# Epigenetic effects of IVF in placental tissue

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

# **Summary**

## ID

NL-OMON24203

Source NTR

**Brief title** N/A

#### **Health condition**

IVF pregnancies

## **Sponsors and support**

**Primary sponsor:** Academic hospital Maastricht, the Netherlands **Source(s) of monetary or material Support:** Self-financing research

#### Intervention

## **Outcome measures**

#### **Primary outcome**

The expression levels of several imprinted genes in placental tissue from spontaneous and IVF pregnancies

#### Secondary outcome

1 - Epigenetic effects of IVF in placental tissue 5-05-2025

The DNA methylation level of several imprinted genes in placental tissue from spontaneous and IVF pregnancies

# **Study description**

#### **Background summary**

In animal models it has been demonstrated that assisted reproductive technologies (ART), such as ovarian stimulation and in vitro culture of embryos, can lead to abnormal epigenetic regulation of certain genes that are important during early development resulting in grossly abnormal foetal growth. Also in the human, own observations as well as those in published reports seem to indicate epigenetic deregulation after IVF and/or ICSI, albeit that the effects are less dramatic as in animal models. As the placenta has been shown as one of the tissues in which epigenetic deregulation leads to clearly aberrant methylation patterns and expression of imprinted genes, we hypothesize that differences in these epigenetic parameters will exist between placental tissues from spontaneous pregnancies and those resulting from IVF pregnancies.

#### **Study objective**

There are differences in epigenetic parameters between placental tissues from spontaneous pregnancies and from IVF pregnancies.

#### Study design

Placental tissue is collected after birth

#### Intervention

None. In both groups, placental tissue will be collected after birth and examined for several epigenetic markers

# Contacts

#### Public

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# **Eligibility criteria**

## **Inclusion criteria**

- 1. Patients pregnant after IVF or ICSI
- 2. Control group: spontaneous pregnant patients

# **Exclusion criteria**

- 1. Twin gestations
- 2. Delivery before 37 weeks of gestation
- 3. Pregnancies after fertility treatment other than IVF or ICSI

# Study design

## Design

Study type:	
Intervention model:	
Masking:	
Control:	

Interventional Other Open (masking not used) N/A , unknown

## Recruitment

NL Recruitment status:

Recruiting

Start date (anticipated):	01-05-2008
Enrollment:	200
Туре:	Anticipated

# **Ethics review**

Positive opinionDate:25-04-2008Application 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	NL1252
NTR-old	NTR1298
Other	METC Maastricht : 07-2-111
ISRCTN	ISRCTN wordt niet meer aangevraagd.

# **Study results**

# Summary results

N/A