

# **Biopredictive dissolution methods for the drug delivery behavior of oral medicines**

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Physiolution's biopredictive dissolution methods enable realistic simulation of gastrointestinal (GI) transit conditions, including pH fluctuations, motility forces, and temperature gradients. These advanced techniques play a crucial role throughout the R&D cycle of oral drugs, supporting the rational, physiology-driven characterization of APIs, formulation optimization, clinical trial preparation, and evaluation of post-approval changes. Designed to generate high-quality data, these tools are particularly suited for absorption simulations and pharmacokinetic (PK) modeling, bridging the gap between *in vitro* studies and *in vivo* drug performance. In this presentation, we will demonstrate their applicability in predicting the drug delivery behavior of oral medicines through clinically relevant case studies.