**STATISTICAL POWER**

Statistical power for the analyses described in the proposal are below, as well as in further detail in “**Research** **Strategy**” (section D3 and D4).

Specific Aim #1: In this exploratory study, the expected cohort size is 200 participants collected over 10-12 months. We anticipate a maximum of 20% data loss due to poor ECG quality (>20% artifact) or missing psychological data. We do not expect attrition as this is a cross-sectional study. After these reductions we expect a sample size of 160 participants. We expect 25% of participants to have major depression, as our pilot study suggests. With α = 0.05, and 1 – β = 0.80, for n = 160 we would be adequately powered to detect an effect size of Cohen’s d = 0.59 (for n = 120, d = 0.59; for n = 200, d = 0.45).57 With α = 0.05 and 1 – β = 0.90, for n = 160 we would be adequately powered to detect an effect size of Cohen’s d = 0.59 (for n = 120, d = 0.68; for n = 200, d = 0.51).

Specific Aim #2: As above, we expect an initial cohort size of 200 patients, with 160 patients with non-missing data. We expect that 75% of patients will have obstructive CAD, similar to the rate seen in our pilot study. With α = 0.05, and 1 – β = 0.80, for n = 160 we would be adequately powered to detect an effect size of Cohen’s d = 0.59 (for n = 120, d = 0.59; for n = 200, d = 0.45).57 With α = 0.05 and 1 – β = 0.90, for n = 160 we would be adequately powered to detect an effect size of Cohen’s d = 0.59 (for n = 120, d = 0.68; for n = 200, d = 0.51).