**Supplementary Table 1:** Change in PAI-1, VEGF, and PEDF by tertiles of change in percent body-fat compared to controls

| **Change in % body-fat** | **Diet** | | | | | **Exercise** | | | | | **Diet+Exercise** | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **N** | **Baseline** | **12-month** | **Abs.**  **Change (%)**e | **P**c | **N** | **Baseline** | **12-month** |  |  | **N** | **Baseline** | **12-month** | **Abs.**  **Change (%)**e | **P**c |
| **GM**a  **(95% CI)** | **GM**a  **(95% CI)** | **GM**a  **(95% CI)** | **GM**a  **(95% CI)** | **Abs.**  **Change (%)**e | **P**c | **GM**a  **(95% CI)** | **GM**a  **(95% CI)** |
| **PAI-1** | | | | | | | | | | | | | | | |
| Control | 87 | 7.89  (7.09-8.76) | 8.15  (7.29-9.11) | 0.27  (3.5) |  | 87 | 7.88  (7.09-8.76) | 8.15  (7.29-9.11) | 0.27  (3.5) |  | 87 | 7.88  (7.09-8.76) | 8.15  (7.29-9.11) | 0.27  (3.5) |  |
| No Change/  Gained | 26 | 6.97  (5.45-8.92) | 8.40  (7.04-10.02) | 1.43  (20.5) | 0.08 | 36 | 6.22  (5.17-7.48) | 6.91  (5.92-8.06) | 0.69  (11.1) | 0.29 | 16 | 7.36  (5.92-9.13) | 7.99  (6.38-10.00) | 0.63  (8.6) | 0.58 |
| Decreased <2.6% | 23 | 9.14  (7.06-11.84) | 7.30  (5.79-9.22) | -1.84  (-20.1) | 0.02 | 47 | 6.730  (5.69-7.96) | 7.46  (6.38-8.72) | 0.73  (10.8) | 0.38 | 17 | 7.946  (6.43-9.82) | 7.45  (5.92-9.38) | -0.50  (-6.2) | 0.37 |
| Decreased  2.6-6.4% | 34 | 6.56  (5.50-7.84) | 6.84  (5.81-8.05) | 0.28  (4.2) | 0.97 | 26 | 6.369  (4.98-8.15) | 6.56  (5.17-8.32) | 0.19  (3.0) | 0.83 | 29 | 7.16  (5.60-9.15) | 5.50  (4.36-6.94) | -1.65  (-23.1) | <0.0001 |
| Decreased >6.4% | 31 | 6.09  (5.23-7.09) | 4.11  (3.49-4.83) | -1.99  (-32.6) | <0.0001 | 5 | 7.023  (3.63-13.59 | 6.53  (4.41-9.68) | -0.49  (-7.0) | 0.45 | 52 | 6.02  (5.19-6.98) | 4.33  (3.73-5.03) | -1.69  (-28.1) | <0.0001 |
| dPtrend | <0.0001 | | | | | 0.96 | | | | | <0.0001 | | | | |
| **PEDF** | | | | | | | | | | | | | | | |
| Control | 87 | 10.75  (10.35-11.17) | 10.77  (10.37-  11.20) | 0.02  (0.2) |  | 87 | 10.75  (10.35-11.17) | 10.77  (10.37-11.20) | 19.63  (0.2) |  | 87 | 10.75  (10.35-11.17) | 10.77  (10.37-11.20) | 0.02  (0.2) |  |
| No Decrease | 28 | 11.43  (10.62-12.29) | 11.72  (10.91-12.58) | 0.29  (2.5) | 0.39 | 36 | 10.80  (10.32-11.31) | 10.69  (10.18-11.22) | -0.11  (-1.0) | 0.37 | 16 | 10.02  (8.63-11.64) | 9.96  (8.72-11.39) | -0.54  (-0.5) | 0.67 |
| Decreased <2.6% | 24 | 11.89  (11.06-12.79) | 10.28  (9.56-11.05) | -1.62  (-13.6) | <0.0001 | 49 | 10.46  (9.97-10.97) | 10.40  (9.89-10.94) | -0.06  (-0.6) | 0.68 | 17 | 11.35  (10.42-12.37) | 10.59  (9.87-11.35) | -0.77  (-6.8) | 0.03 |
| Decreased  2.6-6.4% | 35 | 10.08  (9.49-10.71) | 9.32  (8.88-9.78) | -0.77  (-7.6) | 0.008 | 27 | 9.92  (9.31-10.59) | 9.516  (9.01-10.05) | -0.41  (-4.1) | 0.09 | 30 | 10.61  (9.65-11.67) | 9.70  (8.85-10.64) | -0.91  (-8.6) | 0.0001 |
| Decreased >6.4% | 31 | 9.87  (9.30-10.47) | 8.18  (7.69-8.70) | -1.69  (-17.1) | <0.0001 | 5 | 11.20  (8.85-14.17) | 8.676  (7.34-10.26) | -2.52  (-22.5) | <0.0001 | 53 | 10.20  (9.70-10.73) | 8.75  (8.35-9.17) | -1.45  (-14.2) | <0.0001 |
| dPtrend | <0.0001 | | | | | 0.009 | | | | | <0.0001 | | | | |
| **VEGF** | | | | | | | | | | | | | | | |
| Control | 87 | 325.0  (284.6-371.1) | 321.0  (279.3--369.0) | -3.92  (-1.2) |  | 87 | 325.0  (284.6-371.1) | 321.0  (279.3-369.0) | -3.92  (-1.2) |  | 87 | 325.0  (284.6-371.1) | 321.0  (279.3-369.0) | -3.92  (-1.2) |  |
| No Decrease | 28 | 259.5  (199.7-337.2) | 256.8  (196.6-335.4) | -2.68  (-1.0) | 0.60 | 36 | 312.4  (250.0-390.4 | 297.7  (238.8-371.2) | -14.7  (-4.7) | 0.15 | 16 | 343.5  (267.7-440.8) | 331.5  (249.3-440.6) | -12.1  (-3.5) | 0.51 |
| Decreased <2.6% | 24 | 299.2  (226.4-395.5) | 281.4  (209.9-377.2) | -17.8  (-6.0) | 0.31 | 49 | 307.9  (253.0-374.8 | 304.3  (249.6-370.9) | -3.64  (-1.2) | 0.91 | 17 | 432.8  (317.4-590.0) | 408.5  (296.6-562.6) | -24.2  (-5.6) | 0.34 |
| Decreased  2.6-6.4% | 35 | 265.3  (214.9-327.5) | 243.5  (198.2-299.2) | -21.8  (-8.2) | 0.009 | 27 | 292.8  (228.2-375.7 | 283.2  (220.8-363.2) | -9.60  (-3.3) | 0.49 | 30 | 282.1  (219.5-362.6) | 260.1  (202.5-334.2) | -22.0  (-7.8) | 0.08 |
| Decreased >6.4% | 31 | 366.3  (284.0-472.5) | 307.7  (240.2-394.3) | -58.6  (-16.0) | <0.0001 | 5 | 353.4  (210.1-594.5) | 318.8  (197.6-514.5) | -34.6  (-9.8) | 0.08 | 53 | 286.7  (230.9-356.0) | 245.5  (198.6-303.7) | -41.1  (-14.3) | <0.0001 |
| dPtrend | <0.0001 | | | | | 0.40 | | | | | <0.0001 | | | | |

aGM: geometric mean.

bAnalyses stratified by change in percent body-fat, using all available data, . adjusted for age, baseline BMI (<30kg/m2, >30kg/m2), race/ethnicity.

Pc: p-value obtained from GEE model comparing the difference in change of biomarkers from baseline to 12-months in intervention group vs control within strata of change in percent body-fat.

dPtrend: p-value obtained from GEE model testing the linear trend in the change of the biomarkers from baseline to 12-month from Control through all levels of change in percent body-fat.

e Change at 12-month from baseline