# Package 'iTReX'

December 10, 2021

Type Package

Version 1.1.1

Title interactive Therapy Response eXploration

<b>Description</b> An R/Shiny web app for interactive exploration of mono- and combination therapy dose response profiling data and drug target interaction network mapping.
License GPL-3
<pre>URL https://github.com/iTReX-Shiny/iTReX</pre>
BugReports https://github.com/iTReX-Shiny/iTReX/issues
<b>Depends</b> R (>= 3.5.0), shiny
biocViews ShinyApps, Network
Imports ComplexHeatmap, imageHTS, OmnipathR, base64enc, bayestestR, circlize, data.table, desc, dplyr, DT, ggplot2, ggpubr, git2r, glue, htmlwidgets, igraph, knitr, nplr, openxlsx, patchwork, plotly, purrr, readr, readxl, rlang, rmarkdown, shinyjs, shinythemes, shinyWidgets, stats, stringr, tools, tibble, tidyr, utils, zeallot, zip
<b>Suggests</b> BiocCheck, Cairo, curl, devtools, httr, kableExtra, lintr, processx, remotes, rmdformats, shinytest, styler, testthat (>= 3.0.0)
Encoding UTF-8
RoxygenNote 7.1.2
Config/testthat/edition 3
VignetteBuilder knitr
R topics documented:
build_manuals check_testnames clean_and_convert_layout compute_dss debug_save prepare prepare_demos prep_and_check record_test.
_

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\_\_\_\_\_build\_manuals

Build manuals (including vignettes) in the working copy.

# Description

Build manuals (including vignettes) in the working copy.

# Usage

```
build_manuals(pkg = getwd())
```

# Arguments

pkg

The directory holding the working copy.

 $check\_testnames$ 

Check test names against pattern.

# Description

Check test names against pattern.

# Usage

```
check_testnames(pkg = getwd())
```

# Arguments

pkg

The directory holding the working copy.

```
clean_and_convert_layout
```

Convert layout from old to new format. Can be safely applied to new layouts.

#### **Description**

Convert layout from old to new format. Can be safely applied to new layouts.

#### Usage

```
clean_and_convert_layout(df, is_demo = FALSE)
```

#### **Arguments**

df A data frame.

is\_demo Whether to apply further normalization to minimize entries.

compute\_dss

Compute a Drug Sensitivity Score (DSS)

# Description

Compute a Drug Sensitivity Score (DSS)

#### Usage

```
compute_dss(
  pars_table,
  resp_min = 10,
  score_type = 3,
  conc_scale_unused = 1e-09,
  apply_log_to_conc = TRUE,
  curve = NA,
  force_symm = FALSE,
  resp_max = 100,
  bottom_corr = TRUE,
  allow_big_mid = FALSE,
  int_decreasing = FALSE,
  allow_nan = TRUE
)
```

# Arguments

```
pars_table can be a data.frame of (in that order!)
resp_min TODO
score_type TODO
conc_scale_unused
TODO
```

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```
apply_log_to_conc
TODO

curve TODO

force_symm TODO

resp_max TODO

bottom_corr TODO

allow_big_mid TODO

int_decreasing TODO

allow_nan TODO
```

debug\_save

Save arguments in rds files named after arguments.

# Description

Save arguments in rds files named after arguments.

# Usage

```
debug_save(...)
```

#### **Arguments**

... Variables to be saved (not quoted).

prepare

Prepare working copy for commit.

# Description

Prepare working copy for commit.

# Usage

```
prepare(pkg = getwd(), manual = TRUE)
```

# **Arguments**

pkg The directory holding the working copy.

manual Whether to run [build\_manuals()].

prepare\_demos 5

prepare\_demos

Prepare demo data (xlsx and zip) in the working copy.

#### **Description**

Prepare demo data (xlsx and zip) in the working copy.

# Usage

```
prepare_demos(pkg = getwd())
```

#### **Arguments**

pkg

The directory holding the working copy.

prep\_and\_check

Prepare and check iTReX in the working copy.

# Description

Prepare and check iTReX in the working copy.

## Usage

```
prep_and_check(pkg = getwd(), strict = FALSE)
```

# **Arguments**

pkg

The directory holding the working copy.

strict

Whether to check for CRAN and BioConductor compatibility.

record\_test

Record a new test and store it in the working copy.

# Description

Record a new test and store it in the working copy.

#### Usage

```
record_test(pkg = getwd())
```

#### **Arguments**

pkg

The directory holding the working copy.

6 test

run

Run iTReX Shiny app

#### **Description**

Run iTReX Shiny app

# Usage

run()

show\_system\_deps

Generate system dependencies for README.md

# Description

Generate system dependencies for README.md

# Usage

```
show_system_deps(pkg = getwd())
```

# **Arguments**

pkg

The directory holding the working copy.

test

Run iTReX tests

# Description

Run iTReX tests

# Usage

```
test(testnames = NULL, quiet = FALSE)
```

### **Arguments**

testnames Passed to [shinytest::testApp]
quiet Passed to [shinytest::testApp]

# **Examples**

```
test(testnames = c("tabs_home"))
```

test\_and\_update 7

test\_and\_update

Run (and update) tests in the working copy.

### **Description**

Run (and update) tests in the working copy.

# Usage

```
test_and_update(..., pkg = getwd())
```

# Arguments

... Parameters (such as testnames) passed to [shinytest::testApp()].

pkg The directory holding the working copy.

test\_github

Install from GitHub and test

# Description

Install from GitHub and test

# Usage

```
test_github()
```

update\_tests

Update test-expected in the working copy.

# Description

Update test-expected in the working copy.

# Usage

```
update_tests(..., pkg = getwd())
```

# Arguments

... Parameters passed to [shinytest::snapshotUpdate()].

pkg The directory holding the working copy.

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version

Report iTReX version

# Description

Report iTReX version

# Usage

```
version(long = FALSE)
```

# Arguments

long

Whether to print the full version string with git commit hash.

# **Examples**

```
version()
version(long = TRUE)
```

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