**Supplemental Tables**

Gene Methylation and Cytological Atypia in Random Fine Needle Aspirates for Assessment of Breast Cancer Risk

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**Supplementary Tables.**







**Table S4: Association between DNA methylation and lifetime Gail risk score – multivariate analysis**

|  |  |  |  |
| --- | --- | --- | --- |
| **Multi-variate analysis** | | | |
| **Gene** | **Coefficient** | **Std. Error** | **P-value** |
| *AKR1B1* | -0.003 | 0.008 | 0.711 |
| *TM6SF1* | 0.001 | 0.010 | 0.955 |
| *CCND2* | 0.000 | 0.011 | 0.984 |
| *RARB* | -0.009 | 0.012 | 0.459 |
| *RASSF1* | -0.002 | 0.011 | 0.880 |
| *TWIST1* | -0.032 | 0.017 | 0.055 |
| *TMEFF2* | -0.006 | 0.011 | 0.584 |
| HIN1 | -0.008 | 0.011 | 0.452 |
| CMI | -0.024 | 0.015 | 0.112 |
| Adjusted for age, BMI, total cell counts,and log(percent density) | | | |



**Table S6 Association between Methylation and Masood Cytology Score**

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| --- | --- | --- | --- |
|  | **Multivariate Analysis** | | |
| **Gene** | **Coefficient** | **Std. Error** | **P-value\*** |
|
| *AKR1B1* | 0.007 | 0.003 | 0.018 |
| *TM6SF1* | 0.009 | 0.004 | 0.022 |
| *CCND2* | 0.032 | 0.004 | 0.000 |
| *RARB* | -0.008 | 0.005 | 0.108 |
| *RASSF1* | 0.023 | 0.004 | 0.000 |
| *TWIST1* | 0.023 | 0.006 | 0.000 |
| *TMEFF2* | 0.003 | 0.004 | 0.526 |
| HIN1 | 0.014 | 0.004 | 0.001 |
| CMI | 0.030 | 0.006 | 0.000 |
| \*Adjusted for age, BMI, total cell counts, log (percent density), log (Gail score). Significant at P<0.006, after Bonferroni adjustment for multiple comparisons of individual genes. | | | |



|  |  |  |
| --- | --- | --- |
| **Table S9 Agreement between the baseline and the 6-month methylation levels in rFNA among individuals (n = 15)** | | |
|  |  | |
| **Gene** | **Cohen's kappa coefficient** | **95% confidence interval** |
|
| *AKR1B1* | 0.216 | (-0.702, 0.269) |
| *TM6SF1* | 0.571 | (0.145, 0.998) |
| *CCND2* | 0.464 | (0.015, 0.913) |
| *RARB* | 0.196 | (-0.300, 0.693) |
| *RASSF1* | 0.464 | (0.015, 0.913) |
| *TWIST1* | 0.324 | (-0.153, 0.801) |
| HIN1 | 0.182 | (-0.300, 0.664) |
| CMI | 0.196 | (-0.300, 0.693) |