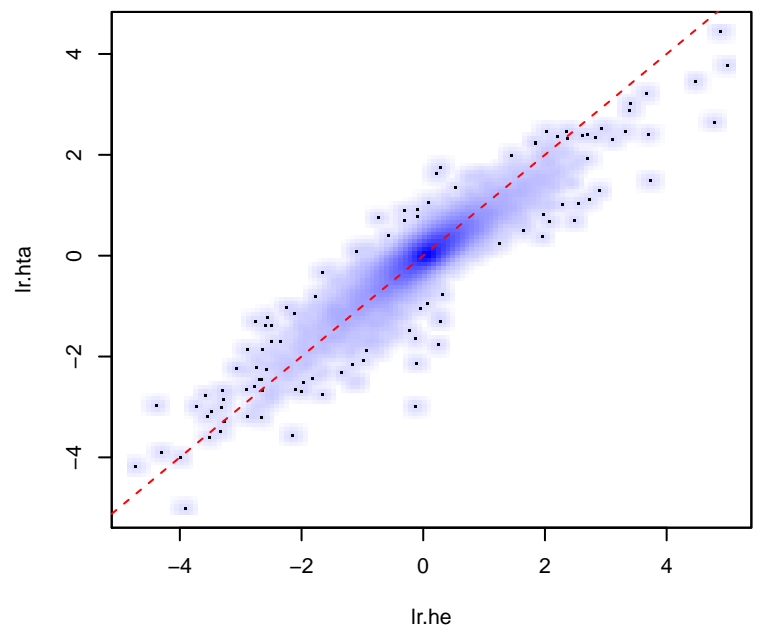
lr.counts-lr.hta
rs=0.7731



lr.cpm-lr.hta
rs=0.8242

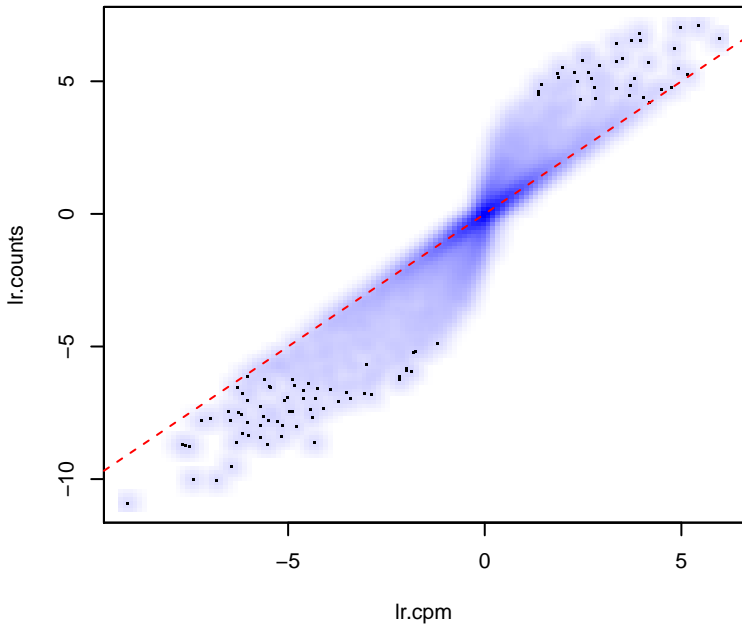


lr.he-lr.hta
rs=0.8260

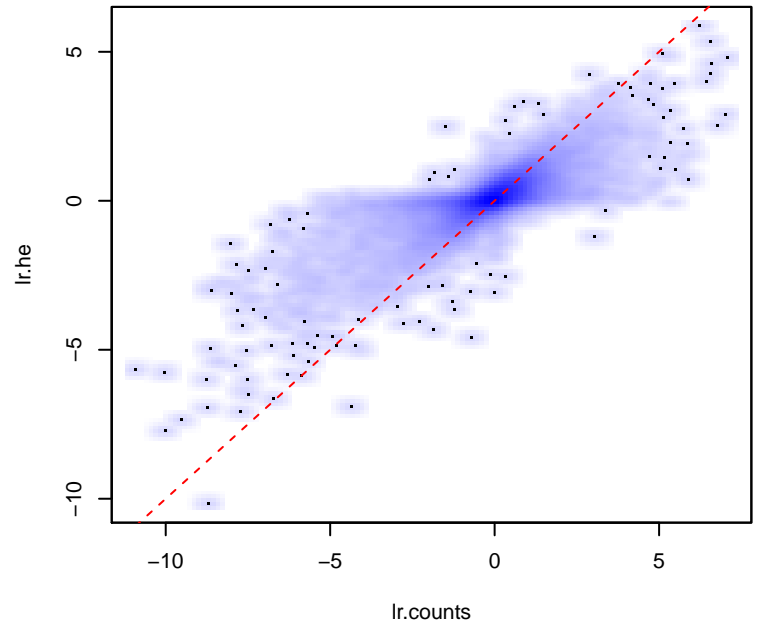


Mean LogFC: SCC

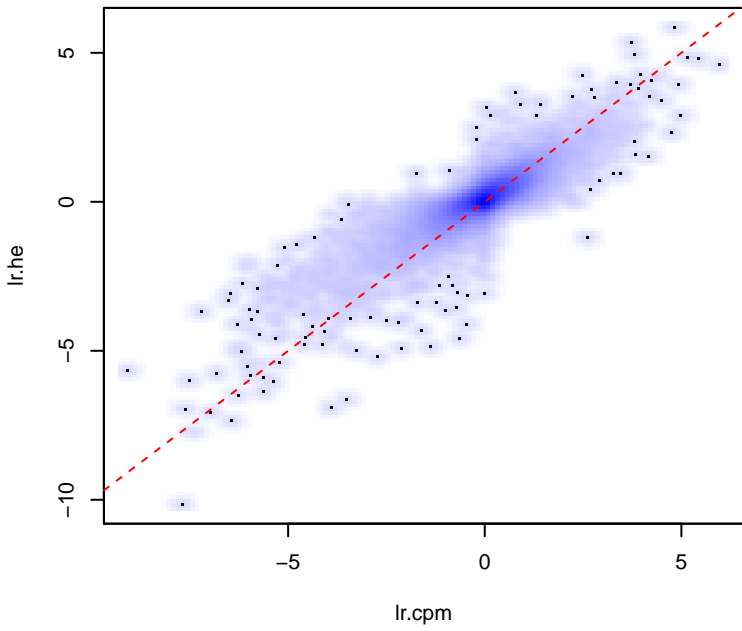
lr.cpm-lr.counts
rs=0.9602



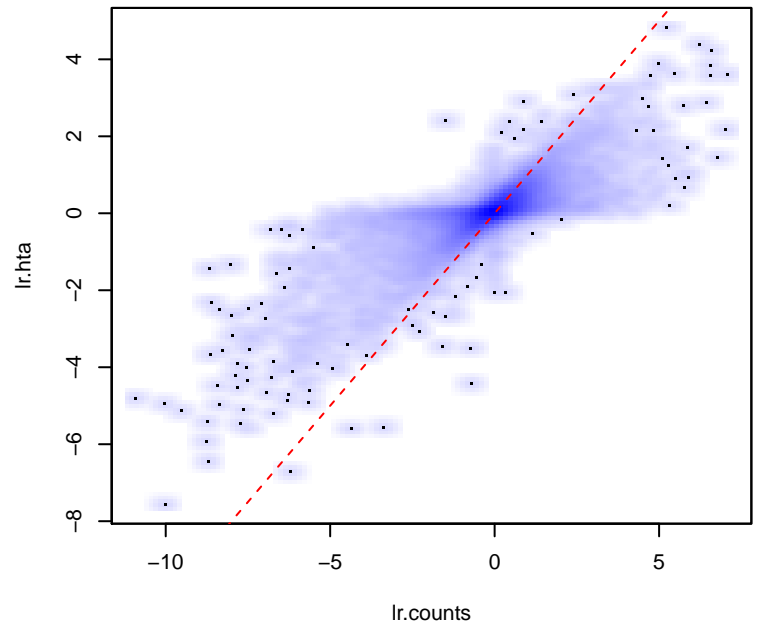
lr.counts-lr.he
rs=0.7685



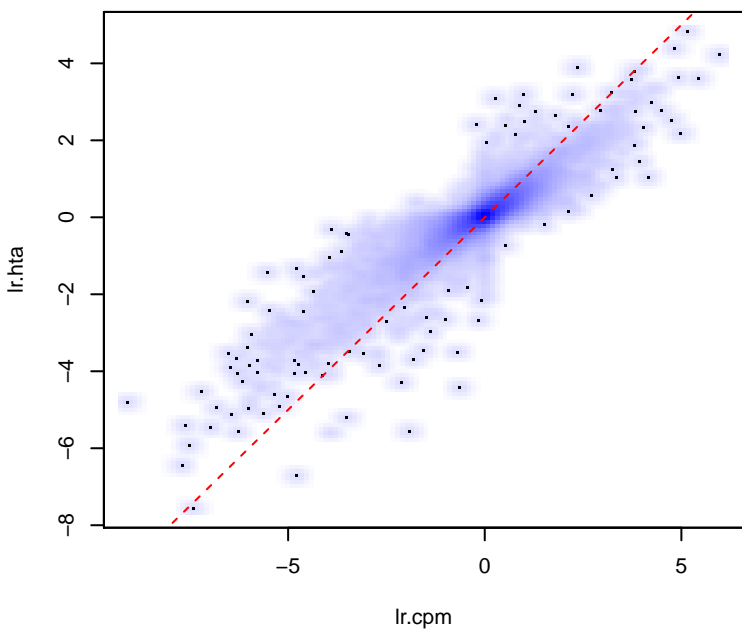
lr.cpm-lr.he
rs=0.7989



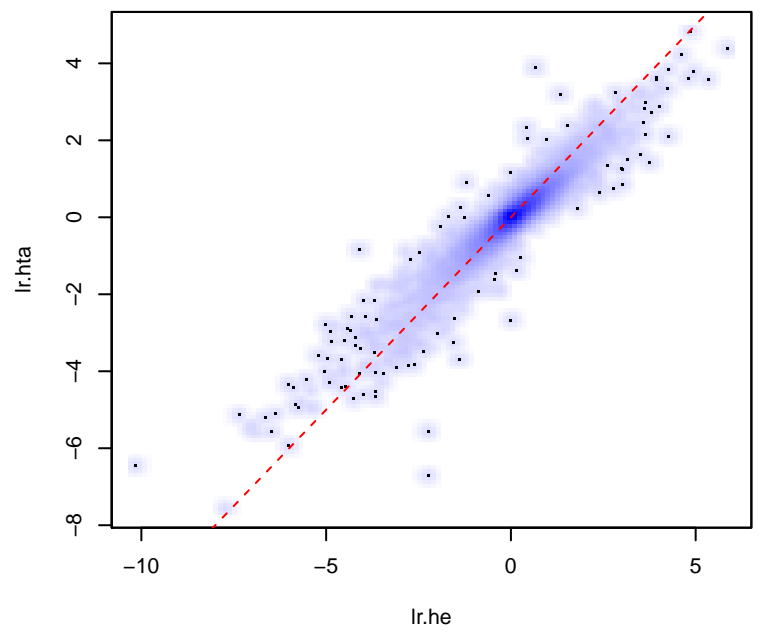
lr.counts-lr.hta
rs=0.8122



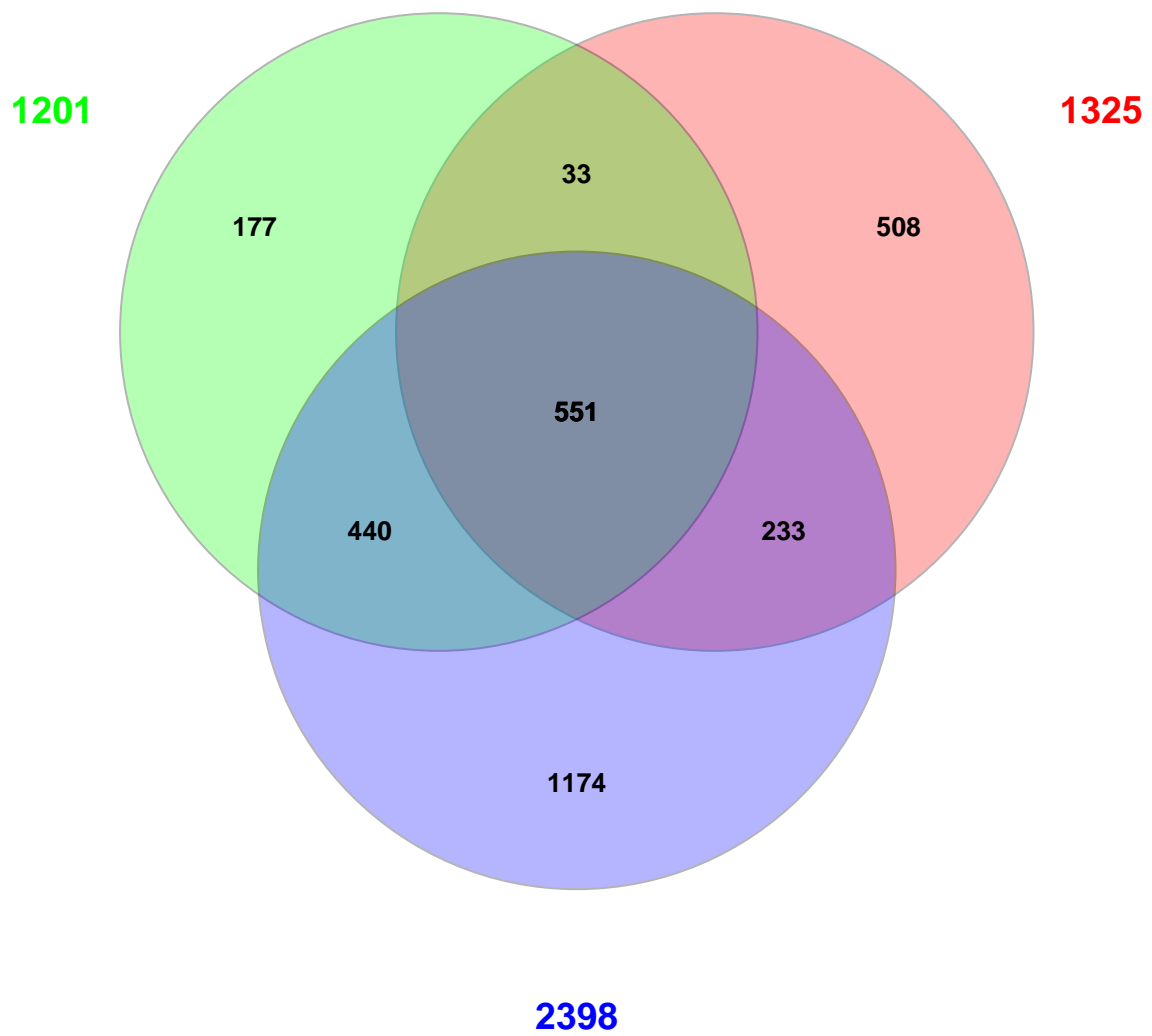
lr.cpm-lr.hta
rs=0.8587



lr.he-lr.hta
rs=0.8958



DEG in AC, FDR<0.01 (unpaired)

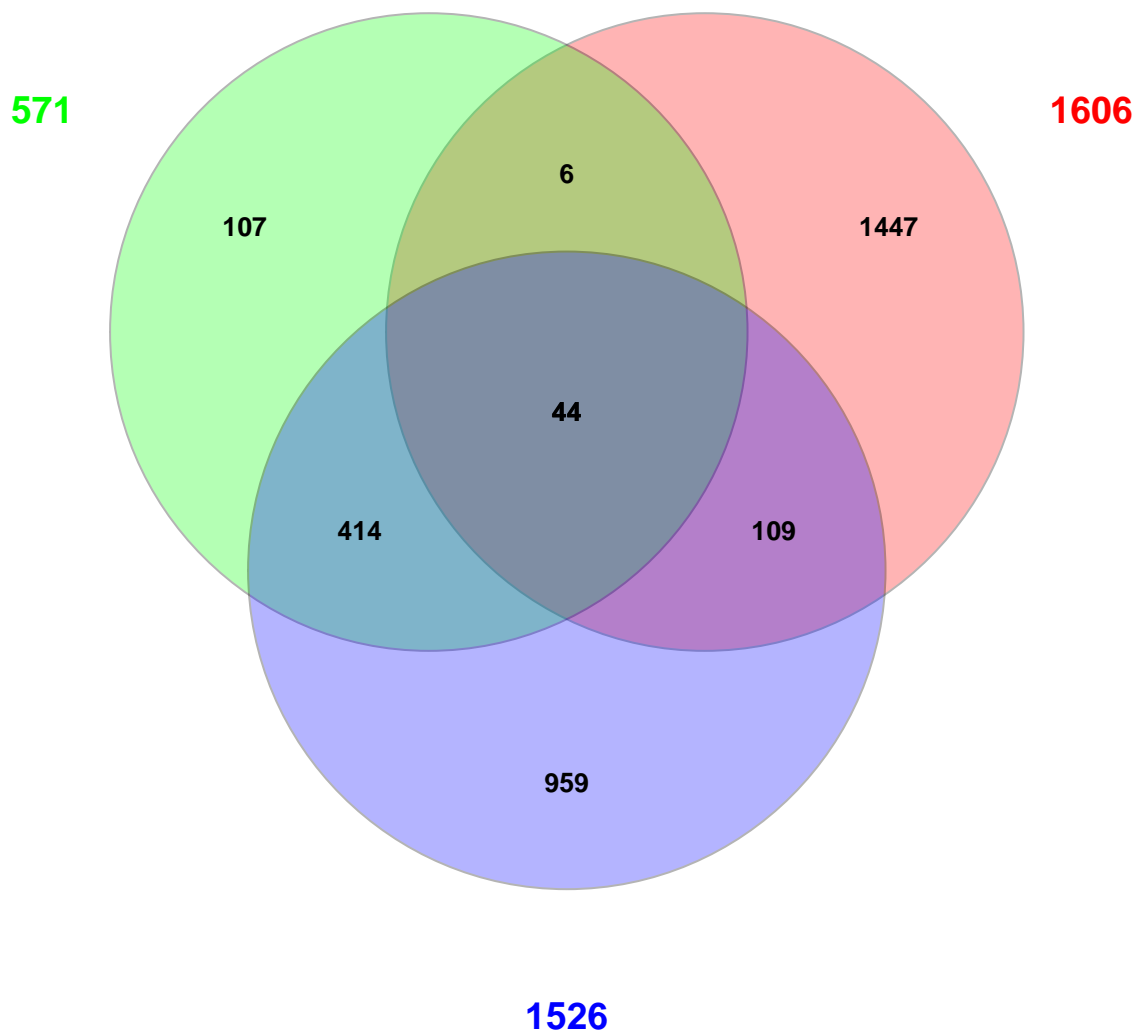


NGS:edgeR

HuEx:limma

HTA:limma

DEG in AC, FDR<0.01 (paired)

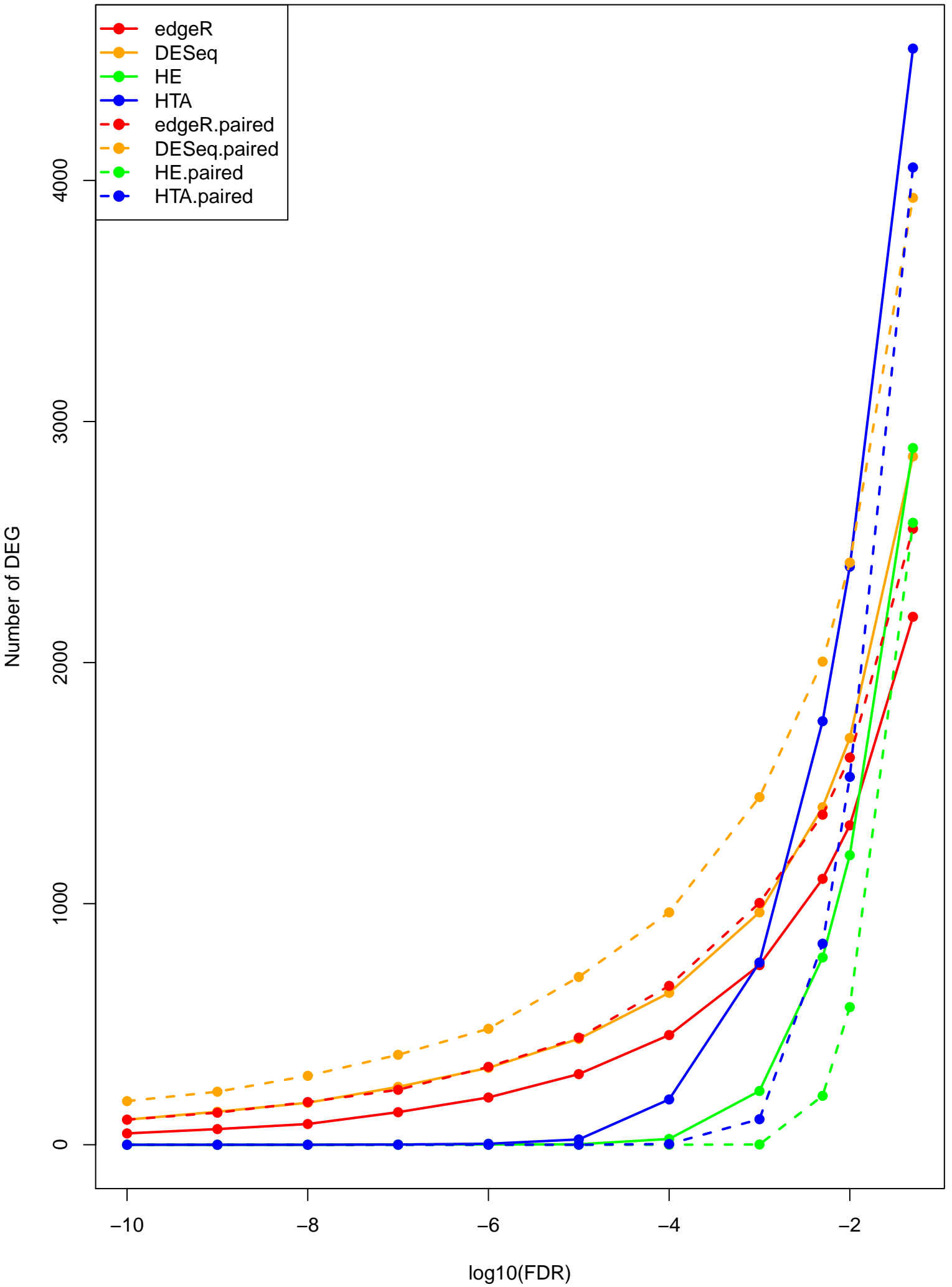


NGS:edgeR

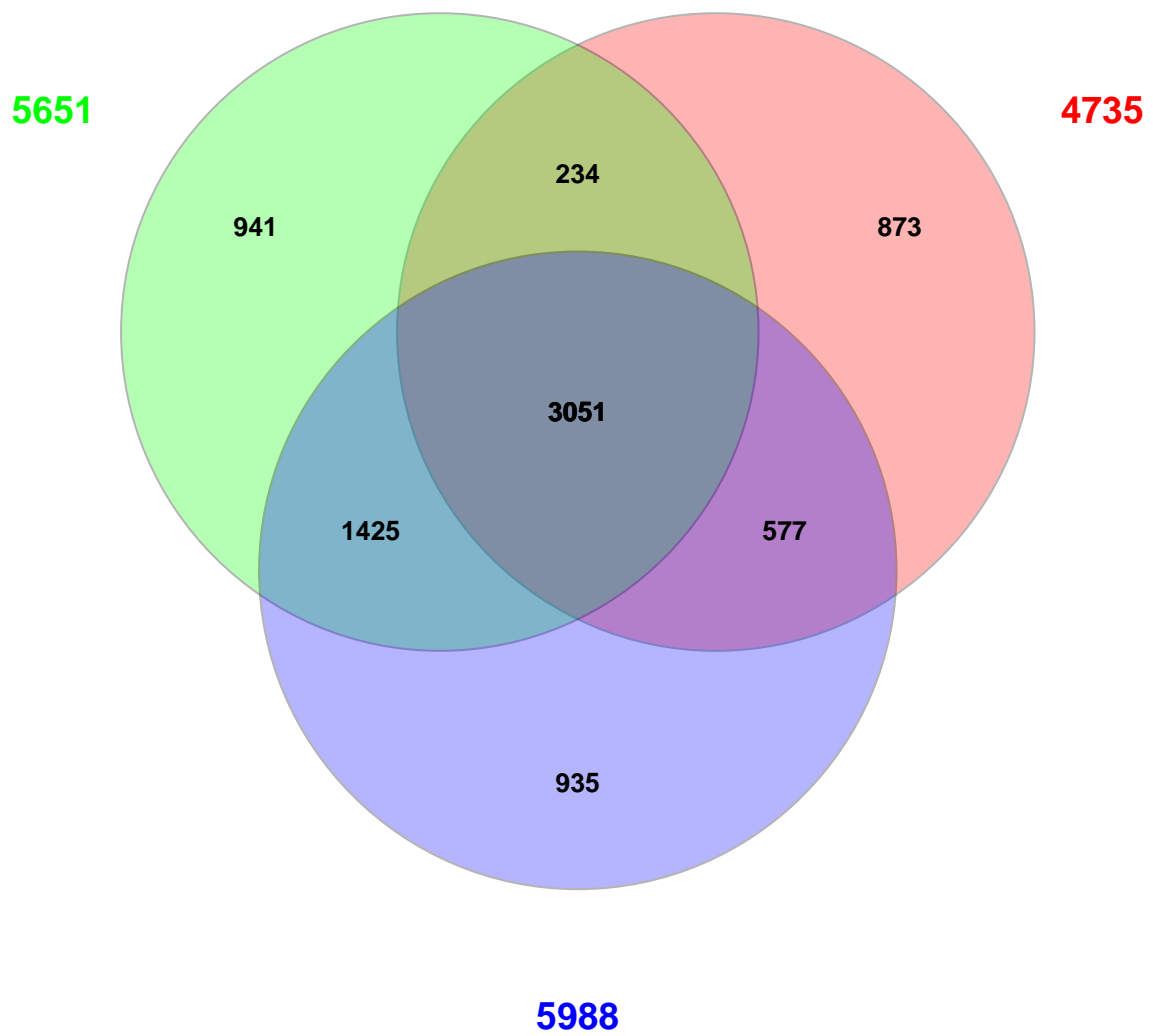
HuEx:limma

HTA:limma

AC



DEG in SCC, FDR<0.01 (unpaired)

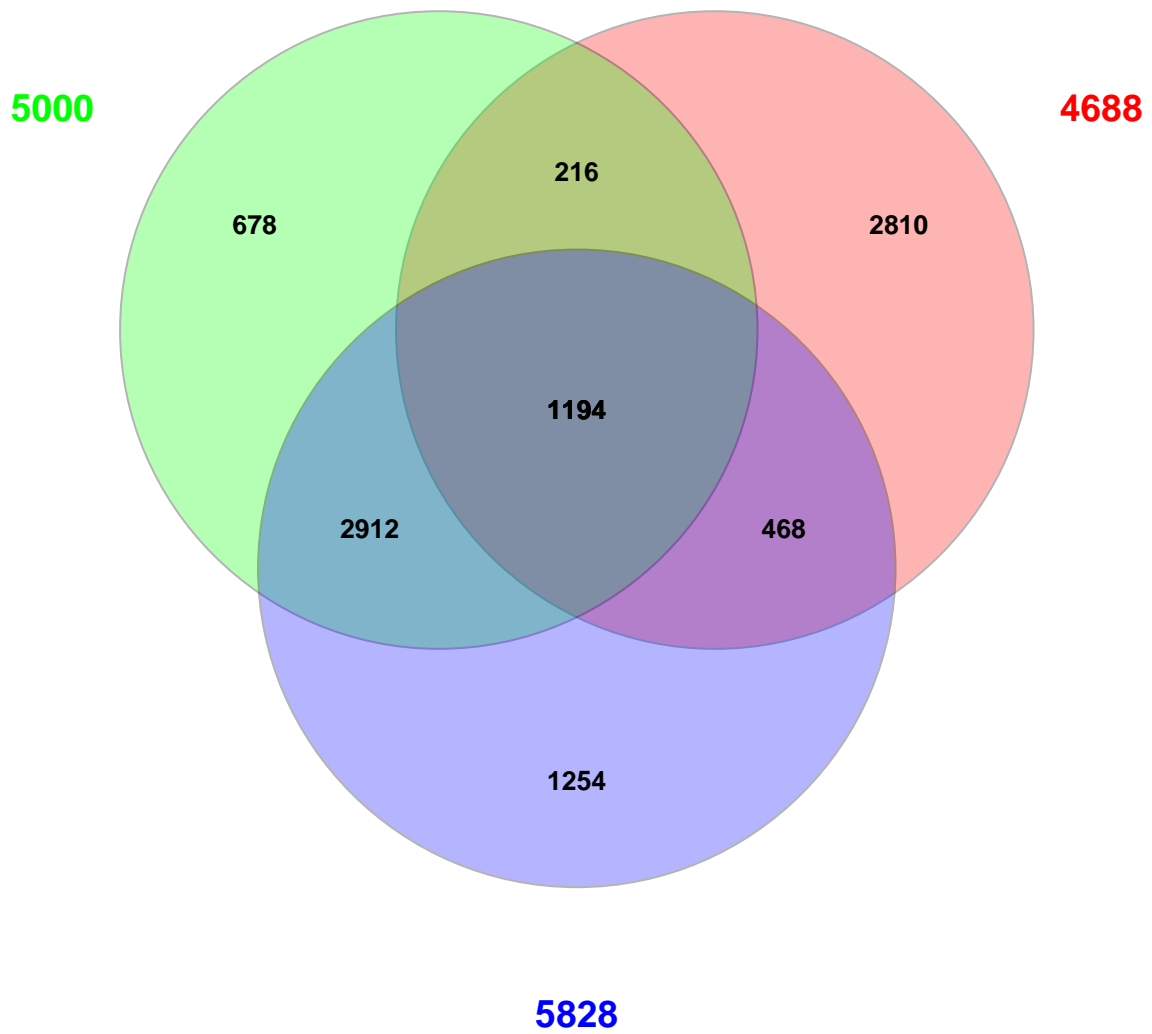


NGS:edgeR

HuEx:limma

HTA:limma

DEG in SCC, FDR<0.01 (paired)

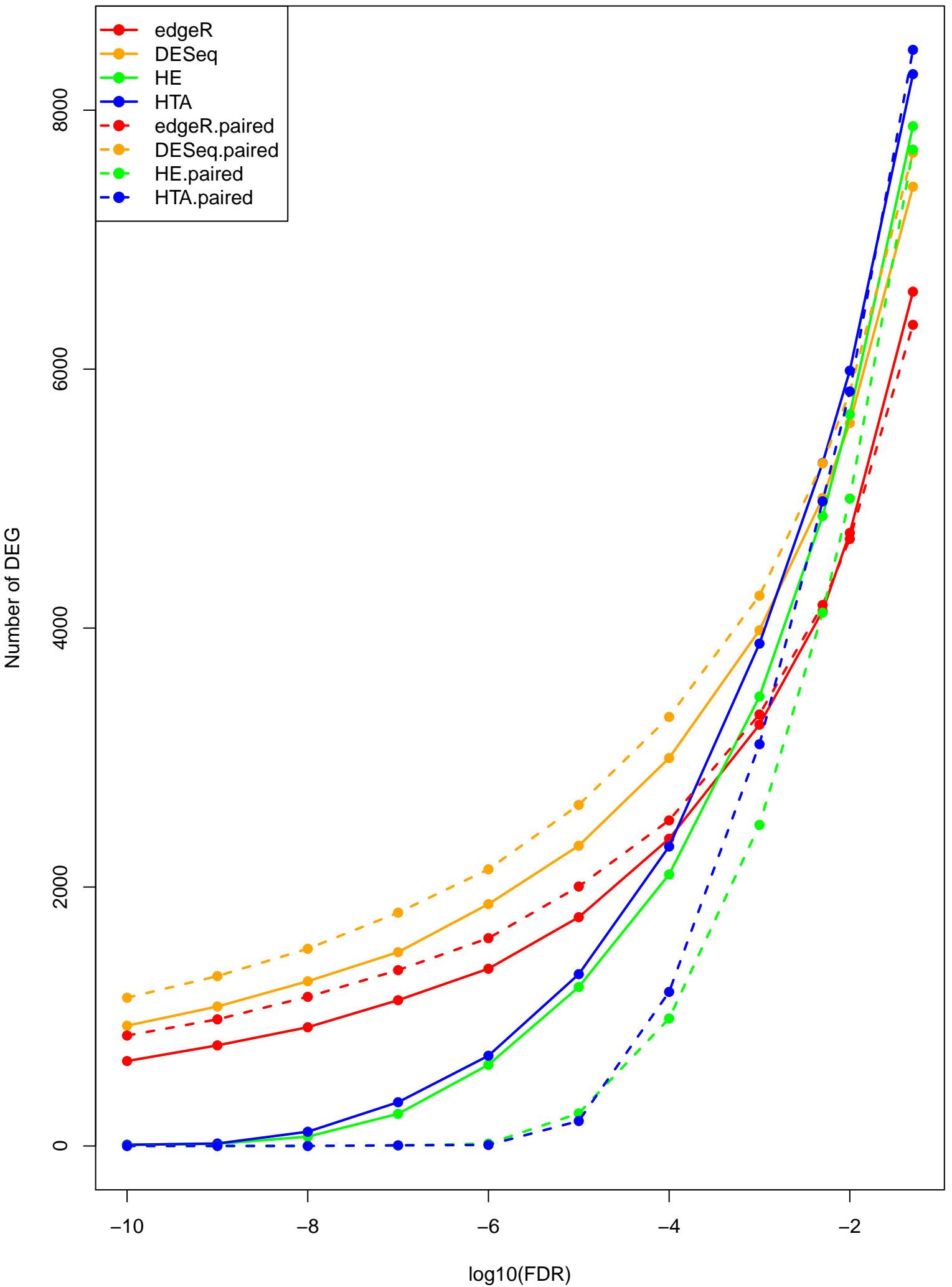


NGS:edgeR

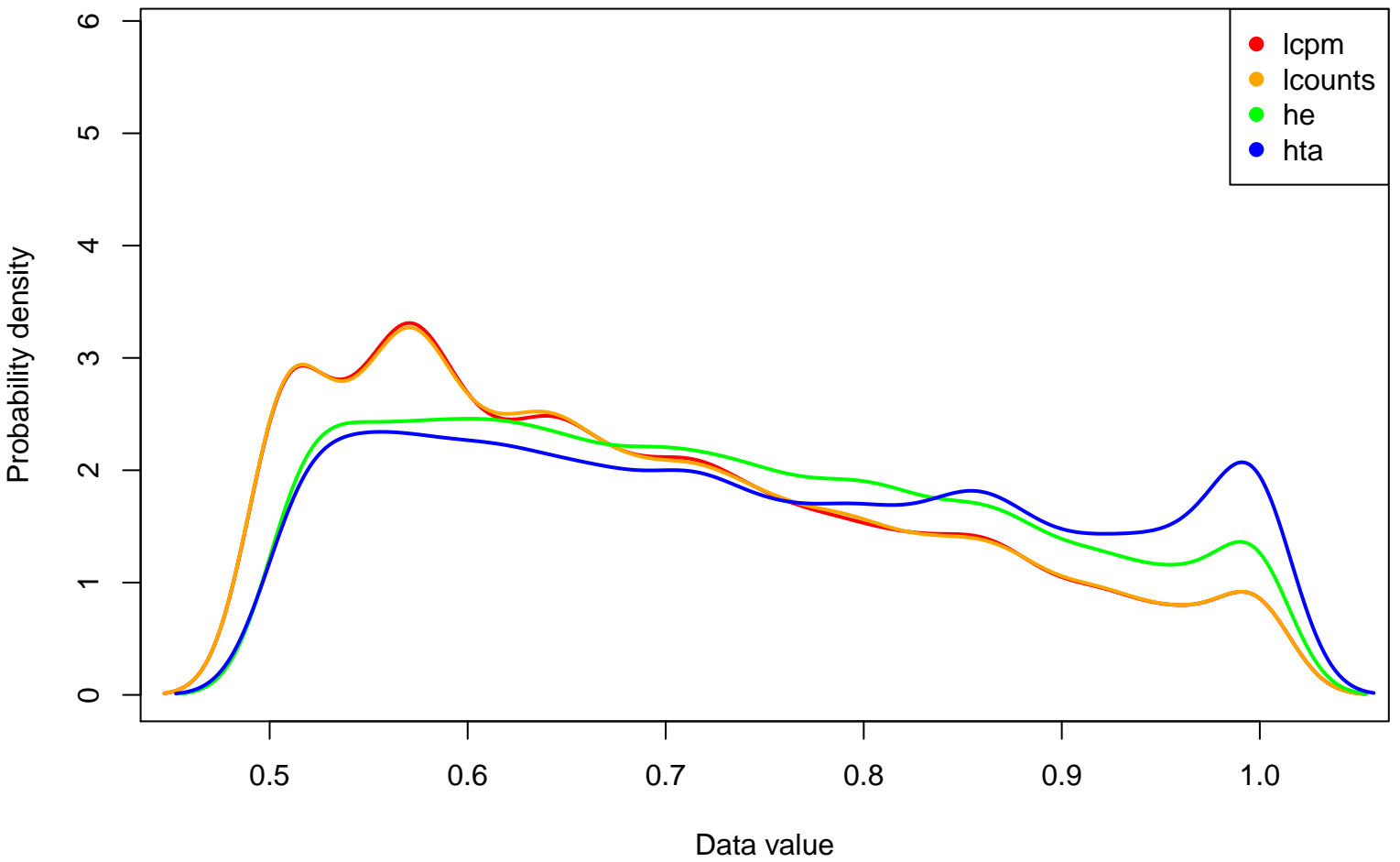
HuEx:limma

HTA:limma

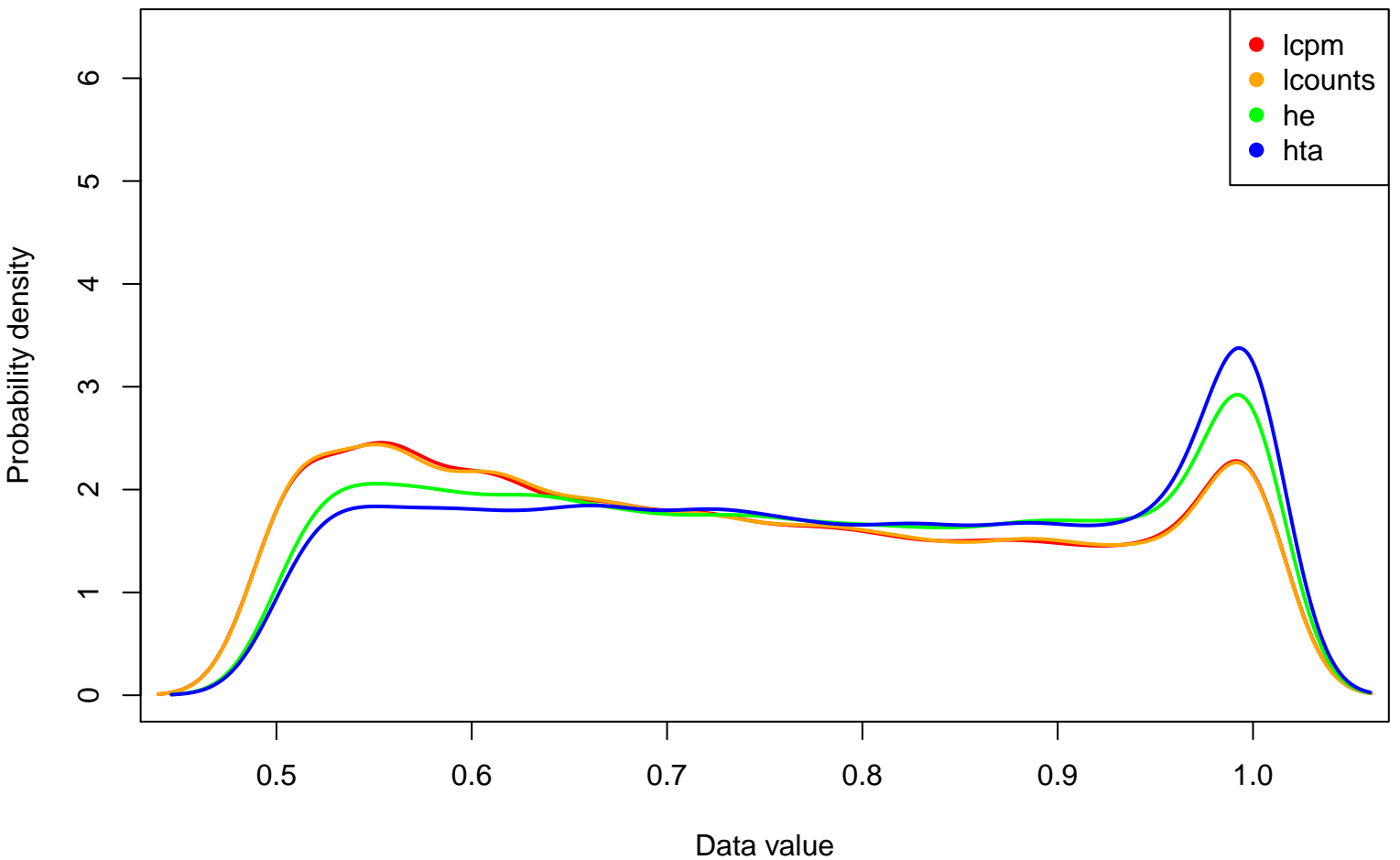
SCC



AUC in AC for different methods



AUC in SCC for different methods



PCA for samples by All samples
(28% variability)

