A pharmacokinetic evaluation of the addition of Aprepitant to the Cisplatin - Etoposide (CE) treatment of patients with metastatic lung carcinoma (ACE)

Published: 03-09-2007
Last updated: 09-05-2024

The question is whether aprepitant should be added to CE cycles (cisplatin containing regimen with etoposide) because of a possible interaction between aprepitant and etoposide.This question derives from the fact that both drugs are metabolised…

Ethical review	Approved WMO
Status	Pending
Health condition type	Other condition
Study type	Interventional

Summary

ID

NL-OMON31383

Source
ToetsingOnline

Brief title
ACE study

Condition

- Other condition
- Miscellaneous and site unspecified neoplasms benign

Synonym
nausea and vomiting

Health condition

misselijkheid en braken na toedienen cytostatica kuur

Research involving
Human

Sponsors and support

Primary sponsor: Universitair Medisch Centrum Sint Radboud
Source(s) of monetary or material Support: Meck Sharp & Dohme.,Merck Sharpe & Dohme (MSD)

Intervention

Keyword: anti-emetics, nausea and vomiting, pharmacokinetic

Outcome measures

Primary outcome

The effect of aprepitant on the pharmacokinetics of etoposide.

Secondary outcome

Efficacy and safety of the addition of aprepitant to an etoposide containing

cisplatin regimen.

Study description

Background summary

Aprepitant is a novel, potent and selective nonpeptide neurokinin-1 receptor antagonist that was licensed in 2004 for the prevention of acute and delayed nausea and vomiting associated with highly emetogenic cancer chemotherapy. When used in a 3-day treatment schedule together with dexamethasone and ondansetron, aprepitant has demonstrated to improve complete response from 47.8 to 67.7%. The effect of aprepitant remained present after repeated cycles of chemotherapy. Based on the positive benefit/risk ratio aprepitant was approved in the Radboud University Nijmegen Medical Centre for use in cisplatin-based highly emetogenic (cisplatin dose > 50 mg/m2) chemotherapy cycles. Currently approximately 7 treatment protocol are used in which aprepitant is added to the anti-emetic regimen of highly emetogenic cisplatin-based protocols.

Study objective

The question is whether aprepitant should be added to CE cycles (cisplatin

containing regimen with etoposide) because of a possible interaction between aprepitant and etoposide.
This question derives from the fact that both drugs are metabolised through the same cytochrome P450 3A4 (CYP3A4).
Theoretically adding aprepitant could lead to more etoposide related toxicity on day 1 and less etoposide efficacy on day 3-4. The two objectives of the study are to study the pharmacokinetics of etoposide with and without adding aprepitant to the standard anti-emetic regimen in patients with metastatic lung carcinoma treated with standard CE regimen and to study the efficacy and safety of this combination of medication.

Study design

The ACE study consists of 2 cycles of 21 days. Patients who participate are devided in group A or group B. The subjects in group A receive aprepitant as well as standard anti-emetics in the first cycle and standard anti-emetics only in the second cycle. The subjects in group B receive standard anti-emetics in the first cycle and in the second cycle they receive aprepitant as well as standard anti-emetics.

Intervention

The anti-emetic treatment starts at day 1 of the chemotherapy. At that day one capsule aprepitant (Emend®) 125 mg is given. At day 2 and 3 subjects take one capsule aprepitant 80mg.

Study burden and risks

The side effects of aprepitant can be: burping, constipation, diarhoea, dizzyness, tiredness, headache, hiccups, indigestion, loss of appetite and elevation of liver enzymes.
The needles for the extra blood take could cause discomfort or pain.
The burden and risk are equal for both participant groups.

Contacts

Public
Universitair Medisch Centrum Sint Radboud

Geert Grooteplein 10
6500 HB Nijmegen
Nederland
Scientific
Universitair Medisch Centrum Sint Radboud

Geert Grooteplein 10
6500 HB Nijmegen
Nederland

Trial sites

Listed location countries

Netherlands

Eligibility criteria

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

Inclusion criteria

Subject is at least 18 and no older than 75 years of age
Subject is able and willing to sign the Informed Consent Form prior to screening evaluations
Subject has an indication for treatment with CE regimen
Subject is expected to receive at least 2 cycles of CE regimen
Subject is able to swallow capsules

Exclusion criteria

Documented history of sensitivity/idiosyncrasy to aprepitant capsules or exipients
Relevant history or current condition that might interfere with drug absorption
History or current abuse of drugs, alcohol or solvents
Inability to understand the nature and extent of the trial and the procedures required
Participation in a drug trial within 30 days before the first dose
Febrile illness within 3 days before the first dose
Concomitant use of agents that are known to interfere with aprepitant pharmacokinetics
Abnormal liver or renal function

Study design

Design

Study phase:	4
Study type:	Interventional
Intervention model:	Crossover
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-01-2008
Enrollment:	20
Type:	Anticipated

Medical products/devices used

Product type:	Medicine
Brand name:	Emend
Generic name:	Aprepitant
Registration:	Yes - NL intended use

Ethics review

Approved WMO Date:	03-09-2007
Application type:	First submission
Review commission:	CMO regio Arnhem-Nijmegen (Nijmegen)
Approved WMO Date:	11-09-2008
Application type:	Amendment
Review commission:	CMO regio Arnhem-Nijmegen (Nijmegen)
Approved WMO Date:	13-07-2009

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	EUCTR2007-003347-73-NL
CCMO	NL19351.091.07