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Autologous Stem cell Transplantation International Scleroderma (ASTIS) trial

Submission date	Recruitment status	[_] Prospectively registered
21/09/2005	No longer recruiting	[X] Protocol
Registration date	**Overall study status**	[_] Statistical analysis plan
19/10/2005	Completed	[X] Results
Last Edited	**Condition category**	[_] Individual participant data
25/07/2014	Musculoskeletal Diseases	

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
NTR338

Study information

Scientific Title
High dose immunoablation and autologous haematopoietic stem cell transplantation versus monthly intravenous pulse therapy

Acronym
ASTIS

Study objectives
It is postulated that high dose immunoablation and autologous stem cell transplantation has superior clinical benefit in comparison to intravenous pulse therapy cyclophosphamide, with respect to survival and prevention of major organ failure (referred to as event-free survival which is considered the primary endpoint) and has a greater impact on skin thickening, visceral involvement, functional status and quality of life.

On 17/04/2012 the following changes were made to the trial record:
1. Australia has been removed from the countries of recruitment and Belgium added.
2. The target number of participants has been changed from 200 to 156.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Ethics approval received from the local medical ethics committee

Study design
Multicentre randomised active-controlled parallel-group trial

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Systemic sclerosis

Interventions
This multicentre prospective randomised controlled phase III study compares efficacy and safety of high dose immunoablation and autologous haematopoietic stem cell transplantation (HSCT) (considered the investigational treatment), versus monthly intravenous pulse-therapy cyclophosphamide (considered the control treatment). The investigational treatment arm comprises the following consecutive steps:
1. Mobilisation of haematopoietic stem cells with intravenous (IV) cyclophosphamide (2 x 2 g /m^2) and filgrastim (10 mg/kg/day)
2. Leukapheresis and selection of CD34+ stem cells
3. Conditioning with IV cyclophosphamide (200 mg/kg) and rbATG (7.5 mg/kg)
4. HSCT
The procedures are normally completed within three to four months after randomisation.

The control treatment arm consists of 12 consecutive monthly IV pulses cyclophosphamide (750 mg/m^2).

As of 17/04/2012, the sponsor name has been amended from European Group Bone Marrow + Transplantation (EBMT)/European League Against Rheumatism (EULAR) Working Party Autoimmune Diseases to European Group for Bone Marrow Transplantation.

Intervention Type
Drug

Phase
Phase III

Drug/device/biological/vaccine name(s)
Cyclophosphamide, filgrastim, rabbit Anti-Thymocyte Globulin (rbATG)

Primary outcome(s)
Current primary outcome measure(s) as of 29/05/2012
The primary endpoint is event-free survival defined as the time in days from the day of randomisation until the occurrence of death or the development of persistent major organ failure (heart, lung, kidney).

Previous primary outcome measure(s)
The primary endpoint is event-free survival defined as the time in days from the day of randomisation until the occurrence of death or the development of persistent major organ failure (heart, lung, kidney) during the study period of two years.

Key secondary outcome(s))
Key secondary outcomes include:
1. Treatment related mortality
2. Treatment toxicity
3. Progression-free survival

Completion date
01/01/2008

Eligibility

Key inclusion criteria
Patients with diffuse systemic sclerosis, aged 16 to 65 years, and:
1. Disease duration four years or less, plus evidence of heart, lung or kidney involvement, plus skin score of 15 or more, or
2. Disease duration two years or less, plus evidence of an acute phase reaction in blood, plus skin score 20 or more

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Sex
All

Key exclusion criteria
Patients with concomitant severe disease, extensive pretreatment according to predefined criteria with cyclophosphamide are excluded.

Date of first enrolment
22/03/2001

Date of final enrolment
01/01/2008

Locations

Countries of recruitment
United Kingdom

England

Austria

Belgium

Canada

France

Germany

Greece

Italy

Netherlands

Switzerland

Study participating centre
Institute of Cellular Medicine,
Newcastle upon Tyne
United Kingdom
NE2 4HH

Sponsor information

Organisation
European Group for Bone Marrow Transplantation

Funder(s)

Funder type
Industry

Funder Name
European League Against Rheumatism (EULAR)

Funder Name
Amgen Europe

Funder Name
Sangstat B.V. (The Netherlands)

Funder Name
Horton Foundation (Switzerland)

Funder Name
AP - HP

Alternative Name(s)
Assistance Publique Hôpitaux de Paris, Assistance Publique–Hôpitaux de Paris, AP-HP

Funding Body Type
Private sector organisation

Funding Body Subtype
Trusts, charities, foundations (both public and private)

Location
France

Funder Name
European Group for Blood and Marrow Transplantation (EBMT)

Results and Publications

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?
Results article	results	25/06/2014		Yes	No
Protocol article	protocol	01/10/2005		Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes