

# Package ‘cthist’

December 1, 2023

**Title** Clinical Trial Registry History

**Version** 2.1.6

**Description** Retrieves historical versions of clinical trial registry entries from <<https://ClinicalTrials.gov>>. Package functionality and implementation for v 1.0.0 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, readr, rlang, stringr, tibble

**Suggests** testthat (>= 3.0.0)

**Config/testthat/edition** 3

**Encoding** UTF-8

**RoxygenNote** 7.2.3

**NeedsCompilation** no

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**Repository** CRAN

**Date/Publication** 2023-12-01 22:00:02 UTC

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clinicaltrials\_gov\_dates

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

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### **Description**

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

### **Usage**

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

### **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.

### **Value**

A table with three columns: the version number (starting from 0), the ISO-8601 formatted date on which there were clinical trial history version updates, and the trial's overall status on that date.

### **Examples**

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

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clinicaltrials\_gov\_download

*Mass-download registry entry historical versions from ClinicalTrials.gov*

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### **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,  
  quiet = FALSE,  
  latest = FALSE  
)
```

**Arguments**

nctids	A list of well-formed NCT numbers, e.g. c("NCT00942747", "NCT03281616").
output_filename	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.
quiet	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.
latest	A boolean TRUE or FALSE. If TRUE, only the latest version of the registry entry will be downloaded, if FALSE, all versions will be downloaded. FALSE by default.

**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*

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**Description**

Download a registry entry version from ClinicalTrials.gov

**Usage**

```
clinicaltrials_gov_version(nctid, versionno = 0)
```

**Arguments**

<code>nctid</code>	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.)
<code>versionno</code>	An integer version number, e.g. 3, where 0 is the earliest version of the trial in question, 1 is the next most recent, etc. (Please note that this differs from the convention used in <code>cthist</code> v. $\leq$ 1.4.2, in which 1 is the earliest version of the trial in question.) If no version number is specified, the first version will be downloaded. If -1 (negative one) is specified, the latest version will be downloaded.

**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, accepts healthy volunteers, inclusion/exclusion criteria, outcome measures, overall contacts, central contacts, responsible party, lead sponsor, collaborators, reason why the trial stopped (if provided), whether results are posted, references data, organization identifiers and other secondary trial identifiers.

**Examples**

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

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