

Package ‘xpose.nlmixr2’

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Type Package

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

Version 0.4.1

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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.

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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 7.3.2

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.

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](#).

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.

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

<code>obj</code>	nlmixr2 fit object to be evaluated.
<code>pred</code>	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.
<code>wres</code>	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.
<code>gg_theme</code>	A ggplot2 theme object.
<code>xp_theme</code>	An xpose theme or vector of modifications to the xpose theme (eg. <code>c(point_color = 'red', line_linetype = 'dashed')</code>).
<code>quiet</code>	Logical, if FALSE messages are printed to the console.
<code>skip</code>	Character vector be used to skip the import/generation of: 'data', 'files', 'summary' or any combination of the three.
<code>...</code>	Additional arguments to be passed to the read_delim 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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