

# Allopurinol Treatment And oxypurinol Concentrations in gouty patients: Knowing the therapeutic window.

Published: 09-06-2009

Last updated: 04-07-2024

- Demonstrating an association between oxypurinol concentration and the chance of succesfull lowering of urate concentration in gouty patients (defined as reaching urate concentrations < 0,30 mmol/l)

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Other condition
<b>Study type</b>	Observational invasive

## Summary

### ID

NL-OMON33306

### Source

ToetsingOnline

### Brief title

ATTACK

### Condition

- Other condition

### Synonym

gout

### Health condition

Aandoening van het bewegingsapparaat

### Research involving

Human

## Sponsors and support

**Primary sponsor:** Medisch Centrum Leeuwarden

**Source(s) of monetary or material Support:** eigen middelen.

## Intervention

**Keyword:** allopurinol, gout, oxypurinol, TDM

## Outcome measures

### Primary outcome

- association between oxypurinol concentration and the chance on succesfull treatment of gout (defined as reaching urate concentrations of  $<0,30$  mmol/l)

### Secondary outcome

- association between oxypurinol concentration and the risk of getting adverse drug reactions
- association between oxypurinol concentration and the chance on succesfull treatment of gout (defined as reaching urate concentrations of  $<0,36$  mmol/l)
- percentage of patients succesfully treated with the proposed dosage nomogram
- the role of genetic variations on the occurence of adverse reactions

## Study description

### Background summary

Treatment of gouty patients with allopurinol is contemporary on basis of the applying guidelines. Allopurinol is well-thought-of in treating gout. When urate lowering is insufficient allopurinol dosage should be raised untill the maximum dosage of 900 mg per day. Own research shows that only 25% of gouty patients is succesfull in reaching urate concentration  $<0,30$  mmol/l with an

allopurinol dosage of 300 mg per day.

The active metabolite of allopurinol is oxypurinol. The registration holder of allopurinol advises to measure the oxypurinol concentration in case of impaired renal function. The oxypurinol concentration should be beneath 15,2 mg/l to avoid adverse effects. Common practice shows that oxypurinol concentrations are seldom measured.

### **Study objective**

- Demonstrating an association between oxypurinol concentration and the chance of successful lowering of urate concentration in gouty patients (defined as reaching urate concentrations  $< 0,30$  mmol/l)

### **Study design**

Patients diagnosed with gout and being treated with allopurinol are included. Dosing of allopurinol based on a dose nomogram for patients with impaired renal function. The dosage varies from 100 - 600 mg per day. Two and four months after starting allopurinol oxypurinol concentrations and serum urate are measured.

### **Study burden and risks**

not applicable

## **Contacts**

### **Public**

Medisch Centrum Leeuwarden

H. dunantweg 2

8934 AD

NL

### **Scientific**

Medisch Centrum Leeuwarden

H. dunantweg 2

8934 AD

NL

## **Trial sites**

## Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

1. Confirmed gout with urate crystals or tophi
2. First treatment with allopurinol
3. Filled and signed informed consent

### Exclusion criteria

1. Patients younger than 18 years and pregnant women
2. Patients with eGFR <20 ml/min
3. Patients using azathioprine, mercaptopurine or cyclofosfamide
4. patients with elevated liverenzymes, defined as more than twice baseline ASAT or ALAT values

## 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):	09-06-2009
Enrollment:	70
Type:	Actual

## Medical products/devices used

Product type:	Medicine
Registration:	Yes - NL intended use

## Ethics review

Approved WMO	
Date:	09-06-2009
Application type:	First submission
Review commission:	RTPO, Regionale Toetsingscie Patientgebonden Onderzoek (Leeuwarden)

## 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	EUCTR2009-011260-10-NL
CCMO	NL27230.099.09