TCGA BrCa Female Cases Age Dependent Fisher Exact Tests on ER binding

April 16, 2018

# FET Tables by ER/HER2 status

## All Female Cases, n = 1079, FDR = 0.05

FET Table All Female Cases, FDR = 0.05

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Column(%) | 512 12.68% | 1166 7.82% | 1678 |
| **Not ER binding** N Column(%) | 3525 87.32% | 13747 92.18% | 17272 |
| Total | 4037 21.3% | 14913 78.7% | 18950 |

FET Statistics All Female Cases, FDR = 0.05

|  |  |
| --- | --- |
| Statistics | Value |
| p.value | 2.014e-20 |
| conf.int | [1.53, 1.914] |
| estimate | 1.712 |
| null.value | 1 |
| alternative | two.sided |

## ER+/HER2- Female Cases, n = 538, FDR = 0.05

FET Table ER+/HER2- Female Cases, FDR = 0.05

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Column(%) | 375 11.86% | 1303 8.25% | 1678 |
| **Not ER binding** N Column(%) | 2788 88.14% | 14484 91.75% | 17272 |
| Total | 3163 16.69% | 15787 83.31% | 18950 |

FET Statistics ER+/HER2- Female Cases, FDR = 0.05

|  |  |
| --- | --- |
| Statistics | Value |
| p.value | 3.161e-10 |
| conf.int | [1.32, 1.691] |
| estimate | 1.495 |
| null.value | 1 |
| alternative | two.sided |

## ER+/HER2+ Female Cases, n = 134, FDR = 0.05

FET Table ER+/HER2+ Female Cases, FDR = 0.05

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Column(%) | 18 13.04% | 1660 8.82% | 1678 |
| **Not ER binding** N Column(%) | 120 86.96% | 17152 91.18% | 17272 |
| Total | 138 0.73% | 18812 99.27% | 18950 |

FET Statistics ER+/HER2+ Female Cases, FDR = 0.05

|  |  |
| --- | --- |
| Statistics | Value |
| p.value | 0.09577 |
| conf.int | [0.886, 2.564] |
| estimate | 1.55 |
| null.value | 1 |
| alternative | two.sided |

## ER-/HER2+ Female Cases, n = 43, FDR = 0.05

FET Table ER-/HER2+ Female Cases, FDR = 0.05

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Not ER binding ER binding | 0 | 1678 | 1678 |
| **Not ER binding** N Total Not ER binding | 0 | 17272 | 17272 |
| Total | 0 | 18950 | 18950 |

FET Statistics ER-/HER2+ Female Cases, FDR = 0.05

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

## ER-/HER2- Female Cases, n = 155, FDR = 0.05

FET Table ER-/HER2- Female Cases, FDR = 0.05

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Not ER binding ER binding | 0 | 1678 | 1678 |
| **Not ER binding** N Total Not ER binding | 0 | 17272 | 17272 |
| Total | 0 | 18950 | 18950 |

FET Statistics ER-/HER2- Female Cases, FDR = 0.05

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

## All Female Cases, n = 1079, FDR = 0.01

FET Table All Female Cases, FDR = 0.01

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Column(%) | 397 12.47% | 1281 8.13% | 1678 |
| **Not ER binding** N Column(%) | 2787 87.53% | 14485 91.87% | 17272 |
| Total | 3184 16.8% | 15766 83.2% | 18950 |

FET Statistics All Female Cases, FDR = 0.01

|  |  |
| --- | --- |
| Statistics | Value |
| p.value | 4.248e-14 |
| conf.int | [1.425, 1.817] |
| estimate | 1.611 |
| null.value | 1 |
| alternative | two.sided |

## ER+/HER2- Female Cases, n = 538, FDR = 0.01

FET Table ER+/HER2- Female Cases, FDR = 0.01

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Column(%) | 252 12.98% | 1426 8.38% | 1678 |
| **Not ER binding** N Column(%) | 1689 87.02% | 15583 91.62% | 17272 |
| Total | 1941 10.24% | 17009 89.76% | 18950 |

FET Statistics ER+/HER2- Female Cases, FDR = 0.01

|  |  |
| --- | --- |
| Statistics | Value |
| p.value | 1.568e-10 |
| conf.int | [1.407, 1.883] |
| estimate | 1.63 |
| null.value | 1 |
| alternative | two.sided |

## ER+/HER2+ Female Cases, n = 134, FDR = 0.01

FET Table ER+/HER2+ Female Cases, FDR = 0.01

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Column(%) | 2 18.18% | 1676 8.85% | 1678 |
| **Not ER binding** N Column(%) | 9 81.82% | 17263 91.15% | 17272 |
| Total | 11 0.06% | 18939 99.94% | 18950 |

FET Statistics ER+/HER2+ Female Cases, FDR = 0.01

|  |  |
| --- | --- |
| Statistics | Value |
| p.value | 0.254 |
| conf.int | [0.2405, 11.07] |
| estimate | 2.289 |
| null.value | 1 |
| alternative | two.sided |

## ER-/HER2+ Female Cases, n = 43, FDR = 0.01

FET Table ER-/HER2+ Female Cases, FDR = 0.01

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Not ER binding ER binding | 0 | 1678 | 1678 |
| **Not ER binding** N Total Not ER binding | 0 | 17272 | 17272 |
| Total | 0 | 18950 | 18950 |

FET Statistics ER-/HER2+ Female Cases, FDR = 0.01

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

## ER-/HER2- Female Cases, n = 155, FDR = 0.01

FET Table ER-/HER2- Female Cases, FDR = 0.01

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Not ER binding ER binding | 0 | 1678 | 1678 |
| **Not ER binding** N Total Not ER binding | 0 | 17272 | 17272 |
| Total | 0 | 18950 | 18950 |

FET Statistics ER-/HER2- Female Cases, FDR = 0.01

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

# FET Tables by IntClust subgroups

## IntClust1 Female Cases, n = 75, FDR = 0.05

FET Table IntClust1 Female Cases, FDR = 0.05

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Column(%) | 0 0.00% | 1678 8.86% | 1678 |
| **Not ER binding** N Column(%) | 11 100.00% | 17261 91.14% | 17272 |
| Total | 11 0.06% | 18939 99.94% | 18950 |

FET Statistics IntClust1 Female Cases, FDR = 0.05

|  |  |
| --- | --- |
| Statistics | Value |
| p.value | 0.6145 |
| conf.int | [0, 4.103] |
| estimate | 0 |
| null.value | 1 |
| alternative | two.sided |

## IntClust2 Female Cases, n = 38, FDR = 0.05

FET Table IntClust2 Female Cases, FDR = 0.05

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Not ER binding ER binding | 0 | 1678 | 1678 |
| **Not ER binding** N Total Not ER binding | 0 | 17272 | 17272 |
| Total | 0 | 18950 | 18950 |

FET Statistics IntClust2 Female Cases, FDR = 0.05

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

## IntClust3 Female Cases, n = 181, FDR = 0.05

FET Table IntClust3 Female Cases, FDR = 0.05

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Column(%) | 94 14.35% | 1584 8.66% | 1678 |
| **Not ER binding** N Column(%) | 561 85.65% | 16711 91.34% | 17272 |
| Total | 655 3.46% | 18295 96.54% | 18950 |

FET Statistics IntClust3 Female Cases, FDR = 0.05

|  |  |
| --- | --- |
| Statistics | Value |
| p.value | 2.406e-06 |
| conf.int | [1.397, 2.217] |
| estimate | 1.768 |
| null.value | 1 |
| alternative | two.sided |

## IntClust4 Female Cases, n = 165, FDR = 0.05

FET Table IntClust4 Female Cases, FDR = 0.05

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Column(%) | 13 18.57% | 1665 8.82% | 1678 |
| **Not ER binding** N Column(%) | 57 81.43% | 17215 91.18% | 17272 |
| Total | 70 0.37% | 18880 99.63% | 18950 |

FET Statistics IntClust4 Female Cases, FDR = 0.05

|  |  |
| --- | --- |
| Statistics | Value |
| p.value | 0.009343 |
| conf.int | [1.182, 4.371] |
| estimate | 2.358 |
| null.value | 1 |
| alternative | two.sided |

## IntClust5 Female Cases, n = 84, FDR = 0.05

FET Table IntClust5 Female Cases, FDR = 0.05

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Column(%) | 0 0.00% | 1678 8.86% | 1678 |
| **Not ER binding** N Column(%) | 2 100.00% | 17270 91.14% | 17272 |
| Total | 2 0.01% | 18948 99.99% | 18950 |

FET Statistics IntClust5 Female Cases, FDR = 0.05

|  |  |
| --- | --- |
| Statistics | Value |
| p.value | 1 |
| conf.int | [0, 54.85] |
| estimate | 0 |
| null.value | 1 |
| alternative | two.sided |

## IntClust6 Female Cases, n = 60, FDR = 0.05

FET Table IntClust6 Female Cases, FDR = 0.05

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Not ER binding ER binding | 0 | 1678 | 1678 |
| **Not ER binding** N Total Not ER binding | 0 | 17272 | 17272 |
| Total | 0 | 18950 | 18950 |

FET Statistics IntClust6 Female Cases, FDR = 0.05

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

## IntClust7 Female Cases, n = 100, FDR = 0.05

FET Table IntClust7 Female Cases, FDR = 0.05

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Column(%) | 0 0.00% | 1678 8.86% | 1678 |
| **Not ER binding** N Column(%) | 4 100.00% | 17268 91.14% | 17272 |
| Total | 4 0.02% | 18946 99.98% | 18950 |

FET Statistics IntClust7 Female Cases, FDR = 0.05

|  |  |
| --- | --- |
| Statistics | Value |
| p.value | 1 |
| conf.int | [0, 15.6] |
| estimate | 0 |
| null.value | 1 |
| alternative | two.sided |

## IntClust8 Female Cases, n = 145, FDR = 0.05

FET Table IntClust8 Female Cases, FDR = 0.05

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Column(%) | 144 14.05% | 1534 8.56% | 1678 |
| **Not ER binding** N Column(%) | 881 85.95% | 16391 91.44% | 17272 |
| Total | 1025 5.41% | 17925 94.59% | 18950 |

FET Statistics IntClust8 Female Cases, FDR = 0.05

|  |  |
| --- | --- |
| Statistics | Value |
| p.value | 1.776e-08 |
| conf.int | [1.443, 2.102] |
| estimate | 1.746 |
| null.value | 1 |
| alternative | two.sided |

## IntClust9 Female Cases, n = 74, FDR = 0.05

FET Table IntClust9 Female Cases, FDR = 0.05

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Not ER binding ER binding | 0 | 1678 | 1678 |
| **Not ER binding** N Total Not ER binding | 0 | 17272 | 17272 |
| Total | 0 | 18950 | 18950 |

FET Statistics IntClust9 Female Cases, FDR = 0.05

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

## IntClust10 Female Cases, n = 157, FDR = 0.05

FET Table IntClust10 Female Cases, FDR = 0.05

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Not ER binding ER binding | 0 | 1678 | 1678 |
| **Not ER binding** N Total Not ER binding | 0 | 17272 | 17272 |
| Total | 0 | 18950 | 18950 |

FET Statistics IntClust10 Female Cases, FDR = 0.05

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

## IntClust1 Female Cases, n = 75, FDR = 0.01

FET Table IntClust1 Female Cases, FDR = 0.01

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Not ER binding ER binding | 0 | 1678 | 1678 |
| **Not ER binding** N Total Not ER binding | 0 | 17272 | 17272 |
| Total | 0 | 18950 | 18950 |

FET Statistics IntClust1 Female Cases, FDR = 0.01

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

## IntClust2 Female Cases, n = 38, FDR = 0.01

FET Table IntClust2 Female Cases, FDR = 0.01

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Not ER binding ER binding | 0 | 1678 | 1678 |
| **Not ER binding** N Total Not ER binding | 0 | 17272 | 17272 |
| Total | 0 | 18950 | 18950 |

FET Statistics IntClust2 Female Cases, FDR = 0.01

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

## IntClust3 Female Cases, n = 181, FDR = 0.01

FET Table IntClust3 Female Cases, FDR = 0.01

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Column(%) | 24 13.56% | 1654 8.81% | 1678 |
| **Not ER binding** N Column(%) | 153 86.44% | 17119 91.19% | 17272 |
| Total | 177 0.93% | 18773 99.07% | 18950 |

FET Statistics IntClust3 Female Cases, FDR = 0.01

|  |  |
| --- | --- |
| Statistics | Value |
| p.value | 0.03285 |
| conf.int | [1.006, 2.516] |
| estimate | 1.623 |
| null.value | 1 |
| alternative | two.sided |

## IntClust4 Female Cases, n = 165, FDR = 0.01

FET Table IntClust4 Female Cases, FDR = 0.01

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Column(%) | 0 0.00% | 1678 8.86% | 1678 |
| **Not ER binding** N Column(%) | 1 100.00% | 17271 91.14% | 17272 |
| Total | 1 0.01% | 18949 99.99% | 18950 |

FET Statistics IntClust4 Female Cases, FDR = 0.01

|  |  |
| --- | --- |
| Statistics | Value |
| p.value | 1 |
| conf.int | [0, 398.9] |
| estimate | 0 |
| null.value | 1 |
| alternative | two.sided |

## IntClust5 Female Cases, n = 84, FDR = 0.01

FET Table IntClust5 Female Cases, FDR = 0.01

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Not ER binding ER binding | 0 | 1678 | 1678 |
| **Not ER binding** N Total Not ER binding | 0 | 17272 | 17272 |
| Total | 0 | 18950 | 18950 |

FET Statistics IntClust5 Female Cases, FDR = 0.01

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

## IntClust6 Female Cases, n = 60, FDR = 0.01

FET Table IntClust6 Female Cases, FDR = 0.01

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Not ER binding ER binding | 0 | 1678 | 1678 |
| **Not ER binding** N Total Not ER binding | 0 | 17272 | 17272 |
| Total | 0 | 18950 | 18950 |

FET Statistics IntClust6 Female Cases, FDR = 0.01

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

## IntClust7 Female Cases, n = 100, FDR = 0.01

FET Table IntClust7 Female Cases, FDR = 0.01

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Column(%) | 0 0.00% | 1678 8.86% | 1678 |
| **Not ER binding** N Column(%) | 1 100.00% | 17271 91.14% | 17272 |
| Total | 1 0.01% | 18949 99.99% | 18950 |

FET Statistics IntClust7 Female Cases, FDR = 0.01

|  |  |
| --- | --- |
| Statistics | Value |
| p.value | 1 |
| conf.int | [0, 398.9] |
| estimate | 0 |
| null.value | 1 |
| alternative | two.sided |

## IntClust8 Female Cases, n = 145, FDR = 0.01

FET Table IntClust8 Female Cases, FDR = 0.01

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Column(%) | 54 20.93% | 1624 8.69% | 1678 |
| **Not ER binding** N Column(%) | 204 79.07% | 17068 91.31% | 17272 |
| Total | 258 1.36% | 18692 98.64% | 18950 |

FET Statistics IntClust8 Female Cases, FDR = 0.01

|  |  |
| --- | --- |
| Statistics | Value |
| p.value | 2.709e-09 |
| conf.int | [2.013, 3.789] |
| estimate | 2.782 |
| null.value | 1 |
| alternative | two.sided |

## IntClust9 Female Cases, n = 74, FDR = 0.01

FET Table IntClust9 Female Cases, FDR = 0.01

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Not ER binding ER binding | 0 | 1678 | 1678 |
| **Not ER binding** N Total Not ER binding | 0 | 17272 | 17272 |
| Total | 0 | 18950 | 18950 |

FET Statistics IntClust9 Female Cases, FDR = 0.01

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

## IntClust10 Female Cases, n = 157, FDR = 0.01

FET Table IntClust10 Female Cases, FDR = 0.01

|  |  |  |  |
| --- | --- | --- | --- |
| ER binding | Age association Age associated | Not age associated | Total |
| **ER binding** N Not ER binding ER binding | 0 | 1678 | 1678 |
| **Not ER binding** N Total Not ER binding | 0 | 17272 | 17272 |
| Total | 0 | 18950 | 18950 |

FET Statistics IntClust10 Female Cases, FDR = 0.01

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