Tacrolimus monotherapy in low-risk kidney transplant recipients.

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The objective of this pilot study is to determine the feasibility of a larger non-inferiority trial investigating the safety of tacrolimus monotherapy (TACmono) in terms of rejection rate after kidney transplantation. Feasibility objectives are...

Ethische beoordeling Positief advies **Status** Werving gestart

Type aandoening -

Onderzoekstype Interventie onderzoek

Samenvatting

ID

NL-OMON26543

Bron

NTR

Verkorte titel

TACmono

Aandoening

kidney transplantation/ niertransplantatie rejection/ rejectie immunologic profiling/ immunologisch risico tacrolimus advagraf infectious compications/ infectieuze complicaties

Ondersteuning

Primaire sponsor: Erasmus Medical Center, Rotterdam, The Netherlands

Overige ondersteuning: investigator-driven

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Feasibility objectives are consent rate, BPAR-rate and biological plausibility.

The primary objective of the pilot study consists of the following immunological markers:

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- II. Total number of infectious episodes.<br
- III. Vaccination response score. <br

Eight secondary objectives are described in the protocol. <br

Criteria for success of pilot study:

- 1. A total of 100 patients is recruited within three years.

- 2. Consent is given in 70% of eligible patients. <br
- 3. The descriptive outcomes in general immune responses provide for a biological plausible benefit of TACmono over dual therapy.

Toelichting onderzoek

Achtergrond van het onderzoek

Rationale: Kidney transplant recipients with a favorable immunological profile, such as less than four HLA mismatches and less than five per cent panel reactive antibodies have a low risk of rejection. Therefore standard immunosuppressive therapy after kidney transplantation might expose them to a higher than necessary risk of infectious diseases and malignancies.

Objective: The objective of this pilot study is to determine the feasibility of a larger non-inferiority trial investigating the safety of tacrolimus monotherapy (TACmono) in terms of rejection rate after kidney transplantation. Feasibility objectives are consent rate, BPAR-rate and biological plausibility. This biological plausibility will be the primary endpoint of the pilot study and includes immunological parameters as surrogate markers for infectious disease and malignancy.

Study-design: This is a randomized, investigator-driven, open-label, single centre pilot study. The pilot is conducted to assess the feasibility of a larger non-inferiority study. The follow-up will be 15 months for the primary and secondary outcomes. The aim is to recruit 100 patients.

Study population: Adult patients (18 years and older) receiving a deceased or living donor kidney transplant in the Erasmus Medical Center Rotterdam, and historical panel reactive antibodies of less than five per cent and less than four HLA mismatches on A, B and DR loci, are eligible for this study.

Intervention: Participants are converted from Prograft to Advagraf one week after kidney

transplantation. Six months after transplantation participants with stable renal function (eGFR >30 ml/min and proteinuria ≤0.5 gram per 10 mmol creatinin in spot urine) are randomized to either continue standard therapy with Advagraf and Cellcept or gradually decrease the Cellcept, to Advagraf monotherapy at 9 months. A renal transplant biopsy is performed at randomisation, 6 months after transplantation. One year after kidney transplantation participants are vaccinated against pneumococcus and DTP (Diphteria, tetanus and poliomyelitis). Depending on the season also the influenza vaccine is administered. Participants are asked to fill in questionnaires about gastrointestinal symptoms and quality of life at 6, 12 and 15 months after transplantation.

Main study parameters: Feasibility objectives are consent rate, BPAR-rate and biological plausibility.

The primary objective of the pilot study consists of the following immunological markers:

- I. Number of cytokine-producing alloreactive CD137+ T cells.
- II. Total number of infectious episodes.
- III. Vaccination response score.

Eight secondary objectives are described in the protocol.

Criteria for success of pilot study:

- 1. A total of 100 patients is recruited within three years.
- 2. Consent is given in 70% of eligible patients.
- 3. The descriptive outcomes in general immune responses provide for a biological plausible benefit of TACmono over dual therapy.

Nature and extent of the burden and risks associated with participation, benefit and group relatedness: Extra blood tubes are taken at time points when blood is already drawn, except for the blood drawn to measure vaccination responses. The main risk of vaccination is the rare incidence of anaphylactic reactions. Norepinephrine will be present during administration of the vaccine. Mild side effects occur in the majority of patients and are self-limiting (local redness, itching, pain, headaches and malaise). A renal transplant biopsy has a small risk (<2%) of clinically relevant bleeding. Protocol biopsies are standard of care in many transplant centers. Treatment by TACmono has theoretically a greater risk of rejection. Therefore a time window for discontinuation at nine months has been chosen. The investigators and the DSMB will closely monitor rejection rates. The potential benefit of treatment by TACmono consists of fewer infections and less malignancies. In the intervention group participants have a more patient-friendly medication regime with only once daily an immunosuppressive tablet, enhancing compliance.

Doel van het onderzoek

The objective of this pilot study is to determine the feasibility of a larger non-inferiority trial investigating the safety of tacrolimus monotherapy (TACmono) in terms of rejection rate after kidney transplantation. Feasibility objectives are consent rate, BPAR-rate and biological plausibility. This biological plausibility will be the primary endpoint of the pilot study and includes immunological parameters as surrogate markers for infectious disease and malignancy.

Onderzoeksopzet

Pre-transplantation and 6, 9, 12 and 15 months after kidney transplantation.

Onderzoeksproduct en/of interventie

Participants are converted from Prograft to Advagraf one week after kidney transplantation. Six months after transplantation participants with stable renal function (eGFR >30 ml/min and proteinuria ≤0.5 gram per 10 mmol creatinin in spot urine) are randomized to either continue standard therapy with Advagraf and Cellcept or gradually decrease the Cellcept, to Advagraf monotherapy at 9 months. A renal transplant biopsy is performed at randomisation, 6 months after transplantation. One year after kidney transplantation participants are vaccinated against pneumococcus and DTP (Diphteria, tetanus and poliomyelitis). Depending on the season also the influenza vaccine is administered. Participants are asked to fill in questionnaires about gastrointestinal symptoms and quality of life at 6, 12 and 15 months after transplantation.

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Adult patients receiving a deceased or living kidney transplant in the Erasmus Medical Center Rotterdam, The Netherlands and:
- Historical PRA <5% and
- HLA MM <4.

Re-transplantation are allowed when meeting the before mentioned criteria.

Patients have to give written informed consent to participate in the study.

Before randomization at 6 months, renal function should be stable with eGFR (MDRD formula) >30 in mL/min with proteinuria ≤0.5 gram per 10 mmol creatinin in spot urine.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- HLA identical living-related transplant recipients.
- Patients with an indication to continue MMF or other immunosuppressive drugs, e.g. vasculitis, SLE etc. (according to judgement of treating physician).
- Recipient of an ABO-incompatible allograft or with a positive crossmatch (complement-dependent cytotoxicity or flow cytometry).
- Biopsy proven rejection three months and later after transplantation.
- Recipient of multiple organ transplants.
- Females of childbearing potential who are planning to become pregnant, who are pregnant and/or lactating or who are unwilling to use effective means of contraception.

- T-cell depleting therapy (anti-thymocyte globulin and alemtuzumab) after transplantation.

Onderzoeksopzet

Opzet

Type: Interventie onderzoek

Onderzoeksmodel: Parallel

Toewijzing: Gerandomiseerd

Blindering: Open / niet geblindeerd

Controle: Geneesmiddel

Deelname

Nederland

Status: Werving gestart

(Verwachte) startdatum: 05-09-2014

Aantal proefpersonen: 100

Type: Verwachte startdatum

Ethische beoordeling

Positief advies

Datum: 28-09-2014

Soort: Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register ID

NTR-new NL4672 NTR-old NTR4824

Ander register : MEC-2014-318 / NL48634.078.14.

Resultaten