# Is MRKH syndrome caused by intrauterine blood exchange between sex-discordant twins?

No registrations found.

**Ethical review** Positive opinion **Status** Recruitment stopped

Health condition type

**Study type** Observational non invasive

# **Summary**

#### ID

NL-OMON28058

**Source** 

NTR

**Brief title** 

MIPT study

**Health condition** 

MRKH syndrome

# **Sponsors and support**

**Primary sponsor:** VU university medical centre

**Source(s) of monetary or material Support:** VU university medical centre

#### Intervention

#### **Outcome measures**

#### **Primary outcome**

The primary outcome is the difference in occurrence of microchimerism (with an extra male cell line) in MRKH patients vs. controls.

#### **Secondary outcome**

The secondary outcome is the presence of chimerism in non-hematopoietic tissue (buccal cells) in MRKH patients.

# **Study description**

#### **Background summary**

The aim of this study is to determine whether male microchimerism is present in patients with MRKH syndrome. This would be a result of intrauterine cell trafficking - and possible AMH transfer- from male to female co-twin.

Study design: Observational case control study.

In the course of this study we ask the subjects for one visit to the outpatient clinic or a home visit for blood sampling, collecting of a buccal smear and a short questionnaire.

#### **Study objective**

Our hypothesis is that MRKH patients are exposed to high concentrations AMH in utero, coming from their male co-twin (possible vanished twin). This AMH-exchange is possible because of intrauterine blood exchange between two fetuses. This blood exchange results in male (micro)chimerism in blood. Our aim is to study the presence of this male microchimerism in adult patients with MRKH.

#### Study design

Only one visit is necessary for blood sampling, buccal smear sampling and filling in a questionnaire (about medical history, family history, intoxications, BMI, age)

#### Intervention

96 patients with MRKH will be included. The controlgroup exists of 96 healthy women, already sampled. No interventions. Blood samples will be analyzed for Y-chromosome-specific real-time quantitative polymerase chain reaction.

# **Contacts**

#### **Public**

VUmc, afdeling reproductive medicine. PK 5x -194.

#### Henrike Peters

2 - Is MRKH syndrome caused by intrauterine blood exchange between sex-discordant tw ... 6-05-2025

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#### **Scientific**

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# **Eligibility criteria**

#### Inclusion criteria

- Diagnosed with MRKH syndrome
- Age ≥ 18 years

## **Exclusion criteria**

none

# Study design

## **Design**

Study type: Observational non invasive

Intervention model: Other

Masking: Open (masking not used)

Control: N/A, unknown

#### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 11-01-2017

Enrollment: 96

Type: Actual

## **IPD** sharing statement

Plan to share IPD: Undecided

## **Ethics review**

Positive opinion

Date: 08-07-2016

Application type: First submission

# **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.

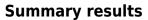
## In other registers

Register ID

NTR-new NL5806 NTR-old NTR5961

Other ABR-nummer van de CCMO: 57503

# **Study results**



Human Reprod 2019. Low prevalence of male microchimerism in women with MRKH