

# Package ‘xpose.nlmixr2’

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**Type** Package

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

**Version** 0.4.0

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**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

**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

**NeedsCompilation** no

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nlmixr2_vpc_theme	<i>Default VPC theme for 'xpose.nlmixr2'</i>
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### 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.

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summarise_nlmixr2_model	<i>Data summary function</i>
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### 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](#).

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theme_xp_nlmixr2	<i>Default 'nlmixr2' theme for 'xpose'</i>
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**Description**

Default 'nlmixr2' theme for 'xpose'.

**Usage**

```
theme_xp_nlmixr2()
```

**Value**

A list with 'xpose' theme specifiers.

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xpose_data_nlmixr2	<i>Import nlmixr2 output into xpose object</i>
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**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)
```

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