# TSDIST study: Taste and smell disturbances in graft versus host disease patients

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Primary objective: To study the prevalence and nature of taste and smell disturbances in GvHD patients. Secondary objective: To study whether the prevalence and nature of taste and smell disturbances are related to - oral GvHD - salivary flow - oral...

**Ethical review** Approved WMO

**Status** Recruitment stopped

**Health condition type** Other condition

**Study type** Observational non invasive

## **Summary**

## ID

NL-OMON48338

#### Source

ToetsingOnline

## **Brief title**

**TSDIST study** 

## **Condition**

- Other condition
- Leukaemias

#### **Synonym**

smell changes, taste changes

#### **Health condition**

smaak-en reukstoornissen

## Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Academisch Medisch Centrum

Source(s) of monetary or material Support: Ministerie van OC&W

## Intervention

**Keyword:** graft versus host disease, oral cavity, smell, taste

## **Outcome measures**

## **Primary outcome**

- Qualitative and quantitative measurements of taste disturbances -

Quantitative measurements of smell disturbances

## **Secondary outcome**

- Amount of (un)stimulated salivary flow - (Oral health related) quality of

life - Score overall GvHD - Oral GvHD (subjective/objective) - Perception of

taste and smell changes

# **Study description**

## **Background summary**

Over the past 50 years, more than a million hematopoietic stem cell transplantations (HSCT) have been performed. The success of allogeneic HSCT is tempered by one of the most common and potentially life-threatening complications, graft-versus-host disease (GvHD), an alloimmune response of donor immune cells against healthy recipient\u2019s tissues including skin, liver, lungs, gut, oropharynx and oral cavity. Despite improvements in donor selection, tailored conditioning regimens, and better supportive care, the incidence of GVHD will increase related to more frequent use of unrelated donors and the aging of the donor and de recipients. Clinical oral complications of GvHD manifest from relatively innocent oral lichen planus-like erythema/ulcers up to severe oral lesions, salivary dysfunction, impaired mouth opening and taste disturbances. A limited number of studies have focused on taste alterations among HSCT patients. Alterations in taste perception are commonly caused by upper respiratory viral infections and infections in the oral cavity. Furthermore, activation of inflammatory pathways by immune

dysregulation may alter taste bud homeostasis and contribute to the development of taste disorders. Finally, treatment modalities such as radiotherapy and chemotherapy can also temporarily or permanently disrupt taste bud homeostasis through direct damage to the taste cells. Although there is some evidence for taste changes in allogeneic HSCT recipients, it is not clear what the prevalence of taste and smell changes is and whether these changes are related to oral GvHD. Therefore, the aim of this project is to study the prevalence of taste and smell disturbances in GvHD patients and to study whether there is a relationship between post-allogeneic HSCT taste and smell disturbances and oral GvHD.

## Study objective

Primary objective: To study the prevalence and nature of taste and smell disturbances in GvHD patients. Secondary objective: To study whether the prevalence and nature of taste and smell disturbances are related to - oral GvHD - salivary flow - oral health related quality of life - subjective complaints of taste and smell disturbances

## Study design

Single center, cross-sectional study that takes place at the departments of hematology and oral and maxillofacial surgery in the AMC. All patients are diagnosed with GvHD, we will compare two subgroups: with and without oral GvHD. The duration of the study will be approximately 1 year.

#### Study burden and risks

No risk for participants

## **Contacts**

#### **Public**

Academisch Medisch Centrum

Meibergdreef 9 Amsterdam 1191GM NI

## **Scientific**

Academisch Medisch Centrum

Meibergdreef 9 Amsterdam 1191GM NL

## **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

## Age

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

## Inclusion criteria

adult allogeneic hematopoietic stem cell transplantation recipients with graft versus host disease

## **Exclusion criteria**

allogeneic HSCT recipients without GVHD, patients with neurodegenerative diseases and smokers

# Study design

## **Design**

Study type: Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled
Primary purpose: Basic science

## Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 19-06-2019

Enrollment: 40

Type: Actual

# **Ethics review**

Approved WMO

Date: 20-06-2019

Application type: First submission

Review commission: METC Amsterdam UMC

# **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

CCMO NL69437.018.19