

# Age-Associated Biomarker Study

## TCGA Lung Cancer All Cases Fisher's Exact Tests

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

ER binding	Age association Age associated	Not age associated	Total
<b>ER binding</b>			
N	227	1451	1678
Row(%)	13.53%	86.47%	8.85%
Column(%)	9.84%	8.72%	
<b>Not ER binding</b>			
N	2081	15191	17272
Row(%)	12.05%	87.95%	91.15%
Column(%)	90.16%	91.28%	
Total	2308	16642	18950
	12.18%	87.82%	

```
##
## Fisher's Exact Test for Count Data
##
## data:  tab
## p-value = 0.07855
## alternative hypothesis: true odds ratio is not equal to 1
## 95 percent confidence interval:
##  0.9812369 1.3246358
## sample estimates:
## odds ratio
##  1.141971
```

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

ER binding	Age association Age associated	Not age associated	Total
<b>ER binding</b>			
N	92	1586	1678
Row(%)	5.48%	94.52%	8.85%
Column(%)	10.44%	8.78%	
<b>Not ER binding</b>			
N	789	16483	17272
Row(%)	4.57%	95.43%	91.15%
Column(%)	89.56%	91.22%	
Total	881	18069	18950
	4.65%	95.35%	

```
##
## Fisher's Exact Test for Count Data
##
## data:  tab
## p-value = 0.08926
## alternative hypothesis: true odds ratio is not equal to 1
## 95 percent confidence interval:
##  0.959734 1.515485
## sample estimates:
## odds ratio
##  1.211822
```

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

ER binding	Age association Age associated	Not age associated	Total
<b>Tier 1</b>			
N	384	2491	2875
Row(%)	13.36%	86.64%	15.17%
Column(%)	16.64%	14.97%	
<b>Tier 2 Only</b>			
N	440	2765	3205
Row(%)	13.73%	86.27%	16.91%
Column(%)	19.06%	16.61%	
<b>Not ER binding</b>			
N	1484	11386	12870
Row(%)	11.53%	88.47%	67.92%
Column(%)	64.30%	68.42%	
Total	2308	16642	18950
	12.18%	87.82%	

```
##
## Fisher's Exact Test for Count Data
##
## data:  tab
## p-value = 0.0003615
## alternative hypothesis: two.sided
```

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

ER binding	Age association Age associated	Not age associated	Total
<b>Tier 1</b>			
N	142	2733	2875
Row(%)	4.94%	95.06%	15.17%
Column(%)	16.12%	15.13%	
<b>Tier 2 Only</b>			
N	160	3045	3205
Row(%)	4.99%	95.01%	16.91%
Column(%)	18.16%	16.85%	

ER binding	Age association Age associated	Not age associated	Total
<b>Not ER binding</b>			
N	579	12291	12870
Row(%)	4.50%	95.50%	67.92%
Column(%)	65.72%	68.02%	
Total	881	18069	18950
	4.65%	95.35%	

```
##
## Fisher's Exact Test for Count Data
##
## data:  tab
## p-value = 0.3457
## alternative hypothesis: two.sided
```