## Table 1

|  |  |  | n (%) or median (IQR) |
| --- | --- | --- | --- |
| Child |  | Female | 408 (48%) |
|  | Urinary F2-isoprostanes (Year 1) | iPF(2a)-III | 0.66 (0.48, 0.91) |
|  |  | 2,3-dinor-iPF(2a)-III | 5.8 (4.7, 7.14) |
|  |  | iPF(2a-VI | 13.06 (10.05, 17.63) |
|  |  | 8,12-iso-iPF(2a)-VI | 13.12 (8.7, 18.43) |
|  | Salivary cortisol reactivity (Year 2) | Change in slope between pre- and post-stressor cortisol | 0 (-0.01, 0) |
|  |  | Cortisol residualized gain score | -0.09 (-0.21, 0.14) |
|  | sAA reactivity (Year 2) | Change in slope between pre- and post-stressor sAA change | -1.39 (-4.37, 0.06) |
|  |  | sAA residualized gain score | -26.37 (-51.35, 27.2) |
|  | SAM biomarkers (Year 2) | Mean arterial pressure | 64.44 (60.89, 68.89) |
|  |  | Resting heart rate | 109 (98.67, 118) |
|  | Glucocorticoid receptor | NR3C1 exon 1F promoter methylation | 0.33 (0.22, 0.48) |
|  |  | NGFI-A transcription factor binding site methylation | 0.87 (0, 1.21) |
|  | Anthropometry (14 months, Year 1) | Length-for-age Z score | -1.43 (-2.09, -0.79) |
|  |  | Weight-for-age Z score | -1.31 (-1.99, -0.68) |
|  |  | Weight-for-length Z score | -0.89 (-1.61, -0.26) |
|  |  | Head circumference-for-age Z score | -1.79 (-2.39, -1.19) |
|  | Anthropometry (28 months, Year 2) | Length-for-age Z score | -1.56 (-2.26, -0.96) |
|  |  | Weight-for-age Z score | -1.56 (-2.1, -0.9) |
|  |  | Weight-for-length Z score | -1.01 (-1.6, -0.36) |
|  |  | Head circumference-for-age Z score | -1.79 (-2.37, -1.22) |
|  | Diarrhea (14 months, Year 1) | Caregiver-reported 7-day recall | 108 (15%) |
|  | Diarrhea (28 months, Year 2) | Caregiver-reported 7-day recall | 59 (8%) |
| Mother |  | Age (years) | 23 (20, 27) |
|  | Anthropometry at enrollment | Height (cm) | 150.3 (147.06, 153.8) |
|  | Education | Schooling completed (years) | 7 (4, 9) |
|  | Depression at Year 1 | CES-D score | 12 (9, 17) |
|  | Depression at Year 2 | CES-D score | 12 (9, 16) |
|  | Perceived stress at Year 2 | Perceived Stress Scale score | 14 (10, 18) |
|  | Intimate partner violence | Any lifetime exposure | 406 (56%) |

## Table 2

|  |  |  |  | Outcome, 75th Percentile v. 25th Percentile | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | Unadjusted | | | | Fully adjusted | | | |
| Urinary oxidative stress biomarker | Outcome | 25th Percentile | 75th Percentile | Predicted Outcome at 25th Percentile | Predicted Outcome at 75th Percentile | Coefficient (95% CI) | P-value | Predicted Outcome at 25th Percentile | Predicted Outcome at 75th Percentile | Coefficient (95% CI) | P-value |
| IPF(2a)-III | LAZ Year 1 | -0.73 | -0.09 | -1.26 | -1.39 | -0.14 (-0.23, -0.05) | 0.01 | -1.61 | -1.59 | 0.02 (-0.06, 0.1) | 0.84 |
|  | LAZ Year 2 | -0.73 | -0.09 | -1.3 | -1.39 | -0.09 (-0.17, 0) | 0.14 | -1.8 | -1.8 | 0 (-0.06, 0.06) | 0.95 |
|  | Length velocity Year 1 and Year 2 | -0.73 | -0.09 | 0.8 | 0.8 | 0 (-0.01, 0.01) | 0.99 | 0.78 | 0.78 | 0 (-0.01, 0.01) | 0.79 |
|  | Change in LAZ Year 1 to Year 2 | -0.73 | -0.09 | -0.05 | -0.01 | 0.04 (-0.01, 0.08) | 0.12 | -0.25 | -0.24 | 0.01 (-0.03, 0.05) | 0.84 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 2,3-dinor-iPF(2a)-III | LAZ Year 1 | 1.55 | 1.97 | -1.24 | -1.5 | -0.26 (-0.37, -0.16) | 0 | -1.61 | -1.61 | 0 (-0.04, 0.04) | 0.98 |
|  | LAZ Year 2 | 1.54 | 1.97 | -1.29 | -1.45 | -0.17 (-0.27, -0.07) | 0.02 | -1.81 | -1.8 | 0.01 (-0.1, 0.11) | 0.95 |
|  | Length velocity Year 1 and Year 2 | 1.54 | 1.97 | 0.8 | 0.81 | 0.01 (0, 0.02) | 0.3 | 0.78 | 0.79 | 0.01 (0, 0.02) | 0.1 |
|  | Change in LAZ Year 1 to Year 2 | 1.54 | 1.97 | -0.06 | 0.01 | 0.07 (-0.03, 0.17) | 0.17 | -0.27 | -0.27 | 0.01 (-0.09, 0.11) | 0.87 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| iPF(2a)-VI | LAZ Year 1 | 2.31 | 2.87 | -1.11 | -1.44 | -0.32 (-0.55, -0.09) | 0.01 | -1.62 | -1.58 | 0.03 (-0.01, 0.08) | 0.3 |
|  | LAZ Year 2 | 2.3 | 2.86 | -1.31 | -1.41 | -0.1 (-0.19, 0) | 0.14 | -1.81 | -1.79 | 0.02 (-0.04, 0.08) | 0.95 |
|  | Length velocity Year 1 and Year 2 | 2.3 | 2.86 | 0.8 | 0.81 | 0 (-0.01, 0.02) | 0.8 | 0.78 | 0.79 | 0.02 (0, 0.03) | 0.1 |
|  | Change in LAZ Year 1 to Year 2 | 2.3 | 2.86 | -0.1 | 0.06 | 0.16 (0.06, 0.26) | 0.01 | -0.28 | -0.22 | 0.06 (-0.01, 0.13) | 0.22 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 8,12-iso-iPF(2a)-VI | LAZ Year 1 | 2.16 | 2.91 | -1.39 | -1.33 | 0.06 (-0.15, 0.28) | 0.59 | -1.62 | -1.58 | 0.04 (0, 0.08) | 0.26 |
|  | LAZ Year 2 | 2.17 | 2.9 | -1.41 | -1.33 | 0.09 (-0.11, 0.28) | 0.66 | -1.89 | -1.88 | 0.01 (-0.15, 0.16) | 0.95 |
|  | Length velocity Year 1 and Year 2 | 2.17 | 2.9 | 0.79 | 0.81 | 0.02 (-0.01, 0.05) | 0.3 | 0.77 | 0.79 | 0.02 (0, 0.04) | 0.15 |
|  | Change in LAZ Year 1 to Year 2 | 2.17 | 2.9 | -0.1 | 0.02 | 0.12 (0.01, 0.23) | 0.07 | -0.3 | -0.21 | 0.09 (-0.01, 0.18) | 0.22 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Combined urinary oxidative stress biomarkers | LAZ Year 1 | 2.48 | 3.53 | -1.21 | -1.46 | -0.26 (-0.5, -0.02) | 0.04 | -1.62 | -1.59 | 0.03 (-0.01, 0.06) | 0.32 |
|  | LAZ Year 2 | 2.48 | 3.52 | -1.31 | -1.41 | -0.1 (-0.25, 0.05) | 0.36 | -1.7 | -1.89 | -0.19 (-0.34, -0.04) | 0.15 |
|  | Length velocity Year 1 and Year 2 | 2.48 | 3.52 | 0.8 | 0.8 | 0 (-0.02, 0.03) | 0.99 | 0.78 | 0.79 | 0 (-0.02, 0.03) | 0.82 |
|  | Change in LAZ Year 1 to Year 2 | 2.48 | 3.52 | -0.07 | 0.02 | 0.09 (0, 0.19) | 0.09 | -0.26 | -0.23 | 0.03 (-0.06, 0.12) | 0.81 |

## Table 3

|  |  |  |  | Outcome, 75th Percentile v. 25th Percentile | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | Unadjusted | | | | Fully adjusted | | | |
| Salivary stress biomarker | Outcome | 25th Percentile | 75th Percentile | Predicted Outcome at 25th Percentile | Predicted Outcome at 75th Percentile | Coefficient (95% CI) | P-value | Predicted Outcome at 25th Percentile | Predicted Outcome at 75th Percentile | Coefficient (95% CI) | P-value |
| Pre to post-stress change in slope of cortisol | LAZ Year 2 | -0.01 | 0 | -1.41 | -1.4 | 0.01 (-0.08, 0.09) | 0.97 | -1.89 | -1.94 | -0.05 (-0.2, 0.09) | 0.95 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Cortisol residualized gain score | LAZ Year 2 | -0.21 | 0.14 | -1.41 | -1.41 | 0 (-0.09, 0.08) | 0.97 | -1.9 | -1.85 | 0.05 (-0.04, 0.14) | 0.95 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Pre to post-stress change in slope of sAA | LAZ Year 2 | -4.37 | 0.06 | -1.45 | -1.5 | -0.04 (-0.28, 0.19) | 0.97 | -1.81 | -1.82 | -0.01 (-0.05, 0.03) | 0.95 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| sAA residualized gain score | LAZ Year 2 | -51.35 | 27.2 | -1.48 | -1.48 | -0.01 (-0.25, 0.23) | 0.97 | -1.94 | -1.83 | 0.11 (-0.01, 0.22) | 0.42 |

## Table 4

|  |  |  |  | Outcome, 75th Percentile v. 25th Percentile | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | Unadjusted | | | | Fully adjusted | | | |
| Resting SAM biomarker | Outcome | 25th Percentile | 75th Percentile | Predicted Outcome at 25th Percentile | Predicted Outcome at 75th Percentile | Coefficient (95% CI) | P-value | Predicted Outcome at 25th Percentile | Predicted Outcome at 75th Percentile | Coefficient (95% CI) | P-value |
| Mean arterial pressure | LAZ Year 2 | 60.89 | 68.89 | -1.39 | -1.26 | 0.13 (0, 0.25) | 0.14 | -1.8 | -1.81 | -0.01 (-0.07, 0.06) | 0.95 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Mean resting heart rate | LAZ Year 2 | 98.5 | 118 | -1.27 | -1.42 | -0.15 (-0.3, -0.01) | 0.14 | -1.82 | -1.83 | 0 (-0.07, 0.07) | 0.95 |

## Table 5

|  |  |  |  | Outcome, 75th Percentile v. 25th Percentile | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | Unadjusted | | | | Fully adjusted | | | |
| Methylation site | Outcome | 25th Percentile | 75th Percentile | Predicted Outcome at 25th Percentile | Predicted Outcome at 75th Percentile | Coefficient (95% CI) | P-value | Predicted Outcome at 25th Percentile | Predicted Outcome at 75th Percentile | Coefficient (95% CI) | P-value |
| Entire promoter region (39 assayed CpG sites) | LAZ Year 2 | 0.22 | 0.48 | -1.34 | -1.38 | -0.05 (-0.11, 0.01) | 0.29 | -1.82 | -1.84 | -0.02 (-0.06, 0.02) | 0.95 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| NGFI-A transcription factor binding site (CpG site #12) | LAZ Year 2 | -4.65 | -4.14 | -1.31 | -1.3 | 0.02 (-0.1, 0.13) | 0.97 | -1.69 | -1.68 | 0.02 (-0.06, 0.09) | 0.95 |