# The effect of IV antibiotics on gut flora during an episode of fever in children with cancer.

No registrations found.

**Ethical review** Not applicable **Status** Recruiting

Health condition type -

**Study type** Observational non invasive

# **Summary**

#### ID

NL-OMON21552

**Source** 

NTR

**Brief title** 

**AntiMic** 

**Health condition** 

Systemic antibiotics, microbiota, pediatric patients with cancer, febrile neutropenia.

## **Sponsors and support**

**Primary sponsor:** University Medical Centre Groningen

Intervention

#### **Outcome measures**

#### **Primary outcome**

- Number of specific bacterial groups in feces of pediatric patients

#### **Secondary outcome**

- The difference in diversity of the microbiota before and after treatment
- Type of systemic antibiotics
- Laboratory values (Hb, CRP, leukocytes)
- Blood cultures
- Temperature
- Type of nutrition

# **Study description**

#### **Background summary**

Unbalance between aerobic and anaerobic bacteria in the gastrointestinal tract can result in favoring a potentially pathogenic microorganism, which could cause a bacterial infection. For this reason it is important to identify how systemic broad spectrum antibiotics affect the microbiota during febrile neutropenia in pediatric patients with cancer. To investigate our research question, we will collect feces samples from pediatric patients with cancer during febrile neutropenia in the UMCG at two points during treatment. These samples will be analyzed by using pyrosequencing techniques. We hypothesize that the bacterial content of the gut changes when the patient gets systemic intravenous antibiotics.

#### Study objective

What is the effect of the systemic antibiotic therapy on the number and diversity of specific bacterial groups in fecal samples of pediatric patients with cancer?

#### Study design

First and last day of treatment with systemic antibiotics.

#### Intervention

Collecting fecal samples obtained from feces in commode chair.

## **Contacts**

#### **Public**

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# **Eligibility criteria**

### **Inclusion criteria**

- Pediatric patients with cancer hospitalised in University Medical Centre Groningen
- Reason of hospitalization is febrile neutropenia
- Active treatment with systemic antibiotics

#### **Exclusion criteria**

- No defecation within the first three days of hospitalization

# Study design

## **Design**

Study type: Observational non invasive

Intervention model: Other

Masking: Open (masking not used)

Control: N/A, unknown

#### Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 18-06-2015

Enrollment: 20

Type: Anticipated

## **Ethics review**

Not applicable

Application type: Not applicable

# **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 NL5510 NTR-old NTR5806

Other Medische Ethische Toetsingscommissie: M15.174103

# **Study results**