Optimal dementia risk prediction models and validation for young individuals

First published: 16/07/2018

Last updated: 11/08/2021

Study Finalised

Administrative details

EU PAS number

EUPAS24833

Study ID

42447

DARWIN EU® study

No

Study countries

France

United Kingdom

Study description

The objectives of our project are: 1. To conduct a systematic review of statistical methods used for AD pathology risk prediction including previous

attempts to create a tool for estimating AD pathology risk score. 2. To estimate risk scores on existing cohorts using a more flexible modeling method than the Cox model. 3. To internally and externally validate the proposed risk prediction model on multiple cohorts 4. To test the prognostic score in the PREVENT cohort of adult volunteers using AD pathology through CSF or PET as endpoints. 5. To use the prognostic score in order to follow the overall risk of AD in PREVENT participants.

Study status

Finalised

Research institutions and networks

Institutions

Inserm Montpellier

Contact details

Study institution contact

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Study contact

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Primary lead investigator

Graciela Muniz Terrera

Primary lead investigator

Study timelines

Date when funding contract was signed
Planned: 15/06/2017

Actual: 15/06/2017

Study start date
Planned: 10/12/2018

Actual: 10/12/2019

Data analysis start date
Planned: 04/03/2019

Actual: 04/03/2019

Date of interim report, if expected
Planned: 07/05/2019

Date of final study report
Planned: 31/07/2020

Actual: 30/07/2021

Sources of funding

- Pharmaceutical company and other private sector

More details on funding

Merck

Regulatory

Was the study required by a regulatory body?

No

Is the study required by a Risk Management Plan (RMP)?

Not applicable

Methodological aspects

Study type

Study type list

Study topic:

Other

Study topic, other:

Disease/Epidemiology study, Optimal dementia risk prediction models and validation

Study type:

Non-interventional study

Scope of the study:

Assessment of risk minimisation measure implementation or effectiveness

Disease epidemiology

Data collection methods:

Secondary use of data

Main study objective:

The objectives of our project are: 1. To conduct a systematic review of statistical methods used for AD pathology risk prediction 2. To estimate and validate risk scores on existing cohorts using a more flexible modeling method than the Cox model.

Study Design

Non-interventional study design

Systematic review and meta-analysis

Population studied

Short description of the study population

Dementia patients

Age groups

- Adults (46 to < 65 years)
- Adults (65 to < 75 years)

Estimated number of subjects

3000

Study design details

Outcomes

We will consider dementia outcomes or change in key dementia indicators in the absence of diagnositic information

Data analysis plan

Risk estimation will be conducted using different methodologies. The aim is to evaluate and compare Generalised Cox modelling with PH cox models and other methods, including ML and logistic regression.

Documents

Study, other information

55147 - Statistical methods literature review.pdf (333.75 KB)

Combined papers.pdf (3.8 MB)

Study publications

Ellis KA, Bush AI, Darby D, De Fazio D, Foster J, Hudson P, Lautenschlager NT, ... Ritchie CW, Ritchie K. The PREVENT study: a prospective cohort study to identif...

Ritchie K, Carrière I, Berr C, Amieva H, Dartigues JF, Ancelin ML, Ritchie CW. ...

Data management

ENCePP Seal

The use of the ENCePP Seal has been discontinued since February 2025. The ENCePP Seal fields are retained in the display mode for transparency but are no longer maintained.

Signed code of conduct checklist

EUPAS24833-37645.pdf (267.97 KB)

Data sources

Data sources (types)

Other

Data sources (types), other

The data sources used in developing the models were obtained from the Survey of Health, Ageing, and Retirement in Europe (SHARE) study and the PREVENT Dementia programme

Use of a Common Data Model (CDM)

CDM mapping

No

Data quality specifications

Check conformance

Unknown

Check completeness

Unknown

Check stability

Unknown

Check logical consistency

Unknown

Data characterisation

Data characterisation conducted

No

Procedures

Procedure of results generation

55147 - Risk prediction Comparison

English (851.43 KB - PDF)

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