September 25, 2023

Dear Dr. Niebauer,

Please consider our article, “Sample Size Considerations in the Design of Orthopaedic Risk-factor Studies”, for publication in VCOT Open. We noticed that some risk-factor-study articles acknowledge the challenge of correctly identifying control subjects with certainty. In our simulation study, we showed that even small proportions of positive subjects in negative control groups can adversely affect the power of the statistical association tests. That is a problem because low powered tests, with p>0.05, are often misinterpreted as “no effect” and some disease risk factors may be overlooked.

Sincerely,

Richard Evans, PhD, PSTAT