QuantPharm LLC

Advanced PK-PD Consulting

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QuantPharm LLC is a consulting company specializing in advanced quantitative modeling, simulation, drug development and clinical pharmacology consulting to support pharmaceutical and biotechnology industries. QuantPharm LLC offers:

Support for Model-Based Drug Development:

- Population (nonlinear mixed-effects) PK and PK-PD data analyses, including preparation of FDA submission-ready reports;
- Population pharmacokinetic and pharmacodynamic modeling and clinical trial simulation to support drug development programs;
- Population PK-PD analysis of continuous or categorical responses, count data, survival, time-toevent, or QTc prolongation data;
- Design and analysis of pediatric studies;
- Optimal Study Design endpoints, sampling times, number of subjects, etc.

Pharmacokinetic and Pharmacodynamic Analysis for Biologics:

- Client support for model-based drug development of biologics;
- Mechanistic modeling of monoclonal antibodies and other biologics with target-mediated drug disposition;
- Analysis of the preclinical data and scale up of the preclinical models to human for biologics with target-mediated drug disposition;
- Design and analysis of first-in-man, Phase 1, Phase 2 and Phase 3 studies for drugs described by the target-mediated drug disposition (TMDD) equations.

Clinical Pharmacology Consulting:

- General PK and PK-PD consulting;
- Preparation of pharmacokinetic/pharmacodynamic sections of Phase 1 Phase 3 study protocols;
- Critical review of the sponsor's protocols.

In Vitro - In Vivo Correlation (IVIVC) Analysis:

- Convolution-based In Vivo-In Vitro Correlation (IVIVC) Modeling;
- Level-A nonlinear mixed effects IVIVC modeling.

On-demand Support of Sponsor's Modeling Efforts:

- Data management support including preparation of the Nonmem-ready data files;
- Nonmem (including Nonmem 7) control stream development and debugging;
- S-plus and R script development;
- Expert support and critical review of population PK and PK-PD analyses;
- Expert support and critical review of the sponsor's IVIVC analyses;
- Preparation of publications.

Training courses or workshops:

- Mixed effects modeling using Nonmem: from data preparation to model evaluation (beginners to advanced levels);
- In-Vivo In-Vitro Correlations: theory, applications, and IVIVC model development;
- Pharmacokinetic/pharmacodynamics modeling of biologics with Target-Mediated Drug Disposition;
- R for pharmacometric data management and model diagnostics.

We guarantee fast turn-around time and complete transfer of know-how related to the sponsor's projects. Strict confidentiality, scientific expertise and integrity, high efficiency and close collaboration with the sponsor form the foundation of our services.