Age Associated Gene Set Similarities

Derek Chiu 2018-05-16

METABRIC vs TCGA Comparisons

METABRIC vs. TCGA_BrCa

Table 1: FET Table All Cases METABRIC vs. TCGA_BrCa, FDR = 0.05, FC = 1.25

METABRIC	TCGA_BrCa Age Associated	Not Age Associated	Total
Age Associated			
N	2025	1676	3701
Column(%)	50.16%	11.24%	
Not Age Associated			
N	2012	13237	15249
Column(%)	49.84%	88.76%	
Total	4037	14913	18950
	21.3%	78.7%	

Table 2: FET Statistics All Cases METABRIC vs. TCGA_BrCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	0
conf.int	[7.333, 8.616]
estimate	7.948
null.value	1
alternative	two.sided

Table 3: FET Table All Cases METABRIC vs. TCGA_BrCa, FDR = 0.01, FC = 1.25

METABRIC	TCGA_BrCa Age Associated	Not Age Associated	Total
Age Associated			
N	1679	1983	3662
$\operatorname{Column}(\%)$	52.73%	12.58%	
Not Age Associated			
N	1505	13783	15288
Column(%)	47.27%	87.42%	
Total	3184	15766	18950
	16.8%	83.2%	

Table 4: FET Statistics All Cases METABRIC vs. TCGA_BrCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	0
$\begin{array}{c} { m conf.int} \\ { m estimate} \end{array}$	$[7.123, 8.44] \\ 7.753$
null.value	1
alternative	two.sided

Table 5: FET Table All Cases METABRIC vs. TCGA_BrCa, FDR = 0.01, FC = 2

METABRIC	TCGA_BrCa Age Associated	Not Age Associated	Total
Age Associated			
N	157	186	343
$\operatorname{Column}(\%)$	39.35%	1.00%	
Not Age Associated			
N	242	18365	18607
Column(%)	60.65%	99.00%	
Total	399	18551	18950
	2.11%	97.89%	

Table 6: FET Statistics All Cases METABRIC vs. TCGA_BrCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	6.86e-179
conf.int	[49.64, 82.73]
estimate	63.86
null.value	1
alternative	two.sided

Table 7: FET Table All Cases METABRIC vs. TCGA_BrCa, FDR = 0.01, FC = 4

METABRIC	TCGA_BrCa Age Associated	Not Age Associated	Total
Age Associated			
N	11	20	31
Column(%)	37.93%	0.11%	
Not Age Associated			
N	18	18901	18919
Column(%)	62.07%	99.89%	
Total	29	18921	18950
	0.15%	99.85%	

Table 8: FET Statistics All Cases METABRIC vs. TCGA_BrCa, FDR = 0.01, FC = 4

Statistics	Value
p.value conf.int	1.018e-24 [215.8, 1600]
estimate	566.7
$rac{ ext{null.value}}{ ext{alternative}}$	two.sided

${\bf METABRIC\ vs.\ TCGA_KidneyCa}$

Table 9: FET Table All Cases METABRIC vs. TCGA_KidneyCa, FDR = 0.05, FC = 1.25

METABRIC	TCGA_KidneyCa Age Associated	Not Age Associated	Total
Age Associated			
N	45	3656	3701
$\operatorname{Column}(\%)$	25.42%	19.47%	
Not Age Associated			
N	132	15117	15249
$\operatorname{Column}(\%)$	74.58%	80.53%	
Total	177	18773	18950
	0.93%	99.07%	

Table 10: FET Statistics All Cases METABRIC vs. TCGA_KidneyCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	0.05612
$\operatorname{conf.int}$	[0.9798, 1.995]
estimate	1.41
null.value	1
alternative	two.sided

Table 11: FET Table All Cases METABRIC vs. TCGA_KidneyCa, FDR = 0.01, FC = 1.25

METABRIC	TCGA_KidneyCa Age Associated	Not Age Associated	Total
Age Associated			
N	9	3653	3662
$\operatorname{Column}(\%)$	39.13%	19.30%	
Not Age Associated			
N	14	15274	15288
$\operatorname{Column}(\%)$	60.87%	80.70%	
Total	23	18927	18950
	0.12%	99.88%	

Table 12: FET Statistics All Cases METABRIC vs. TCGA_KidneyCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	0.02923
conf.int	[1.025, 6.673]
estimate	2.688
null.value	1
alternative	two.sided

Table 13: FET Table All Cases METABRIC vs. TCGA_KidneyCa, FDR = 0.01, FC = 2

	TCGA_KidneyCa		
METABRIC	Age Associated	Not Age Associated	Total
Age Associated			
N	1	342	343
$\operatorname{Column}(\%)$	11.11%	1.81%	
Not Age Associated			
N	8	18599	18607
$\operatorname{Column}(\%)$	88.89%	98.19%	
Total	9	18941	18950
	0.05%	99.95%	

Table 14: FET Statistics All Cases METABRIC vs. TCGA_KidneyCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	0.1516
$\operatorname{conf.int}$	[0.1528, 50.99]
estimate	6.796
null.value	1
alternative	two.sided

Table 15: FET Table All Cases METABRIC vs. TCGA_KidneyCa, FDR = 0.01, FC = 4

METABRIC	TCGA_KidneyCa Age Associated	Not Age Associated	Total
Age Associated N	0	31	31
Not Age Associated Age Associated			
Not Age Associated N Total	0	18919	18919
Not Age Associated Total	0	18950	18950

Table 16: FET Statistics All Cases METABRIC vs. TCGA_KidneyCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

METABRIC vs. TCGA_LungCa

Table 17: FET Table All Cases METABRIC vs. TCGA_LungCa, FDR = 0.05, FC = 1.25

1,555	TCGA_LungCa		
METABRIC	Age Associated	Not Age Associated	Total
Age Associated			
$\mathbf N$	631	3070	3701
$\operatorname{Column}(\%)$	27.34%	18.45%	
Not Age Associated			
N	1677	13572	15249
$\operatorname{Column}(\%)$	72.66%	81.55%	
Total	2308	16642	18950
	12.18%	87.82%	

Table 18: FET Statistics All Cases METABRIC vs. TCGA_LungCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value conf.int estimate null.value	2.128e-22 [1.503, 1.839] 1.663
$rac{ ext{null.value}}{ ext{alternative}}$	1 two.sided

Table 19: FET Table All Cases METABRIC vs. TCGA_LungCa, FDR = 0.01, FC = 1.25

METABRIC	TCGA_LungCa Age Associated	Not Age Associated	Total
Age Associated			
N	238	3424	3662
$\operatorname{Column}(\%)$	27.01%	18.95%	
Not Age Associated			
N	643	14645	15288
$\operatorname{Column}(\%)$	72.99%	81.05%	
Total	881	18069	18950
	4.65%	95.35%	

Table 20: FET Statistics All Cases METABRIC vs. TCGA_LungCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	1.509 e-08
conf.int	[1.352, 1.849]
estimate	1.583
null.value	1
alternative	two.sided

Table 21: FET Table All Cases METABRIC vs. TCGA_LungCa, FDR = 0.01, FC = 2

METABRIC	TCGA_LungCa Age Associated	Not Age Associated	Total
Age Associated			
N	12	331	343
$\operatorname{Column}(\%)$	5.41%	1.77%	
Not Age Associated			
N	210	18397	18607
Column(%)	94.59%	98.23%	
Total	222	18728	18950
	1.17%	98.83%	

Table 22: FET Statistics All Cases METABRIC vs. TCGA_LungCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	0.0007597
conf.int	[1.599, 5.74]
estimate	3.176
null.value	1
alternative	two.sided

Table 23: FET Table All Cases METABRIC vs. TCGA_LungCa, FDR = 0.01, FC = 4

METABRIC	TCGA_LungCa Age Associated	Not Age Associated	Total
Age Associated			
N	1	30	31
$\operatorname{Column}(\%)$	9.09%	0.16%	
Not Age Associated			
N	10	18909	18919
$\operatorname{Column}(\%)$	90.91%	99.84%	
Total	11	18939	18950
	0.06%	99.94%	

Table 24: FET Statistics All Cases METABRIC vs. TCGA_LungCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	0.01785
conf.int	[1.406, 465.9]
estimate	62.85
null.value	1
alternative	two.sided

${\bf METABRIC\ vs.\ TCGA_ProstateCa}$

Table 25: FET Table All Cases METABRIC vs. TCGA_ProstateCa, FDR = 0.05, FC = 1.25

METABRIC	TCGA_ProstateCa Age Associated	Not Age Associated	Total
Age Associated			
N	138	3563	3701
Column(%)	29.05%	19.29%	
Not Age Associated			
N	337	14912	15249
$\operatorname{Column}(\%)$	70.95%	80.71%	
Total	475	18475	18950
	2.51%	97.49%	

Table 26: FET Statistics All Cases METABRIC vs. TCGA_ProstateCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	4.078e-07
conf.int	[1.391, 2.103]
estimate	1.714
null.value	1
alternative	two.sided

Table 27: FET Table All Cases METABRIC vs. TCGA_ProstateCa, FDR = 0.01, FC = 1.25

	TCGA_ProstateCa		
METABRIC	Age Associated	Not Age Associated	Total
Age Associated			
N	7	3655	3662
$\operatorname{Column}(\%)$	24.14%	19.32%	
Not Age Associated			
N	22	15266	15288
$\operatorname{Column}(\%)$	75.86%	80.68%	
Total	29	18921	18950
	0.15%	99.85%	

Table 28: FET Statistics All Cases METABRIC vs. TCGA_ProstateCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value conf.int	0.4832 [0.4791, 3.224]
estimate	[0.4791, 3.224] 1.329
$rac{ ext{null.value}}{ ext{alternative}}$	$1 \\ { m two.sided}$

Table 29: FET Table All Cases METABRIC vs. TCGA_ProstateCa, FDR = 0.01, FC = 2

	TCGA_ProstateCa		
METABRIC	Age Associated	Not Age Associated	Total
Age Associated			
N	0	343	343
$\operatorname{Column}(\%)$	0.00%	1.81%	
Not Age Associated			
N	8	18599	18607
$\operatorname{Column}(\%)$	100.00%	98.19%	
Total	8	18942	18950
	0.04%	99.96%	

Table 30: FET Statistics All Cases METABRIC vs. TCGA_ProstateCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, 31.89]
estimate	0
null.value	1
alternative	two.sided

Table 31: FET Table All Cases METABRIC vs. TCGA_ProstateCa, FDR = 0.01, FC = 4

METABRIC	TCGA_ProstateCa Age Associated	Not Age Associated	Total
Age Associated N	0	31	31
Not Age Associated	U	01	91
Age Associated Not Age Associated			
N Total	0	18919	18919
Not Age Associated			
Total	0	18950	18950

Table 32: FET Statistics All Cases METABRIC vs. TCGA_ProstateCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
conf.int	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

${\bf METABRIC\ vs.\ TCGA_ThyroidCa}$

Table 33: FET Table All Cases METABRIC vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

METABRIC	TCGA_ThyroidCa Age Associated	Not Age Associated	Total
Age Associated			
N	291	3410	3701
$\operatorname{Column}(\%)$	31.29%	18.92%	
Not Age Associated			
N	639	14610	15249
$\operatorname{Column}(\%)$	68.71%	81.08%	
Total	930	18020	18950
	4.91%	95.09%	

Table 34: FET Statistics All Cases METABRIC vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	2.414e-18
$\operatorname{conf.int}$	[1.684, 2.256]
estimate	1.951
null.value	1
alternative	two.sided

Table 35: FET Table All Cases METABRIC vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

	TCGA_ThyroidCa		
METABRIC	Age Associated	Not Age Associated	Total
Age Associated			
N	115	3547	3662
$\operatorname{Column}(\%)$	29.64%	19.11%	
Not Age Associated			
N	273	15015	15288
$\operatorname{Column}(\%)$	70.36%	80.89%	
Total	388	18562	18950
	2.05%	97.95%	

Table 36: FET Statistics All Cases METABRIC vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	9.158e-07
conf.int	[1.417, 2.233]
estimate	1.783
null.value	1
alternative	two.sided

Table 37: FET Table All Cases METABRIC vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

TCGA_ThyroidCa				
METABRIC	Age Associated	Not Age Associated	Total	
Age Associated				
N	5	338	343	
$\operatorname{Column}(\%)$	8.20%	1.79%		
Not Age Associated				
N	56	18551	18607	
$\operatorname{Column}(\%)$	91.80%	98.21%		
Total	61	18889	18950	
	0.32%	99.68%		

Table 38: FET Statistics All Cases METABRIC vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	0.004901
conf.int	[1.522, 12.24]
estimate	4.899
null.value	1
alternative	two.sided

Table 39: FET Table All Cases METABRIC vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

TCGA_ThyroidCa				
METABRIC	Age Associated	Not Age Associated	Total	
Age Associated				
N	0	31	31	
$\operatorname{Column}(\%)$	0.00%	0.16%		
Not Age Associated				
N	2	18917	18919	
$\operatorname{Column}(\%)$	100.00%	99.84%		
Total	2	18948	18950	
	0.01%	99.99%		

Table 40: FET Statistics All Cases METABRIC vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, 3450]
estimate	0
null.value	1
alternative	two.sided

TCGA Pairwise Comparisons

$TCGA_BrCa$ vs. $TCGA_KidneyCa$

Table 41: FET Table All Cases TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.05, FC = 1.25

TCGA_KidneyCa				
$TCGA_BrCa$	Age Associated	Not Age Associated	Total	
Age Associated				
$\mathbf N$	57	3980	4037	
$\operatorname{Column}(\%)$	32.2%	21.2%		
Not Age Associated				
\mathbf{N}	120	14793	14913	
$\operatorname{Column}(\%)$	67.8%	78.8%		
Total	177	18773	18950	
	0.93%	99.07%		

Table 42: FET Statistics All Cases TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	0.0008225
$\operatorname{conf.int}$	[1.262, 2.445]
estimate	1.765
null.value	1
alternative	two.sided

Table 43: FET Table All Cases TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.01, FC = 1.25

TCGA_BrCa	TCGA_KidneyCa Age Associated	Not Age Associated	Total
Age Associated			
N	10	3174	3184
$\operatorname{Column}(\%)$	43.48%	16.77%	
Not Age Associated			
N	13	15753	15766
Column(%)	56.52%	83.23%	
Total	23	18927	18950
	0.12%	99.88%	

Table 44: FET Statistics All Cases TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	0.002418
conf.int	[1.497, 9.432]
estimate	3.817
null.value	1
alternative	two.sided

Table 45: FET Table All Cases TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.01, FC = 2

$TCGA_BrCa$	TCGA_KidneyCa Age Associated	Not Age Associated	Total
Age Associated			
N	1	398	399
Column(%)	11.11%	2.10%	
Not Age Associated			
N	8	18543	18551
Column(%)	88.89%	97.90%	
Total	9	18941	18950
	0.05%	99.95%	

Table 46: FET Statistics All Cases TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	0.1743
conf.int	[0.1309, 43.57]
estimate	5.822
null.value	1
alternative	two.sided

Table 47: FET Table All Cases TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.01, FC = 4

TCGA_BrCa	TCGA_KidneyCa Age Associated	Not Age Associated	Total
Age Associated N	0	29	29
Not Age Associated Age Associated Not Age Associated			
N Total	0	18921	18921
Not Age Associated Total	0	18950	18950

Table 48: FET Statistics All Cases TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

TCGA_BrCa vs. TCGA_LungCa

Table 49: FET Table All Cases TCGA_BrCa vs. TCGA_LungCa, FDR = 0.05, FC = 1.25

TCGA_BrCa	TCGA_LungCa Age Associated	Not Age Associated	Total
Age Associated			
N	709	3328	4037
$\operatorname{Column}(\%)$	30.72%	20.00%	
Not Age Associated			
$^{-}$ N	1599	13314	14913
$\operatorname{Column}(\%)$	69.28%	80.00%	
Total	2308	16642	18950
	12.18%	87.82%	

Table 50: FET Statistics All Cases TCGA_BrCa vs. TCGA_LungCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value conf.int	7.696e-30 [1.609, 1.955]
${f estimate} \\ {f null.value}$	1.774 1
alternative	two.sided

Table 51: FET Table All Cases TCGA_BrCa vs. TCGA_LungCa, FDR = 0.01, FC = 1.25

TCGA_BrCa	TCGA_LungCa Age Associated	Not Age Associated	Total
Age Associated			
N	215	2969	3184
$\operatorname{Column}(\%)$	24.40%	16.43%	
Not Age Associated			
N	666	15100	15766
$\operatorname{Column}(\%)$	75.60%	83.57%	
Total	881	18069	18950
	4.65%	95.35%	

Table 52: FET Statistics All Cases TCGA_BrCa vs. TCGA_LungCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	3.885e-09
conf.int	[1.394, 1.928]
estimate	1.642
null.value	1
alternative	two.sided

Table 53: FET Table All Cases TCGA_BrCa vs. TCGA_LungCa, FDR = 0.01, FC = 2

TCGA_BrCa	TCGA_LungCa Age Associated	Not Age Associated	Total
Age Associated			
N	14	385	399
Column(%)	6.31%	2.06%	
Not Age Associated			
N	208	18343	18551
Column(%)	93.69%	97.94%	
Total	222	18728	18950
	1.17%	98.83%	

Table 54: FET Statistics All Cases TCGA_BrCa vs. TCGA_LungCa, FDR = 0.01, FC = 2

Value
0.0002721
[1.707, 5.569]
3.206
1
two.sided

Table 55: FET Table All Cases TCGA_BrCa vs. TCGA_LungCa, FDR = 0.01, FC = 4

TCGA_BrCa	TCGA_LungCa Age Associated	Not Age Associated	Total
Age Associated			
N	0	29	29
$\operatorname{Column}(\%)$	0.00%	0.15%	
Not Age Associated			
\mathbf{N}	11	18910	18921
$\operatorname{Column}(\%)$	100.00%	99.85%	
Total	11	18939	18950
	0.06%	99.94%	

Table 56: FET Statistics All Cases TCGA_BrCa vs. TCGA_LungCa, FDR = 0.01, FC = 4

Value
1
, 272.3]
U 1
o.sided

$TCGA_BrCa$ vs. $TCGA_ProstateCa$

Table 57: FET Table All Cases TCGA_BrCa vs. TCGA_ProstateCa, FDR = 0.05, FC = 1.25

$TCGA_BrCa$	TCGA_ProstateCa Age Associated	Not Age Associated	Total
Age Associated			
N	163	3874	4037
$\operatorname{Column}(\%)$	34.32%	20.97%	
Not Age Associated			
N	312	14601	14913
$\operatorname{Column}(\%)$	65.68%	79.03%	
Total	475	18475	18950
	2.51%	97.49%	

Table 58: FET Statistics All Cases TCGA_BrCa vs. TCGA_ProstateCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value conf.int estimate	3.098e-11 [1.614, 2.395] 1.969
null.value alternative	1.909 1 two.sided

Table 59: FET Table All Cases TCGA_BrCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 1.25

	TCGA_ProstateCa		
$TCGA_BrCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	5	3179	3184
$\operatorname{Column}(\%)$	17.24%	16.80%	
Not Age Associated			
N	24	15742	15766
$\operatorname{Column}(\%)$	82.76%	83.20%	
Total	29	18921	18950
	0.15%	99.85%	

Table 60: FET Statistics All Cases TCGA_BrCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value conf.int	1 [0.3072, 2.761]
estimate null.value	1.032 1
alternative	two.sided

Table 61: FET Table All Cases TCGA_BrCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 2

	TCGA_ProstateCa		
$TCGA_BrCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	0	399	399
Column(%)	0.00%	2.11%	
Not Age Associated			
N	8	18543	18551
Column(%)	100.00%	97.89%	
Total	8	18942	18950
	0.04%	99.96%	

Table 62: FET Statistics All Cases TCGA_BrCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, 27.32]
estimate	0
null.value	1
alternative	two.sided

Table 63: FET Table All Cases TCGA_BrCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 4

$TCGA_BrCa$	TCGA_ProstateCa Age Associated	Not Age Associated	Total
Age Associated			
N	0	29	29
Not Age Associated			
Age Associated			
Not Age Associated			
N	0	18921	18921
Total			
Not Age Associated			
Total	0	18950	18950

Table 64: FET Statistics All Cases TCGA_BrCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

TCGA_BrCa vs. TCGA_ThyroidCa

Table 65: FET Table All Cases TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

TCGA_ThyroidCa			
$TCGA_BrCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	369	3668	4037
Column(%)	39.68%	20.36%	
Not Age Associated			
N	561	14352	14913
Column(%)	60.32%	79.64%	
Total	930	18020	18950
	4.91%	95.09%	

Table 66: FET Statistics All Cases TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	7.154e-39
conf.int	[2.239, 2.955]
estimate	2.573
null.value	1
alternative	two.sided

Table 67: FET Table All Cases TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

	TCGA_ThyroidCa		
$TCGA_BrCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	115	3069	3184
$\operatorname{Column}(\%)$	29.64%	16.53%	
Not Age Associated			
N	273	15493	15766
Column(%)	70.36%	83.47%	
Total	388	18562	18950
	2.05%	97.95%	

Table 68: FET Statistics All Cases TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	2.47e-10
conf.int	[1.689, 2.663]
estimate	2.126
null.value	1
alternative	two.sided

Table 69: FET Table All Cases TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

	TCGA_ThyroidCa		
$TCGA_BrCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	5	394	399
$\operatorname{Column}(\%)$	8.20%	2.09%	
Not Age Associated			
N	56	18495	18551
$\operatorname{Column}(\%)$	91.80%	97.91%	
Total	61	18889	18950
	0.32%	99.68%	

Table 70: FET Statistics All Cases TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	0.009146
conf.int	[1.303, 10.46]
estimate	4.191
null.value	1
alternative	two.sided

Table 71: FET Table All Cases TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

	$TCGA_ThyroidCa$		
$TCGA_BrCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	0	29	29
$\operatorname{Column}(\%)$	0.00%	0.15%	
Not Age Associated			
N	2	18919	18921
Column(%)	100.00%	99.85%	
Total	2	18948	18950
	0.01%	99.99%	

Table 72: FET Statistics All Cases TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
$\begin{array}{c} { m conf.int} \\ { m estimate} \end{array}$	$[0, 3718] \\ 0$
null.value	1
alternative	two.sided

TCGA_KidneyCa vs. TCGA_LungCa

Table 73: FET Table All Cases TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.05, FC = 1.25

	TCGA_LungCa		_
TCGA_KidneyCa	Age Associated	Not Age Associated	Total
Age Associated			
$\mathbf N$	13	164	177
$\operatorname{Column}(\%)$	0.56%	0.99%	
Not Age Associated			
N	2295	16478	18773
$\operatorname{Column}(\%)$	99.44%	99.01%	
Total	2308	16642	18950
	12.18%	87.82%	

Table 74: FET Statistics All Cases TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.05, FC = 1.25

Value
0.04911
$[0.2962, 1.003] \\ 0.5692$
1 two.sided

Table 75: FET Table All Cases TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 1.25

	TCGA_LungCa		
TCGA_KidneyCa	Age Associated	Not Age Associated	Total
Age Associated			
N	0	23	23
$\operatorname{Column}(\%)$	0.00%	0.13%	
Not Age Associated			
N	881	18046	18927
$\operatorname{Column}(\%)$	100.00%	99.87%	
Total	881	18069	18950
	4.65%	95.35%	

Table 76: FET Statistics All Cases TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	0.6246
$\operatorname{conf.int}$	[0, 3.571]
estimate	0
null.value	1
alternative	two.sided

Table 77: FET Table All Cases TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 2

	TCGA_LungCa		
TCGA_KidneyCa	Age Associated	Not Age Associated	Total
Age Associated			
$\mathbf N$	0	9	9
$\operatorname{Column}(\%)$	0.00%	0.05%	
Not Age Associated			
N	222	18719	18941
$\operatorname{Column}(\%)$	100.00%	99.95%	
Total	222	18728	18950
	1.17%	98.83%	

Table 78: FET Statistics All Cases TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, 42.98]
estimate	0
null.value	1
alternative	two.sided

Table 79: FET Table All Cases TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 4

	TCGA_LungCa		
TCGA_KidneyCa	Age Associated	Not Age Associated	Total
Age Associated			
N	0	0	0
$\operatorname{Column}(\%)$	0%	0%	
Not Age Associated			
\mathbf{N}	11	18939	18950
$\operatorname{Column}(\%)$	100%	100%	
Total	11	18939	18950
	0.06%	99.94%	

Table 80: FET Statistics All Cases TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

$TCGA_KidneyCa$ vs. $TCGA_ProstateCa$

Table 81: FET Table All Cases TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.05, FC = 1.25

$TCGA_ProstateCa$				
TCGA_KidneyCa	Age Associated	Not Age Associated	Total	
Age Associated				
N	3	174	177	
$\operatorname{Column}(\%)$	0.63%	0.94%		
Not Age Associated				
N	472	18301	18773	
$\operatorname{Column}(\%)$	99.37%	99.06%		
Total	475	18475	18950	
	2.51%	97.49%		

Table 82: FET Statistics All Cases TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	0.8061
${ m conf.int} \ { m estimate}$	$[0.136, 1.999] \\ 0.6685$
null.value	1
alternative	two.sided

Table 83: FET Table All Cases TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 1.25

TCGA_KidneyCa	TCGA_ProstateCa Age Associated	Not Age Associated	Total
Age Associated			
\mathbf{N}	0	23	23
$\operatorname{Column}(\%)$	0.00%	0.12%	
Not Age Associated			
\mathbf{N}	29	18898	18927
$\operatorname{Column}(\%)$	100.00%	99.88%	
Total	29	18921	18950
	0.15%	99.85%	

Table 84: FET Statistics All Cases TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, 119.9]
estimate	0
null.value	1
alternative	two.sided

Table 85: FET Table All Cases TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 2

$TCGA_KidneyCa$	TCGA_ProstateCa Age Associated	Not Age Associated	Total
Age Associated			
N	0	9	9
$\operatorname{Column}(\%)$	0.00%	0.05%	
Not Age Associated			
N	8	18933	18941
$\operatorname{Column}(\%)$	100.00%	99.95%	
Total	8	18942	18950
	0.04%	99.96%	

Table 86: FET Statistics All Cases TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	1
conf.int	[0, 1373]
estimate	0
null.value	1
alternative	two.sided

Table 87: FET Table All Cases TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 4

TCGA_KidneyCa	TCGA_ProstateCa Age Associated	Not Age Associated	Total
Age Associated			
N	0	0	0
Not Age Associated			
Age Associated			
Not Age Associated			
N	0	18950	18950
Total			
Not Age Associated			
Total	0	18950	18950

Table 88: FET Statistics All Cases TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
conf.int	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

$TCGA_KidneyCa$ vs. $TCGA_ThyroidCa$

Table 89: FET Table All Cases TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

$TCGA_ThyroidCa$			
TCGA_KidneyCa	Age Associated	Not Age Associated	Total
Age Associated			
N	23	154	177
$\operatorname{Column}(\%)$	2.47%	0.85%	
Not Age Associated			
N	907	17866	18773
$\operatorname{Column}(\%)$	97.53%	99.15%	
Total	930	18020	18950
	4.91%	95.09%	

Table 90: FET Statistics All Cases TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	1.939e-05
$\begin{array}{c} { m conf.int} \\ { m estimate} \end{array}$	[1.801, 4.605] 2.942
null.value	1
alternative	two.sided

Table 91: FET Table All Cases TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

TCGA_ThyroidCa			
$TCGA_KidneyCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	5	18	23
$\operatorname{Column}(\%)$	1.29%	0.10%	
Not Age Associated			
N	383	18544	18927
Column(%)	98.71%	99.90%	
Total	388	18562	18950
	2.05%	97.95%	

Table 92: FET Statistics All Cases TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	8.705e-05
conf.int	[3.881, 37.82]
estimate	13.44
null.value	1
alternative	two.sided

Table 93: FET Table All Cases TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

TCGA_KidneyCa	TCGA_ThyroidCa Age Associated	Not Age Associated	Total
Age Associated			
N	2	7	9
$\operatorname{Column}(\%)$	3.28%	0.04%	
Not Age Associated			
N	59	18882	18941
$\operatorname{Column}(\%)$	96.72%	99.96%	
Total	61	18889	18950
	0.32%	99.68%	

Table 94: FET Statistics All Cases TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	0.0003616
conf.int	[9.055, 496.6]
estimate	91.07
null.value	1
alternative	two.sided

Table 95: FET Table All Cases TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

$TCGA_ThyroidCa$			
$TCGA_KidneyCa$	Age Associated	Not Age Associated	Total
Age Associated			
$^{\mathrm{N}}$	0	0	0
$\operatorname{Column}(\%)$	0%	0%	
Not Age Associated			
N	2	18948	18950
$\operatorname{Column}(\%)$	100%	100%	
Total	2	18948	18950
	0.01%	99.99%	

Table 96: FET Statistics All Cases TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
conf.int	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

$TCGA_LungCa$ vs. $TCGA_ProstateCa$

Table 97: FET Table All Cases TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.05, FC = 1.25

TCGA_LungCa	TCGA_ProstateCa Age Associated	Not Age Associated	Total
Age Associated			
N	111	2197	2308
$\operatorname{Column}(\%)$	23.37%	11.89%	
Not Age Associated			
N	364	16278	16642
$\operatorname{Column}(\%)$	76.63%	88.11%	
Total	475	18475	18950
	2.51%	97.49%	

Table 98: FET Statistics All Cases TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value conf.int	6.695e-12 [1.801, 2.816]
estimate null.value	2.259
alternative	two.sided

Table 99: FET Table All Cases TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 1.25

	TCGA_ProstateCa		
$TCGA_LungCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	2	879	881
$\operatorname{Column}(\%)$	6.90%	4.65%	
Not Age Associated			
N	27	18042	18069
$\operatorname{Column}(\%)$	93.10%	95.35%	
Total	29	18921	18950
	0.15%	99.85%	

Table 100: FET Statistics All Cases TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value conf.int	0.3931 [0.1749, 6.067]
$rac{ m estimate}{ m null.value}$	1.52 1
alternative	two.sided

Table 101: FET Table All Cases TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 2

	TCGA_ProstateCa		
$TCGA_LungCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	0	222	222
$\operatorname{Column}(\%)$	0.00%	1.17%	
Not Age Associated			
N	8	18720	18728
$\operatorname{Column}(\%)$	100.00%	98.83%	
Total	8	18942	18950
	0.04%	99.96%	

Table 102: FET Statistics All Cases TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	1
conf.int	[0, 49.7]
estimate	0
null.value	1
alternative	two.sided

Table 103: FET Table All Cases TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 4

	TOCA D 4 4 C		
$TCGA_LungCa$	TCGA_ProstateCa Age Associated	Not Age Associated	Total
Age Associated N Not Age Associated	0	11	11
Age Associated Not Age Associated N Total	0	18939	18939
Not Age Associated Total	0	18950	18950

Table 104: FET Statistics All Cases TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 4

Statistics	Value
p.value conf.int	$\begin{array}{c} 1 \\ [0, \mathrm{Inf}] \end{array}$
estimate null.value alternative	$egin{array}{c} 0 \\ 1 \\ { m two.sided} \end{array}$

TCGA_LungCa vs. TCGA_ThyroidCa

Table 105: FET Table All Cases TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

	TCGA_ThyroidCa		
$TCGA_LungCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	169	2139	2308
$\operatorname{Column}(\%)$	18.17%	11.87%	
Not Age Associated			
N	761	15881	16642
$\operatorname{Column}(\%)$	81.83%	88.13%	
Total	930	18020	18950
	4.91%	95.09%	

Table 106: FET Statistics All Cases TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value conf.int	5.788e-08 [1.379, 1.963]
estimate null.value	1.649
alternative	two.sided

Table 107: FET Table All Cases TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

TCCA LungCo	TCGA_ThyroidCa	Not Ama Aggasiated	Total
TCGA_LungCa	Age Associated	Not Age Associated	Total
Age Associated			
N	18	863	881
$\operatorname{Column}(\%)$	4.64%	4.65%	
Not Age Associated			
N	370	17699	18069
$\operatorname{Column}(\%)$	95.36%	95.35%	
Total	388	18562	18950
	2.05%	97.95%	

Table 108: FET Statistics All Cases TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0.5819, 1.609]
estimate	0.9977
null.value	1
alternative	two.sided

Table 109: FET Table All Cases TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

	TCGA_ThyroidCa		
$TCGA_LungCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	0	222	222
$\operatorname{Column}(\%)$	0.00%	1.18%	
Not Age Associated			
N	61	18667	18728
$\operatorname{Column}(\%)$	100.00%	98.82%	
Total	61	18889	18950
	0.32%	99.68%	

Table 110: FET Statistics All Cases TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, 5.285]
estimate	0
null.value	1
alternative	two.sided

Table 111: FET Table All Cases TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

TCGA_ThyroidCa			
$TCGA_LungCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	0	11	11
$\operatorname{Column}(\%)$	0.00%	0.06%	
Not Age Associated			
N	2	18937	18939
$\operatorname{Column}(\%)$	100.00%	99.94%	
Total	2	18948	18950
	0.01%	99.99%	

Table 112: FET Statistics All Cases TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
conf.int	[0, 8192]
estimate	0
null.value	1
alternative	two.sided

$TCGA_ProstateCa$ vs. $TCGA_ThyroidCa$

Table 113: FET Table All Cases TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

$TCGA_ThyroidCa$			
$TCGA_ProstateCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	31	444	475
$\operatorname{Column}(\%)$	3.33%	2.46%	
Not Age Associated			
N	899	17576	18475
$\operatorname{Column}(\%)$	96.67%	97.54%	
Total	930	18020	18950
	4.91%	95.09%	

Table 114: FET Statistics All Cases TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	0.1056
$\begin{array}{c} { m conf.int} \\ { m estimate} \end{array}$	$[0.9107, 1.98] \\ 1.365$
null.value	1
alternative	two.sided

Table 115: FET Table All Cases TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

TCGA_ProstateCa	TCGA_ThyroidCa Age Associated	Not Age Associated	Total
Age Associated			
N	0	29	29
Column(%)	0.00%	0.16%	
Not Age Associated			
N	388	18533	18921
$\operatorname{Column}(\%)$	100.00%	99.84%	
Total	388	18562	18950
	2.05%	97.95%	

Table 116: FET Statistics All Cases TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, 6.508]
estimate	0
null.value	1
alternative	two.sided

Table 117: FET Table All Cases TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

TCGA_ProstateCa	TCGA_ThyroidCa Age Associated	Not Age Associated	Total
Age Associated			
N	0	8	8
$\operatorname{Column}(\%)$	0.00%	0.04%	
Not Age Associated			
N	61	18881	18942
$\operatorname{Column}(\%)$	100.00%	99.96%	
Total	61	18889	18950
	0.32%	99.68%	

Table 118: FET Statistics All Cases TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, 185.2]
estimate	0
null.value	1
alternative	two.sided

Table 119: FET Table All Cases TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

TCGA ProstateCa	TCGA_ThyroidCa Age Associated	Not Age Associated	Total
Age Associated	0		
N	0	0	0
$\operatorname{Column}(\%)$	0%	0%	, and the second
Not Age Associated			
\mathbf{N}	2	18948	18950
$\operatorname{Column}(\%)$	100%	100%	
Total	2	18948	18950
	0.01%	99.99%	

Table 120: FET Statistics All Cases TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

Statistics	Value
p.value conf.int estimate	$\begin{bmatrix} 1 \\ [0, \operatorname{Inf}] \\ 0 \end{bmatrix}$
null.value alternative	$\frac{1}{\text{two.sided}}$

Within Gender Comparisons

Females

$TCGA_BrCa$ vs. $TCGA_KidneyCa$

Table 121: FET Table Females TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.05, FC = 1.25

TCGA_BrCa	TCGA_KidneyCa Age Associated	Not Age Associated	Total
	1180 11800014004	1100 Fige Fisheriated	10001
Age Associated			
N	0	4037	4037
Not Age Associated			
Age Associated			
Not Age Associated			
N	0	14913	14913
Total			
Not Age Associated			
Total	0	18950	18950

Table 122: FET Statistics Females TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	1
conf.int	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

Table 123: FET Table Females TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.01, FC = 1.25

TCGA BrCa	TCGA_KidneyCa Age Associated	Not Age Associated	Total
TOGA_DICa	Age Associated	Not Age Associated	10041
Age Associated			
N	0	3184	3184
Not Age Associated			
Age Associated			
Not Age Associated			
N	0	15766	15766
Total			
Not Age Associated			
Total	0	18950	18950

Table 124: FET Statistics Females TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

Table 125: FET Table Females TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.01, FC = 2

TCGA_BrCa	TCGA_KidneyCa Age Associated	Not Age Associated	Total
Age Associated	-		
N	0	399	399
Not Age Associated			
Age Associated			
Not Age Associated			
$\mathbf N$	0	18551	18551
Total			
Not Age Associated			
Total	0	18950	18950

Table 126: FET Statistics Females TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

Table 127: FET Table Females TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.01, FC = 4

TCGA_BrCa	TCGA_KidneyCa Age Associated	Not Age Associated	Total
Age Associated N	0	29	29
Not Age Associated Age Associated Not Age Associated			
N Total	0	18921	18921
Not Age Associated Total	0	18950	18950

Table 128: FET Statistics Females TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
conf.int	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

TCGA_BrCa vs. TCGA_LungCa

Table 129: FET Table Females TCGA_BrCa vs. TCGA_LungCa, FDR = 0.05, FC = 1.25

TCGA_BrCa	TCGA_LungCa Age Associated	Not Age Associated	Total
Age Associated			
N	166	3871	4037
$\operatorname{Column}(\%)$	31.14%	21.02%	
Not Age Associated			
N	367	14546	14913
Column(%)	68.86%	78.98%	
Total	533	18417	18950
	2.81%	97.19%	

Table 130: FET Statistics Females TCGA_BrCa vs. TCGA_LungCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value conf.int	6.939e-08 [1.401, 2.054]
estimate null.value	1.7 1
alternative	two.sided

Table 131: FET Table Females TCGA_BrCa vs. TCGA_LungCa, FDR = 0.01, FC = 1.25

$TCGA_BrCa$	TCGA_LungCa Age Associated	Not Age Associated	Total
Age Associated			
N	3	3181	3184
$\operatorname{Column}(\%)$	27.27%	16.80%	
Not Age Associated			
N	8	15758	15766
Column(%)	72.73%	83.20%	
Total	11	18939	18950
	0.06%	99.94%	

Table 132: FET Statistics Females TCGA_BrCa vs. TCGA_LungCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	0.4097
conf.int	[0.3172, 7.745]
estimate	1.858
null.value	1
alternative	two.sided

Table 133: FET Table Females TCGA_BrCa vs. TCGA_LungCa, FDR = 0.01, FC = 2

TCGA_BrCa	TCGA_LungCa Age Associated	Not Age Associated	Total
Age Associated			
N	0	399	399
$\operatorname{Column}(\%)$	0.00%	2.11%	
Not Age Associated			
N	9	18542	18551
$\operatorname{Column}(\%)$	100.00%	97.89%	
Total	9	18941	18950
	0.05%	99.95%	

Table 134: FET Statistics Females TCGA_BrCa vs. TCGA_LungCa, FDR = 0.01, FC = 2

Statistics	Value
	varue
p.value	1
$\operatorname{conf.int}$	[0, 23.62]
estimate	0
null.value	1
alternative	two.sided

Table 135: FET Table Females TCGA_BrCa vs. TCGA_LungCa, FDR = 0.01, FC = 4

$TCGA_BrCa$	TCGA_LungCa Age Associated	Not Age Associated	Total
Age Associated			
N	0	29	29
$\operatorname{Column}(\%)$	0.00%	0.15%	
Not Age Associated			
N	3	18918	18921
Column(%)	100.00%	99.85%	
Total	3	18947	18950
	0.02%	99.98%	

Table 136: FET Statistics Females TCGA_BrCa vs. TCGA_LungCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, 1644]
estimate	0
null.value	1
alternative	two.sided

TCGA_BrCa vs. TCGA_ThyroidCa

Table 137: FET Table Females TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

TCGA_ThyroidCa			
$TCGA_BrCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	219	3818	4037
$\operatorname{Column}(\%)$	35.61%	20.82%	
Not Age Associated			
N	396	14517	14913
Column(%)	64.39%	79.18%	
Total	615	18335	18950
	3.25%	96.75%	

Table 138: FET Statistics Females TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	1.418e-16
conf.int	[1.768, 2.496]
estimate	2.103
null.value	1
alternative	two.sided

Table 139: FET Table Females TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

	TCGA_ThyroidCa		
$TCGA_BrCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	41	3143	3184
$\operatorname{Column}(\%)$	26.45%	16.72%	
Not Age Associated			
\mathbf{N}	114	15652	15766
$\operatorname{Column}(\%)$	73.55%	83.28%	
Total	155	18795	18950
	0.82%	99.18%	

Table 140: FET Statistics Females TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	0.00234
conf.int	[1.219, 2.586]
estimate	1.791
null.value	1
alternative	two.sided

Table 141: FET Table Females TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

	TCGA_ThyroidCa		
$TCGA_BrCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	1	398	399
$\operatorname{Column}(\%)$	2.5%	2.1%	
Not Age Associated			
N	39	18512	18551
$\operatorname{Column}(\%)$	97.5%	97.9%	
Total	40	18910	18950
	0.21%	99.79%	

Table 142: FET Statistics Females TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	0.5735
conf.int	[0.02938, 7.086]
estimate	1.193
null.value	1
alternative	two.sided

Table 143: FET Table Females TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

	$TCGA_ThyroidCa$		
$TCGA_BrCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	0	29	29
$\operatorname{Column}(\%)$	0.00%	0.15%	
Not Age Associated			
N	1	18920	18921
$\operatorname{Column}(\%)$	100.00%	99.85%	
Total	1	18949	18950
	0.01%	99.99%	

Table 144: FET Statistics Females TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
conf.int	[0, 16380]
estimate	0
null.value	1
alternative	two.sided

TCGA_KidneyCa vs. TCGA_LungCa

Table 145: FET Table Females TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.05, FC = 1.25

	$TCGA_LungCa$		
TCGA_KidneyCa	Age Associated	Not Age Associated	Total
Age Associated			
N	0	0	0
$\operatorname{Column}(\%)$	0%	0%	
Not Age Associated			
N	533	18417	18950
$\operatorname{Column}(\%)$	100%	100%	
Total	533	18417	18950
	2.81%	97.19%	

Table 146: FET Statistics Females TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

Table 147: FET Table Females TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 1.25

	$TCGA_LungCa$		
TCGA_KidneyCa	Age Associated	Not Age Associated	Total
Age Associated			
N	0	0	0
$\operatorname{Column}(\%)$	0%	0%	
Not Age Associated			
N	11	18939	18950
$\operatorname{Column}(\%)$	100%	100%	
Total	11	18939	18950
	0.06%	99.94%	

Table 148: FET Statistics Females TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	1
conf.int	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

Table 149: FET Table Females TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 2

	$TCGA_LungCa$		
$TCGA_KidneyCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	0	0	0
$\operatorname{Column}(\%)$	0%	0%	
Not Age Associated			
N	9	18941	18950
$\operatorname{Column}(\%)$	100%	100%	
Total	9	18941	18950
	0.05%	99.95%	

Table 150: FET Statistics Females TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

Table 151: FET Table Females TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 4

TCGA_KidneyCa	TCGA_LungCa Age Associated	Not Age Associated	Total
Age Associated	G	8	
N	0	0	0
$\operatorname{Column}(\%)$	0%	0%	
Not Age Associated			
N	3	18947	18950
$\operatorname{Column}(\%)$	100%	100%	
Total	3	18947	18950
	0.02%	99.98%	

Table 152: FET Statistics Females TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

$TCGA_KidneyCa$ vs. $TCGA_ThyroidCa$

Table 153: FET Table Females TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

TCGA_KidneyCa	TCGA_ThyroidCa Age Associated	Not Age Associated	Total
Age Associated			
N	0	0	0
Column(%)	0%	0%	
Not Age Associated			
N	615	18335	18950
$\operatorname{Column}(\%)$	100%	100%	
Total	615	18335	18950
	3.25%	96.75%	

Table 154: FET Statistics Females TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

Table 155: FET Table Females TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

TCGA_ThyroidCa				
$TCGA_KidneyCa$	Age Associated	Not Age Associated	Total	
Age Associated				
N	0	0	0	
$\operatorname{Column}(\%)$	0%	0%		
Not Age Associated				
N	155	18795	18950	
Column(%)	100%	100%		
Total	155	18795	18950	
	0.82%	99.18%		

Table 156: FET Statistics Females TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

Table 157: FET Table Females TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

TCGA_KidneyCa	TCGA_ThyroidCa Age Associated	Not Age Associated	Total
Age Associated			
N	0	0	0
$\operatorname{Column}(\%)$	0%	0%	
Not Age Associated			
N	40	18910	18950
Column(%)	100%	100%	
Total	40	18910	18950
	0.21%	99.79%	

Table 158: FET Statistics Females TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

Statistics	Value
p.value conf.int estimate	$\begin{bmatrix} 1 \\ [0, \operatorname{Inf}] \\ 0 \end{bmatrix}$
null.value alternative	$\frac{1}{\text{two.sided}}$

Table 159: FET Table Females TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

TCGA_KidneyCa	TCGA_ThyroidCa Age Associated	Not Age Associated	Total
Age Associated			
N	0	0	0
$\operatorname{Column}(\%)$	0%	0%	
Not Age Associated			
N	1	18949	18950
Column(%)	100%	100%	
Total	1	18949	18950
	0.01%	99.99%	

Table 160: FET Statistics Females TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
conf.int	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

TCGA_LungCa vs. TCGA_ThyroidCa

Table 161: FET Table Females TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

$TCGA_ThyroidCa$			
$TCGA_LungCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	14	519	533
$\operatorname{Column}(\%)$	2.28%	2.83%	
Not Age Associated			
N	601	17816	18417
$\operatorname{Column}(\%)$	97.72%	97.17%	
Total	615	18335	18950
	3.25%	96.75%	

Table 162: FET Statistics Females TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	0.5338
${ m conf.int} \ { m estimate}$	$[0.4314, 1.365] \\ 0.7996$
null.value	1
alternative	two.sided

Table 163: FET Table Females TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

TCGA_ThyroidCa			
$TCGA_LungCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	0	11	11
$\operatorname{Column}(\%)$	0.00%	0.06%	
Not Age Associated			
N	155	18784	18939
$\operatorname{Column}(\%)$	100.00%	99.94%	
Total	155	18795	18950
	0.82%	99.18%	

Table 164: FET Statistics Females TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	1
conf.int	[0, 48.75]
estimate	0
null.value	1
alternative	two.sided

Table 165: FET Table Females TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

TCGA_ThyroidCa			
$TCGA_LungCa$	Age Associated	Not Age Associated	Total
Age Associated			
${f N}$	0	9	9
$\operatorname{Column}(\%)$	0.00%	0.05%	
Not Age Associated			
N	40	18901	18941
$\operatorname{Column}(\%)$	100.00%	99.95%	
Total	40	18910	18950
	0.21%	99.79%	

Table 166: FET Statistics Females TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, 247.2]
estimate	0
null.value	1
alternative	two.sided

Table 167: FET Table Females TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

TCGA_ThyroidCa			
$TCGA_LungCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	0	3	3
$\operatorname{Column}(\%)$	0.00%	0.02%	
Not Age Associated			
N	1	18946	18947
Column(%)	100.00%	99.98%	
Total	1	18949	18950
	0.01%	99.99%	

Table 168: FET Statistics Females TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
conf.int	[0, 4.504e+15]
estimate	0
null.value	1
alternative	two.sided

Males

$TCGA_KidneyCa$ vs. $TCGA_LungCa$

Table 169: FET Table Males TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.05, FC = 1.25

TCGA_KidneyCa	TCGA_LungCa Age Associated	Not Age Associated	Total
Age Associated			
N	0	45	45
$\operatorname{Column}(\%)$	0.00%	0.24%	
Not Age Associated			
N	315	18590	18905
$\operatorname{Column}(\%)$	100.00%	99.76%	
Total	315	18635	18950
	1.66%	98.34%	

Table 170: FET Statistics Males TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	1
conf.int	[0, 5.071]
estimate	0
null.value	1
alternative	two.sided

Table 171: FET Table Males TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 1.25

	TCGA_LungCa		_
TCGA_KidneyCa	Age Associated	Not Age Associated	Total
Age Associated			
N	0	9	9
$\operatorname{Column}(\%)$	0.00%	0.05%	
Not Age Associated			
N	24	18917	18941
$\operatorname{Column}(\%)$	100.00%	99.95%	
Total	24	18926	18950
	0.13%	99.87%	

Table 172: FET Statistics Males TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	1
conf.int	[0, 421.8]
estimate	0
null.value	1
alternative	two.sided

Table 173: FET Table Males TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 2

	$TCGA_LungCa$		
$TCGA_KidneyCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	0	5	5
$\operatorname{Column}(\%)$	0.00%	0.03%	
Not Age Associated			
N	17	18928	18945
Column(%)	100.00%	99.97%	
Total	17	18933	18950
	0.09%	99.91%	

Table 174: FET Statistics Males TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 2

Statistics	Value
p.value conf.int	1
estimate	$[0, 1337] \\ 0$
null.value alternative	1 two.sided

Table 175: FET Table Males TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 4

TCGA_KidneyCa	TCGA_LungCa Age Associated	Not Age Associated	Total
Age Associated			
N	0	1	1
Column(%)	0.00%	0.01%	
Not Age Associated			
N	2	18947	18949
$\operatorname{Column}(\%)$	100.00%	99.99%	
Total	2	18948	18950
	0.01%	99.99%	

Table 176: FET Statistics Males TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
conf.int	[0, 4.504e+15]
estimate	0
null.value	1
alternative	two.sided

$TCGA_KidneyCa$ vs. $TCGA_ProstateCa$

Table 177: FET Table Males TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.05, FC = 1.25

TCGA_KidneyCa	TCGA_ProstateCa Age Associated	Not Age Associated	Total
Age Associated			
N	1	44	45
$\operatorname{Column}(\%)$	0.21%	0.24%	
Not Age Associated			
N	474	18431	18905
$\operatorname{Column}(\%)$	99.79%	99.76%	
Total	475	18475	18950
	2.51%	97.49%	

Table 178: FET Statistics Males TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	1
conf.int	[0.02184, 5.211]
estimate	0.8837
null.value	1
alternative	two.sided

Table 179: FET Table Males TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 1.25

TCGA_ProstateCa				
$TCGA_KidneyCa$	Age Associated	Not Age Associated	Total	
Age Associated				
N	0	9	9	
Column(%)	0.00%	0.05%		
Not Age Associated				
N	29	18912	18941	
Column(%)	100.00%	99.95%		
Total	29	18921	18950	
	0.15%	99.85%		

Table 180: FET Statistics Males TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, 345.3]
estimate	0
null.value	1
alternative	two.sided

Table 181: FET Table Males TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 2

$TCGA_ProstateCa$			
TCGA_KidneyCa	Age Associated	Not Age Associated	Total
Age Associated			
N	0	5	5
$\operatorname{Column}(\%)$	0.00%	0.03%	
Not Age Associated			
N	8	18937	18945
$\operatorname{Column}(\%)$	100.00%	99.97%	
Total	8	18942	18950
	0.04%	99.96%	

Table 182: FET Statistics Males TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	1
conf.int	[0, 3262]
estimate	0
null.value	1
alternative	two.sided

Table 183: FET Table Males TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 4

TCGA_KidneyCa	TCGA_ProstateCa Age Associated	Not Age Associated	Total
Age Associated			
N	0	1	1
Not Age Associated			
Age Associated			
Not Age Associated			
N	0	18949	18949
Total			
Not Age Associated			
Total	0	18950	18950

Table 184: FET Statistics Males TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 4

Statistics	Value
p.value conf.int	1
estimate	$[0,\mathrm{Inf}] \ 0$
null.value	1
alternative	two.sided

$TCGA_KidneyCa$ vs. $TCGA_ThyroidCa$

Table 185: FET Table Males TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

	TCGA_ThyroidCa		_
TCGA_KidneyCa	Age Associated	Not Age Associated	Total
Age Associated			
\mathbf{N}	0	45	45
Not Age Associated			
Age Associated			
Not Age Associated			
N	0	18905	18905
Total			
Not Age Associated			
Total	0	18950	18950

Table 186: FET Statistics Males TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

Table 187: FET Table Males TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

$TCGA_ThyroidCa$		
Age Associated	Not Age Associated	Total
0	9	9
0	18941	18941
0	18950	18950
	Age Associated 0	Age Associated 0 9 18941

Table 188: FET Statistics Males TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

Table 189: FET Table Males TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

	TCGA_ThyroidCa		
$TCGA_KidneyCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	0	5	5
Not Age Associated			
Age Associated			
Not Age Associated			
N	0	18945	18945
Total			
Not Age Associated			
Total	0	18950	18950

Table 190: FET Statistics Males TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

Table 191: FET Table Males TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

TCGA_KidneyCa	TCGA_ThyroidCa Age Associated	Not Age Associated	Total
Age Associated N	0	1	1
Not Age Associated Age Associated	•		
Not Age Associated	0	10040	10040
N Total	0	18949	18949
Not Age Associated	_		
Total	0	18950	18950

Table 192: FET Statistics Males TCGA_KidneyCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

Statistics	Value
p.value conf.int	1
estimate	$[0,\mathrm{Inf}] \ 0$
null.value	1
alternative	two.sided

$TCGA_LungCa$ vs. $TCGA_ProstateCa$

Table 193: FET Table Males TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.05, FC = 1.25

$TCGA_ProstateCa$			
$TCGA_LungCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	9	306	315
Column(%)	1.89%	1.66%	
Not Age Associated			
N	466	18169	18635
$\operatorname{Column}(\%)$	98.11%	98.34%	
Total	475	18475	18950
	2.51%	97.49%	

Table 194: FET Statistics Males TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value conf.int	0.5877 [0.5161, 2.225]
estimate null.value	1.147
alternative	two.sided

Table 195: FET Table Males TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 1.25

$TCGA_ProstateCa$			
$TCGA_LungCa$	Age Associated	Not Age Associated	Total
Age Associated			
\mathbf{N}	0	24	24
$\operatorname{Column}(\%)$	0.00%	0.13%	
Not Age Associated			
N	29	18897	18926
$\operatorname{Column}(\%)$	100.00%	99.87%	
Total	29	18921	18950
	0.15%	99.85%	

Table 196: FET Statistics Males TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, 114.4]
estimate	0
null.value	1
alternative	two.sided

Table 197: FET Table Males TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 2

$TCGA_ProstateCa$			
$TCGA_LungCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	0	17	17
$\operatorname{Column}(\%)$	0.00%	0.09%	
Not Age Associated			
N	8	18925	18933
$\operatorname{Column}(\%)$	100.00%	99.91%	
Total	8	18942	18950
	0.04%	99.96%	

Table 198: FET Statistics Males TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, 697.7]
estimate	0
null.value	1
alternative	two.sided

Table 199: FET Table Males TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 4

	$TCGA_ProstateCa$		
$TCGA_LungCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	0	2	2
Not Age Associated			
Age Associated			
Not Age Associated			
$\mathbf N$	0	18948	18948
Total			
Not Age Associated			
Total	0	18950	18950

Table 200: FET Statistics Males TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
conf.int	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

TCGA_LungCa vs. TCGA_ThyroidCa

Table 201: FET Table Males TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

	TCGA_ThyroidCa		
TCGA_LungCa	Age Associated	Not Age Associated	Total
Age Associated			
N	0	315	315
Not Age Associated			
Age Associated			
Not Age Associated			
N	0	18635	18635
Total			
Not Age Associated			
Total	0	18950	18950

Table 202: FET Statistics Males TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	1
conf.int	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

Table 203: FET Table Males TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

TCGA_LungCa	TCGA_ThyroidCa Age Associated	Not Age Associated	Total
100H_Bungoa	11ge 11ssociated	1100 Fige Fissociated	10001
Age Associated			
N	0	24	24
Not Age Associated			
Age Associated			
Not Age Associated			
N	0	18926	18926
Total			
Not Age Associated			
Total	0	18950	18950

Table 204: FET Statistics Males TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	1
conf.int	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

Table 205: FET Table Males TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

	TCGA_ThyroidCa		
$TCGA_LungCa$	Age Associated	Not Age Associated	Total
Age Associated			
N	0	17	17
Not Age Associated			
Age Associated			
Not Age Associated			
N	0	18933	18933
Total			
Not Age Associated			
Total	0	18950	18950

Table 206: FET Statistics Males TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

Statistics	Value
p.value	1
conf.int	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

Table 207: FET Table Males TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

TCGA_LungCa	TCGA_ThyroidCa Age Associated	Not Age Associated	Total
Age Associated			
N	0	2	2
Not Age Associated			
Age Associated			
Not Age Associated			
N	0	18948	18948
Total			
Not Age Associated			
Total	0	18950	18950

Table 208: FET Statistics Males TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

Statistics	Value
p.value	1
conf.int	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

$TCGA_ProstateCa$ vs. $TCGA_ThyroidCa$

Table 209: FET Table Males TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

TCGA_ProstateCa	TCGA_ThyroidCa Age Associated	Not Age Associated	Total
Age Associated N Not Age Associated	0	475	475
Age Associated Not Age Associated N Total	0	18475	18475
Not Age Associated Total	0	18950	18950

Table 210: FET Statistics Males TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.05, FC = 1.25

Statistics	Value
p.value	1
conf.int	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

Table 211: FET Table Males TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

TCGA ProstateCa	TCGA_ThyroidCa Age Associated	Not Age Associated	Total
10011_11050000000	11ge 11ssociated	1100 Hgc Hisbociated	10001
Age Associated			
N	0	29	29
Not Age Associated			
Age Associated			
Not Age Associated			
N	0	18921	18921
Total			
Not Age Associated			
Total	0	18950	18950

Table 212: FET Statistics Males TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25

Statistics	Value
p.value	1
$\operatorname{conf.int}$	[0, Inf]
estimate	0
null.value	1
alternative	two.sided

Table 213: FET Table Males TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

TCGA ProstateCa	TCGA_ThyroidCa Age Associated	Not Age Associated	Total
Age Associated	g		
N	0	8	8
Not Age Associated			
Age Associated			
Not Age Associated			
N	0	18942	18942
Total			
Not Age Associated			
Total	0	18950	18950

Table 214: FET Statistics Males TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 2

Statistics	Value
p.value conf.int	1
estimate	$[0,\mathrm{Inf}] \ 0$
null.value	1
alternative	two.sided

Table 215: FET Table Males TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

TCCA DrogtateCo	TCGA_ThyroidCa Age Associated	Not Ama Aggasiated	Total
TCGA_ProstateCa	Age Associated	Not Age Associated	Total
Age Associated			
N	0	0	0
Not Age Associated			
Age Associated			
Not Age Associated			
N	0	18950	18950
Total			
Not Age Associated			
Total	0	18950	18950

Table 216: FET Statistics Males TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4

Statistics	Value
p.value conf.int	1
estimate	$[0,\mathrm{Inf}] \ 0$
null.value	1
alternative	two.sided

Multiple Comparison Adjustments

All Cases

Table 217: All Cases Original and Adjusted p-values

	pvals_all	adj_pvals_all
METABRIC vs. $TCGA_BrCa$, $FDR = 0.05$, $FC = 1.25$	0	0
METABRIC vs. $TCGA_BrCa$, $FDR = 0.01$, $FC = 1.25$	0	0
METABRIC vs. $TCGA_BrCa$, $FDR = 0.01$, $FC = 2$	6.86e-179	1.372e-177
METABRIC vs. $TCGA_BrCa$, $FDR = 0.01$, $FC = 4$	1.018e-24	1.018e-23
METABRIC vs. $TCGA$ _KidneyCa, $FDR = 0.05$, $FC =$	0.05612	0.1161
1.25		
METABRIC vs. TCGA_KidneyCa, FDR = 0.01 , FC = 1.25	0.02923	0.06496
METABRIC vs. $TCGA$ _KidneyCa, $FDR = 0.01$, $FC = 2$	0.1516	0.2935
METABRIC vs. $TCGA$ _KidneyCa, $FDR = 0.01$, $FC = 4$	1	1
METABRIC vs. $TCGA_LungCa$, $FDR = 0.05$, $FC = 1.25$	2.128e-22	1.824e-21
METABRIC vs. $TCGA_LungCa$, $FDR = 0.01$, $FC = 1.25$	1.509e-08	6.966e-08
METABRIC vs. $TCGA$ _LungCa, $FDR = 0.01$, $FC = 2$	0.0007597	0.002171
METABRIC vs. $TCGA_LungCa$, $FDR = 0.01$, $FC = 4$	0.01785	0.0412
METABRIC vs. TCGA_ProstateCa, FDR = 0.05, FC =	4.078e-07	1.631e-06
1.25	2.0.00 0.	1.0010 00
METABRIC vs. TCGA_ProstateCa, FDR = 0.01 , FC = 1.25	0.4832	0.8527
METABRIC vs. $TCGA_ProstateCa$, $FDR = 0.01$, $FC = 2$	1	1
METABRIC vs. $TCGA$ _ProstateCa, $FDR = 0.01$, $FC = 2$ METABRIC vs. $TCGA$ _ProstateCa, $FDR = 0.01$, $FC = 4$	1	1
METABRIC vs. TCGA_TrostateCa, FDR = 0.01, FC = 4 METABRIC vs. TCGA_ThyroidCa, FDR = 0.05, FC =	2.414e-18	1.81e-17
1.25	2.4140-10	1.010-17
METABRIC vs. TCGA_ThyroidCa, FDR = 0.01, FC =	9.158e-07	3.434e-06
1.25	9.1006-07	3.4346-00
METABRIC vs. $TCGA$ _ThyroidCa, $FDR = 0.01$, $FC = 2$	0.004901	0.01225
METABRIC vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4	1	0.01225
$TCGA_BrCa$ vs. $TCGA_KidneyCa$, $FDR = 0.05$, $FC = 4$	0.0008225	0.002243
1.25	0.0000229	0.002249
$TCGA_BrCa$ vs. $TCGA_KidneyCa$, $FDR = 0.01$, $FC =$	0.002418	0.006309
1.25	0.002410	0.000903
$TCGA_BrCa$ vs. $TCGA_KidneyCa$, $FDR = 0.01$, $FC = 2$	0.1743	0.3269
$TCGA_BrCa$ vs. $TCGA_KidneyCa$, $FDR = 0.01$, $FC = 4$	1	1
TCGA_BrCa vs. TCGA_LungCa, FDR = 0.05, FC =	7.696e-30	9.235e-29
1.25	1.0000 00	0.2000 20
$TCGA_BrCa$ vs. $TCGA_LungCa$, $FDR = 0.01$, $FC =$	3.885e-09	1.942e-08
1.25	0.0000 00	1.0120 00
$TCGA_BrCa$ vs. $TCGA_LungCa$, $FDR = 0.01$, $FC = 2$	0.0002721	0.0008593
$TCGA_BrCa$ vs. $TCGA_LungCa$, $FDR = 0.01$, $FC = 4$	1	1
TCGA_BrCa vs. TCGA_ProstateCa, FDR = 0.05, FC =	3.098e-11	1.859e-10
1.25	0.0000 11	1.0000 10
$TCGA_BrCa$ vs. $TCGA_ProstateCa$, $FDR = 0.01$, $FC =$	1	1
1.25	1	1
$TCGA_BrCa$ vs. $TCGA_ProstateCa$, $FDR = 0.01$, $FC = 2$	1	1
$TCGA_BrCa$ vs. $TCGA_ProstateCa$, $FDR = 0.01$, $FC =$	1	1
4		

	pvals_all	adj_pvals_all
$\overline{\text{TCGA_BrCa vs. TCGA_ThyroidCa, FDR}} = 0.05, \text{ FC} = 1.25$	7.154e-39	1.073e-37
$TCGA_BrCa$ vs. $TCGA_ThyroidCa$, $FDR = 0.01$, $FC = 1.25$	2.47e-10	1.347e-09
$TCGA_BrCa$ vs. $TCGA_ThyroidCa$, $FDR = 0.01$, $FC = \frac{2}{3}$	0.009146	0.02195
$TCGA_BrCa$ vs. $TCGA_ThyroidCa$, $FDR = 0.01$, $FC = \frac{1}{4}$	1	1
$TCGA_KidneyCa \text{ vs. } TCGA_LungCa, FDR = 0.05, FC$ $= 1.25$	0.04911	0.1052
$TCGA$ _KidneyCa vs. $TCGA$ _LungCa, $FDR = 0.01$, $FC = 1.25$	0.6246	1
-1.25 -1.2	1	1
TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 4	1	1
$TCGA_KidneyCa$ vs. $TCGA_ProstateCa$, $FDR=0.05$, $FC=1.25$	0.8061	1
$TCGA$ _KidneyCa vs. $TCGA$ _ProstateCa, $FDR = 0.01$, $FC = 1.25$	1	1
$TC = 1.25$ $TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.01,$ $FC = 2$	1	1
$TC = 2$ $TCGA$ _KidneyCa vs. $TCGA$ _ProstateCa, $FDR = 0.01$, $FC = 4$	1	1
$TCGA$ _KidneyCa vs. $TCGA$ _ThyroidCa, $FDR = 0.05$, $FC = 1.25$	1.939e-05	6.843 e-05
$TC = 1.25$ $TCGA$ _KidneyCa vs. $TCGA$ _ThyroidCa, $FDR = 0.01$, $FC = 1.25$	8.705 e-05	0.0002902
$TC = 1.25$ $TCGA$ _KidneyCa vs. $TCGA$ _ThyroidCa, $FDR = 0.01$, $FC = 2$	0.0003616	0.001085
$TCGA$ _KidneyCa vs. $TCGA$ _ThyroidCa, $FDR = 0.01$, $FC = 4$	1	1
$TCGA_LungCa$ vs. $TCGA_ProstateCa$, $FDR = 0.05$, $FC = 1.25$	6.695 e-12	4.463e-11
$TCGA_LungCa$ vs. $TCGA_ProstateCa$, $FDR = 0.01$, $FC = 1.25$	0.3931	0.7148
-1.25 -1.2	1	1
$TCGA_LungCa$ vs. $TCGA_ProstateCa$, $FDR = 0.01$, $FC = 4$	1	1
TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.05 , FC = 1.25	5.788e-08	2.481e-07
$TCGA_LungCa$ vs. $TCGA_ThyroidCa$, $FDR = 0.01$, $FC = 1.25$	1	1
TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01 , FC = 2	1	1
TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01 , FC = 4	1	1
$TCGA_ProstateCa$ vs. $TCGA_ThyroidCa$, $FDR=0.05$, $FC=1.25$	0.1056	0.2113
$egin{aligned} ext{FC} &= 1.25 \ ext{TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR} &= 0.01, \ ext{FC} &= 1.25 \end{aligned}$	1	1

	$pvals_all$	adj_pvals_all
$TCGA_ProstateCa$ vs. $TCGA_ThyroidCa$, $FDR = 0.01$,	1	1
$FC=2$ $TCGA_ProstateCa$ vs. $TCGA_ThyroidCa$, $FDR=0.01$, $FC=4$	1	1

The table contains 60 tests due to 15 pairwise comparisons of 6 datasets, on 4 biological significance levels.

Females

Table 218: Female Cases Original and Adjusted p-values

	pvals_F	adj_pvals_F
TCGA_BrCa vs. TCGA_KidneyCa, FDR = 0.05, FC =	1	1
1.25	1	1
$TCGA_BrCa$ vs. $TCGA_KidneyCa$, $FDR = 0.01$, $FC =$	1	1
1.25	-	-
$TCGA_BrCa$ vs. $TCGA_KidneyCa$, $FDR = 0.01$, $FC = 2$	1	1
$TCGA_BrCa$ vs. $TCGA_KidneyCa$, $FDR = 0.01$, $FC = 4$	1	1
$TCGA_BrCa$ vs. $TCGA_LungCa$, $FDR = 0.05$, $FC = 1.25$	6.939 e-08	8.326e-07
$TCGA_BrCa$ vs. $TCGA_LungCa$, $FDR = 0.01$, $FC = 1.25$	0.4097	1
$\overline{\text{TCGA}}$ _BrCa vs. $\overline{\text{TCGA}}$ _LungCa, $\overline{\text{FDR}} = 0.01$, $\overline{\text{FC}} = 2$	1	1
$TCGA_BrCa$ vs. $TCGA_LungCa$, $FDR = 0.01$, $FC = 4$	1	1
TCGA_BrCa vs. TCGA_ThyroidCa, FDR = 0.05, FC =	1.418e-16	3.404e-15
- 1.25		
$TCGA_BrCa$ vs. $TCGA_ThyroidCa$, $FDR = 0.01$, $FC =$	0.00234	0.01872
- 1.25		
$TCGA_BrCa$ vs. $TCGA_ThyroidCa$, $FDR = 0.01$, $FC = 2$	0.5735	1
$TCGA_BrCa$ vs. $TCGA_ThyroidCa$, $FDR = 0.01$, $FC = 4$	1	1
TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.05, FC =	1	1
$\overline{1.25}$		
$TCGA_KidneyCa$ vs. $TCGA_LungCa$, $FDR = 0.01$, $FC = 1.25$	1	1
$TCGA$ _KidneyCa vs. $TCGA$ _LungCa, $FDR = 0.01$, $FC = 2$	1	1
$TCGA$ _KidneyCa vs. $TCGA$ _LungCa, $FDR = 0.01$, $FC = 4$	1	1
$TCGA_KidneyCa$ vs. $TCGA_ThyroidCa$, $FDR=0.05$, $FC=1.25$	1	1
$TCGA$ _KidneyCa vs. $TCGA$ _ThyroidCa, $FDR = 0.01$, $FC = 1.25$	1	1
$TCGA$ _KidneyCa vs. $TCGA$ _ThyroidCa, $FDR = 0.01$, $FC = 2$	1	1
$TC = 2$ $TCGA$ _KidneyCa vs. $TCGA$ _ThyroidCa, $FDR = 0.01$, $FC = 4$	1	1
$TCGA_LungCa$ vs. $TCGA_ThyroidCa$, $FDR=0.05$, FC	0.5338	1
$= 1.25$ TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC	1	1
$= 1.25$ TCGA_LungCa vs. TCGA_ThyroidCa, FDR $= 0.01$, FC	1	1
= 2		

	pvals_F	adj_pvals_F
TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 4	1	1

The table contains 24 tests due to 6 pairwise comparisons of 4 datasets, on 4 biological significance levels.

Males

Table 219: Male Cases Original and Adjusted p-values

	pvals_M	adj_pvals_M
$TCGA$ _KidneyCa vs. $TCGA$ _LungCa, $FDR = 0.05$, $FC = 1.25$	1	1
TCGA_KidneyCa vs. TCGA_LungCa, FDR = 0.01, FC = 1.25	1	1
$TCGA$ _KidneyCa vs. $TCGA$ _LungCa, $FDR = 0.01$, $FC = 2$	1	1
$TCGA$ _KidneyCa vs. $TCGA$ _LungCa, $FDR = 0.01$, $FC = 4$	1	1
$TCGA_KidneyCa$ vs. $TCGA_ProstateCa$, $FDR = 0.05$, $FC = 1.25$	1	1
$TCGA_KidneyCa$ vs. $TCGA_ProstateCa$, $FDR = 0.01$, $FC = 1.25$	1	1
$TCGA_KidneyCa$ vs. $TCGA_ProstateCa$, $FDR = 0.01$, $FC = 2$	1	1
TCGA_KidneyCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 4	1	1
$TCGA$ _KidneyCa vs. $TCGA$ _ThyroidCa, $FDR = 0.05$, $FC = 1.25$	1	1
$TCGA$ _KidneyCa vs. $TCGA$ _ThyroidCa, $FDR = 0.01$, $FC = 1.25$	1	1
$TCGA$ _KidneyCa vs. $TCGA$ _ThyroidCa, $FDR = 0.01$, $FC = 2$	1	1
$TCGA$ _KidneyCa vs. $TCGA$ _ThyroidCa, $FDR = 0.01$, $FC = 4$	1	1
TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.05, FC = 1.25	0.5877	1
TCGA_LungCa vs. TCGA_ProstateCa, FDR = 0.01, FC = 1.25	1	1
$TCGA_LungCa$ vs. $TCGA_ProstateCa$, $FDR = 0.01$, $FC = 2$	1	1
$TCGA_LungCa$ vs. $TCGA_ProstateCa$, $FDR = 0.01$, $FC = 4$	1	1
TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.05, FC =	1	1
TCGA_LungCa vs. TCGA_ThyroidCa, FDR = 0.01, FC = 1.25	1	1
$TCGA_LungCa$ vs. $TCGA_ThyroidCa$, $FDR = 0.01$, $FC = 2$	1	1
$TCGA_LungCa$ vs. $TCGA_ThyroidCa$, $FDR = 0.01$, $FC = 4$	1	1
TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.05 , FC = 1.25	1	1

	pvals_M	adj_pvals_M
$\overline{ ext{TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR}} = 0.01, \text{FC}$	1	1
=1.25		
$TCGA_ProstateCa$ vs. $TCGA_ThyroidCa$, $FDR = 0.01$, FC	1	1
$= 2$ TCGA_ProstateCa vs. TCGA_ThyroidCa, FDR = 0.01, FC	1	1
= 4	1	1
=4		

The table contains 24 tests due to 6 pairwise comparisons of 4 datasets, on 4 biological significance levels.