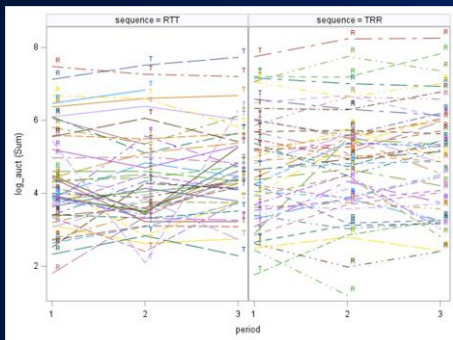




Label	LowerCI	Ratio	UpperCI
T-R	86.92	97.38	109.10



## COURSE TITLE: Bioequivalence Trials: Concepts, Issues and Pitfalls

### Agenda:

#### Overview of Key Statistical Concepts

- Descriptive vs. Inferential Statistics
- Measures of Central Tendency and Variability, Demo
- One- and two-sample t-test, Demo
- Confidence Interval and p-values, Demo
- ANOVA key concepts
  - Demo

#### Bioequivalence Trials: Key Concepts, Issues and Pitfalls

- Test for difference vs. test for equivalence
- Clinical vs. bioequivalence trials
  - Endpoints
  - Aims
  - Results
  - Demo
- In-vivo vs. in-vitro bioequivalence trials
- Parallel vs. paired designs
- Standard crossover vs. higher-order (replicated) crossover design
  - Some common designs
    - 2 treatment designs
    - 2x2 vs. Higher order/replicated designs
    - 3 treatment designs
    - 4 treatment designs
    - Demo
  - Design evaluation and comparison
    - Uniformity, balance
    - Bias
    - Precision/efficiency
  - Randomization
    - Demo
- Sample Size and Power for bioequivalence trials
  - Demo
- Raw vs. log scale
- Parametric vs. nonparametric analysis
- Models for the analysis of bioequivalence data
  - Data from a parallel design
    - Demo
  - Data from a non-replicated crossover design
    - Demo
  - Data from a replicated crossover design
    - Demo
  - Fixed factors vs. mixed factors
- Pitfalls in bioequivalence trials and how to avoid them

#### Schedule:

4 half-days (2 x 1.5 hours per day)

#### Timing:

To be agreed

#### Maximum number of participants:

10

#### Course format:

On-line via MS-Teams

#### Presenters:

Vesna Luzar-Stiffler, PhD Statistics/IT  
Anja Oberiter-Korbar, PhD Toxicology/IT

#### Course materials:

PowerPoint Slides