

STATISTICAL EDUCATION FOR NON-STATISTICIANS

MISSION: Our mission is to help individuals understand statistics in the environment and applications with which they are familiar through topic specific seminars or a comprehensive statistics course tailored to the precise needs of the customer.

TARGET AUDIENCE: Non-statisticians involved in the planning, execution, presentation, and interpretation of non-clinical studies including study directors, contributing scientists, facility management, data management, programmers, and technical writers.

SOFTWARE TRAINING

Many CROs and conducting laboratories have purchased third-party software for data management, statistical analysis, and results presentation. While these software packages come with operational instructions, they are generally lacking in terms of training and explanation from a statistical perspective. BioSTAT can provide training on the software's capabilities and limitations, as well as guidance on interpretation of its output.

BioSTAT can assist in the development of a standard, protocol-ready statistical methodology that complies with regulatory guidance and takes full advantage of the software's capabilities. Additionally, training can be tailored for the presentation and interpretation of the software's output and results in study reports.

SHORT COURSE

An introductory short course can be tailored to address common statistical terms and topics:

- P-values, confidence intervals & significance
- Preliminary tests of variance & normality
- Parametric analysis: ANOVA, ANCOVA
- Nonparametric analysis: Kruskal-Wallis, Fisher
- Repeated measures analysis
- Multiple comparisons: Dunnett, Bonferroni
- Dose-response trend testing
- Experimental unit, litter effect
- Sample size and power
- Recovery data

TOPIC SPECIFIC SEMINAR

Specific topics can be explored in greater detail via dedicated seminars. Sample topics include:

- Long term carcinogenicity analysis of tumor data
- Developmental neurotoxicity testing
- Cardiovascular and ECG data
- FDA Guidance #226: Target Animal Safety Statistical Analysis
- EFSA Guidance: Repeated-dose 90-day oral toxicity in rodents on whole food

Training can be customized for combinations of software, short course and/or specific topics and presented onsite or online.