

# Package: xpose.nlmixr2 (via r-universe)

July 8, 2024

**Type** Package

**Title** Graphical Diagnostics for Pharmacometric Models: Extension to 'nlmixr2'

**Version** 0.4.0

**Maintainer** Justin Wilkins <justin.wilkins@occams.com>

**Description** Extension to 'xpose' to support 'nlmixr2'. Provides functions to import 'nlmixr2' fit data into an 'xpose' data object, allowing the use of 'xpose' for 'nlmixr2' model diagnostics.

**License** GPL (>=2)

**Encoding** UTF-8

**LazyData** true

**Depends** R (>= 3.2), xpose (>= 0.4.2)

**Imports** ggplot2 (>= 2.2.1), dplyr (>= 0.7.4), tibble (>= 2.0.0), stringr (>= 1.2.0), tidyr (>= 0.7.2), magrittr (>= 1.5), methods (>= 3.4.1), vpc (>= 1.0.2), crayon, rlang, nlmixr2est

**Suggests** readr, nlmixr2

**RoxygenNote** 7.1.2

**Repository** <https://nlmixr2.r-universe.dev>

**RemoteUrl** <https://github.com/nlmixr2/xpose.nlmixr2>

**RemoteRef** HEAD

**RemoteSha** 1f8cbbaa7a3dd7d9b587e97750808d643eb0c685

## Contents

|                                   |   |
|-----------------------------------|---|
| nlmixr2_vpc_theme . . . . .       | 2 |
| summarise_nlmixr2_model . . . . . | 2 |
| theme_xp_nlmixr2 . . . . .        | 3 |
| xpose_data_nlmixr2 . . . . .      | 3 |

|              |          |
|--------------|----------|
| <b>Index</b> | <b>6</b> |
|--------------|----------|

---

nlmixr2\_vpc\_theme      *Default VPC theme for 'xpose.nlmixr2'*

---

**Description**

Default VPC theme for 'xpose.nlmixr2'.

**Usage**

```
nlmixr2_vpc_theme
```

**Format**

An object of class vpc\_theme of length 23.

**Value**

A list with 'vpc' theme specifiers.

---

summarise\_nlmixr2\_model  
*Data summary function*

---

**Description**

Convert 'nlmixr2' model output into an 'xpose' database

**Usage**

```
summarise_nlmixr2_model(obj, model, software, rounding, runname)
```

**Arguments**

|          |  |
|----------|--|
| obj      | nlmixr2 fit object to be evaluated       |
| model    | Model. Can be blank                      |
| software | Software that generated the model fit    |
| rounding | Number of figures to round estimates to  |
| runname  | Name of the model object being converted |

**Value**

A summary data object used by [xpose\\_data\\_nlmixr2](#).

---

|                  |  |
|------------------|--|
| theme_xp_nlmixr2 | <i>Default 'nlmixr2' theme for 'xpose'</i> |
|------------------|--|

---

**Description**

Default 'nlmixr2' theme for 'xpose'.

**Usage**

```
theme_xp_nlmixr2()
```

**Value**

A list with 'xpose' theme specifiers.

---

|                    |  |
|--------------------|--|
| xpose_data_nlmixr2 | <i>Import nlmixr2 output into xpose object</i> |
|--------------------|--|

---

**Description**

Convert 'nlmixr2' model output into an 'xpose' database.

**Usage**

```
xpose_data_nlmixr2(  
  obj = NULL,  
  pred = NULL,  
  wres = NULL,  
  gg_theme = theme_readable(),  
  xp_theme = theme_xp_default(),  
  quiet,  
  skip = NULL,  
  ...  
)
```

```
xpose_data_nlmixr(  
  obj = NULL,  
  pred = NULL,  
  wres = NULL,  
  gg_theme = theme_readable(),  
  xp_theme = theme_xp_default(),  
  quiet,  
  skip = NULL,  
  ...  
)
```

**Arguments**

|          |  |
|----------|--|
| obj      | nlmixr2 fit object to be evaluated.  |
| pred     | Name of the population prediction variable to use for plotting. If unspecified, it will choose either "NPDE", "CWRES", and "RES" (in that order) if the column exists in the data. |
| wres     | Name of the weighted residual variable to use for plotting. If unspecified, it will choose either "NPDE", "CWRES", and "RES" (in that order) if the column exists in the data.     |
| gg_theme | A ggplot2 theme object.  |
| xp_theme | An xpose theme or vector of modifications to the xpose theme (eg. <code>c(point_color = 'red', line_linetype = 'dashed')</code> ).   |
| quiet    | Logical, if FALSE messages are printed to the console.   |
| skip     | Character vector be used to skip the import/generation of: 'data', 'files', 'summary' or any combination of the three.   |
| ...      | Additional arguments to be passed to the <a href="#">read_delim</a> functions.   |

**Value**

An [xpose\\_data](#) object suitable for use in 'xpose'.

**Examples**

```
## Not run:
library(nlmixr2)

one.cmt <- function() {
  ini({
    ## You may label each parameter with a comment
    tka <- 0.45 # Ka
    tcl <- log(c(0, 2.7, 100)) # Log Cl
    ## This works with interactive models
    ## You may also label the preceding line with label("label text")
    tv <- 3.45; label("log V")
    ## the label("Label name") works with all models
    eta.ka ~ 0.6
    eta.cl ~ 0.3
    eta.v ~ 0.1
    add.sd <- 0.7
  })
  model({
    ka <- exp(tka + eta.ka)
    cl <- exp(tcl + eta.cl)
    v <- exp(tv + eta.v)
    linCmt() ~ add(add.sd)
  })
}

theo_sd_fit <- nlmixr2(one.cmt, theo_sd, "focei", control=foceiControl(print=0))
```

```
xpdb <- xpose_data_nlmixr2(obj = theo_sd_fit)  
## End(Not run)
```

# Index

## \* datasets

- `nlmixr2_vpc_theme`, 2
- `nlmixr2_vpc_theme`, 2
- `read_delim`, 4
- `summarise_nlmixr2_model`, 2
- `theme_xp_nlmixr2`, 3
- `xpose_data`, 4
- `xpose_data_nlmixr` (`xpose_data_nlmixr2`),  
3
- `xpose_data_nlmixr2`, 2, 3