St SimulationsPlus



ADDITIONAL DOSAGE ROUTES:

INTRAARTICULAR

Understanding the knee joint physiology and its impact on drug PK after intraarticular (IA) injection is critical for developing new drugs aiming to cure rheumatoid arthritis (RA) and other specific diseases affecting human joints.



The model can simulate a variety of dosage forms including:



Solution



Suspension



Controlled Release



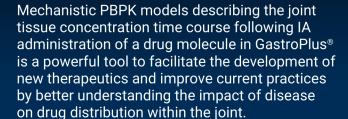
Utilize validated PBBM models

Mechanistic, physiologically-based models are provided for each tissue, for different species.



Customize in GastroPlus®

As with other GastroPlus modules, there is no equation or code writing required.



Some of the mechanism considered in the model include dissolution in the IA fluid, diffusion in cartilage, and uptake into the systemic circulation through the sinobial membrane.



Optimize your models

Load measured *in vivo* PK data, for local tissues, to optimize and validate your models.



Leverage PBPK delivery models

PBPK delivery models, including the Population Simulator and Parameter Sensitivity Analysis, can be utilized.



simulations-plus.com/gastroplus



Interested in collaborating?



Email us! info@simulations-plus.com