An open-label, single centre study to assess and compare the intra- and interpatientvariability in the oral bioavailability for Immediate-Release Tacrolimus and after conversion to Modified-Release Tacrolimus in stable kidney transplant recipients.

Published: 20-03-2009
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Primary objective: - evaluation and comparison of the intra- and interpatient variability for the Area under the curve (AUC) of orally administered Tac BID and Tac QD in stable renal transplant patients. Secondary objective: - evaluation and...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Urethral disorders (excl calculi)
Study type	Interventional

Summary

ID

NL-OMON35391

Source
ToetsingOnline

Brief title
Advagraf Conversion Study

Condition

- Urethral disorders (excl calculi)

Synonym
kidney transplantation, renal transplant

Research involving
Human

Sponsors and support

Primary sponsor: Interne Geneeskunde, onderafdeling Nefrologie
Source(s) of monetary or material Support: Astellas Pharma,industrie

Intervention

Keyword: kidney transplantation, pharmacogenetics, pharmacokinetics, Tacrolimus

Outcome measures

Primary outcome

- intra- and interpatientvariability of the Area Under the Curve (AUC) for

orally administered Tacrolimus.

Secondary outcome

- tacrolimus maximum concentration (Cmax) and its intra- and

interpatientvariability;

- time to reach Cmax (Tmax) and its intra- and interpatientvariability;

- tacrolimus trough level (Cmin) and its intra- and interpatientvariability;

- CYP3A5 genotype;

- questionnaires on health status and quality of life

- transplant function (endogeneous creatinine clearance

- use of co-medication

- the change in tacrolimus bloodlevels (AUC) when Advagraf is administered

together with a continental breakfastl (only patients participating in

amendment 2 (AUC tacrolimus intake together with breakfast)

Study description

Background summary

A modified-release formulation of Tacrolimus, a potent immuno-suppressor, has been developed which has to be taken once daily (Tac QD, Advagraf) instead of twice daily as is the case with the immediate-release formulation of Tacrolimus (Tac BID, Prograft). This has been developed to enhance therapy adherence. However we do not know whether patients really appreciate a once-daily formulation, which may be related to the use of sometimes extensive co-medication. Secondly, intra- and interpatient variability of Tac QD have not been reported yet in stable renal transplant recipients. Third, the observed reduced intra-patient variability in afro-american de novo kidney patients may have a genetic background. We would like to study these three aspects in a population of stable renal transplant recipients before and after conversion to the Tac QD.
In patient participating in the study as described in amendment 2 (AUC tacrolimus intake together with breakfast) the change in tacrolimus bloodlevels (AUC) are examined when Advagraf is administered together with a continental breakfast.

Study objective

Primary objective:
- evaluation and comparison of the intra- and interpatient variability for the Area under the curve (AUC) of orally administered Tac BID and Tac QD in stable renal transplant patients.
Secondary objective:
- evaluation and comparison of the intra- and interpatient variability for other pharmacokinetic parameters of orally administered Tac BID and Tac QD in stable renal transplant patients.
- Pooling of these data towards the patients* CytochromeP450 3A5 (CYP3A5) genotype;
- evaluation of the patients*s perception on his/her health status and quality of life to before and after conversion to Tac QD
- Evaluation of the change in tacrolimus bloodlevels (AUC) when Advagraf is administered together with a continental breakfastI (only patients participating in amendment 2 (AUC tacrolimus intake together with breakfast)

Study design

An open label, single centre conversion study

Intervention

Conversion from Prograf to Advagraf

Study burden and risks

risk:
There are no risks associated with participation: conversion from Prograf to Advagraf has been shown to be safe and effective. Advagraf has been registered for the same indication as Prograf. In fact the conversion is part of our regular patient care coupled to additional scientific research.
burden:
The participant will be screened before definite inclusion on our outpatient clinic. This stands for one surplus visit to our centre. Furthermore, patients will be asked to compose 8-point tacrolimus profiles with weekly intervals during two 6-week periods (i.e. 12 profiles). The profiles will be composed by means of capillary blood sampling, the Blood Spot method. This is a validated method for the determiantion of tacrolimus blood concetrations. Besides, a questionnaire will have to be completed twice, before and after conversion to Advagraf.

Contacts

Public
Selecteer

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Scientific
Selecteer

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

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

Inclusion criteria

· 18 years of age or older
· stable renal allograft function
· immunosuppression with Tac BID (Prograft)
· part of the population is selected on base of already known CYP3A5 SNP*s (carrier or homozygous for CYP3A5*1) to ensure inclusion of an adequate amount of patients with an increased metabolism of tacrolimus.

Exclusion criteria

· graft failure
· other organ transplanted than kidney
· malignancy
· renal replacement therapy (RRT)
· sign of infection before inclusion
· patients already taking Tac QD
·

Study design

Design

Study type: Interventional

Control:	Active
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	17-05-2010
Enrollment:	40

Type:	Actual

Medical products/devices used

Product type:	Medicine
Brand name:	Advagraf
Generic name:	Tacrolimus
Registration:	Yes - NL intended use
Product type:	Medicine
Brand name:	Prograf
Generic name:	Tacrolimus
Registration:	Yes - NL intended use

Ethics review

Approved WMO Date:	20-03-2009
Application type:	First submission
Review commission:	METC academisch ziekenhuis Maastricht/Universiteit Maastricht, METC azM/UM (Maastricht)
Approved WMO Date:	31-03-2010
Application type:	First submission
Review commission:	METC academisch ziekenhuis Maastricht/Universiteit Maastricht, METC azM/UM (Maastricht)
Approved WMO Date:	02-11-2010
Application type:	Amendment
Review commission:	METC academisch ziekenhuis Maastricht/Universiteit Maastricht, METC azM/UM (Maastricht)
Approved WMO Date:	04-11-2010
Application type:	Amendment
Review commission:	METC academisch ziekenhuis Maastricht/Universiteit Maastricht, METC azM/UM (Maastricht)
Approved WMO Date:	10-01-2011

Application type:	Amendment
Review commission:	METC academisch ziekenhuis Maastricht/Universiteit Maastricht, METC azM/UM (Maastricht)
Approved WMO Date:	24-01-2011
Application type:	Amendment
Review commission:	METC academisch ziekenhuis Maastricht/Universiteit Maastricht, METC azM/UM (Maastricht)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

ID: 29529
Source: Nationaal Trial Register
Title:

In other registers

Register	ID
Other	1791
EudraCT	EUCTR2009-010400-28-NL
CCMO	NL26976.068.09
OMON	NL-OMON29529