Age-Associated Biomarker Study TCGA Prostate Cancer All Cases Fisher's Exact Tests

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Table 1: ER binding and age associated gene counts for TCGA Prostate cancer data, All Cases, FDR 0.05

ER binding	Age association Age associated	Not age associated	Total
ER binding			
N	40	1638	1678
Row(%)	2.38%	97.62%	8.85%
$\operatorname{Column}(\%)$	8.42%	8.87%	
Not ER binding			
N	435	16837	17272
Row(%)	2.52%	97.48%	91.15%
$\widehat{\text{Column}}(\%)$	91.58%	91.13%	
Total	475	18475	18950
	2.51%	97.49%	

```
##
## Fisher's Exact Test for Count Data
##
## data: tab
## p-value = 0.8062
## alternative hypothesis: true odds ratio is not equal to 1
## 95 percent confidence interval:
## 0.6632816 1.3142895
## sample estimates:
## odds ratio
## 0.9451949
```

Table 2: ER binding and age associated gene counts for TCGA Prostate cancer data, All Cases, FDR 0.01

ER binding	Age association Age associated	Not age associated	Total
ER binding			
N	2	1676	1678
Row(%)	0.12%	99.88%	8.85%
$\operatorname{Column}(\%)$	6.90%	8.86%	
Not ER binding			
N	27	17245	17272
Row(%)	0.16%	99.84%	91.15%
$\operatorname{Column}(\%)$	93.10%	91.14%	
Total	29	18921	18950
	0.15%	99.85%	

```
##
## Fisher's Exact Test for Count Data
##
## data: tab
## p-value = 1
## alternative hypothesis: true odds ratio is not equal to 1
## 95 percent confidence interval:
## 0.08775684 3.03738128
## sample estimates:
## odds ratio
## 0.762161
```

Table 3: NKI ER binding and age associated gene counts for TCGA Prostate cancer data, All Cases, FDR $0.05\,$

ER binding	Age association Age associated	Not age associated	Total
	rige associated	1100 age associated	10041
$\mathbf{Tier} 1$			
N	67	2808	2875
Row(%)	2.33%	97.67%	15.17%
$\operatorname{Column}(\%)$	14.11%	15.20%	
Tier 2 Only			
N	99	3106	3205
$\operatorname{Row}(\%)$	3.09%	96.91%	16.91%
$\operatorname{Column}(\%)$	20.84%	16.81%	
Not ER binding			
N	309	12561	12870
Row(%)	2.40%	97.60%	67.92%
$\operatorname{Column}(\%)$	65.05%	67.99%	
Total	475	18475	18950
	2.51%	97.49%	

##
Fisher's Exact Test for Count Data
##
data: tab
p-value = 0.07429

alternative hypothesis: two.sided

Table 4: NKI ER binding and age associated gene counts for TCGA Prostate cancer data, All Cases, FDR 0.01

ER binding	Age associated	Not age associated	Total
Tier 1			
N	6	2869	2875
Row(%)	0.21%	99.79%	15.17%
$\operatorname{Column}(\%)$	20.69%	15.16%	
Tier 2 Only			
N	4	3201	3205
Row(%)	0.12%	99.88%	16.91%
$\operatorname{Column}(\overset{\circ}{\%})$	13.79%	16.92%	

ER binding	Age associated	Not age associated	Total
Not ER binding			
$\mathbf N$	19	12851	12870
Row(%)	0.15%	99.85%	67.92%
$\operatorname{Column}(\%)$	65.52%	67.92%	
Total	29	18921	18950
	0.15%	99.85%	

##

Fisher's Exact Test for Count Data

##

data: tab ## p-value = 0.635

alternative hypothesis: two.sided