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Top 10 Pet “Peeves”:
What NOT to do With Data

Abstract:
Clinical studies are generally rigorously designed to address one or two primary questions, and usually have a detailed pre-specified statistical analysis plan. In contrast, basic and early translational studies are usually more flexible. Although basic/translational experimental designs can be complex, there are often no sample size or power calculations, no statistician ‘of record’, and no formal statistical analysis plans. There is a high prevalence of irreproducible results (Begley and Ellis, 2012, Nature 483:531-3), at least some of which can be attributed to poor or suboptimal analysis methods. There is now increasing emphasis on ‘Rigor and Reproducibility’. Better approaches are needed. The good news is that improvements do not necessarily have to be complicated. This talk will share three relatively common scenarios where critical thinking and small, relatively simple improvements could make a big difference.