

# Simcyp Workshops 2026: Hands-On PBPK & MIDD Modeling

In 2025 over 700 professionals worldwide trusted Simcyp workshops to sharpen their modeling expertise. Now it's your turn, explore our 2026 lineup and take your PBPK and MIDD skills to the next level.

## 2026 Workshops

Registration is open at: [simcyp.learnupon.com/store](https://simcyp.learnupon.com/store)

### Online workshops

Biologics II

Mar 16-20, 2026

Intensive 10-day Workshop on Model-informed Drug Development (English)

May 11-22, 2026

Discovery to First-in-Human

Jun 8-12, 2026

Simcyp Designer

Jun 8-12, 2026

Absorption I

Jun 15-19, 2026

Best Practice

Jul 6-10, 2026

Specific Populations

Jul 6-10, 2026

Bridging Bottom-Up and Top-Down PBPK Approaches

Jul 13-17, 2026

Biologics I

Jul 13-17, 2026

Simcyp Boot Camp for Students

Jul 20-23, 2026

Discovery to First-in-Human

Oct 5-9, 2026

DDI

Oct 5-9, 2026

Pregnancy & Lactation

Oct 12-16, 2026

Intensive 10-day Workshop on Model-informed Drug Development (English)

Oct 19-30, 2026

Pediatrics

Nov 2-6, 2026

Simcyp Designer

Nov 2-6, 2026

Transporters

Nov 16-20, 2026

Absorption II

Nov 16-20, 2026

Biomarkers

Nov 23-27, 2026

### In-person workshops

Hands-on Introduction & Regulatory Applications of PBPK Modeling

Apr 21, 2026 | Basel, Switzerland

DDI

Aug 3-4, 2026 | Tokyo, Japan

Biopharmaceutics Applications

Aug 5-6, 2026 | Tokyo, Japan

The 27th Annual Consortium Meeting

Sep 22-24, 2026 | London, UK

### On-demand workshops

- Rectal & Vaginal Absorption
- Dermal
- Long Acting Injectables
- Introduction to PBPK modeling

In 2025, professionals from across four continents joined Simcyp® workshops to gain cutting-edge expertise in PBPK modeling and model-informed drug development. Each workshop is designed to deliver maximum value through:

- Expert-led content: Developed and delivered by Simcyp specialists to ensure the most current, practical, and impactful learning.
- Flexible learning: Access to lecture materials and recording (in online workshops), and Simcyp Simulator lets you engage with content at your own pace.
- Hands-on experience: Complete practical assignments that reinforce key concepts and real-world applications.
- Complementary support: Benefit from dedicated instructor office hours for Q&A and tailored feedback to optimize your learning journey.

## Overview of Simcyp workshops

Model-informed drug development (MIDD) is transforming the way leading pharmaceutical companies design and optimize clinical programs. Simcyp workshops empower scientists to harness compound-specific in vitro and in vivo data alongside human system information to accurately simulate and predict drug behavior across diverse populations. This integrated approach supports critical decisions for Investigational New Drugs and enables the efficient design of clinical studies. The ultimate goal: deepen understanding of PK/PD properties, reduce development time and cost, strengthen regulatory submissions, and accelerate access to life-changing medicines.

These workshops provide an exceptional opportunity for professionals in discovery, DMPK, clinical pharmacology, pharmaceuticals, and drug development to advance their expertise. Participants gain practical skills, stay current with scientific innovations, and connect with peers from industry, academia, and regulatory agencies. Each course combines expert-led lectures with hands-on sessions using the Simcyp Simulator, SIVA Toolkit, and Microsoft Excel, ensuring a dynamic and applied learning experience.

### 10-Day workshop on model-informed drug development

Incorporating population variability into mechanistic prediction of PK and modeling PK/PD

The model-informed approach to various aspects of drug development is rapidly being adopted by the leading pharmaceutical companies. The Simcyp workshops focus on the optimal use of compound-specific in vitro and in vivo data together with system specific information related to humans to simulate and understand drug behavior in various target populations. This integrated approach informs decisions related to Investigational New Drugs and assists with the conduct and optimal design of clinical studies. The ultimate aim is to better understand drug PK/PD properties, reduce the cost and time of drug development, improve the quality of regulatory submissions, and eventually implement precision medicine.

## Biologics I

This workshop will explain the principle of therapeutic protein pharmacokinetic (PK) and pharmacodynamic (PD) modeling. Distribution, clearance, FcRn recycling, target-mediated drug disposition (TMDD), and subcutaneous absorption will be covered for monoclonal antibodies and other therapeutic proteins. Additionally, the suppression of CYP enzymes by cytokines and thus interactions between biologics and small molecule drugs will be simulated.

Participants will learn how to apply these models using case studies.

### Key aspects covered in this course:

- The use of the full PBPK models for therapeutic proteins available within the Simcyp Simulator
- Prediction of the PK of therapeutic proteins in populations as well as in an average individual
- Utilization of the two-pore calculation to predict the distribution of therapeutic proteins
- Use of the renal filtration clearance for smaller proteins and peptides
- The effect of FcRn affinity and charge state on the PK of monoclonal antibodies
- Demonstrating the utility of the TMDD models within the Simcyp Simulator
- Inclusion of target shedding from the cell surface and simulation of the shed target in circulation
- Linking the biologics/TMDD models to simulate the PD effect
- Modeling subcutaneous / intramuscular absorption of therapeutic proteins
- Modeling the interaction between biologics and small molecule drugs

**“The flexibility of online learning, mix between lecture and hands-on, and the ability to use the virtual machine in your own time.”**

## Biologics II

The aim of this workshop is to provide an overview of PBPK models to predict the PK of complex large molecules such as antibody-drug conjugates (ADCs), bispecific antibodies, and oligonucleotides. Of special interest will be the prediction of therapeutic protein concentration in the tumor and the application of a tumor model. Furthermore, the simulation of large molecules in monkey and pediatrics will be discussed. Several model applications will also be presented.

### Key aspects covered in this course:

- Use of minimal and full PBPK models for ADCs and their link to the Simcyp Simulator
- Utilization of the tumor model for large molecules to predict the drug concentration at the tumor site
- Introducing the concept of bispecific antibodies and the use of TMDD models for bispecific antibodies
- Introduction to modeling oligonucleotides
- Modeling and simulation of therapeutic proteins in monkey and translation to humans
- Large molecules disposition in children
- Application of large molecule models at different stages of drug development

# Transporters

The basics of modeling drug transporter data with mechanistic approaches to predict the impact of drug transport proteins on ADME, PK, PD, and toxicity.

- Revisiting common in vitro transporter-based assays
- Characterization of key parameters required to model in vitro data
- Understanding complex data sets generated from in vitro assays
- Approaches to optimizing and modeling complex data sets derived from in vitro assays
- Scaling of in vitro data for gut, liver, brain, and kidney to in vivo
- Practical examples involving application of modeling to answer observations related to oral bioavailability, renal clearance, hepatic clearance, drug-drug interactions, and brain disposition
- Predicting impact of transporters on tissue-drug concentrations (efficacy/toxicity)
- Impact of population variability on transporter-based drug disposition
- Biomarkers for transporter pathways
- Approaches to handling genetic variations
- Modeling the impact of transporters on pharmacodynamics

“Possibility to work on real data from real clinical studies.”

The course is ideal for modelers and scientists (both bench and clinical) who want to enhance their knowledge of mechanistic approaches to predicting the impact of drug transport proteins on ADME, PK, PD, and toxicity.

# Pediatrics

This workshop discusses predicting age-related changes to PK and DDIs, including associated variability, and linking this information to drug response in the pediatric population. Participants will learn how PK behavior can be modeled in neonates, infants, and children and how it can be linked to PD. Hands-on exercises explore how this valuable information is relevant to early and informed decisions to assist in the improved design of pediatric clinical studies.

## Key aspects covered in this course:

- The impact of developmental physiology and ontogeny of drug elimination systems
- How changing ontogeny influences the level of DDIs in pediatrics
- In vitro-in vivo extrapolation (IVIVE) and how it applies to neonates, infants, and children
- Development and utilization of a pediatric full PBPK model
- How the PBPK model can be linked to PD
- Handling unknown values for pediatric PBPK/PD model parameters
- Pediatric oral drug absorption
- Specialized study design considerations (e.g., formulation, diet)
- The role of modeling and simulation in pediatric drug development

# Absorption I

Mechanistic oral absorption modeling and prediction of bioavailability for drug products incorporating inter-subject variability. Theory and applications of the Simcyp Advanced Dissolution, Absorption, and Metabolism (ADAM) Model.

- Gut wall permeability and first-pass metabolism
- Drug solubility, dissolution, precipitation and supersaturation
- Oral drug absorption incorporating food effects
- Bioavailability and the impact of physiology and dosage form including salts
- Entero-hepatic recirculation
- Inter-individual variability assessment

**“The structure of the workshop, starting with the basics and gradually building to more advanced models.”**

Application of the SIVA Toolkit to modeling of in vitro experiments to confirm and/or estimate parameters for PBPK simulations with a case study; mechanistic modeling of dissolution and precipitation in USP 2, USP 4, serial dilution, transfer and biphasic systems.

# Oral absorption II

This course broadens the range and utilization of in silico-based mechanistic prediction and analysis of drug absorption after oral delivery, including the development of mechanistic physiologically based in vitro-in vivo correlations (IVIVCs), virtual bioequivalence (VBE) concepts, and application of biopharmaceutic IVIVE using the SIVA Toolkit. We strongly recommend attending Oral Absorption I before taking this workshop.

**Key aspects covered in this course:**

- Recognize the opportunities and challenges in applying quantitative modeling and simulation tools in the field of oral drug formulation development
- Application of the SIVA Toolkit to IVIVE of dissolution including the P-PSD approach
- Development of mechanistic physiologically based in vitro-in vivo correlations (IVIVCs) for oral dosage forms.
- Virtual bioequivalence for oral dosage forms, theory and application.
- Mechanistic modeling of excipient binding to API and Drug-Excipient-Mediated Interactions
- Expanding the Simcyp absorption model to PD/scripting - modeling of acid-reducing agents (ARAs) and other applications

**“The lectures focus on the core science behind each topic and what has been built into the Simulator. In addition to learning about the software the lectures provide a detailed review of overall ADME science and technology.”**

## Best practice in PBPK model building

The aim of this focused workshop is to demonstrate the application of best practices in developing PBPK models, and to show how to verify and refine model performance. Various case studies, including real-life examples, will be presented.

The case studies will cover key elements of model development, including DDIs, specific populations, transporters, and different formulations. Optimal in vitro and clinical datasets will be discussed. Participants will learn how to select the most suitable models and evaluate the impact of relevant assumptions on model performance. Requirements for regulatory submissions will also be discussed. This is an intermediate-level workshop intended for participants with a basic understanding of PBPK modeling and some prior hands-on experience.

### Key aspects covered in this course:

- Quick overview of models within the Simcyp Simulator
- Model selection: how to choose the most suitable models
- What are the most appropriate in vitro data
- Leveraging clinical data to verify and refine PBPK model performance
- Application of specific population models
- Using sensitivity analysis to assess the impact of uncertain parameters

**“The individual presenters are experts in their given areas of expertise and conveyed that throughout the course.”**

## PBPK in specific populations

This workshop will provide an in-depth overview of generating populations for mechanistic PBPK, focusing on key covariates to inform prediction of PK in healthy as well as ethnic and disease populations.

### Key aspects covered in this course:

- Population building & sampling: Master creating custom populations with Correlated Monte Carlo methods for realistic variability.
- Trial design optimization: Match demographics to clinical trials and optimize study designs for accurate PK predictions.
- Ethnic bridging: Focus on Japanese/Chinese/North American populations for dose adjustments and inter-ethnic PK assessments.
- Organ impairment: Model renal impairment and cirrhosis effects on PK parameters and dosing.
- Oncology population: Simulate altered physiology in cancer patients for therapy optimization.
- Obesity & comorbidities: Scale PBPK models for obese subjects and associated conditions.
- Inflammatory effects: Quantify cytokine-mediated downregulation of enzymes (e.g., Rheumatoid Arthritis impact on CYP3A4).
- Hands-on Simcyp practice: Execute assignments with dedicated office hours for debugging.

# Bridging bottom-up and top-down PBPK approaches

## Sensitivity analysis and UQ for regulatory applications

The recent ICH M15 Model-Informed Drug Development (MIDD) guidance outlines regulatory expectations for the development, evaluation, and application of mechanistic models. This workshop focuses on PBPK model development and performance assessment, with particular emphasis on sensitivity analysis, parameter estimation, and uncertainty quantification (UQ) in a regulatory context.

Participants will learn how sensitivity analysis can support model development, identify influential parameters, and inform confidence in model predictions. Key principles and practical implementation of uncertainty quantification will be introduced as part of PBPK model evaluation, alongside strategies for bridging bottom-up and top-down.

The workshop demonstrates how in vitro data, physiological knowledge, and clinical observations can be integrated to refine uncertain model parameters. Delegates will explore sensitivity analysis tools, parameter estimation workflows using clinical data, and the use of the Simcyp-R package for running simulations and analyzing model outputs in R. An overview of pharmacodynamic models available within the Simulator will also be provided, illustrating their integration with PBPK modeling.

The course is delivered as through a combination of lectures and tutor led interactive examples sessions.

### Key aspects covered in this course:

- The theoretical basis for combining bottom-up and top-down modelling and simulation that meets regulatory requirements
- Sensitivity Analysis
  - Workflow
  - Local methods: PK profiles, parametric scanning and population SA
  - Global methods including meta-modelling approaches
- Parameter estimation:
  - Step-by step guidance on data entry, fitting, and interpretation of results
  - Simultaneous fitting of PK and PD parameters
  - Covariate recognition
- Simcyp R:
  - Technical details on the R package and it's capabilities
  - Scripts for key tasks
- Uncertainty Quantification
  - Principal of uncertainty quantification for DDI
  - Applications in regulatory applications
- Pharmacodynamics:
  - Models available
  - Use of preliminary clinical data to model and simulate various covariate effects (e.g., genotypic/phenotypic differences, effects of diseases such as renal impairment or cirrhosis)
  - PD at the relevant effect site (e.g., liver)
- Options for user-defined PD models

# Simcyp Designer

## A hands-on workshop with Simcyp Designer for tailored PBPK-PD/QSP models

This course will review the principles of PBPK modeling, using the Simcyp Simulator and how to use Simcyp Designer to modify existing PBPK models and link them to custom-built PD/QSP models. We will have brief lectures to introduce the PBPK models to be changed and interactive hands-on sessions to introduce the customization of PBPK models with Simcyp Designer. Access to the Simcyp Simulator and Simcyp Designer will be provided. This hands-on intensive workshop can be attended without prior knowledge, and joining the live online sessions is recommended.

### Key aspects covered in this course:

- Overview of PBPK modeling, using the Simcyp Simulator.
- Rapidly create new models in a graphical editor – Simcyp Designer.
- Replace PBPK model components in Simcyp with a user-defined model.
- Add components/modules to Simcyp PBPK models.
- Extend PBPK models for large molecules and oligonucleotides.
- Build PBPK driven PD/QSP models.
- Incorporate population variability into the customized models.
- Sensitivity analysis and parameter estimation with Simcyp Designer models.

## Simcyp Designer (biologics focused)

This advanced hands-on workshop builds upon foundational knowledge of biologics PBPK modeling and guides you through the creation and extension of large molecule models using Simcyp Simulator's biologics module and Simcyp Designer's biologics platform. Participants will engage in hands-on exercises to build and refine models for monoclonal antibodies and other biologics, integrating mechanistic PK, complex distribution processes, and downstream PD/QSP components.

This workshop focuses on applying Simcyp Designer to rapidly prototype and iterate advanced biologics models, with emphasis on building reusable components and tailoring models to fit specific mechanisms, data, or hypotheses. Lectures and tutorials are informed by a [published biologics PBPK tutorial](#), extended with new case studies and model structures.

Prerequisites: Basic biologics PBPK modeling knowledge is recommended.

### Key aspects covered in this course:

- Adapting the simulator's pre-built biologics models.
- Linking simulator's PBPK models to dynamic PD or QSP models.
- Modularity and automation of PBPK model building.
- Simcyp Designer modularity features.
- Overview of the biologics PBPK platform in Simcyp.
- Strategies for tailoring the platform model to specific scenarios, molecules, mechanisms, and datasets.
- Implementing and adapting biologics PBPK models across species for translational applications.
- Sensitivity analysis and parameter estimation using Simcyp Designer.

## PK during pregnancy and lactation

Hands-on workshop discussing the changes to PK during pregnancy and the prediction of PK (including in the milk) during lactation. A PBPK approach will be utilized to describe the PK during pregnancy and lactation and to determine population variability.

### Key aspects covered in this course:

- Maternal and fetal gestational age-dependent physiological changes
- Prediction of maternal and fetal drug PK
- Ways of incorporating ex vivo experimental data on transplacental kinetics within the PBPK model
- Handling gestational age-varying covariates during simulation
- Prediction of PK in breastfeeding mothers and milk exposure using lactation models
- Prediction of infant dose for breastfed infant
- To understand the requirements in developing maternal/ fetal and lactation PBPK models using hands-on examples
- To get familiar with different pregnancy/lactation PBPK models assumptions within the Simcyp Simulator, interpretation of the results to make recommendations using clinical examples
- To be able to integrate experimental results within the pregnancy and lactation PBPK framework
- Upon completion, participants should be able to recognize opportunities and challenges in applying quantitative modeling and simulation tools in the field of perinatal pharmacology
- Upon completion, participants should be able to utilize the advantages of PBPK models in providing information during drug development and in clinical settings

## Biomarkers

This workshop is ideal for those interested in developing PBPK models for endogenous biomarkers as sensitive and specific markers of ADME-related enzymes and transporters. Attendees will examine how these models assess metabolic and transporter-mediated DDI risk and how biomarkers can refine PBPK models for disease-state applications. Practical exercises will reinforce concepts and demonstrate the use of Simcyp features to develop effective endogenous biomarker models.

### Key aspects covered in this course:

- Development of biomarker PBPK models, including key assumptions, verification, and real-world applications.
- Leverage established Simcyp features for 'small molecule' files to develop effective biomarker models.
- Hands-on experience building biomarker models using the dedicated 'Endogenous' module within the Simcyp Simulator.
- Explore the use of PBPK biomarker models as sensitive and selective markers for ADME-related metabolic enzymes.
- Understand how endogenous PBPK models are applied in clinical and regulatory contexts, including their role in assessing DDI risk.
- Examine biomarkers for hepatic and renal transporters and their contribution to evaluating transporter-mediated DDI risk.
- Employing biomarker model assessments to refine PBPK model system parameters in disease.

## Discovery to first-in-human

In this focused workshop you will use the dynamic models within the Simcyp Discovery Simulator to prioritize compounds for progress to the next stage of development using information available in early drug discovery. You will use information on clearance, absorption, tissue distribution and DDI liability to inform compound selection. Participants will use workflow functionality to efficiently generate multiple workspaces, run simulations in parallel, and compare results using the Outputs Comparison (OC) tool to support selection of suitable compounds for progression to the next stage.

The workshop provides a comprehensive introduction to the application of PBPK modeling in early drug development. The lectures cover key aspects of PBPK in drug discovery, including data requirements, strategies for working with limited experimental data and animal data, and practical considerations for model development. Regulatory perspectives will also be discussed, highlighting the broad application of PBPK modeling as well as expectations and challenges. The lectures will present different strategies for FIH prediction, addressing absorption, distribution, clearance, and drug-drug interaction assessment. Participants will also explore the application of the standalone Simcyp SIVA tool for integrating solubility and permeability data, as well as sessions on sensitivity analysis, parameter estimation, and pharmacodynamic modeling.

### Key aspects covered in this course:

- Compound import
- Workflow
- Outputs comparison
- Dose finding
- Static DDI vs Dynamic DDI
- SIVA Toolkit
- Retrograde calculator
- Sensitivity analysis
- Parameter estimation
- Pharmacodynamic modeling

## Drug-drug interactions (DDIs)

This workshop will provide an in-depth overview of predicting and evaluating complex DDIs and applying the Simcyp Simulator to real-life cases.

Participants will learn good practices in combining data from both in vitro and clinical studies, whilst gaining experience in using such data within physiologically-based dynamic models to evaluate DDI liability of drug candidates.

- Static vs. dynamic models (including discussion around regulatory guidance)
- Metabolic and transporter mediated DDIs
- Competitive inhibition, mechanism-based inhibition, induction, and suppression
- Complex DDIs involving combined interaction mechanisms and multiple inhibitors (including inhibitory metabolites)
- Importance of in vitro study design
- The role of non-hepatic metabolism in DDIs
- Use of parameter estimation and sensitivity analysis
- Optimal clinical study design
- Specific populations—identification of individuals at risk of DDI

## Simcyp boot camp for students

This PBPK boot camp is an ideal way to enhance the continuous education of students conducting research in the areas of Discovery, Drug Metabolism and Pharmacokinetics (DMPK), Clinical Pharmacology, Pharmaceutical and Drug Development and, it will provide an excellent opportunity to develop skills and remain informed of the latest scientific advances using Simcyp Simulator as the state of the art PBPK modeling platform. This 4-day workshop will comprise of lectures delivered by leading experts in the fields of PBPK modeling and will cover some of the major topics in model-informed drug development in-depth.

## Biopharmaceutics applications

### Simcyp focus group workshop

This hands-on workshop is designed to deepen your understanding of the biopharmaceutic aspects of physiologically based pharmacokinetic (PBPK) modeling and its practical applications, including formulation development, virtual bioequivalence and automated safe space assessment. Covering both foundational concepts and case studies. This event offers a comprehensive learning experience for professionals in industry, academia, and regulatory agencies.

#### Workshop highlights:

1. Overview of the biopharmaceutic/oral absorption modeling tools including modeling of in vitro solubility and dissolution experiments to better understand your data and parameterize biopharmaceutic aspects of PBPK models.
2. Handling of different formulations ranging from suspensions and IR to controlled and modified release including ASDs and salts.
3. Mechanistic modeling of food effects including advanced aspects such as the Magenstrasse.
4. Application of virtual bioequivalence (VBE) and automated safe space tools.
5. Learning best practices and regulatory requirements through case studies.

## Introduction to PBPK modeling

In this workshop you will get familiar with the general concepts and application of:

- In Vitro In Vivo Extrapolation (IVIVE) linked PBPK models
- Fundamental concepts of separation of systems, drug and trial design parameters and incorporation of physiological and biological parameters in prediction of PK parameters and profiles are described
- Applications of PBPK models for predicting transporters function and metabolism- and transporter-mediated drug-drug interactions are explained

## Dermal

This on-demand workshop focuses on in silico-based mechanistic prediction of dermal drug absorption. The details of the models used to mechanistically predict skin absorption after topical application will be explained. In addition, examples of using mechanistic physiologically-based in vitro-in vivo correlation (IVIVCs), and VBE concepts will be presented.

### Key aspects covered in this course:

- Recognize opportunities and challenges in applying quantitative modeling and simulation tools in the field of dermal drug formulation development
- The use of Multi-Phase Multi-Layer (MPML) MechDermA model for simulating the absorption of drug from the skin
- Development a PBPK framework for modeling in vitro and in vivo skin permeation of topical/transdermal products – establishing dermal in vitro in vivo extrapolation
- Utilization of IVPT module for the in vitro skin permeation simulation and further extrapolation to in vivo situation (IVIVE)
- Dealing with different types of topical formulations— solutions, emulsions (O/W, W/O), emulsions with solid particles, suspensions, patches
- Understanding and modeling the metamorphosis of topical formulations when applied on the skin surface
- Development of mechanistic physiologically-based in vitro-in vivo correlations (IVIVCs) for dermally applied with discussion around case studies
- VBE for dermally applied with discussion around case studies

## Long acting injectables focused workshop

Learn how to develop in vitro release and in vivo PK models using long-acting injectable module of the Simcyp Simulator. The course will review building PBPK models to predict drug release. The users are not expected to have prior knowledge but are expected to learn quickly!

You will also learn model applications for evaluating VBE by applying population variability to systemic parameters (volume of distribution, clearance, etc.).

### Key aspects covered in this course:

- A brief overview of PBPK modeling using the Simcyp Simulator
- An introduction to long acting injectables and considerations to be given for modeling the polymer-based long acting injectables
- In vitro release testing of solid implants
- VBE testing of drug products
- Modeling different processes in the case of solid/in situ implants during drug release for example wetting, polymer degradation, etc.
- Modeling in vivo PK after administration of implants
- Optimization of PBPK model parameters with the help of sensitivity analysis and parameter estimation tool

# Rectal and vaginal absorption

This on-demand workshop focuses on in silico-based mechanistic predictions of rectal and vaginal drug absorption. The workshop will include details of the Simcyp models simulating rectal and vaginal absorption. Case studies, including in-depth understanding of the model parameterization and prediction of systemic plasma concentrations after rectal and vaginal administration, will be presented. Additionally, examples of VBE concepts related to vaginal delivery will be discussed.

## Key aspects covered in this course:

- Brief description of rectal and vaginal physiology
- In-depth description of drugs administered through rectal and vaginal routes, including formulation types
- Detailed summary of the Mechanistic Rectal Absorption Model (MechRAM) and the Mechanistic Vaginal Absorption Model (MechVAM) structure and underlying assumptions
- Summary of rectal and vaginal absorption model outputs
- Overview of MechRAM and MechVAM model parametrization for simulating the absorption of drug from the rectal and vaginal routes
- Case studies with different types of rectal and vaginal formulations including rectal suppositories, vaginal gel and vaginal ring
- Example of VBE analysis for vaginally applied formulations with discussion around a case study

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Online, in-person and on-demand options available

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Registration is open

## About Certara

Certara accelerates medicines using proprietary biosimulation software, technology and services to transform traditional drug discovery and development. Its clients include more than 2,400 biopharmaceutical companies, academic institutions and regulatory agencies across 70 countries.

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