SimulationsPlus

GastroPlus®

PBPK+

PBPKPLUS™

Ranked as the #1 PBPK software for *in vitro-in vivo* Extrapolation (IVIVE) & PBPK modeling by Pfizer!*

What is the PBPKPlus™ module?

The PBPKPlus™ Module extends GastroPlus to define a physiologically based pharmacokinetic (PBPK) model consisting of various tissues. You can easily simulate the distribution and elimination of compound throughout the body and track concentrations in any tissue. Any tissue can employ fixed intrinsic clearance and with the Metabolism and Transporter Module, saturable metabolism and transport can be incorporated.

Tissues can be defined as needed, or default models can be used with a standard set of compartments:

- Adipose
- Arterial blood
- Brain
- Heart
- Lungs
- Muscle
- Skin
- Spleen
- Reproductive organs
- Venous blood
- Yellow marrow
- Red marrow
- Kidney
- Liver

Generate physiological model parameters (tissue weights and volumes, perfusion rates, etc…) with our built-in PEAR Physiology™ (Population Estimates for Age-Related Physiology).

Current physiology models are:

- Human
- Infant/pediatric groups
- Rat
- Dog
- Mouse
- Monkey
- Rabbit
- Minipig
- Disease populations
- Pregnancy
- Swine

Customize in GastroPlus®

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

Transporter-based IVIVE

Automated scaling of permeability across tissues using a single parameter!

simulations-plus.com/gastroplus

Interested in collaborating?

Email us! info@simulations-plus.com

*Cole et al., 2nd Asian Pacific Regional ISSX Meeting, May 2008, Shanghai, China

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