

# A phase III randomized, open-label, multi-center study of nilotinib versus imatinib in adult patients with philadelphia chromosome positive (Ph+) chronic myelogenous leukemia in chronic phase (CML-CP) who have suboptimal cytogenetic response (CyR) to imatinib

Published: 26-10-2007

Last updated: 08-05-2024

To evaluate the CCyR rate at 12 months of nilotinib compared to imatinib in adult patients with Ph+ CML in CP who have a suboptimal cytogenetic response on imatinib.

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Leukaemias
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON31183

### Source

ToetsingOnline

### Brief title

CML chronic fase, suboptimal response on imatinib, imatinib versus nilotinib

### Condition

- Leukaemias

### Synonym

Chronic myeloid leukemia (CML)

## Research involving

Human

## Sponsors and support

**Primary sponsor:** Medisch Spectrum Twente

**Source(s) of monetary or material Support:** Industrie;nl Novartis Pharma B.V.

## Intervention

**Keyword:** CML-chronic phase, imatinib, nilotinib, suboptimal cytogenetic response

## Outcome measures

### Primary outcome

To evaluate the CCyR rate at 12 months of nilotinib compared to imatinib in adult patients with Ph+ CML in CP who have a suboptimal cytogenetic response on imatinib.

### Secondary outcome

To evaluate the rate of durable CCyR at 24 months (patients who have achieved CCyR by 12 months, and also maintain continuous CCyR until the 24 month time point).

To evaluate the rate of a major molecular response (MMR) of nilotinib compared to imatinib in adult patients with Ph+ CML in CP.

To evaluate the rate of durable CCyR over the initial 24 months of this study in adult patients with Ph+ CM in CP who have a suboptimal cytogenetic response to imatinib. Rate of durable CCyR over 24 months is defined as the proportion of patients who have been in continuous CCyR for a period of at least one year during this 24 month time period.

To evaluate the CCyR rate of nilotinib compared to imatinib in adult patients with Ph+ CML in CP at 24 months.

To evaluate the time to and duration of CCyR of nilotinib compared to imatinib in adult patients with Ph+ CML in CP.

To evaluate the rate of a  $> 4$  log reduction in BCR-ABL transcript levels of nilotinib compared to imatinib in adult patients with Ph+ CML in CP.

To evaluate the time to and duration of a  $> 4$  log reduction in BCR-ABL transcript levels of nilotinib compared to imatinib in adult patients with Ph+ CML in CP.

To describe overall survival, progression free survival, and event-free survival up to 5 years in adult patients with Ph+ CML in CP.

To evaluate the safety profile of nilotinib and imatinib in adult patients with Ph+ CML in CP.

To investigate the presence of BCR-ABL mutations in patients at the initiation of the study and during the course of treatment and correlate the mutations with treatment response to nilotinib and imatinib.

To examine whether individual genetic variation influences drug

metabolism, CML, and the drug target pathway confer differential response to nilotinib and imatinib (pharmacogenetic assessment).

To identify sources of variability in PK parameters for both nilotinib and imatinib and to investigate PK/PD relationships.

To examine the patient reported outcomes (PRO) including quality of life (QoL) between nilotinib and imatinib.

## Study description

### Background summary

Imatinib mesylate binds to the inactive conformation of BCR-ABL tyrosine kinase suppressing the Ph<sup>+</sup> clone in CML. It is effective in CML and is a major advance in therapy. Evidence suggests that in individuals treated with imatinib the achievement of a complete cytogenetic response (CCyR) is a predictor of positive outcome. If a patient has not achieved at least a partial cytogenetic response (PCyR) by 12 months, achievement of CCyR is unlikely.

Nilotinib is a novel, oral tyrosine kinase inhibitor with improved potency compared with imatinib. Nilotinib was also found to have an acceptable tolerability profile. Preliminary results from an ongoing study appear to confirm the efficacy and safety profile of nilotinib. In this study the effect on CCyR of nilotinib will be compared with imatinib.

### Study objective

To evaluate the CCyR rate at 12 months of nilotinib compared to imatinib in adult patients with Ph<sup>+</sup> CML in CP who have a suboptimal cytogenetic response on imatinib.

### Study design

After the screening period patients will be randomized 1:1 between nilotinib and imatinib. Patients will be treated open label. Patients will be treated until progressive disease, until unacceptable toxicity

or up to 5 years.

Patients who continue on study will be followed for up to 5 years for event free, progression free, and overall survival.

## **Intervention**

After randomization patients will be treated with imatinib 2x400 mg or nilotinib 2x400 mg. A cycle is 28 days, patients take their medication continuously.

## **Study burden and risks**

After the screening period patients will visit the hospital every week first month of treatment. Until 6 months of treatment patients will visit the hospital every month. After 2 years of treatment patients will visit the hospital every 3 months up to 5 years of treatment.

Evaluation of response will be determined by cytogenetics of the bone marrow assessment.

ECG's and ECHO's are performed to monitor the cardiac function.

Possible risks for patients during the course of this study are toxicity from nilotinib and imatinib and the effects of venapuncture and bone marrow assessment.

Mogelijk risico gedurende dit onderzoek zijn de bijwerkingen van imatinib en nilotinib, gevolgen van venapuntie en gevolgen van beenmergafname.

## **Contacts**

### **Public**

Medisch Spectrum Twente

Haaksbergerstraat 55  
7700 KA Enschede  
NL

### **Scientific**

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

Adult patients with suboptimal cytogenetic response to a dose of 400 mg imatinib (first line therapy) defined as:

\* 6-12 months of treatment and have 36-95% Ph+ metaphases or

\* 12-18 months of treatment and have 1-35% Ph+ metaphases;EOG 0, 1, or 2;Patients must meet the following laboratory criteria:

Total bilirubin  $<1.5 \times \text{ULN}$

SGOT and SGPT  $<2.5 \times \text{ULN}$

Creatinine  $<1.5 \times \text{ULN}$

Serum potassium, phosphorus, magnesium and calcium  $>\text{LLN}$  or correctable with supplements prior to first dose of study drug.;Written informed consent.

### Exclusion criteria

Previously documented T315I mutations;Achieved prior PCyR or CCyR on imatinib and lost that response prior to entering the study;Prior treatment with  $> 400 \text{ mg}$  imatinib;Previous treatment with any other tyrosine kinase inhibitor except imatinib;Impaired cardiac function

## Study design

## Design

Study phase:	3
Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Treatment

## Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	01-12-2007
Enrollment:	5
Type:	Anticipated

## Medical products/devices used

Product type:	Medicine
Brand name:	Gleevec
Generic name:	imatinib
Registration:	Yes - NL intended use
Product type:	Medicine
Brand name:	Tasigna
Generic name:	nilotinib

## Ethics review

Approved WMO	
Date:	26-10-2007
Application type:	First submission
Review commission:	METC Twente (Enschede)
Approved WMO	
Date:	10-04-2008
Application type:	Amendment

## 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	EUCTR2005-005047-26-NL
CCMO	NL18485.044.07