Immuun interventie met tolerogene dendritische cellen (DC) in type 1 diabetes. Eerste klinische veiligheidsstudie genaamd D-sense

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON21892

Source
NTR

Brief title
D-sense

Health condition

Diabetes Mellitus, Type 1
Immunotherapy
Dendritic cells
Safety
Type 1 diabetes
Immunotherapie
Dendritische cellen
Veiligheid

Sponsors and support

Primary sponsor: Leiden Universitu Medical Center
Source(s) of monetary or material Support: FP7, NAIMIT

Intervention

Outcome measures

Primary outcome

a. Primary safety endpoints

Occurrence of any of the following safety and feasibility concerns:

- hypersensitivity reaction grade ¡Ý 3 to PIpepTolDC product upon intradermal injections

- disease exacerbation as defined by ¡Ý 40% decrease of stimulated C-peptide production compared to baseline

- any infectious complications requiring systemic medical treatment

- diagnosis of any new disease associated with autoimmunity

- diagnosis of new malignancy

- any other serious adverse event

b. Primary feasibility endpoints

- failure to complete a successful leukapheresis procedure

- failure to isolate sufficient numbers of mononuclear cells by leukapheresis for PIpepTolDC production

- failure to generate the required dose of PIpepTolDCs

- any event that prevents the protocol or follow up to be executed as planned.

Secondary outcome

Secondary endpoints

- Improved stimulated C-peptide production compared to baseline at 12 and 24 weeks

- Change in the level or quality of T-cell specific immune responses at 4, 8, 12, and 24 weeks versus baseline

Study description

Study objective

Diabetes Mellitus type 1 is an autoimmune disease that cannot be cured. Complications due to insufficient regulation of blood glucose by exogenous insulin reduce life expectancy and quality of life. Proinsuline-loaded Tolerogenic DCs are induce antigen-specific Tregs and thereby inhibit autoimmune destruction of beta-cells.

Study design

weeks: 4, 8, 12, 24

Intervention

Two intradermal injections of PIpepTolDCs (5x 10e6, 10x 10e6 or 20 x 10e6/ injection in 3 patients each) with a 28-day interval.

Contacts

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Eligibility criteria

Inclusion criteria

• Age 18-50 years;

• Diagnosis of type 1 Diabetes Mellitus at least 18 months (dated from the first insulin

injection);

• Adequate self-assessment of blood glucose values, and recording of glucose values and administered insuline
doses as deemed sufficient by the patient¡¯s physician

• Stable glycemic control according to the patient¡¯s physician

• Possession of *0401 allele at the HLA-DRB1 gene locus;

• Written and witnessed informed consent.

Exclusion criteria

• Use of immunosuppressive or immunomodulatory therapies, including systemic steroids within 1 month prior to
enrolment and/or prior monoclonal antibody therapy of any type given for any indication at any time;

• Immunisation with live or killed vaccines or allergic desensitization procedures less than 1 month prior to
enrolment;

• History of disease associated with autoimmunity or inflammatory disorders other than type 1 Diabetes Mellitus;

• History of malignancy;

• Male or female patients who are fertile and are unwilling to use adequate contraception at least 3 months prior to
the first administration of PIpepTolDCs until at least 60 days following the last administration of PIpepTolDCs;

• Recent (< 3 months) fasting insulin C-peptide > 200 pmol/L;

• Peak insulin C-peptide < 200 pmol/L after stimulation with Mixed Meal Tolerance Tests (MMTT).

• Recent (< 3 months) HbA1c > 64 mmol/ mol.

• No positive beta-cell autoantibody or antibodies (eligible autoantibodies: anti IAA, GADA or dIA-2A)

• Female patients who are pregnant or breastfeeding;

Study design

Design

Study type:	Interventional
Intervention model:	Other
Allocation:	Non controlled trial

Control: Active

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	01-05-2015
Enrollment:	9
Type:	Anticipated

Ethics review

Positive opinion

Date:	02-10-2015
Application type:	First submission

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
NTR-new	NL5425
NTR-old	NTR5542
Other	: ABR48984

Study results