Simulations Plus presents: The GastroPlus™ DMPK Workshop



July 10-12, 2017 at Chungnam National University

Simulations Plus, the industry's leading provider of simulation and modeling software for drug discovery and development, will be hosting its "GastroPlus™ DMPK Workshop" at Chungnam National University in Daejeon, South Korea on July 10 - 12, 2017.

This three-day, hands-on course provides a working knowledge of the theories and application of our state-ofthe-art PBPK modeling and simulation software for the analysis of drug dissolution and absorption, coupled with the resulting pharmacokinetics and pharmacodynamics. A combination of presentations and interactive examples, taken from actual industry experience and using GastroPlus, illustrate how to recognize and deal with the multiple interacting phenomena that affect the absorption, pharmacokinetics, and pharmacodynamics of drugs as they progress to the clinic.



Attendance for this event is limited, so register today!

Who should attend?

This workshop is appropriate for research scientists and engineers in the areas of DMPK, ADME, and biopharmaceutics. Prior experience with GastroPlus is not required. The course will use GastroPlus for all case studies, but the guiding principles will be taught in a software-independent manner. Class size is limited to encourage interaction with the course instructors and among attendees. Interaction and networking among industry, government, and academic scientists is an important and valuable part of the experience!

What will you learn?

Upon completion of this course, you should have a solid understanding of the interactions that exist among the various mechanistic phenomena affecting drug dissolution, absorption, pharmacokinetics (employing both compartmental PK and physiologically based pharmacokinetics - PBPK), and pharmacodynamics.

You will understand and learn to recognize potential interactions among such factors as:

- pKa ionization effects on dissolution, precipitation, absorption, and distribution
- solubility and permeability changes in the various environments in the gastrointestinal tract
- differences in physiology between human and preclinical species
- transit times through various gut regions and how and why they may vary
- formulation effects, including particle size distributions and controlled release dosage forms
- influx and efflux transporters in the gut wall and in other tissues
- metabolizing enzymes in the gut wall and in other tissues
- renal clearance and its variables
- potential for enterohepatic circulation

You will gain experience with:

- screening compound libraries for absorption and bioavailability using chemical structures
- recognizing when to use PBPK vs. standard compartmental PK models
- predicting first-in-human doses with available preclinical and in vitro data
- assessing formulation strategies such as micronization and nanoparticles
- simulating populations including selected mixes of ages, gender ratios, and ethnicities
- estimating local concentration of drug following dermal and pulmonary administration
- modeling the distribution of large molecules (biologics) using PBPK approaches
- understanding optimization methods, objective function weighting, and constraints

How will the workshop operate?

All presentation files and data sets needed to run case studies will be available in electronic format. All attendees will be responsible for bringing their own laptop computers, with GastroPlus™ installed prior to the course.

Continental breakfast, a refreshment break, and lunch will be provided.

Where will this be held?



The workshop will be held July 10 - 12, 2017 at the College of Pharmacy (Sam-Nam Hall, 1st floor), Chungnam National University in Daejeon, South Korea. Chungnam National University is a "reference university" for Simulations Plus, with students and professors using our modeling & simulation technology to assist with their research.



The workshop is co-hosted by the Institute of Drug Research & Development and the BK21 Plus Program, College of Pharmacy, Chungnam National University

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Please fill in this form and return to Renee Bouche (renee@simulations-plus.com) Fax: +1-661-723-5524 To register by phone, please call Renee at +1-661-723-7723 ext. 227

The GastroPlus™ DMPK Workshop July 10 - 12, 2017 in Daejeon, South Korea

Title: Professor / Dr. / Mr. / Mrs. / Miss /	′ Ms.	
FIRST NAME:		
LAST NAME:	COMPANY:	
POSITION:	DEPARTMENT:	
ADDRESS:		
TELEPHONE:	EMAIL:	
PURCHASE ORDER NO. (if applicable):		
Cost for the workshop is 500,000 Korean Won (k workshop materials, continental breakfast, refresh to GastroPlus, with all optional modules, will be ava Hotel accommodation is not included with registra	nment breaks, and lunch each da ailable after the workshop.	
Method of payment (Please check one)		
Credit card (a confirmation message will be sent	t to the email address provided)	
Name on card:	Email:	Tel:
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Terms and Conditions Cancellation Policy: Cancellations made prior to June 26, 20 days after the date of payment for credit card transactions Payment Terms: Following completion and return of the re	s. Substitutions are allowed up to 10	days before the event.