

# Package ‘CohortCharacteristics’

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**Type** Package

**Title** Summarise and Visualise Characteristics of Patients in the OMOP CDM

**Version** 0.5.1

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**Description** Summarise and visualise the characteristics of patients in data mapped to the Observational Medical Outcomes Partnership (OMOP) common data model (CDM).

**License** Apache License (>= 2)

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**Imports** CDMConnector (>= 1.6.0), dplyr, tidyr, rlang, cli, stringr, omopgenerics (>= 0.4.0), PatientProfiles (>= 1.3.1), snakecase, lifecycle, purrr

**URL** <https://darwin-eu.github.io/CohortCharacteristics/>

**BugReports** <https://github.com/darwin-eu/CohortCharacteristics/issues>

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**NeedsCompilation** no

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---

availablePlotColumns *Available columns to use in facet and colour arguments in plot functions.*

---

## Description

Available columns to use in facet and colour arguments in plot functions.

**Usage**

```
availablePlotColumns(result)
```

**Arguments**

result            A summarised\_result object.

**Value**

Character vector with the available columns.

**Examples**

```
{
  cdm <- mockCohortCharacteristics()

  result <- summariseCharacteristics(cdm$cohort1)

  availablePlotColumns(result)

  mockDisconnect(cdm)
}
```

---

`availableTableColumns` *Available columns to use in header, groupColumn and hide arguments in table functions.*

---

**Description**

Available columns to use in header, groupColumn and hide arguments in table functions.

**Usage**

```
availableTableColumns(result)
```

**Arguments**

result            A summarised\_result object.

**Value**

Character vector with the available columns.

**Examples**

```
{
  cdm <- mockCohortCharacteristics()

  result <- summariseCharacteristics(cdm$cohort1)

  availableTableColumns(result)

  mockDisconnect(cdm)
}
```

---

benchmarkCohortCharacteristics

*Benchmark the main functions of CohortCharacteristics package.*

---

**Description**

Benchmark the main functions of CohortCharacteristics package.

**Usage**

```
benchmarkCohortCharacteristics(
  cohort,
  analysis = c("count", "attrition", "characteristics", "overlap", "timing",
    "large scale characteristics")
)
```

**Arguments**

cohort	A cohort_table from a cdm_reference.
analysis	Set of analysis to perform, must be a subset of: "count", "attrition", "characteristics", "overlap", "timing" and "large scale characteristics".

**Value**

A summarised\_result object.

**Examples**

```
## Not run:
CDMConnector::requireEunomia()
con <- duckdb::dbConnect(duckdb::duckdb(), CDMConnector::eunomiaDir())
cdm <- CDMConnector::cdmFromCon(
  con = con, cdmSchema = "main", writeSchema = "main"
)

cdm <- CDMConnector::generateConceptCohortSet(
  cdm = cdm,
```

```
conceptSet = list(sinusitis = 40481087, pharyngitis = 4112343),
name = "my_cohort"
)

benchmarkCohortCharacteristics(cdm$my_cohort)

## End(Not run)
```

---

mockCohortCharacteristics

*It creates a mock database for testing CohortCharacteristics package*

---

### Description

It creates a mock database for testing CohortCharacteristics package

### Usage

```
mockCohortCharacteristics(
  con = NULL,
  writeSchema = NULL,
  numberIndividuals = 10,
  ...,
  seed = NULL
)
```

### Arguments

con	A DBI connection to create the cdm mock object.
writeSchema	Name of an schema on the same connection with writing permissions.
numberIndividuals	Number of individuals to create in the cdm reference.
...	User self defined tables to put in cdm, it can input as many as the user want.
seed	A number to set the seed. If NULL seed is not used.

### Value

A mock cdm\_reference object created following user's specifications.

### Examples

```
library(CohortCharacteristics)
library(CDMConnector)

cdm <- mockCohortCharacteristics()
```

```
mockDisconnect(cdm = cdm)
```

---

plotCharacteristics *Create a ggplot from the output of summariseCharacteristics.*

---

## Description

**[Experimental]**

## Usage

```
plotCharacteristics(
  result,
  plotType = "barplot",
  facet = NULL,
  colour = NULL,
  plotStyle = lifecycle::deprecated()
)
```

## Arguments

result	A summarised_result object.
plotType	Either barplot, scatterplot or boxplot. If barplot or scatterplot subset to just one estimate.
facet	Columns to facet by. See options with availablePlotColumns(result). Formula is also allowed to specify rows and columns.
colour	Columns to color by. See options with availablePlotColumns(result).
plotStyle	deprecated.

## Value

A ggplot.

## Examples

```
library(CohortCharacteristics)
library(dplyr, warn.conflicts = FALSE)

cdm <- mockCohortCharacteristics()

results <- summariseCharacteristics(
  cohort = cdm$cohort1,
  ageGroup = list(c(0, 19), c(20, 39), c(40, 59), c(60, 79), c(80, 150)),
  tableIntersectCount = list(
    tableName = "visit_occurrence", window = c(-365, -1)
```

```
    ),
    cohortIntersectFlag = list(
      targetCohortTable = "cohort2", window = c(-365, -1)
    )
  )

results |>
  filter(
    variable_name == "Cohort2 flag -365 to -1", estimate_name == "percentage"
  ) |>
  plotCharacteristics(
    plotType = "barplot",
    colour = "variable_level",
    facet = c("cdm_name", "cohort_name")
  )

results |>
  filter(variable_name == "Age", estimate_name == "mean") |>
  plotCharacteristics(
    plotType = "scatterplot",
    facet = "cdm_name"
  )

results |>
  filter(variable_name == "Age", group_level == "cohort_1") |>
  plotCharacteristics(
    plotType = "boxplot",
    facet = "cdm_name",
    colour = "cohort_name"
  )

mockDisconnect(cdm)
```

---

plotCohortAttrition *create a ggplot from the output of summariseLargeScaleCharacteristics.*

---

## Description

**[Experimental]**

## Usage

```
plotCohortAttrition(
  result,
  show = c("subjects", "records"),
  type = "htmlwidget",
  cohortId = lifecycle::deprecated()
)
```

**Arguments**

result	A summarised_result object.
show	Which variables to show in the attrition plot, it can be 'subjects', 'records' or both.
type	type of the output, it can either be: 'htmlwidget', 'png', or 'DiagrammeR'.
cohortId	deprecated.

**Value**

A grViz visualisation.

**Examples**

```
library(CohortCharacteristics)
library(omopgenerics)
library(dplyr, warn.conflicts = FALSE)

cdm <- mockCohortCharacteristics(numberIndividuals = 1000)

cdm[["cohort1"]] <- cdm[["cohort1"]] |>
  filter(year(cohort_start_date) >= 2000) |>
  recordCohortAttrition("Restrict to cohort_start_date >= 2000") |>
  filter(year(cohort_end_date) < 2020) |>
  recordCohortAttrition("Restrict to cohort_end_date < 2020") |>
  compute(temporary = FALSE, name = "cohort1")

result <- summariseCohortAttrition(cdm$cohort1)

result |>
  filter(group_level == "cohort_2") |>
  plotCohortAttrition()

mockDisconnect(cdm)
```

---

plotCohortCount

*Plot the result of summariseCohortCount.*

---

**Description**

**[Experimental]**

**Usage**

```
plotCohortCount(result, x = NULL, facet = c("cdm_name"), colour = NULL)
```



**Arguments**

result	A summarised_result object.
x	Variables to use in x axis.
facet	Columns to facet by. See options with availablePlotColumns(result). Formula is also allowed to specify rows and columns.
colour	Columns to color by. See options with availablePlotColumns(result).

**Value**

A ggplot.

**Examples**

```
library(CohortCharacteristics)
library(PatientProfiles)
library(dplyr, warn.conflicts = FALSE)

cdm <- mockCohortCharacteristics(numberIndividuals = 100)

counts <- cdm$cohort2 |>
  addSex() |>
  addAge(ageGroup = list(c(0, 29), c(30, 59), c(60, Inf))) |>
  summariseCohortCount(strata = list("age_group", "sex", c("age_group", "sex"))) |>
  filter(variable_name == "Number subjects")

counts |>
  plotCohortCount(
    x = "sex",
    facet = cohort_name ~ age_group,
    colour = "sex"
  )

mockDisconnect(cdm)
```

---

plotCohortOverlap      *Plot the result of summariseCohortOverlap.*

---

**Description**

**[Experimental]**

**Usage**

```
plotCohortOverlap(
  result,
  uniqueCombinations = TRUE,
  y = NULL,
  facet = c("cdm_name", "cohort_name_reference"),
  colour = "variable_name",
  .options = lifecycle::deprecated()
)
```

**Arguments**

result	A summarised_result object.
uniqueCombinations	Whether to restrict to unique reference and comparator comparisons.
y	Variables to use in y axis, if NULL all variables not present in facet are used.
facet	Columns to facet by. See options with availablePlotColumns(result). Formula is also allowed to specify rows and columns.
colour	Columns to color by. See options with availablePlotColumns(result).
.options	deprecated.

**Value**

A ggplot.

**Examples**

```
library(CohortCharacteristics)

cdm <- mockCohortCharacteristics()

overlap <- summariseCohortOverlap(cdm$cohort2)

plotCohortOverlap(overlap, uniqueCombinations = FALSE)

mockDisconnect(cdm)
```

---

plotCohortTiming

*Plot summariseCohortTiming results.*

---

**Description**

**[Experimental]**

**Usage**

```
plotCohortTiming(
  result,
  plotType = "boxplot",
  timeScale = "days",
  uniqueCombinations = TRUE,
  facet = c("cdm_name", "cohort_name_reference"),
  colour = c("cohort_name_comparator")
)
```

**Arguments**

result	A summarised_result object.
plotType	Type of desired formatted table, possibilities are "boxplot" and "densityplot".
timeScale	Time scale to show, it can be "days" or "years".
uniqueCombinations	Whether to restrict to unique reference and comparator comparisons.
facet	Columns to facet by. See options with availablePlotColumns(result). Formula is also allowed to specify rows and columns.
colour	Columns to color by. See options with availablePlotColumns(result).

**Value**

A ggplot.

**Examples**

```
## Not run:
library(CohortCharacteristics)
library(duckdb)
library(CDMConnector)
library(DrugUtilisation)

con <- dbConnect(duckdb(), eunomiaDir())
cdm <- cdmFromCon(con, cdmSchem = "main", writeSchema = "main")

cdm <- generateIngredientCohortSet(
  cdm = cdm,
  name = "my_cohort",
  ingredient = c("acetaminophen", "morphine", "warfarin")
)

timings <- summariseCohortTiming(cdm$my_cohort)

plotCohortTiming(
  timings,
  timeScale = "years",
  uniqueCombinations = FALSE,
  facet = c("cdm_name", "cohort_name_reference"),
```

```

  colour = c("cohort_name_comparator")
)

plotCohortTiming(
  timings,
  plotType = "densityplot",
  timeScale = "years",
  uniqueCombinations = FALSE,
  facet = c("cdm_name", "cohort_name_reference"),
  colour = c("cohort_name_comparator")
)

cdmDisconnect(cdm)

## End(Not run)

```

---

plotComparedLargeScaleCharacteristics

*create a ggplot from the output of summariseLargeScaleCharacteristics.*

---

## Description

**[Experimental]**

## Usage

```

plotComparedLargeScaleCharacteristics(
  result,
  reference,
  missings = 0,
  facet = NULL,
  colour = NULL
)

```

## Arguments

result	A summarised_result object.
reference	A named character to set up the reference.
missings	Value to replace the missing value with. If NULL missing values will be eliminated.
facet	Columns to facet by. See options with availablePlotColumns(result). Formula is also allowed to specify rows and columns.
colour	Columns to color by. See options with availablePlotColumns(result).

**Value**

A ggplot.

**Examples**

```
## Not run:
library(CohortCharacteristics)
library(duckdb)
library(CDMConnector)
library(DrugUtilisation)
library(plotly, warn.conflicts = FALSE)

con <- dbConnect(duckdb(), eunomiaDir())
cdm <- cdmFromCon(con, cdmSchem = "main", writeSchema = "main")

cdm <- generateIngredientCohortSet(
  cdm = cdm, name = "my_cohort", ingredient = "acetaminophen"
)

resultsLsc <- cdm$my_cohort |>
  summariseLargeScaleCharacteristics(
    window = list(c(-365, -1), c(1, 365)),
    eventInWindow = "condition_occurrence"
  )

resultsLsc |>
  plotComparedLargeScaleCharacteristics(
    reference = c(variable_level = "-365 to -1"),
    colour = "variable_name",
    missings = NULL
  ) |>
  ggplotly()

cdmDisconnect(cdm)

## End(Not run)
```

---

plotLargeScaleCharacteristics

*create a ggplot from the output of summariseLargeScaleCharacteristics.*

---

**Description**

**[Experimental]**

**Usage**

```
plotLargeScaleCharacteristics(
  result,
  facet = c("cdm_name", "cohort_name"),
  colour = "variable_level"
)
```

**Arguments**

<code>result</code>	A summarised_result object.
<code>facet</code>	Columns to facet by. See options with <code>availablePlotColumns(result)</code> . Formula is also allowed to specify rows and columns.
<code>colour</code>	Columns to color by. See options with <code>availablePlotColumns(result)</code> .

**Value**

A ggplot2 object.

**Examples**

```
## Not run:
library(CohortCharacteristics)
library(duckdb)
library(CDMConnector)
library(DrugUtilisation)

con <- dbConnect(duckdb(), eunomiaDir())
cdm <- cdmFromCon(con, cdmSchem = "main", writeSchema = "main")

cdm <- generateIngredientCohortSet(
  cdm = cdm, name = "my_cohort", ingredient = "acetaminophen"
)

resultsLsc <- cdm$my_cohort |>
  summariseLargeScaleCharacteristics(
    window = list(c(-365, -1), c(1, 365)),
    eventInWindow = "condition_occurrence"
  )

resultsLsc |>
  plotLargeScaleCharacteristics(
    facet = c("cdm_name", "cohort_name"),
    colour = "variable_level"
  )

cdmDisconnect(cdm)

## End(Not run)
```

---

 summariseCharacteristics

*Summarise characteristics of cohorts in a cohort table*


---

## Description

Summarise characteristics of cohorts in a cohort table

## Usage

```

summariseCharacteristics(
  cohort,
  cohortId = NULL,
  strata = list(),
  counts = TRUE,
  demographics = TRUE,
  ageGroup = NULL,
  tableIntersectFlag = list(),
  tableIntersectCount = list(),
  tableIntersectDate = list(),
  tableIntersectDays = list(),
  cohortIntersectFlag = list(),
  cohortIntersectCount = list(),
  cohortIntersectDate = list(),
  cohortIntersectDays = list(),
  conceptIntersectFlag = list(),
  conceptIntersectCount = list(),
  conceptIntersectDate = list(),
  conceptIntersectDays = list(),
  otherVariables = character(),
  estimates = list(),
  weights = NULL,
  otherVariablesEstimates = lifecycle::deprecated()
)

```

## Arguments

cohort	A cohort_table object.
cohortId	A cohort definition id to restrict by. If NULL, all cohorts will be included.
strata	A list of variables to stratify results. These variables must have been added as additional columns in the cohort table.
counts	TRUE or FALSE. If TRUE, record and person counts will be produced.
demographics	TRUE or FALSE. If TRUE, patient demographics (cohort start date, cohort end date, age, sex, prior observation, and future observation will be summarised).
ageGroup	A list of age groups to stratify results by.

<code>tableIntersectFlag</code>	A list of arguments that uses <code>PatientProfiles::addTableIntersectFlag()</code> to add variables to summarise.
<code>tableIntersectCount</code>	A list of arguments that uses <code>PatientProfiles::addTableIntersectCount()</code> to add variables to summarise.
<code>tableIntersectDate</code>	A list of arguments that uses <code>PatientProfiles::addTableIntersectDate()</code> to add variables to summarise.
<code>tableIntersectDays</code>	A list of arguments that uses <code>PatientProfiles::addTableIntersectDays()</code> to add variables to summarise.
<code>cohortIntersectFlag</code>	A list of arguments that uses <code>PatientProfiles::addCohortIntersectFlag()</code> to add variables to summarise.
<code>cohortIntersectCount</code>	A list of arguments that uses <code>PatientProfiles::addCohortIntersectCount()</code> to add variables to summarise.
<code>cohortIntersectDate</code>	A list of arguments that uses <code>PatientProfiles::addCohortIntersectDate()</code> to add variables to summarise.
<code>cohortIntersectDays</code>	A list of arguments that uses <code>PatientProfiles::addCohortIntersectDays()</code> to add variables to summarise.
<code>conceptIntersectFlag</code>	A list of arguments that uses <code>PatientProfiles::addConceptIntersectFlag()</code> to add variables to summarise.
<code>conceptIntersectCount</code>	A list of arguments that uses <code>PatientProfiles::addConceptIntersectCount()</code> to add variables to summarise.
<code>conceptIntersectDate</code>	A list of arguments that uses <code>PatientProfiles::addConceptIntersectDate()</code> to add variables to summarise.
<code>conceptIntersectDays</code>	A list of arguments that uses <code>PatientProfiles::addConceptIntersectDays()</code> to add variables to summarise.
<code>otherVariables</code>	Other variables contained in cohort that you want to be summarised.
<code>estimates</code>	To modify the default estimates for a variable. By default: <code>'min'</code> , <code>'q25'</code> , <code>'median'</code> , <code>'q75'</code> , <code>'max'</code> for "date", "numeric" and "integer" variables ("numeric" and "integer" also use <code>'mean'</code> and <code>'sd'</code> estimates). <code>'count'</code> and <code>'percentage'</code> for "categorical" and "binary". You have to provide them as a list: <code>list(age = c("median", "density"))</code> . You can also use <code>'date'</code> , <code>'numeric'</code> , <code>'integer'</code> , <code>'binary'</code> , <code>'categorical'</code> , <code>'demographics'</code> , <code>'intersect'</code> , <code>'other'</code> , <code>'table_intersect_count'</code> , ...
<code>weights</code>	Column in cohort that points to weights of each individual.
<code>otherVariablesEstimates</code>	deprecated.



**Value**

A summary of the characteristics of the cohorts in the cohort table.

**Examples**

```
library(dplyr, warn.conflicts = FALSE)
library(CohortCharacteristics)
library(PatientProfiles)

cdm <- mockCohortCharacteristics()

cdm$cohort1 |>
  addSex() |>
  addAge(
    ageGroup = list(c(0, 40), c(41, 150))
  ) |>
  summariseCharacteristics(
    strata = list("sex", "age_group"),
    cohortIntersectFlag = list(
      "Cohort 2 Flag" = list(
        targetCohortTable = "cohort2", window = c(-365, 0)
      )
    ),
    cohortIntersectCount = list(
      "Cohort 2 Count" = list(
        targetCohortTable = "cohort2", window = c(-365, 0)
      )
    )
  ) |>
  glimpse()

mockDisconnect(cdm)
```

---

summariseCohortAttrition

*Summarise attrition associated with cohorts in a cohort table*

---

**Description**

Summarise attrition associated with cohorts in a cohort table

**Usage**

```
summariseCohortAttrition(cohort, cohortId = NULL)
```

**Arguments**

cohort	A cohort_table object.
cohortId	A cohort definition id to restrict by. If NULL, all cohorts will be included.

**Value**

A summary of the attrition for the cohorts in the cohort table.

**Examples**

```
library(CohortCharacteristics)
library(dplyr, warn.conflicts = FALSE)

cdm <- mockCohortCharacteristics()

summariseCohortAttrition(cohort = cdm$cohort1) |>
  glimpse()

mockDisconnect(cdm)
```

---

summariseCohortCount *Summarise counts for cohorts in a cohort table*

---

**Description**

Summarise counts for cohorts in a cohort table

**Usage**

```
summariseCohortCount(cohort, cohortId = NULL, strata = list())
```

**Arguments**

cohort	A cohort_table object.
cohortId	A cohort definition id to restrict by. If NULL, all cohorts will be included.
strata	A list of variables to stratify results. These variables must have been added as additional columns in the cohort table.

**Value**

A summary of counts of the cohorts in the cohort table.

**Examples**

```
library(CohortCharacteristics)
library(dplyr, warn.conflicts = FALSE)

cdm <- mockCohortCharacteristics()

summariseCohortCount(cohort = cdm$cohort1) |>
  glimpse()

mockDisconnect(cdm)
```

---

`summariseCohortOverlap`*Summarise overlap between cohorts in a cohort table*

---

**Description**

Summarise overlap between cohorts in a cohort table

**Usage**

```
summariseCohortOverlap(  
  cohort,  
  cohortId = NULL,  
  strata = list(),  
  overlapBy = "subject_id"  
)
```

**Arguments**

<code>cohort</code>	A <code>cohort_table</code> object.
<code>cohortId</code>	A cohort definition id to restrict by. If <code>NULL</code> , all cohorts will be included.
<code>strata</code>	A list of variables to stratify results. These variables must have been added as additional columns in the cohort table.
<code>overlapBy</code>	Columns in cohort to use as record identifiers.

**Value**

A summary of overlap between cohorts in the cohort table.

**Examples**

```
library(CohortCharacteristics)  
library(dplyr, warn.conflicts = FALSE)  
  
cdm <- mockCohortCharacteristics()  
  
summariseCohortOverlap(cdm$cohort2) |>  
  glimpse()  
  
mockDisconnect(cdm)
```

---

summariseCohortTiming *Summarise timing between entries into cohorts in a cohort table*

---

### Description

Summarise timing between entries into cohorts in a cohort table

### Usage

```
summariseCohortTiming(  
  cohort,  
  cohortId = NULL,  
  strata = list(),  
  restrictToFirstEntry = TRUE,  
  estimates = c("min", "q25", "median", "q75", "max", "density"),  
  density = lifecycle::deprecated()  
)
```

### Arguments

cohort	A cohort_table object.
cohortId	A cohort definition id to restrict by. If NULL, all cohorts will be included.
strata	A list of variables to stratify results. These variables must have been added as additional columns in the cohort table.
restrictToFirstEntry	If TRUE only an individual's first entry per cohort will be considered. If FALSE all entries per individual will be considered.
estimates	Summary statistics to use when summarising timing.
density	deprecated.

### Value

A summary of timing between entries into cohorts in the cohort table.

### Examples

```
library(CohortCharacteristics)  
library(dplyr, warn.conflicts = FALSE)  
  
cdm <- mockCohortCharacteristics(numberIndividuals = 100)  
  
summariseCohortTiming(cdm$cohort2) |>  
  glimpse()  
  
mockDisconnect(cdm)
```

---

```
summariseLargeScaleCharacteristics
```

*This function is used to summarise the large scale characteristics of a cohort table*

---

### Description

This function is used to summarise the large scale characteristics of a cohort table

### Usage

```
summariseLargeScaleCharacteristics(
  cohort,
  cohortId = NULL,
  strata = list(),
  window = list(c(-Inf, -366), c(-365, -31), c(-30, -1), c(0, 0), c(1, 30), c(31, 365),
    c(366, Inf)),
  eventInWindow = NULL,
  episodeInWindow = NULL,
  indexDate = "cohort_start_date",
  censorDate = NULL,
  includeSource = FALSE,
  minimumFrequency = 0.005,
  excludedCodes = c(0)
)
```

### Arguments

cohort	A cohort_table object.
cohortId	A cohort definition id to restrict by. If NULL, all cohorts will be included.
strata	A list of variables to stratify results. These variables must have been added as additional columns in the cohort table.
window	Temporal windows that we want to characterize.
eventInWindow	Tables to characterise the events in the window. eventInWindow must be provided if episodeInWindow is not specified.
episodeInWindow	Tables to characterise the episodes in the window. episodeInWindow must be provided if eventInWindow is not specified.
indexDate	Variable in x that contains the date to compute the intersection.
censorDate	whether to censor overlap events at a specific date or a column date of x
includeSource	Whether to include source concepts.
minimumFrequency	Minimum frequency of codes to be reported. If a concept_id has a frequency smaller than minimumFrequency in a certain window that estimate will be eliminated from the result object.
excludedCodes	Codes excluded.

**Value**

The output of this function is a ResultSummary containing the relevant information.

**Examples**

```
## Not run:
library(CohortCharacteristics)
library(duckdb)
library(CDMConnector)
library(DrugUtilisation)
library(dplyr, warn.conflicts = FALSE)

con <- dbConnect(duckdb(), eunomiaDir())
cdm <- cdmFromCon(con, cdmSchem = "main", writeSchema = "main")

cdm <- generateIngredientCohortSet(
  cdm = cdm, name = "my_cohort", ingredient = "acetaminophen"
)

cdm$my_cohort |>
  summariseLargeScaleCharacteristics(
    window = list(c(-365, -1), c(1, 365)),
    eventInWindow = "condition_occurrence"
  ) |>
  glimpse()

cdmDisconnect(cdm)

## End(Not run)
```

---

tableCharacteristics *Format a summarise\_characteristics object into a visual table.*

---

**Description**

**[Experimental]**

**Usage**

```
tableCharacteristics(
  result,
  type = "gt",
  header = c("cdm_name", "cohort_name"),
  groupColumn = character(),
  hide = c(additionalColumns(result), settingsColumns(result))
)
```

**Arguments**

result	A summarised_result object.
type	Type of table. Check supported types with visOmapResults::tableType().
header	Columns to use as header. See options with availableTableColumns(result).
groupColumn	Columns to group by. See options with availableTableColumns(result).
hide	Columns to hide from the visualisation. See options with availableTableColumns(result).

**Value**

A formatted table.

**Examples**

```
library(CohortCharacteristics)

cdm <- mockCohortCharacteristics()

result <- summariseCharacteristics(cdm$cohort1)

tableCharacteristics(result)

mockDisconnect(cdm)
```

---

tableCohortAttrition *Create a visual table from the output of summariseCohortAttrition.*

---

**Description**

**[Experimental]**

**Usage**

```
tableCohortAttrition(
  result,
  type = "gt",
  header = "variable_name",
  groupColumn = c("cdm_name", "cohort_name"),
  hide = c("variable_level", "reason_id", "estimate_name", settingsColumns(result))
)
```

**Arguments**

result	A summarised_result object.
type	Type of table. Check supported types with visOmapResults::tableType().
header	Columns to use as header. See options with availableTableColumns(result).
groupColumn	Columns to group by. See options with availableTableColumns(result).
hide	Columns to hide from the visualisation. See options with availableTableColumns(result).

**Value**

A formatted table.

**Examples**

```
library(CohortCharacteristics)

cdm <- mockCohortCharacteristics()

result <- summariseCohortAttrition(cdm$cohort2)

tableCohortAttrition(result)

mockDisconnect(cdm)
```

---

tableCohortCount	<i>Format a summarise_characteristics object into a visual table.</i>
------------------	---

---

**Description**

**[Experimental]**

**Usage**

```
tableCohortCount(
  result,
  type = "gt",
  header = "cohort_name",
  groupColumn = character(),
  hide = c("variable_level", settingsColumns(result))
)
```



**Arguments**

result	A summarised_result object.
type	Type of table. Check supported types with visOmapResults::tableType().
header	Columns to use as header. See options with availableTableColumns(result).
groupColumn	Columns to group by. See options with availableTableColumns(result).
hide	Columns to hide from the visualisation. See options with availableTableColumns(result).

**Value**

A formatted table.

**Examples**

```
library(CohortCharacteristics)

cdm <- mockCohortCharacteristics()

result <- summariseCohortCount(cdm$cohort1)

tableCohortCount(result)

mockDisconnect(cdm = cdm)
```

---

tableCohortOverlap	<i>Format a summariseOverlapCohort result into a visual table.</i>
--------------------	--

---

**Description**

**[Experimental]**

**Usage**

```
tableCohortOverlap(  
  result,  
  uniqueCombinations = TRUE,  
  type = "gt",  
  header = c("variable_name"),  
  groupColumn = c("cdm_name"),  
  hide = c("variable_level", settingsColumns(result))  
)
```

**Arguments**

result	A summarised_result object.
uniqueCombinations	Whether to restrict to unique reference and comparator comparisons.
type	Type of table. Check supported types with visOmapResults::tableType().
header	Columns to use as header. See options with availableTableColumns(result).
groupColumn	Columns to group by. See options with availableTableColumns(result).
hide	Columns to hide from the visualisation. See options with availableTableColumns(result).

**Value**

A formatted table.

**Examples**

```
library(CohortCharacteristics)

cdm <- mockCohortCharacteristics()

overlap <- summariseCohortOverlap(cdm$cohort2)

tableCohortOverlap(overlap)

mockDisconnect(cdm = cdm)
```

---

tableCohortTiming	<i>Format a summariseCohortTiming result into a visual table.</i>
-------------------	---

---

**Description**

**[Experimental]**

**Usage**

```
tableCohortTiming(
  result,
  timeScale = "days",
  uniqueCombinations = TRUE,
  type = "gt",
  header = strataColumns(result),
  groupColumn = c("cdm_name"),
  hide = c("variable_level", settingsColumns(result))
)
```

**Arguments**

result	A summarised_result object.
timeScale	Time scale to show, it can be "days" or "years".
uniqueCombinations	Whether to restrict to unique reference and comparator comparisons.
type	Type of table. Check supported types with visOmapResults::tableType().
header	Columns to use as header. See options with availableTableColumns(result).
groupByColumn	Columns to group by. See options with availableTableColumns(result).
hide	Columns to hide from the visualisation. See options with availableTableColumns(result).

**Value**

A formatted table.

**Examples**

```
## Not run:
library(CohortCharacteristics)
library(duckdb)
library(CDMConnector)
library(DrugUtilisation)

con <- dbConnect(duckdb(), eunomiaDir())
cdm <- cdmFromCon(con, cdmSchem = "main", writeSchema = "main")

cdm <- generateIngredientCohortSet(
  cdm = cdm,
  name = "my_cohort",
  ingredient = c("acetaminophen", "morphine", "warfarin")
)

timings <- summariseCohortTiming(cdm$my_cohort)

tableCohortTiming(timings, timeScale = "years")

cdmDisconnect(cdm)

## End(Not run)
```

---

tableLargeScaleCharacteristics

*Format a summarise\_large\_scale\_characteristics object into a visual table.*

---

**Description**

**[Experimental]**

**Usage**

```
tableLargeScaleCharacteristics(
  result,
  topConcepts = NULL,
  type = "gt",
  header = c("cdm_name", "cohort_name", strataColumns(result), "variable_level"),
  groupColumn = c("table_name", "type", "analysis"),
  hide = character()
)
```

**Arguments**

result	A summarised_result object.
topConcepts	Number of concepts to restrict the table.
type	Type of table. Check supported types with visOmapResults::tableType().
header	Columns to use as header. See options with availableTableColumns(result).
groupColumn	Columns to group by. See options with availableTableColumns(result).
hide	Columns to hide from the visualisation. See options with availableTableColumns(result).

**Value**

A formatted table.

**Examples**

```
## Not run:
library(duckdb)
library(CDMConnector)

con <- dbConnect(duckdb(), eunomiaDir())
cdm <- cdmFromCon(con = con, cdmSchema = "main", writeSchema = "main")
cdm <- generateConceptCohortSet(
  cdm = cdm,
  conceptSet = list("viral_pharyngitis" = 4112343),
  name = "my_cohort"
)

result <- summariseLargeScaleCharacteristics(
  cohort = cdm$my_cohort,
  eventInWindow = "condition_occurrence",
  episodeInWindow = "drug_exposure"
)

tableLargeScaleCharacteristics(result)

cdmDisconnect(cdm)

## End(Not run)
```

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