Once daily DArunavir/ritonavir in HIV-infected children 6-12 years old: a PHarmacokiNEtic validation of model-based dosing recommendations (DAPHNE)

Published: 24-07-2014
Last updated: 20-04-2024

To validate FDA-approved dosing recommendation for once daily darunavir/ritonavir in children 6-12 years old

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Viral infectious disorders
Study type	Observational invasive

Summary

ID

NL-OMON44252

Source
ToetsingOnline

Brief title
DAPHNE

Condition

- Viral infectious disorders

Synonym
HIV-infection

Research involving
Human

Sponsors and support

Primary sponsor: Universitair Medisch Centrum Sint Radboud
Source(s) of monetary or material Support: Eigen budget deelnemende centra;als onderdeel van reguliere patientenzorg

Intervention

Keyword: children, darunavir, once daily, pharmacokinetics

Outcome measures

Primary outcome

Area under the plasma concentration time profile (AUC) for a dose interval of

24 hours

Secondary outcome

- Ratio of the AUC and other pharmacokinetic parameters after once daily,

compared to twice daily dosing.

- Safety of darunavir once daily

- Acceptability of once daily darunavir compared to previous treatment regime

Study description

Background summary

Adherence is crucial for a successful antiretroviral treatment. Less complicated therapy, such as once daily regimens, and less toxic drugs, can improve short and long-term outcomes for HIV-infected children. Dyslipidemia is an adverse effect that is associated with the use of antiretroviral drugs, including all PIs (especially PIs combined with ritonavir as booster). There are indications that within the class of PIs DRV might have more beneficial toxicity profiles, regarding its effects on lipid profile (mainly triglycerides) than other PIs. Together with the potential for once daily dosing, HIV-infected children could benefit from treatment with DRV/r once daily compared to treatment with other PIs.
Darunavir/ritonavir is one of the preferred antiretroviral agents as part of combination antiretroviral therapy for treatment of HIV-infected adults

according to international guidelines. For children 3-12 years old, FDA has recently approved once daily dosing of darunavir/ritonavir. Dosing recommendations for children 6-12 years old have been approved based on a modelling and simulation procedure by the company.
This pharmacokinetic study is designed to validate the proposed dosing recommendation for once daily darunavir/ritonavir in HIV-infected children aged 6-12 years old

Study objective

To validate FDA-approved dosing recommendation for once daily darunavir/ritonavir in children 6-12 years old

Study design

Multi-center, phase I, pharmacokinetic trial

Study burden and risks

The risk-classification is assessed as negligible to the patient population receiving study drug at the current regimens. The drug (darunavir) is licensed by the FDA for the use as investigated in this protocol.
A rich sampling pharmacokinetic assessment, performed after switch to a once-daily regime, is part of current routine clinical practice for children who are treated with a antiretroviral drugs.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Children (2-11 years)

Inclusion criteria

1. Parents/carers are able and willing to sign the informed consent form prior to screening evaluations
2. Subject is HIV infected
3. Subject is at least 6 and not older than 12 years at day of screening
4. Subject has a body weight of at least 15kg
5. Subject is able to swallow tablets
6. Subject has an undetectable viral load (<50 copies/mL) for the last 6 months prior to screening (at least 2 measurements)
7. ART regimen consists of darunavir/ritonavir and 2 NRTIs

Exclusion criteria

1. Inability to understand the nature and extent of the trial and the procedures required
2. Documented history of sensitivity/idiosyncrasy to darunavir or ritonavir medicinal products or its excipients
3. Relevant history or current condition that might interfere with drug absorption, distribution, metabolism or excretion
4. Abnormal renal or liver function (grade 3 or above)
5. Participation in a drug trial within 60 days prior to the first dose
6. Hemoglobin < 10 g/dL (6.0 mmol/L)
7. Children who have previously failed virologically on a PI containing regimen
8. Acute illness
9. Receiving concomitant therapy except for prophylaxis for opportunistic infections.

Study design

Design

Study phase:	4
Study type:	Observational invasive
Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	01-06-2015
Enrollment:	12
Type:	Actual

Medical products/devices used

Product type:	Medicine
Brand name:	Prezista
Generic name:	darunavir
Registration:	Yes - NL outside intended use

Ethics review

Approved WMO

Date:	24-07-2014
Application type:	First submission
Review commission:	CMO regio Arnhem-Nijmegen (Nijmegen)

Approved WMO

Date:	08-12-2014
Application type:	First submission
Review commission:	CMO regio Arnhem-Nijmegen (Nijmegen)

Approved WMO

Date:	23-12-2014
Application type:	Amendment
Review commission:	CMO regio Arnhem-Nijmegen (Nijmegen)

Approved WMO

Date:	29-04-2016
Application type:	Amendment
Review commission:	CMO regio Arnhem-Nijmegen (Nijmegen)
Approved WMO Date:	10-05-2016
Application type:	Amendment
Review commission:	CMO regio Arnhem-Nijmegen (Nijmegen)

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	EUCTR2014-001111-39-NL
CCMO	NL48775.091.14