ADMINISTRATION OF HA-1 TCR TRANSDUCED VIRUS-SPECIFIC T-CELLS AFTER ALLOGENEIC STEM CELL TRANSPLANTATION IN PATIENTS WITH HIGH-RISK LEUKEMIA (LUMC 2010-02)

Published: 01-04-2012
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Primary Objective• To investigate the feasibility and safety of administration of donor HA-1 TCR transduced virus-specific T-cells after allo-SCT.Secondary Objectives• To evaluate the persistence of donor HA-1 TCR transduced virus-specific T-cells...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Leukaemias
Study type	Interventional

Summary

ID

NL-OMON38068

Source
ToetsingOnline

Brief title
HA-1 TCR transduced virus-specific T-cells

Condition

- Leukaemias

Synonym
hematological malignancy, leukemia

Research involving
Human

Sponsors and support

Primary sponsor: Leids Universitair Medisch Centrum
Source(s) of monetary or material Support: ZonMw

Intervention

Keyword: adoptive immunotherapy, allogeneic stem cell transplantation, T Cell Receptor, virus-specific T cells

Outcome measures

Primary outcome

• The number of events of acute GvHD, all other adverse events and death.

• The feasibility of generation of HA-1 TCR transduced virus-specific donor

T-cells.

Secondary outcome

• The number of HA-1 TCR transduced virus-specific donor T-cells in blood or

bone marrow at different time points.

• The number of patients eligible for standard DLI at 6 months.

Study description

Background summary

Patients with hematological malignancies can be successfully treated with allogeneic stem cell transplantation (allo-SCT). In T-cell depleted allo-SCT administration of donor T-cells via a donor lymphocyte infusion (DLI) can induce graft-versus-leukemia (GvL) which can cure relapse or refractory hematological malignancies. However, infusion of DLI before 6 months has a high risk of morbidity and mortality caused by graft-versus-host disease (GvHD) due to alloreactive T-cells in the product. Patients with high-risk acute leukemia are likely to relapse within 6 months after allo-SCT, when DLI is undesirable due to the high risk of developing GvHD. Administration of leukemia specific T-cells with minimal amount of alloreactive T-cells at 8 weeks after allo-SCT might cause GvL without GVHD. Minor histocompatibility antigen (MiHA) HA-1 is exclusively expressed on cells of the hematopoietic system and administration

of HA-1 T-cell receptor (TCR) transduced virus-specific T-cells at 8 and 14 weeks may exert selective GvL activity in allo-SCT patients with high-risk acute leukemia.

Study objective

Primary Objective
• To investigate the feasibility and safety of administration of donor HA-1 TCR transduced virus-specific T-cells after allo-SCT.
Secondary Objectives
• To evaluate the persistence of donor HA-1 TCR transduced virus-specific T-cells after administration.
• To evaluate whether administration of donor HA-1 TCR transduced virus-specific T-cells after allo-SCT makes patients eligible for standard DLI at 6 months after allo-SCT.

Study design

This is an open-label non-randomized phase I/II feasibility study to treat patients with high-risk leukemia with HA-1 TCR transduced virus-specific donor-derived T-cells 8 and 14 weeks after allo-SCT.

Intervention

Administration of HA-1 TCR transduced virus-specific donor T-cells 8 weeks after allo-SCT. This administration may be repeated 6 weeks later.

Study burden and risks

Potential benefits of administration of HA-1 TCR transduced virus-specific donor T-cells is selective GvL activity and prevention of CMV-and/or EBV reactivation. The risk for development of acute GvHD, neoreactivity, oncogenic transformation and infection will be kept to a minimum by critical steps in the manufacturing process.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

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

Inclusion criteria

- Age 18-75 years
- WHO performance score 0-2
- High-risk leukemia (see appendix D)
- Complete remission (CR) or stable partial remission (PR) (see appendix D)
- HLA-A*0201 positive
- HA-1h positive
- Availability of a suitable donor (see donor criteria)
- Written informed consent

Exclusion criteria

- Life expectation < 3 months.
- End stage irreversible multi-system organ failure.
- Pregnant or lactating women.
- Severe psychological disturbances.
- HIV-positivity

Study design

Design

Study phase:	2
Study type:	Interventional
Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	17-09-2013
Enrollment:	20
Type:	Actual

Medical products/devices used

Product type:	Medicine
Generic name:	Somatic cels allogenic

Ethics review

Approved WMO Date:	01-04-2012
Application type:	First submission
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)
Approved WMO Date:	22-05-2012
Application type:	First submission
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)
Approved WMO Date:	23-07-2013

Application type:	Amendment
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)

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
EudraCT	EUCTR2010-024625-20-NL
CCMO	NL35240.000.12

Study results

Date completed:	29-08-2018
Actual enrolment:	9