



[Exam \(Samples\)](#) | [Problem Sets](#)

PHA 5127

Basic Principles of Dose Optimization

On-Line Pharmacokinetic Simulations
Computer Programming
by Ned Phillips

One Compartment Model

- *IV bolus*

[Single Dose](#)

[Physiological Model](#)

[Metabolism](#)

- [Oral Single Dose Absorption](#)
- [Multiple IV Bolus Injection](#)
- [Multiple Dosing with Absorption](#)
- [Single Dose Zero Order Infusion](#)
- [Multiple Dose Zero Order Infusion](#)

Two Compartment Model

- [IV bolus](#)

PK/PD

- *IV bolus*

[Single Dose](#)

Excel Pharmacokinetic Simulations
Developed by Hartmut Derendorf and Guenther Hochhaus

[Excel Files To Download](#)

NOTE: If you have the excel program:

The following excel files can be downloaded to your own computer by clicking on the name and following the choice to save to disk.

Then you can use your own excel program to run these files.

I. 1 compartment body model

- **IV bolus**
 - [IV bolus single dose](#)
 - [IV bolus physiological model \(hepatic\)](#)
 - [IV bolus metabolism](#)
 - [IV bolus physiological model \(GFR\)](#)
 - [IV bolus physiological model \(urine flow\)](#)
 - [IV renal acid](#)
 - [IV renal base](#)

- [Oral single dose with absorption](#)
- [Infusion single dose](#)
- [Multiple IV bolus injection](#)
- [Multiple dosing with absorption](#)
- [Multiple dose zero order infusion](#)

II. 2 compartment body model

[IV bolus](#)

PK/PD

- [IV bolus](#)

Please contact me if you notice any errors. Thank you. [Guenther Hochhaus](#)

[Here is an additional site for further information](#) (Creighton University)



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