Management of the combination of tacrolimus with azoles: effect of tacrolimus formulation on drug-drug interaction magnitude

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON28458

Source
Nationaal Trial Register

Brief title
TAFI

Health condition

Fungal infections

Sponsors and support

Primary sponsor: UMCG
Source(s) of monetary or material Support: Chiesi Pharmaceutici

Intervention

Outcome measures

Primary outcome

Dose-adjusted increase in AUC of IR-Tac and ER-Tac

Secondary outcome

PK parameters, correlation of PK parameters with pharmacogenetic genotype inflammatory markers, Cmin/dose ratio during and after azole treatment, number of dose adjustments and total dose adjustment needed

Study description

Background summary

Tacrolimus treatment is delicate and increases risk of (invasive) fungal infections, which need azole treatment. Tacrolimus and azoles exhibit drug-drug interactions through CYP3A4/5 enzymes in gut and liver, increasing tacrolimus exposure. The choice of tacrolimus formulation for immediate release tacrolimus (IR-Tac) or extended release tacrolimus (ER-Tac) may influence the magnitude of the interaction with azoles, as shown in healthy volunteers. This effect has not been studied in a patient population under real-life conditions yet, and may influence future choice of formulation, dosage adjustment advices and treatment management.

Study objective

Whether the formulation of tacrolimus affects the intensity and variability of the drug-drug interaction with co-administered azoles fluconazole or voriconazole in lung, kidney, pancreas or heart transplant recipients

Study design

Baseline, after >4d of azole use

Intervention

blood draws

Contacts

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Eligibility criteria

Inclusion criteria

- Age >18 years
- Lung, kidney, pancreas or heart transplant recipient
- Stable use of oral tacrolimus formulations Prograft/generic tacrolimus/Envarsus
- eGFR >20 ml/min
- Indication for antifungal therapy with oral voriconazole or fluconazole
- Written informed consent

Exclusion criteria

- Administration of mTOR inhibitors, cyclosporine or quadruple immunosuppression
- Pregnancy
- Concomitant use of drugs that have a pharmacokinetic interaction with tacrolimus
- Acute liver- or intestinal function impairment (liver function over 3 times the reference values; function impairment started in week before 1st study visit and/or expected to be instable for the next weeks)

Study design

Design

Study type:	Observational non invasive
Intervention model:	Parallel
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	01-06-2021
Enrollment:	48
Type:	Anticipated

IPD sharing statement

Plan to share IPD: Undecided

Ethics review

Positive opinion

Date:	26-11-2020
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	NL9080
Other	METC UMCG : 2020/645

Study results