

Package: boxly (via r-universe)

October 12, 2026

Title Interactive Box Plot

Version 0.1.2

Description Interactive box plot using 'plotly' for clinical trial analysis.

License GPL (>= 3)

URL <https://merck.github.io/boxly/>, <https://github.com/Merck/boxly>

BugReports <https://github.com/Merck/boxly/issues>

Encoding UTF-8

LazyData true

Depends R (>= 4.1.0)

Imports DT, brew, crosstalk, ggplot2, htmlwidgets, htmltools, metalite, plotly, uuid

Suggests covr, knitr, rmarkdown, testthat (>= 3.0.0)

VignetteBuilder knitr

Config/testthat/edition 3

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.3

Config/pak/sysreqs cmake make libicu-dev libuv1-dev libssl-dev

Repository <https://merck.r-universe.dev>

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boxly	Create an interactive box plot
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Description

Create an interactive box plot

Usage

```
boxly(  
  outdata,  
  color = NULL,  
  hover_summary_var = c("n", "min", "q1", "median", "mean", "q3", "max"),  
  hover_outlier_label = c("Participant ID", "Parameter value"),  
  x_label = "Visit",  
  y_label = "Change",  
  heading_select_list = "Lab parameter",  
  heading_summary_table = "Number of Participants"  
)
```

Arguments

- outdata An outdata object created from prepare_ae_forestly().
- color Color for box plot.
- hover_summary_var A character vector of statistics to be displayed on hover label of box.
- hover_outlier_label A character vector of hover label for outlier. A label from an input data is used if NA for a variable is specified.
- x_label x-axis label.
- y_label y-axis label.
- heading_select_list Select list menu label.
- heading_summary_table Summary table label.

Value

Interactive box plot.

Examples

```
# Only run this example in interactive R sessions
if (interactive()) {
  analysis_plan <- metalite::plan(
    analysis = "boxly",
    population = "apat",
    observation = "wk12",
    parameter = "SODIUM;BILI"
  )

  meta <- metalite::meta_adam(
    population = boxly_adsl,
    observation = boxly_adlb
  ) |>
  metalite::define_plan(analysis_plan) |>
  metalite::define_population(
    name = "apat",
    group = "TRTA",
    subset = SAFFL == "Y",
    label = "Safety Population"
  ) |>
  metalite::define_observation(
    name = "wk12",
    group = "TRTA",
    var = "PARAM",
    subset = AVISITN <= 12 & !is.na(CHG),
    label = "Weeks 0 to 12"
  ) |>
  metalite::define_parameter(
    name = "SODIUM",
    label = "Sodium (mmol/L)",
    subset = PARAMCD == "SODIUM"
  ) |>
  metalite::define_parameter(
    name = "BILI",
    label = "Bilirubin (mg/dL)",
    subset = PARAMCD == "BILI"
  ) |>
  metalite::define_analysis(
    name = "boxly",
    label = "Interactive Box Plot",
    x = "AVISITN",
    y = "CHG"
  ) |>
  metalite::meta_build()

  meta |>
  prepare_boxly() |>
```

```
    boxly()  
  }
```

boxly_adeq

An example ADEG dataset

Description

Definition of each variable can be found in <https://github.com/phuse-org/phuse-scripts/tree/master/data/adam/cdisc>

Usage

```
boxly_adeq
```

Format

A data frame with 32139 and 35 variables:

Source

<https://github.com/phuse-org/phuse-scripts/tree/master/data/adam/cdisc>

boxly_adlb

An example ADLB dataset

Description

Definition of each variable can be found in <https://github.com/phuse-org/phuse-scripts/tree/master/data/adam/cdisc>

Usage

```
boxly_adlb
```

Format

A data frame with 24746 and 24 variables:

Source

<https://github.com/phuse-org/phuse-scripts/tree/master/data/adam/cdisc>

boxly_adsl*A Subject Level Demographic Dataset*

Description

A dataset containing the demographic information of a clinical trial following CDISC ADaM standard.

Usage

boxly_adsl

Format

A data frame with 254 rows and 51 variables.

Details

Definition of each variable can be found in <https://github.com/phuse-org/phuse-scripts/tree/master/data/adam/cdisc>

Source

<https://github.com/phuse-org/phuse-scripts/tree/master/data/adam/cdisc>

boxly_advsn*An example ADVS dataset*

Description

Definition of each variable can be found in <https://github.com/phuse-org/phuse-scripts/tree/master/data/adam/cdisc>

Usage

boxly_advsn

Format

A data frame with 32139 and 34 variables:

Source

<https://github.com/phuse-org/phuse-scripts/tree/master/data/adam/cdisc>

prepare_boxly	<i>Prepare data for interactive box plot</i>
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Description

Prepare data for interactive box plot

Usage

```
prepare_boxly(
  meta,
  population = NULL,
  observation = NULL,
  analysis = NULL,
  filter_var = "PARAM",
  hover_var_outlier = c("USUBJID", metalite::collect_adam_mapping(meta, analysis)$y)
)
```

Arguments

meta	A metadata object created by metalite.
population	A character value of population term name. The term name is used as key to link information.
observation	A character value of observation term name. The term name is used as key to link information.
analysis	A character value of analysis term name. The term name is used as key to link information.
filter_var	A character value of variable name used for filtering. Default is "PARAM".
hover_var_outlier	A character vector of hover variables for outlier.

Value

Metadata list with plotting dataset.

Metadata list with plotting dataset

Examples

```
analysis_plan <- metalite::plan(
  analysis = "boxly",
  population = "apat",
  observation = "wk12",
  parameter = "SODIUM;BILI"
)

meta <- metalite::meta_adam(
```

```
population = boxly_adsl,
observation = boxly_adlb
) |>
metalite::define_plan(analysis_plan) |>
metalite::define_population(
  name = "apat",
  group = "TRTA",
  subset = SAFFL == "Y",
  label = "Safety Population"
) |>
metalite::define_observation(
  name = "wk12",
  group = "TRTA",
  var = "PARAM",
  subset = AVISITN <= 12 & !is.na(CHG),
  label = "Weeks 0 to 12"
) |>
metalite::define_parameter(
  name = "SODIUM",
  label = "Sodium (mmol/L)",
  subset = PARAMCD == "SODIUM"
) |>
metalite::define_parameter(
  name = "BILI",
  label = "Bilirubin (mg/dL)",
  subset = PARAMCD == "BILI"
) |>
metalite::define_analysis(
  name = "boxly",
  label = "Interactive Box Plot",
  x = "AVISITN",
  y = "CHG"
) |>
metalite::meta_build()

prepare_boxly(meta)
```

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