# Comparison of Alemtuzumab and Rebif® Efficacy in Multiple Sclerosis, Study One

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>
18/02/2008	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
11/03/2009	Completed	[X] Results
Last Edited	Condition category	Individual participant data
20/03/2020	Nervous System Diseases	

# Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

#### Contact name

Dr Genzyme Medical Information Representative

#### Contact details

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# Additional identifiers

# **EudraCT/CTIS** number

2007-001161-14

**IRAS** number

# ClinicalTrials.gov number

NCT00530348

# Secondary identifying numbers

CAMMS323; ACTRN12608000435381

# Study information

#### Scientific Title

A phase 3 randomised, rater-blinded study comparing two annual cycles of intravenous alemtuzumab to three-times weekly subcutaneous interferon beta-1a (Rebif®) in treatment-naïve patients with relapsing-remitting multiple sclerosis

#### **Acronym**

CARE-MS I

# Study objectives

Current hypothesis as of 22/06/2009:

The purpose of this study is to establish the efficacy and safety of alemtuzumab as a treatment for relapsing-remitting multiple sclerosis (MS), in comparison with Rebif® (interferon beta-1a). The study will enrol patients who have not previously received treatment to suppress MS, except steroids. Patients will have monthly laboratory tests and comprehensive testing every 3 months. Every patient will receive active treatment; there is no placebo. Patients who qualify will be randomly assigned to treatment with either alemtuzumab or Rebif® at a 2:1 ratio (i.e., 2 given alemtuzumab for every 1 given Rebif®). Alemtuzumab will be administered in two annual cycles, once at the beginning of the study and again 1 year later. Rebif® will be self-injected 3 times per week for 2 years. All patients will be required to return to their study site every 3 months for neurologic assessment. In addition, safety-related laboratory tests will be performed at least monthly. Participation in this study will end 2 years after the start of treatment for each patient. Additionally, all patients who receive alemtuzumab will be followed in an extension study for safety and efficacy assessments. Patients who receive Rebif® and complete 2 years on study may be eligible to receive alemtuzumab in an extension study.

#### Initial information at time of registration:

The purpose of this study is to establish the efficacy and safety of alemtuzumab as a treatment for relapsing-remitting multiple sclerosis (MS), in comparison with Rebif® (interferon beta-1a). The study will enrol patients who have not previously received treatment to suppress MS, except steroids. Patients will have monthly blood tests and comprehensive testing every 3 months. Every patient will receive active treatment; there is no placebo. Patients who qualify will be randomly assigned to treatment with either alemtuzumab or Rebif® at a 2:1 ratio (i.e., 2 given alemtuzumab for every 1 given Rebif®). Alemtuzumab will be administered in two annual cycles, once at the beginning of the study and again 1 year later. Rebif® will be self-injected 3 times per week for 2 years. All patients will be required to return to their study site every 3 months for neurologic assessment. In addition, a safety-related blood test will be performed at least monthly. Participation in this study will end 2 years after the start of treatment for each patient. Additionally, all patients who receive alemtuzumab will be followed in an extension study for safety for at least 3 years after their last dose of alemtuzumab. Patients who receive Rebif® and complete 2 years on study may be eligible to receive alemtuzumab in an extension study.

# Ethics approval required

Old ethics approval format

# Ethics approval(s)

Nottingham Research Ethics Committee (UK), 09/11/2007, ref: 07/H0408/118. All other centres will seek ethics approval before recruiting patients.

# Study design

Randomised parallel-assignment single-blind (outcome assessor) multi-centre trial

# Primary study design

Interventional

# Secondary study design

Randomised controlled trial

# Study setting(s)

Hospital

# Study type(s)

Treatment

# Participant information sheet

Not available in web format, please email a request for a patient information sheet: ukmedinfo@genzyme.com

# Health condition(s) or problem(s) studied

Multiple sclerosis

#### **Interventions**

Experimental Intervention: alemtuzumab: 12 mg per day administered through IV, once a day for 5 consecutive days at Month 0 and 12 mg per day administered through IV, once a day for 3 consecutive days at Month 12

Active Comparator: interferon beta-1a (Rebif®): 44 mcg administered 3-times weekly by SC injections for 2 years

Details of Lead Principal Investigator for UK sites:

Dr Alasdair Coles Addenbrooke's Hospital Box 165 Hill's Road Cambridge, CB2 2QQ United Kingdom

#### Intervention Type

Drug

#### Phase

Phase III

# Drug/device/biological/vaccine name(s)

Alemtuzumab, interferon beta-1a (Rebif®)

# Primary outcome measure

- 1. Time to Sustained Accumulation of Disability (SAD) (Time frame: 2 years)
- 2. Relapse rate (Time frame: 2 years)

#### Secondary outcome measures

- 1. Proportion of patients who are relapse free at Year 2 (Time frame:2 years)
- 2. Change from baseline in EDSS (Time frame: 2 years)
- 3. Acquisition of disability as measured by change from baseline in Multiple Sclerosis Functional Composite (MSFC) (Time frame: 2 years)
- 4. Percent change from baseline in MRI-T2 hyperintense lesion volume at Year 2 (Time frame: 2 years)

# Overall study start date

07/09/2007

# Completion date

01/03/2011

# Eligibility

# Key inclusion criteria

Amended as of 22/06/2009:

Point 6 below has been removed from the inclusion criteria.

#### Initial information at time of registration:

- 1. Males and females, aged 18 50 years
- 2. Diagnosis of multiple sclerosis (MS) and cranial magnetic resonance imaging (MRI) scan demonstrating white matter lesions attributable to MS within 5 years
- 3. Onset of MS symptoms within 5 years of screening
- 4. Expanded Disability Status Scale (EDSS) score 0.0 to 3.0
- 5. Greater than or equal to 2 MS attacks within 24 months, with greater than or equal to 1 attack within 12 months
- 6. Neurologically stable for the 30 days prior to the date the Informed Consent Form is signed

# Participant type(s)

**Patient** 

# Age group

Adult

# Lower age limit

18 Years

#### Sex

Both

# Target number of participants

525 (added 02/09/2009: actual number of participants: 581)

# Key exclusion criteria

- 1. Received prior therapy for MS other than corticosteroids
- 2. Exposure to immunosuppressive or immunomodulatory agents other than systemic corticosteroid treatment
- 3. Received treatment with a monoclonal antibody for any reason
- 4. Previous treatment with any investigational drug (i.e. medication that is not approved at any dose for any indication)
- 5. Has any progressive form of MS
- 6. Any disability acquired from trauma or another illness that could interfere with evaluation of disability due to MS
- 7. Major systemic disease that cannot be treated or adequately controlled by therapy
- 8. Active infection or high risk for infection
- 9. Autoimmune disorder (other than MS)
- 10. Impaired hepatic or renal function
- 11. History of malignancy, except basal skin cell carcinoma
- 12. Medical, psychiatric, cognitive, or other conditions that compromise the patient's ability to understand the patient information, to give informed consent, to comply with the trial protocol, or to complete the study
- 13. Known bleeding disorder
- 14. Of childbearing potential with a positive serum pregnancy test, pregnant, or lactating
- 15. Current participation in another clinical study
- 16. Previous hypersensitivity reaction to any immunoglobulin product
- 17. Known allergy or intolerance to interferon beta, human albumin, or mannitol
- 18. Intolerance of pulsed corticosteroids, especially a history of steroid psychosis
- 19. Inability to self-administer subcutaneous (SC) injections or receive SC injections from caregiver
- 20. Inability to undergo MRI with gadolinium administration
- 21. Unwilling to use a reliable and acceptable contraceptive method throughout the study period (fertile patients only)

Date of first enrolment 07/09/2007

**Date of final enrolment** 02/09/2009

# Locations

Countries	of	recrui	itment
Argentina			

Australia

Brazil

Canada

Croatia

Czech Republic

Serbia

England

Sweden

Ukraine

**United Kingdom** 

United States of America

Study participating centre Genzyme Therapeutics Oxford United Kingdom OX4 2SU

# Sponsor information

# Organisation

Genzyme Corporation (USA)

# Sponsor details

500 Kendall Street Cambridge Massachusetts United States of America 02142

# Sponsor type

Industry

#### Website

http://www.genzyme.co.uk

#### **ROR**

https://ror.org/027vj4x92

# Funder(s)

# Funder type

Industry

#### **Funder Name**

Genzyme

# Alternative Name(s)

Genzyme Corporation

# **Funding Body Type**

Private sector organisation

#### **Funding Body Subtype**

For-profit companies (industry)

#### Location

United States of America

#### Funder Name

**Bayer Schering** 

#### Alternative Name(s)

#### **Funding Body Type**

Private sector organisation

# Funding Body Subtype

For-profit companies (industry)

#### Location

Germany

# **Results and Publications**

# Publication and dissemination plan

Not provided at time of registration

# Intention to publish date

# Individual participant data (IPD) sharing plan

# IPD sharing plan summary

Not provided at time of registration

# **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Basic results				No	No
Results article	results	24/11/2012		Yes	No