

Package ‘cthist’

December 16, 2022

Title Clinical Trial Registry History

Version 1.4.0

Description Retrieves historical versions of clinical trial registry entries from <<https://ClinicalTrials.gov>>. Package functionality and implementation is documented in Carlisle (2022) <[DOI:10.1371/journal.pone.0270909](https://doi.org/10.1371/journal.pone.0270909)>.

License AGPL (>= 3)

URL <https://github.com/bgcarlisle/cthist>

BugReports <https://github.com/bgcarlisle/cthist/issues>

Imports assertthat, dplyr, httr, jsonlite, magrittr, polite, RCurl, readr, rlang, rvest, stringr, tibble

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

Encoding UTF-8

RoxygenNote 7.2.1

NeedsCompilation no

Author Benjamin Gregory Carlisle [aut, cre]
(<<https://orcid.org/0000-0001-8975-0649>>)

Maintainer Benjamin Gregory Carlisle <murph@bgcarlisle.com>

Repository CRAN

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clinicaltrials_gov_dates

Download a vector of dates on which a ClinicalTrials.gov registry entry was updated

Description

Download a vector of dates on which a ClinicalTrials.gov registry entry was updated

Usage

```
clinicaltrials_gov_dates(nctid, status_change_only = FALSE, polite = TRUE)
```

Arguments

nctid A character string including a well-formed ClinicalTrials.gov NCT Number, e.g. "NCT00942747". (A capitalized "NCT" followed by eight numerals with no spaces or hyphens.)

status_change_only If TRUE, returns only the dates marked with a Recruitment Status change, default FALSE.

polite If TRUE, this function uses the `polite` package to download data, if FALSE, this function uses the `rvest` package, default TRUE.

Value

A character vector of ISO-8601 formatted dates corresponding to the dates on which there were clinical trial history version updates.

Examples

```
versions <- clinicaltrials_gov_dates("NCT00942747")
```

clinicaltrials_gov_download

Mass-download registry entry historical versions from ClinicalTrials.gov

Description

This function will download all ClinicalTrials.gov registry records for the NCT numbers specified. Rather than transcribing NCT numbers by hand, it is recommended that you conduct a search for trials of interest using the ClinicalTrials.gov web front-end and download the result as a comma-separated value (CSV) file. The CSV can be read in to memory as a data frame and the NCT Number column can be passed directly to the function as the `nctids` argument.

Usage

```
clinicaltrials_gov_download(  
  nctids,  
  output_filename = NA,  
  polite = TRUE,  
  quiet = FALSE  
)
```

Arguments

<code>nctids</code>	A list of well-formed NCT numbers, e.g. <code>c("NCT00942747", "NCT03281616")</code> .
<code>output_filename</code>	A character string for a filename into which the data frame will be written as a CSV, e.g. "historical_versions.csv". If no output filename is provided, the data frame of downloaded historical versions will be returned by the function as a data frame.
<code>polite</code>	If TRUE, this function uses the <code>polite</code> package to download data, if FALSE, this function uses the <code>rvest</code> package, default TRUE.
<code>quiet</code>	A boolean TRUE or FALSE. If TRUE, no messages will be printed during download. FALSE by default, messages printed for every version downloaded showing progress.

Value

If an output filename is specified, on successful completion, this function returns TRUE and otherwise returns FALSE. If an output filename is not specified, on successful completion, this function returns a data frame containing the historical versions of the clinical trial that have been retrieved, and in case of error returns FALSE. After unsuccessful completion with an output filename specified, if the function is called again with the same NCT numbers and output filename, the function will check the output file for errors or incompletely downloaded registry entries, remove them and try to download the historical versions that are still needed, while preserving the ones that have already been downloaded correctly.

Examples

```
filename <- tempfile()  
clinicaltrials_gov_download(c("NCT00942747",  
  "NCT03281616"), filename)
```

```
hv <- clinicaltrials_gov_download("NCT00942747")
```

clinicaltrials_gov_version

Download a registry entry version from ClinicalTrials.gov

Description

Download a registry entry version from ClinicalTrials.gov

Usage

```
clinicaltrials_gov_version(nctid, versionno = 1, polite = TRUE)
```

Arguments

nctid	A character string including a well-formed ClinicalTrials.gov NCT Number, e.g. "NCT00942747". (A capitalized "NCT" followed by eight numerals with no spaces or hyphens.)
versionno	An integer version number, e.g. 3, where 1 is the earliest version of the trial in question, 2 is the next most recent, etc. If no version number is specified, the first version will be downloaded.
polite	If TRUE, this function uses the polite package to download data, if FALSE, this function uses the rvest package, default TRUE.

Value

A list containing the overall status, enrolment, start date, start date precision (month or day) primary completion date, primary completion date precision (month or day), primary completion date type, minimum age, maximum age, sex, gender-based, accepts healthy volunteers, inclusion/exclusion criteria, outcome measures, contacts, sponsors, reason why the trial stopped (if provided), whether results are posted, and references data

Examples

```
version <- clinicaltrials_gov_version("NCT00942747", 1)
```

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