Biostatistics plays a critical role in all aspects of clinical trials, including study planning and trial design, sample size and power calculation, interim monitoring, patient safety concerns, data analyses, and results reporting and interpretations of findings. With a solid understanding of various statistical concepts, particularly those ambiguous ones, clinicians and clinical trialists can improve the implementation, comprehension and quality of clinical trials. This talk outlines several common statistical concerns and pitfalls in clinical trials that are important for clinicians and clinical trialists to understand.