

[Demissie Alemayehu](#), Pfizer Inc., and Columbia University, New York, NY USA

In the absence of definitive trials on the comparative safety and effectiveness of drugs, a systematic synthesis of available data may provide critical information to help decision making by medical professionals, patients and other stakeholders. However, uncritical and lopsided use of pooled data to inform decision about important health-care issues may have consequences that adversely impact public health, stifle innovation, and confound medical science. In this talk, current methodological issues in meta-analysis are highlighted, and advantages and disadvantages of alternative techniques are evaluated. The need for a more integrated strategy toward the synthesis, interpretation and dissemination of pooled data is suggested.

The talk, intended for applied statisticians and others involved in medical research, will involve review of case studies to illustrate relevant issues.