

W14-03

ENHANCING SIGNAL DETECTION IN CLINICAL TRIALS

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Dr. Leon will present the biostatistical considerations that contribute to a clinical trial design and the strategies to enhance signal detection. These include minimizing bias in the estimate of treatment effect while maintaining a nominal level of type I error (i.e., false positive results) and maintaining sufficient statistical power (i.e. reducing the likelihood of false negative results). Particular attention will be paid to reducing the problems of attrition and the hazards of multiplicity. Methods to examine moderators of the treatment effect will also be explored. Examples from psychopharmacologic and psychotherapy trials for the treatment of depression and panic disorder will be provided to illustrate these issues. Following the didactic session, the participants will be encouraged to bring forth their own questions regarding clinical trial design for a 45-minute interactive discussion with the presenters. The objectives of the workshop are to improve the participants' understanding of the goals of clinical trial design and methods to achieve those goals in order to improve their own research techniques, grantsmanship, and abilities to more accurately judge the results of studies presented in the literature.