

## **Statistical Analysis Plan**

All statistical analysis was performed using the Statistical Analysis System Software (version 9.4; SAS Institute, Cary, NC). Cutoffs were created for biochemical iron status measures and symptoms of iron deficiency to allow for categorical analysis. Contingency tables assessed association between categorical variables through chi-square analysis. For cells containing 5 or less subjects, analysis was performed using the Fisher's Exact test.

A hematocrit reading below 38% or a hemoglobin value below 12 g/dL was used as an indication of anemia. Additionally, a ferritin concentration of 20 ng/mL or lower and a TIBC value greater than 400 µg/dL were considered indicative of iron deficiency (ID). Additionally, those subjects who were iron deficient without anemia are indicated as IDNA. Classic symptoms of iron deficiency included dizziness, shortness of breath, fatigue, decreased work ability, fatigue after eating or sleeping, headaches, migraines, and racing thoughts that prevent sleep. Those who self-reported as experiencing these symptoms several days, more than half the days, or nearly every day in the past month were categorized as experiencing the symptom; those who reported experiencing these symptoms occasionally were not categorized as experiencing the symptom. Dizziness and shortness of breath were grouped together as symptoms that are specific to iron deficiency and are distinct from symptoms of depression. A cutoff was made for this variable, called select deficiency symptoms, that indicated subjects that experienced these symptoms several days, more than half the days, or nearly every day in the last month.