Package 'DenosumabBoneMetastases'

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Type Package

Title Study of Denosumab vs. Zoledronic Acid to Treat Bone Metastases

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Description A new-user cohort study of denosumab vs. zoledronic acid to treat bone metastases in men with hormone-refractory prostate cancer.

Depends DatabaseConnector

Imports SqlRender, EmpiricalCalibration, Cyclops, FeatureExtraction, CohortMethod, rmarkdown, ggplot2, ff, ffbase, MethodEvaluation, OhdsiRTools (>= 1.5.0)

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LazyData TRUE

RoxygenNote 6.0.1

R topics documented:

createAnalysesDetails *Create the analyses details*

Description

Create the analyses details

Usage

```
createAnalysesDetails(workFolder)
```

Arguments

workFolder	Name of local folder to place results; make sure to use forward slashes (/)

Details

This function creates files specifying the analyses that will be performed.

createCohorts *Create the exposure and outcome cohorts*

Description

Create the exposure and outcome cohorts

Usage

```
createCohorts(connectionDetails, cdmDatabaseSchema, cohortDatabaseSchema,
  cohortTable = "cohort", oracleTempSchema, outputFolder)
```

Arguments

connectionDetails	An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package.
cdmDatabaseSchema	Schema name where your patient-level data in OMOP CDM format resides. Note that for SQL Server, this should include both the database and schema name, for example 'cdm_data.dbo'.
cohortDatabaseSchema	Schema name where intermediate data can be stored. You will need to have write priviliges in this schema. Note that for SQL Server, this should include both the database and schema name, for example 'cdm_data.dbo'.
cohortTable	The name of the table that will be created in the work database schema. This table will hold the exposure and outcome cohorts used in this study.
oracleTempSchema	Should be used in Oracle to specify a schema where the user has write priviliges for storing temporary tables.
outputFolder	Name of local folder to place results; make sure to use forward slashes (/)

Details

This function will create the exposure and outcome cohorts following the definitions included in this package.

`createFiguresAndTables` *Generate diagnostics*

Description

Generate diagnostics

Usage

```
createFiguresAndTables(outputFolder, connectionDetails, cohortDatabaseSchema,
  cohortTable, oracleTempSchema = oracleTempSchema)
```

Arguments

`outputFolder`	Name of local folder where the results were generated; make sure to use forward slashes (/). Do not use a folder on a network drive since this greatly impacts performance.
`connectionDetails`	An object of type `connectionDetails` as created using the `createConnectionDetails` function in the DatabaseConnector package.
`cohortDatabaseSchema`	Schema name where intermediate data can be stored. You will need to have write priviliges in this schema. Note that for SQL Server, this should include both the database and schema name, for example 'cdm_data.dbo'.
`cohortTable`	The name of the table that will be created in the work database schema. This table will hold the exposure and outcome cohorts used in this study.
`oracleTempSchema`	Should be used in Oracle to specify a schema where the user has write priviliges for storing temporary tables.

Details

This function generates figures and tables for the paper. Requires the study to be executed first.

execute *Execute Loop Diuretics Cohort Study*

Description

Execute Loop Diuretics Cohort Study

Usage

```
execute(connectionDetails, cdmDatabaseSchema,
  cohortDatabaseSchema = cdmDatabaseSchema, cohortTable = "cohort",
  oracleTempSchema = cohortDatabaseSchema, outputFolder,
  createCohorts = TRUE, synthesizePositiveControls = TRUE,
  runAnalyses = TRUE, runDiagnostics = TRUE, maxCores = 4)
```

Arguments

connectionDetails	An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package.
cdmDatabaseSchema	Schema name where your patient-level data in OMOP CDM format resides. Note that for SQL Server, this should include both the database and schema name, for example 'cdm_data.dbo'.
cohortDatabaseSchema	Schema name where intermediate data can be stored. You will need to have write priviliges in this schema. Note that for SQL Server, this should include both the database and schema name, for example 'cdm_data.dbo'.
cohortTable	The name of the table that will be created in the work database schema. This table will hold the exposure and outcome cohorts used in this study.
oracleTempSchema	Should be used in Oracle to specify a schema where the user has write priviliges for storing temporary tables.
outputFolder	Name of local folder to place results; make sure to use forward slashes (/). Do not use a folder on a network drive since this greatly impacts performance.
createCohorts	Create the cohortTable table with the exposure and outcome cohorts?
runAnalyses	Perform the cohort method analyses?
maxCores	How many parallel cores should be used? If more cores are made available this can speed up the analyses.
packageResults	Package the results for sharing?

Details

This function executes the DenosumabBoneMetastases Study.

Examples

```
## Not run:
connectionDetails <- createConnectionDetails(dbms = "postgresql",
                                             user = "joe",
                                             password = "secret",
                                             server = "myserver")

execute(connectionDetails,
        cdmDatabaseSchema = "cdm_data",
        cohortDatabaseSchema = "results",
        cohortTable = "cohort",
        oracleTempSchema = NULL,
        outputFolder = "c:/temp/study_results",
        maxCores = 4)

## End(Not run)
```

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generateDiagnostics *Generate diagnostics*

Description

Generate diagnostics

Usage

```
generateDiagnostics(outputFolder)
```

Arguments

outputFolder	Name of local folder where the results were generated; make sure to use forward slashes (/). Do not use a folder on a network drive since this greatly impacts performance.

Details

This function generates analyses diagnostics. Requires the study to be executed first.

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synthesizePositiveControls *Synthesize positive controls*

Description

Synthesize positive controls

Usage

```
synthesizePositiveControls(connectionDetails, cdmDatabaseSchema,
  cohortDatabaseSchema, cohortTable = "cohort", oracleTempSchema,
  outputFolder, maxCores = 1)
```

Arguments

`connectionDetails`
: An object of type `connectionDetails` as created using the `createConnectionDetails` function in the DatabaseConnector package.

`cdmDatabaseSchema`
: Schema name where your patient-level data in OMOP CDM format resides. Note that for SQL Server, this should include both the database and schema name, for example 'cdm_data.dbo'.

`cohortDatabaseSchema`
: Schema name where intermediate data can be stored. You will need to have write priviliges in this schema. Note that for SQL Server, this should include both the database and schema name, for example 'cdm_data.dbo'.

`cohortTable`
: The name of the table that will be created in the work database schema. This table will hold the exposure and outcome cohorts used in this study.

`oracleTempSchema`
: Should be used in Oracle to specify a schema where the user has write priviliges for storing temporary tables.

`outputFolder`
: Name of local folder to place results; make sure to use forward slashes (/)

`maxCores`
: How many parallel cores should be used? If more cores are made available this can speed up the analyses.

Details

This function will synthesize positve controls based on the negative controls. The simulated outcomes will be added to the cohort table.

Index