

**Statistical Analysis Plan**

**Project Title:** Targeting ADAM17 activity for correction of vascular insulin resistance in type 2 diabetes

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**Principal Investigators:** Luis A. Martinez-Lemus, DVM, PhD; Jaume Padilla, PhD

Collaborating Investigators: Camila Manrique, MD

## STATISTICAL ANALYSIS PLAN

R software was used for all statistical analyses. Power analysis was conducted with an  $\alpha$  of 0.05 and 80% power. Based on preclinical data, we determined that 16 subjects per group would be sufficient to detect differences in leg blood flow responses to an oral glucose load. For the main outcomes (with repeated measures), two-way repeated-measures ANOVA was used to assess treatment (PS vs. placebo)  $\times$  time interactions. When appropriate, planned paired t-tests were used to compare final vs. baseline measurements within each group. Missing values during the oral glucose load were accounted for by using nonlinear regression with a best-fit curve for each individual response. No sex differences were observed for the main outcome variables, so the data from subjects were pooled for analysis. Individual responses are included in the figures where appropriate, and data are presented as means $\pm$ SEM. A  $P\leq 0.05$  was considered significant for all statistical tests.