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| **Supplementary Materials**  **A Randomized Controlled Trial of Green Tea Extract Supplementation and Mammographic Density in Postmenopausal Women at Increased Risk of Breast Cancer**  Samavat et al  **Supplementary Table ST1:** Baseline levels (95% CI) of PMD by age, BMI, and parity at baseline (n = 932)  **Supplementary Table ST2:** Mean (95% CI) and percent changes of volumetric density measures from pre- to post-treatment by green tea extract in a subgroup of women (n = 99)  **Supplementary Table ST3:** Mean (95% CI) and percent changes of volumetric density measures from pre- to post-treatment by green tea extract in a subgroup of women stratified by *COMT* genotype (n = 99)  **Supplementary Table ST1:** Baseline levels (95% CI) of PMD by age, BMI, and parity at baseline (n = 932) | | |
| **Variable** | **n** | **PMD** |
| **Age, y** |  |  |
| 50-55 | 239 | 29.34 (27.45, 31.22) |
| 56-60 | 313 | 26.18 (24.53, 27.82) |
| 61-70 | 380 | 25.43 (23.94, 26.93) |
| *Ptrend*a |  | 0.01 |
| *Ptrend*b |  | 0.07 |
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| **BMI, kg/m2** |  |  |
| < 25 | 519 | 30.43 (29.20, 31.66) |
| 25-29.9 | 311 | 23.15 (21.56, 24.74) |
| ≥ 30 | 102 | 18.41 (15.64, 21.19) |
| *Ptrend*a |  | <0.0001 |
| *Ptrend*b |  | <0.0001 |
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| **Parity** |  |  |
| Nulliparous | 225 | 29.30 (27.36, 31.25) |
| 1-2 | 507 | 26.37 (25.07, 27.66) |
| 3+ | 200 | 24.53 (22.47, 26.59) |
| *Ptrend*a |  | 0.003 |
| *Ptrend*b |  | 0.0003 |
| Abbreviations: BMI, body mass index; CI, confidence intervals; GTE, green tea extract; PMD, percent mammographic density. Data presented in least-square means (95% CI). | | |
| a Unadjusted *P* for trend*.* | | |
| b *P* for trend adjusted for baseline age and BMI (where appropriate). | | |
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| **Supplementary Table ST2:** Mean (95% CI) and percent changes of volumetric density measures from pre- to post-treatment by green tea extract in a subgroup of women (n = 99) | | | | | | |
|  |  | **GTE (n = 53)** |  | **Placebo (n = 46)** |  | ***P*a** |
| **FGV, %** |  |  |  |  |  |  |
| Baseline |  | 9.98 (8.62, 11.34) |  | 9.65 (8.19, 11.11) |  | 0.74 |
| Month 12 |  | 9.50 (8.25, 10.75) |  | 9.11 (7.77, 10.46) |  | 0.67 |
| % Change |  | -0.19 (-6.88, 6.50) |  | -1.05 (-8.23, 6.14) |  | 0.86 |
| *P*b |  | 0.17 |  | 0.08 |  |  |
|  |  |  |  |  |  |  |
| **Absolute FGV** |  |  |  |  |  |  |
| % Change |  | 0.82 (-5.40, 7.05) |  | 2.49 (-4.20, 9.17) |  | 0.72 |
| Abbreviations: BMI, body mass index; CI, confidence intervals; FGV, fibroglandular tissue volume; GTE, green tea extract. Values are least-square means. | | | | | | |
| a *P*-value for difference between the GTE and placebo groups at baseline and month 12, and % changes based on one-way ANCOVA test adjusted for age and BMI at baseline and BMI at 12-month. | | | | | | |
| b *P*-value for difference FGV (%) between baseline and month 12 means within GTE or placebo group based on paired t-test. | | | | | | |

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| **Supplementary Table ST3:** Mean (95% CI) and percent changes of volumetric density measures from pre- to post-treatment by green tea extract in a subgroup of women stratified by *COMT* genotype (n = 99) | | | | |
| **Variable** | **GTE (n = 53)** | **Placebo (n = 46)** | ***P*a** | ***P*b** |
|  |  |  |  |  |
| **FGV, %** |  |  |  |  |
| *G/G* Genotype | -8.06 (-17.83, 1.71) | -7.01 (-18.23, 4.21) | 0.89 | 0.68 |
| *G/A* Genotype | 22.68 (-4.52, 51.87) | 15.81 (-4.15, 35.76) | 0.65 |
| *A/A* Genotype | 5.85 (-3.94, 15.63) | -1.68 (-12.44, 9.07) | 0.31 |
| *P*c | 0.07 | 0.10 |  |  |
|  |  |  |  |  |
| **Absolute FGV** |  |  |  |  |
| *G/G* Genotype | -3.43 (-12.55, 5.69) | 0.02 (-10.46, 10.49) | 0.62 | 0.68 |
| *G/A* Genotype | 2.57 (-23.76, 28.90) | 15.46 (-3.17, 34.10) | 0.43 |
| *A/A* Genotype | 4.56 (-4.58, 13.70) | 1.38 (-8.66, 11.42) | 0.65 |
| *P*c | 0.54 | 0.29 |  |  |
| Abbreviations: BMI, body mass index; *COMT, catechol-O-methyltransferase*; FGV, fibroglandular tissue volume; GTE, green tea extract. Data presented in least-square means (95% CI).  GTE- *G/G* Genotype (n) = 25; GTE- *G/A* Genotype (n) = 3; GTE- *A/A* Genotype (n) = 25; Placebo- *G/G* Genotype (n) = 19; Placebo- *G/A* Genotype (n) = 6; Placebo- *A/A* Genotype (n) = 21. | | | | |
| a *P* value for comparison between treatment groups based on two-way ANCOVA test adjusted for age and BMI at baseline. | | | | |
| b *P* value for the interaction between treatment effect and *COMT* genotype derived from the linear mixed model. | | | | |
| c *P* value for change of volumetric density measures across *COMT* genotypes within each treatment assignment group based on one-way ANCOVA test adjusted for age and BMI at baseline. | | | | |