Package 'xpose.nlmixr2'

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Type Package

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

Version 0.4.2

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.

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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, nlmixr2data, testthat (>= 3.0.0)

RoxygenNote 7.3.3

Config/testthat/edition 3

NeedsCompilation no

Author Justin Wilkins [aut, cre, cph], Matthew Fidler [aut, cph], Benjamin Guiastrennec [aut], Andrew C. Hooker [aut], Anna Olofsson [aut, cph], Sebastian Ueckert [aut], Ron Keizer [aut], Kajsa Harling [ctb], Mike K. Smith [ctb], Elodie Plan [ctb], Mats O. Karlsson [aut, cph], Pharmetheus [ctb], Pfizer [ctb], Occams [ctb], Novartis [ctb]

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`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 *Default 'nlmixr2' theme for 'xpose'*

Description

Default 'nlmixr2' theme for 'xpose'.

Usage

```
theme_xp_nlmixr2()
```

Value

A list with 'xpose' theme specifiers.

---

xpose_data_nlmixr2 *Import nlmixr2 output into xpose object*

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. `c(point_color = 'red', line_linetype = 'dashed')`).
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 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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