A double-blind placebo-controlled multicenter study to evaluate the efficacy and safety of MBP8298 in subjects with secondary progressive multiple sclerosis (SPMS)

| Submission date | Recruitment status No longer recruiting | Prospectively registered | | |
|-------------------------------|--|--|--|--|
| 13/06/2005 | | ☐ Protocol | | |
| Registration date | Overall study status | Statistical analysis plan | | |
| 20/09/2005 | Completed | [X] Results | | |
| Last Edited 01/07/2014 | Condition category Nervous System Diseases | Individual participant data | | |
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Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Prof Mark Freedman

Contact details

501 Smyth Road Ottawa Canada K1H 8L6

Additional identifiers

Protocol serial number MBP8298-01

Study information

Scientific Title

Study objectives

The major clinical hypothesis is that MBP8298 will significantly delay the progression of disability, as measured by the Expanded Disability Status Scale (EDSS), in subjects diagnosed with Secondary Progressive Multiple Sclerosis and who are human leukocyte antigen (HLA) DR2 and/or DR4 positive.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Study design

Randomised controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Secondary Progressive Multiple Sclerosis

Interventions

An intravenous administration of MBP peptide versus placebo

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

MBP8298

Primary outcome(s)

To compare the clinical efficacy of 500 mg MBP8298 given intravenously every 6 months for a period of 2 years, to placebo, in subjects diagnosed with SPMS who are positive for the HLA DR2 and/or DR4 haplotype. Clinical efficacy is defined as a statistically and clinically significant increase in the time to confirmed worsening of disability as measured by EDSS.

Key secondary outcome(s))

- 1. To assess safety of MBP8298 synthetic peptide in all subjects irrespective of genotype
- 2. To compare the clinical efficacy of 500 mg MBP8298 given intravenously every 6 months for a period of 2 years, to placebo, in subjects diagnosed with SPMS who are negative for the HLA DR2 and/or DR4 haplotype. Clinical efficacy is defined as a statistically and clinically significant increase in the time to confirmed worsening of disability as measured by EDSS.
- 3. To assess the effects of MBP8298 on MRI parameters:
- 3.1. Activity analysis (T2 lesions, Gadolinium-enhancing lesions)

- 3.2. Lesion burden (T2 burden of disease, chronic T1 black holes)
- 3.3. Atrophy (brain and cervical cord)
- 4. To confirm that treatment with MBP8298 induces immunological tolerance or shift in functional response profile to MBP peptide (82-98) and determine whether this is dependent on HLA subtype
- 5. To determine whether MBP8298 induces immunological tolerance or shift in functional response profile to other MBP epitopes and other myelin antigens (e.g., proteolipid protein [PLP], myelin oligodendrocyte glycoprotein [MOG]), indicating the stop of epitope spreading and whether this too is dependent on HLA subtype
- 6. To confirm the ratio of HLA DR2/4 positive to HLA DR2/4 negative subjects in the SPMS population
- 7. To determine whether MBP8298 induces an improvement in the quality of life of SPMS patients, as determined by the MSQoL-54 (SF-36 plus 18 MS-specific questions in Sweden and Norway)

Completion date

01/05/2008

Eligibility

Key inclusion criteria

- 1. Male or female subjects, 18-65 years of age
- 2. Documented history of SPMS. SPMS is defined as an MS patient who has been diagnosed with MS for at least 3 years, and in the 3-year period prior to enrolment must have documented progression of their pyramidal or cerebellar Kurtzke functional subscores (FSS) in the absence of acute relapses. (In the absence of documented FSS changes, clinical notes documenting changes consistent with these changes will be acceptable). The subject must also have experienced at least one acute relapse as part of their diagnosis of Relapsing/Remitting Multiple Sclerosis (RRMS). Only one relapse prior to diagnosis of MS can be in accordance with the McDonald diagnostic criteria as long as cranial magnetic resonance imaging (MRI) findings consistent with the diagnosis of MS are also present.
- 3. Absence of relapse in the 3 months prior to baseline
- 4. EDSS of 3.5 6.5
- 5. Pvramidal or Cerebellar FSS ≥3
- 6. Subject must be able and willing to give meaningful, written informed consent prior to participation in the trial, in accordance with regulatory requirements
- 7. In the Investigators opinion, subjects must be reliable, compliant, and agree to cooperate with all trial evaluations

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Upper age limit

65 years

Sex

All

Key exclusion criteria

- 1. Diagnosis of Primary Progressive MS
- 2. Subjects have previously received MBP8298
- 3. Any known malignancy, or history of malignancy, with the exclusion of basal cell carcinoma
- 4. Steroid therapy within 30 days prior to first dose, or any other treatment known to be used for putative or experimental MS treatment
- 5. Therapy with ß-interferon, glatiramer acetate, mitoxantrone, cyclophosphamide, methotrexate, azathioprine, or any other immuno-modulating (e.g., intravenous immunoglobulin [IVIG]) or immunosuppressive drugs, including recombinant or non-recombinant cytokines or plasma exchange, within 6 months prior to performance of the first study-specific test, with the exception of corticosteroids or adrenocorticotropic hormone (ACTH) for relapse treatment.
- 6. Initiation of therapy with 4-aminopyridine (4-AP) or 3,4-diaminopyridine (3,4-DAP)
- 7. History of anaphylactic/anaphylactoid reactions to glatiramer acetate
- 8. Abnormal laboratory values at the Baseline Visit deemed by the Investigator to be clinically significant
- 9. Known allergy to Gadolinium-DTPA
- 10. Treatment at any time with Cladribine, total lymphoid irradiation, monoclonal antibody treatment e.g. anti-CD4, anti-CD52, anti-VLA4, anti-CD20
- 11. Treatment at any time with an altered peptide ligand
- 12. Any conditions that could interfere with the performance of study-specific procedures (e.g., MRI)
- 13. Previous randomization to this study
- 14. Known positivity for human immunodeficiency virus (HIV), Hepatitis B, or Hepatitis C
- 15. Participation in any other non-MS clinical trial within 30 days prior to performance of the first study-specific test (the screening/baseline visit), or any investigational therapy in the past 6 months
- 16. Females who are breastfeeding, pregnant (pregnancy test at screening), or not using a medically approved method of contraception regularly
- 17. Known or suspected current or past alcohol or drug abuse (within the last year)
- 18. Any medical, psychiatric or other condition that could result in a subject not being able to give fully informed consent, or to comply with the protocol requirements
- 19. Any other condition that, in the Investigators opinion, makes the subject unsuitable for participation in the study

Date of first enrolment

06/12/2004

Date of final enrolment

01/05/2008

Locations

Countries of recruitment

United Kingdom

| Sweden |
|---|
| Study participating centre 501 Smyth Road Ottawa Canada K1H 8L6 |
| Sponsor information |
| Organisation BioMS Technology Corp (Canada) |
| ROR https://ror.org/03fvjvp95 |
| Funder(s) |
| Funder type Industry |
| Funder Name BioMS Technology Corp (Canada) |

Canada

Denmark

Estonia

Finland

Germany

Netherlands

Results and Publications

Latvia

Spain

Individual participant data (IPD) sharing plan

IPD sharing plan summaryNot provided at time of registration

Study outputs

| Output type | Details | Date created Date added | Peer reviewed? | Patient-facing? |
|-------------------------------|-------------------------------|-------------------------|----------------|-----------------|
| Results article | results | 18/10/2011 | Yes | No |
| Participant information sheet | Participant information sheet | 11/11/2025 11/11/2025 | No | Yes |