# Age-related changes in fatigue, fatigability and dexterity in persons with MS

Published: 08-01-2020 Last updated: 10-04-2024

• 1A: Does aging have additional effects on motor performance in persons with MS compared to age- and sex matched controls?• 1B: Does aging have additional effects on fatigue and fatigability in persons with MS compared to age- and sex matched...

Ethical review	Approved WMO
Status	Recruiting
Health condition type	Demyelinating disorders
Study type	Observational non invasive

# Summary

### ID

NL-OMON49981

**Source** ToetsingOnline

Brief title Aging and MS

### Condition

• Demyelinating disorders

**Synonym** multiple sclerosis

**Research involving** Human

### **Sponsors and support**

**Primary sponsor:** Universitair Medisch Centrum Groningen **Source(s) of monetary or material Support:** Ministerie van OC&W

### Intervention

Keyword: aging, dexterity, fatigue, multiple sclerose

#### **Outcome measures**

#### **Primary outcome**

Changes in persons with MS and in controls over three time points (present

time, after 5 and after 10 years) in:

a) the number of pins placed in a Purdue pegboard task;

b) maximal handgrip and index finger abduction force and

c) the decline in force over a 2-minute sustained maximal contraction.

d) the number of correct digits in the symbol digit modality test.

#### Secondary outcome

not applicable

# **Study description**

#### **Background summary**

Multiple sclerosis (MS) is a chronic demyelinating disease which presents itself with acute inflammatory episodes and co-occurring neurodegeneration. The neuropathological processes are linked to progression in physical disability, cognitive performance and sense of fatigue. New disease modifying therapies increase the mortality prognosis and raises questions on the effects of aging on these parameters.

#### Study objective

• 1A: Does aging have additional effects on motor performance in persons with MS compared to age- and sex matched controls?

• 1B: Does aging have additional effects on fatigue and fatigability in persons with MS compared to age- and sex matched controls?

• 1C: Does aging have additional effects on cognitive performance in persons with MS compared to age- and sex matched controls?

#### Study design

Observational longitudinal case-controlled study.

#### Study burden and risks

Participants perform the tasks (3 times 1 hours) at the UMCG. No risks are associated with experimental protocol. The results contribute knowledge on the effect of aging on MS-related symptoms.

### Contacts

**Public** Universitair Medisch Centrum Groningen

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# **Trial sites**

### **Listed location countries**

Netherlands

# **Eligibility criteria**

#### Age

Adults (18-64 years) Elderly (65 years and older)

### **Inclusion criteria**

- Diagnosed with Multiple sclerosis
- Being able to hold the force transducer and Pegboard pins

### **Exclusion criteria**

- Neurological or muscle disorders other than MS
- Other conditions affecting fatigue
- Depressive symptoms

# Study design

### Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Other

### Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	20-01-2020
Enrollment:	140
Туре:	Actual

# **Ethics review**

Approved WMO	
Date:	08-01-2020
Application type:	First submission
Review commission:	METC Universitair Medisch Centrum Groningen (Groningen)
Approved WMO Date:	25-02-2020

Application type:	Amendment
Review commission:	METC Universitair Medisch Centrum Groningen (Groningen)

# **Study registrations**

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

### In other registers

 Register
 ID

 CCMO
 NL70927.042.19