**Supplemental Table 1.** Spearman partial correlations of one-carbon metabolites with inflammation and angiogenesis biomarkers ranked by p-value1.

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| **One Carbon Metabolites** | **Inflammation & Angiogenesis Biomarkers** | **Partial Correlation Coefficient (*r*)1** | **p-value** |
| HK/XA | CRP | 0.46 | **<0.0001** |
| HK/XA | IL-6 | 0.43 | **<0.0001** |
| Thiamine | IL-6 | -0.38 | **<0.0001** |
| PLP | IL-6 | -0.38 | **<0.0001** |
| HK/XA | SAA | 0.38 | **<0.0001** |
| TMP | CRP | -0.35 | **<0.0001** |
| TMP | IL-6 | -0.33 | **<0.0001** |
| TMP | IL-8 | -0.32 | **<0.0001** |
| PLP | CRP | -0.33 | **<0.0001** |
| PL | IL-6 | -0.30 | **<0.0001** |
| Homocysteine | VEGF-D | 0.31 | **<0.0001** |
| PLP | sVCAM-1 | -0.30 | **<0.0001** |
| apABG | IL-6 | 0.27 | **0.0001** |
| Thiamine | CRP | -0.29 | **0.0001** |
| PL | CRP | -0.29 | **0.0001** |
| PA | CRP | -0.28 | **0.0001** |
| Homocysteine | IL-6 | -0.26 | **0.0002** |
| pABG | VEGF-D | 0.27 | **0.0003** |
| TMP | sICAM-1 | -0.27 | **0.0004** |
| HK/XA | sVCAM-1 | 0.27 | **0.0004** |
| TMP | SAA | -0.26 | **0.0004** |
| PA | IL-6 | -0.24 | **0.0006** |
| PL | IL-8 | -0.24 | **0.0006** |
| HK/XA | sICAM-1 | 0.25 | **0.0007** |
| Homocysteine | TNFα | 0.24 | **0.0007** |
| PA | VEGF-D | 0.24 | **0.001** |
| PL | SAA | -0.24 | **0.001** |
| PL | VEGF-D | 0.23 | **0.002** |
| Cobalamin | VEGF-D | 0.23 | **0.002** |
| PLP | SAA | -0.23 | **0.002** |
| PA | SAA | -0.23 | **0.003** |
| TMP | VEGF-D | -0.23 | **0.003** |
| HK/XA | IL-8 | 0.21 | **0.003** |
| PLP | IL-8 | -0.21 | **0.003** |
| pABG | IL-8 | 0.21 | **0.004** |
| Thiamine | VEGF-D | 0.21 | **0.005** |
| Homocysteine | SAA | -0.21 | **0.006** |
| TMP | sVCAM-1 | -0.21 | **0.006** |
| PLP | VEGF-D | 0.2 | **0.008** |
| PAr index | IL-6 | 0.18 | **0.01** |
| PAr index | IL-8 | 0.18 | **0.01** |
| TMP | MCP-1 | -0.18 | **0.01** |
| PAr index | sVCAM-1 | 0.18 | 0.02 |
| Homocysteine | CRP | -0.17 | 0.02 |
| TMP | TNFα | -0.16 | 0.02 |
| PLP | sICAM-1 | -0.17 | 0.03 |
| Cobalamin | SAA | 0.17 | 0.03 |
| Riboflavin | VEGF-D | 0.17 | 0.03 |
| Thiamine | SAA | -0.17 | 0.03 |
| Cobalamin | CRP | 0.16 | 0.03 |
| PL | sVCAM-1 | -0.16 | 0.03 |
| PAr index | TNFα | 0.15 | 0.03 |
| Riboflavin | IL-8 | 0.15 | 0.04 |
| mTHF | TNFα | -0.15 | 0.04 |
| Folic acid | MCP-1 | -0.14 | 0.05 |
| PAr index | sICAM-1 | 0.15 | 0.05 |
| HK/XA | VEGF-D | -0.14 | 0.06 |
| mTHF | CRP | -0.14 | 0.07 |
| mTHF | SAA | -0.14 | 0.07 |
| PL | TNFα | -0.13 | 0.08 |
| HK/XA | TNFα | 0.13 | 0.08 |
| HK/XA | MCP-1 | 0.12 | 0.08 |
| Cobalamin | sICAM-1 | 0.13 | 0.08 |
| Cobalamin | sVCAM-1 | 0.13 | 0.09 |
| PLP | TNFα | -0.12 | 0.09 |
| pABG | TNFα | 0.11 | 0.12 |
| PA | sVCAM-1 | -0.12 | 0.12 |
| PA | IL-8 | -0.10 | 0.14 |
| Riboflavin | IL-6 | 0.10 | 0.15 |
| PL | MCP-1 | -0.10 | 0.15 |
| PAr index | CRP | 0.11 | 0.16 |
| Riboflavin | SAA | 0.10 | 0.18 |
| Thiamine | MCP-1 | -0.09 | 0.20 |
| PLP | MCP-1 | -0.09 | 0.22 |
| Cobalamin | VEGF-A | 0.09 | 0.23 |
| HK/XA | VEGF-A | 0.09 | 0.24 |
| apABG | VEGF-A | -0.09 | 0.24 |
| PAr index | MCP-1 | 0.08 | 0.24 |
| mTHF | IL-8 | -0.08 | 0.24 |
| Homocysteine | VEGF-A | 0.09 | 0.25 |
| Riboflavin | sVCAM-1 | -0.08 | 0.29 |
| mTHF | MCP-1 | -0.07 | 0.30 |
| pABG | CRP | 0.08 | 0.31 |
| PAr index | SAA | 0.08 | 0.31 |
| Riboflavin | MCP-1 | 0.07 | 0.31 |
| Folic acid | IL-6 | 0.07 | 0.32 |
| mTHF | sICAM-1 | -0.08 | 0.33 |
| PA | MCP-1 | -0.07 | 0.34 |
| TMP | VEGF-A | -0.07 | 0.34 |
| Riboflavin | CRP | 0.07 | 0.35 |
| Homocysteine | sVCAM-1 | -0.07 | 0.35 |
| mTHF | IL-6 | -0.06 | 0.37 |
| pABG | VEGF-A | 0.06 | 0.40 |
| pABG | SAA | 0.06 | 0.41 |
| pABG | MCP-1 | 0.06 | 0.42 |
| apABG | VEGF-D | -0.06 | 0.45 |
| Folic acid | CRP | 0.06 | 0.46 |
| Folic acid | sICAM-1 | -0.06 | 0.46 |
| Thiamine | sICAM-1 | 0.05 | 0.50 |
| Folic acid | VEGF-D | 0.05 | 0.51 |
| apABG | CRP | 0.05 | 0.52 |
| Riboflavin | sICAM-1 | -0.05 | 0.53 |
| pABG | IL-6 | 0.04 | 0.54 |
| PL | sICAM-1 | -0.04 | 0.59 |
| Cobalamin | IL-6 | -0.04 | 0.60 |
| Homocysteine | MCP-1 | -0.04 | 0.63 |
| apABG | IL-8 | -0.03 | 0.63 |
| Cobalamin | TNFα | 0.03 | 0.67 |
| pABG | sICAM-1 | 0.03 | 0.68 |
| Homocysteine | sICAM-1 | -0.03 | 0.69 |
| apABG | sVCAM-1 | 0.03 | 0.70 |
| mTHF | VEGF-D | 0.03 | 0.71 |
| PA | sICAM-1 | 0.03 | 0.73 |
| PAr index | VEGF-D | -0.03 | 0.74 |
| Cobalamin | MCP-1 | 0.02 | 0.75 |
| apABG | sICAM-1 | 0.02 | 0.77 |
| pABG | sVCAM-1 | 0.02 | 0.79 |
| PL | VEGF-A | 0.02 | 0.80 |
| mTHF | VEGF-A | 0.02 | 0.80 |
| Thiamine | IL-8 | -0.02 | 0.81 |
| PA | VEGF-A | -0.02 | 0.82 |
| Folic acid | IL-8 | 0.01 | 0.87 |
| mTHF | sVCAM-1 | -0.01 | 0.88 |
| apABG | SAA | -0.01 | 0.88 |
| Folic acid | sVCAM-1 | 0.01 | 0.88 |
| Folic acid | VEGF-A | -0.01 | 0.87 |
| Folic acid | TNFα | 0.01 | 0.89 |
| Thiamine | VEGF-A | 0.007 | 0.92 |
| PLP | VEGF-A | 0.006 | 0.93 |
| PA | TNFα | 0.005 | 0.95 |
| Folic acid | SAA | 0.004 | 0.96 |
| Cobalamin | IL-8 | 0.004 | 0.96 |
| apABG | MCP-1 | -0.004 | 0.96 |
| Riboflavin | VEGF-A | 0.003 | 0.96 |
| apABG | TNFα | -0.003 | 0.96 |
| Riboflavin | TNFα | -0.003 | 0.97 |
| Thiamine | sVCAM-1 | -0.003 | 0.97 |
| Homocysteine | IL-8 | -0.002 | 0.98 |
| PAr index | VEGF-A | 0.002 | 0.98 |
| Thiamine | TNFα | 0.001 | 0.99 |

**Bold:** false discovery rate (FDR) < 0.05.

Abbreviations: r, Spearman partial coefficient; HK/XA, 3-hydroxykynurenine/ xanthurenic acid ratio; CRP, C-reactive protein; IL-6, interleukin 6; SAA, serum amyloid A; TMP, thiamin monophosphate; PLP, pyridoxal phosphate; PL, pyridoxal; IL-8, interleukin 8; VEGF-D, vascular endothelial growth factor D; sVCAM-1, soluble vascular cell adhesion molecule 1; apABG, acetyl-para-aminobenzoylglutamic acid; PA, pyridoxic acid; pABG, para-aminobenzoylglutamic acid; sICAM-1, soluble intercellular adhesion molecule 1; TNFα, tumor necrosis factor alpha; PAr, PAr index: PA/(PL+PLP);mTHF, 5-methyl-tetrahydrofolate; MCP-1, monocyte chemoattractant protein 1; VEGF-A, vascular endothelial growth factor A.

1Spearman partial correlation analyses were adjusted for: age group (<60, 60-<70 and ≥70 years), sex, body mass index category, cancer stage and site, physical activity, multivitamin intake, and smoking status.