

mrgsolve Users Guide

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Chapter 1

Prerequisites

This is a *sample* book written in **Markdown**. You can use anything that Pandoc's Markdown supports, e.g., a math equation $a^2 + b^2 = c^2$.

For now, you have to install the development versions of **bookdown** from Github:

```
devtools::install_github("rstudio/bookdown")
```

Remember each Rmd file contains one and only one chapter, and a chapter is defined by the first-level heading **#**.

Chapter 2

Introduction

An introduction to `mrgsolve`.

Chapter 3

Model components

Here is a review of existing methods.

Chapter 4

Model specification

We describe our methods in this chapter.

4.1 Variables and Macros

4.1.1 EVID

EVID is an event id indicator. `mrgsolve` recognized the following event IDs:

- 0 = an observation record
- 1 = a bolus or infusion dose
- 2 = other type event
- 3 = system reset
- 4 = system reset and dose
- 8 = replace

4.1.2 NEWIND

4.1.3 ETA(n)

4.1.4 EPS(n)

4.1.5 table(name)

4.2 Code blocks

4.2.1 \$PARAM

4.2.2 \$INIT and \$CMT

4.2.3 \$MAIN

4.2.4 \$ODE

4.2.5 \$TABLE and \$CAPTURE

4.2.6 \$OMEGA

4.2.7 \$SIGMA

4.2.8 \$SET

4.2.9 \$GLOBAL

4.2.10 \$PKMODEL

Chapter 5

Input data sets

Input data sets are used in `mrgsolve` to allow the user to specify interventions and input data items.

5.1 Overview

5.2 Special columns in data sets

5.3 Event data sets

5.4 Individual data sets

Chapter 6

R workflow

We have finished a nice book.

Bibliography