

Data for: Proteomics reveal biomarkers for diagnosis, disease activity and long-term disability outcomes in multiple sclerosis

SND-ID: 2023-165.

Citation

Gustafsson, M., Ernerudh, J., & Olsson, T Data for: Proteomics reveal biomarkers for diagnosis, disease activity and long-term disability outcomes in multiple sclerosis [Data set]. Linköping University. doi:10.48360/jcps-gw67

Creator/Principal investigator(s)

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Research principal

[Linköping University](#)

Description

The concentration of 1463 proteins were measured using the Olink Explore platform which uses Proximity Extension Assay (PEA) technology. The proteins are preselected from four Olink panels: Explore 384 Cardiometabolic, Explore 384 Inflammation, Explore 384 Neurology, and Explore 384 Oncology. The protein concentrations are given as Olink's relative protein quantification unit on log2 scale: Normalized Protein Expression (NPX). The NPX values were intensity normalized by Olink. Protein levels were measured in cerebrospinal fluid samples (n = 186) and plasma samples (n = 165) from persons with multiple sclerosis and healthy controls.

Data contains personal data

Yes

Sensitive personal data

Yes

Type of personal data

The data is pseudonymised and contains information if samples are from persons with MS or healthy controls, and the age and sex of these persons.

Code key exists

Yes

Language

[English](#)

Population

Cerebrospinal fluid (CSF) samples and plasma samples were taken from 92 persons with CIS or RRMS at Linköping University Hospital, Sweden and 51 persons with CIS or RRMS at the Karolinska University Hospital, Sweden. Everyone fulfilled the revised McDonald criteria from 2010 and 2017 for CIS or Multiple sclerosis (MS). Age-matched healthy controls (HC) were recruited from healthy blood donors (23 at the Linköping University hospital and 20 at the Karolinska University Hospital).

Time Method

[Cross-section](#)

Study design

Observational study

Case-control study

Data format / data structure

[Numeric](#)

Other research principals

[Karolinska Institutet](#)

Funding 1

- Funding agency: Swedish Foundation for Strategic Research

Funding 2

- Funding agency: Swedish Brain Foundation

Funding 3

- Funding agency: Knut and Alice Wallenberg Foundation

Funding 4

- Funding agency: Margareth AF Ugglas Foundation

Funding 5

- Funding agency: Swedish Research Council

Funding 6

- Funding agency: Swedish Knowledge Foundation

Funding 7

- Funding agency: Medical Research Council of Southeast Sweden

Funding 8

- Funding agency: NEURO Sweden

Funding 9

- Funding agency: ALF grants

Funding 10

- Funding agency: Region Östergötland

Funding 11

- Funding agency: Swedish Foundation for MS Research

Funding 12

- Funding agency: European Union's Marie Skłodowska-Curie

Ethics Review

Linköping - Ref. 2016/305-32

Stockholm - Ref. 2022-03650-02

Linköping - Ref. 2013/155-32

Linköping - Ref. 2016/304-32

Linköping - Ref. 2014/311-31

Linköping - Ref. 2017/288-31

Research area

[Bioinformatics \(computational biology\)](#) (Standard för svensk indelning av forskningsämnen 2011)

[Bioinformatics and systems biology](#) (Standard för svensk indelning av forskningsämnen 2011)

[Neurology](#) (Standard för svensk indelning av forskningsämnen 2011)

[Rheumatology and autoimmunity](#) (Standard för svensk indelning av forskningsämnen 2011)

[Specific diseases, disorders and medical conditions](#) (CESSDA Topic Classification)

Keywords

[Proteomics](#), [Multiple sclerosis](#)

Accessibility level

Access to data through an external actor

Access to data is restricted

Contact for questions about the data

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Download metadata

[DataCite](#)

[DDI 2.5](#)

[DDI 3.3](#)

[DCAT-AP-SE 2.0](#)

[JSON-LD](#)

[PDF](#)

[Citation \(CSL\)](#)