ORAL ABSORPTION SIMULATION

- Identify risk factors prior to FIH trials
- Make better predictions based on better models
- Easily incorporate proprietary models
- Accurately represent dynamic physiology
- See interdependencies in open model reports

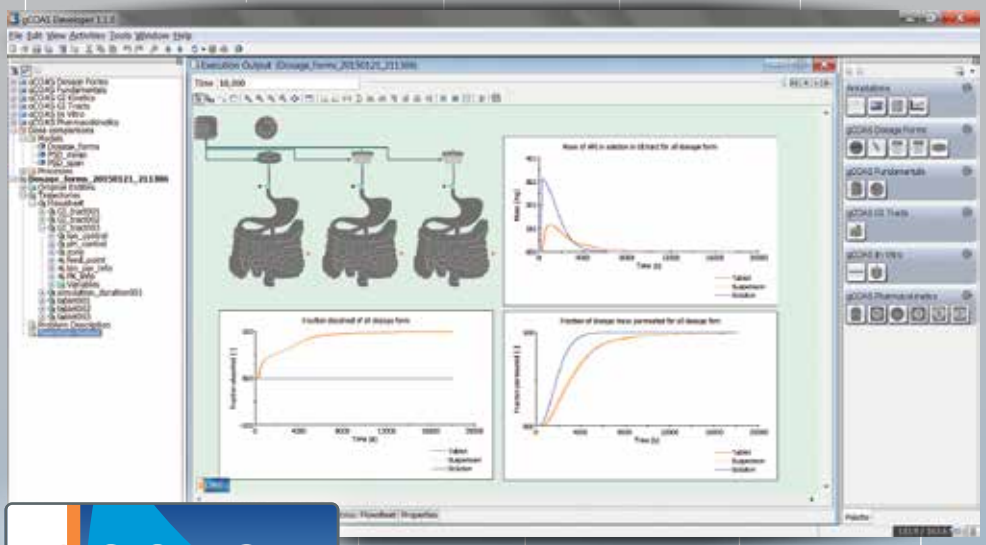
Inputs are directly measurable material physicochemical properties

Openly defined model equations

Custom templates for proprietary kinetic models

Dynamic GI pH and volume

Explicitly track all species in solution



gCOAS

Microclimate pH at particle surface

Kinetic co-existence of multiple solid forms

Population balance-based PSD tracking

Fluid movement kinetics

gCOAS® helps formulation scientists accurately predict oral absorption based on material physicochemical properties, prior to first-in-human trials.

With open, mechanistic models, gCOAS uses the power of the gPROMS platform to harness published scientific research in a flexible, predictive simulation tool.

Now you can explore the formulation decision space rapidly to identify risk factors, overcome liabilities and optimise the clinical trial pathway.

Contact us to find out how gCOAS can help you.

PSE

The Advanced Process Modelling Company

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Life Sciences

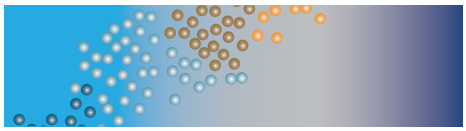
THE POWER TO BE CERTAIN

gCOAS PLATFORM ADVANTAGES

Advanced Process Modelling technology brings new capabilities to oral absorption simulation

Identify risk factors prior to FIH trials

gCOAS is designed from the bottom up to simulate oral absorption based solely on measurable, physicochemical properties available before human, animal or even in vitro trials. Insights developed in gCOAS become a guide to identify and mitigate risk factors, and, ultimately, to reduce the number of costly, time-consuming trials while also reducing unnecessary risk to test subjects.



Make better predictions based on better models

The high fidelity, mechanistic models in gCOAS make use of modelling methods well beyond the data fitting techniques commonly employed. An approach based on fundamental physics, chemistry and physiology allows gCOAS to give unprecedented confidence in the accuracy of predictions.

Easily incorporate proprietary models

gCOAS includes easy-to-use templates to incorporate custom kinetic equations for any process within the system. Formulation scientists can leverage prior R&D investments in specific areas of expertise while operating within an open, compatible simulation framework.

Accurately represent dynamic physiology

gCOAS includes preset physiologies and the explicit values that define the physiological environment. User-defined custom physiologies allow tremendous flexibility to choose the number of segments in the GI tract and the physiological conditions in each segment.

See interdependencies in open model reports

gCOAS is based on the powerful gPROMS platform which simultaneously solves all model equations while providing complete, fast access to all calculations throughout the simulation run-time. Formulation scientists can see not just a result, but also the interdependencies and relationships that lead to the result. gCOAS gives you the clarity to make decisions with confidence.

Find out how gCOAS can help you optimise the clinical trial pathway at

psenterprise.com