Analyzing marginal outcomes in pilot cancer clinical trials

The analysis of small randomized cancer clinical trials poses known difficulty when the outcome measure is based on a marginal relative effects estimate. Confidence intervals for marginal relative effect estimates tend to be overly conservative and have little value in practice. In this presentation, we present a modified multinomial procedure for estimating marginal relative effect estimates and provide simulation results comparing the empirical and expected coverage of the estimated values.

Biography

Jimmy T. Efird is an Associate Member of the Leo Jenkins Cancer at Brody School of Medicine. Additionally, he holds a joint appointment as Associate Professor in the Department of Public Health and as Epidemiologist/Chief Statistician (Director, Shared Resources) in the Center for Health Disparities. Efird received his Ph.D. from Stanford University (Epidemiology with a concentration in Biostatistics). His expertise includes statistical methods for assessing gene-environment interaction, clinical trial design, computing power and sample size for correlated samples, and multiplicity adjustment for confidence intervals. He has over 100 publications in scientific journals and technical proceedings. Additionally, Efird serves as a Senior Consultant for The NCRR-funded RCMI Translational Research Network Data and Technology Coordinating Center.

jimmy.efird@alumni.stanford.edu