

# A randomised controlled trial comparing in vitro maturation of oocytes with in vitro fertilisation in women with an increased risk of ovarian hyperstimulation syndrome.

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A randomized controlled trial to compare the following strategies: two IVM-ICSI cycles or one COH-IVF/ICSI cycle. These strategies are expected to have comparable outcomes for ongoing pregnancy rates and direct costs (treatment costs). IVM is...

<b>Ethische beoordeling</b>	Positief advies
<b>Status</b>	Werving gestart
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Interventie onderzoek

## Samenvatting

### ID

NL-OMON24086

### Bron

NTR

### Verkorte titel

IVM-study

### Aandoening

Infertility, PCOS, OHSS

### Ondersteuning

**Primaire sponsor:** Jeroen Bosch Hospital

**Overige ondersteuning:** Jeroen Bosch Hospital

### Onderzoeksproduct en/of interventie

## **Uitkomstmaten**

### **Primaire uitkomstmaten**

Cumulative live birth rate after IVM/ICSI or COH/IVF/ICSI strategy including pregnancies from cryoembryos transferred within 12 months after the end of IVM/ICSI or COH/IVF/ICSI treatment.

## **Toelichting onderzoek**

### **Achtergrond van het onderzoek**

Current artificial reproductive techniques (ART) as in vitro fertilisation (IVF) and intracytoplasmatic sperm injection (ICSI) require controlled ovarian hyperstimulation (COH) to increase the number of available mature oocytes. COH can lead to ovarian hyperstimulation syndrome (OHSS), a potentially life-threatening complication.

In in vitro maturation (IVM) immature oocytes are harvested from the ovaries without COH and matured in vitro in approximately 30 hours. Subsequently, these in vitro matured oocytes can be fertilised by IVF or ICSI. Due to the absence of COH, IVM has especially potential for patients with an increased risk of developing OHSS, such as polycystic ovary syndrome (PCOS)-patients. Further benefits of IVM extend to a reduction of treatment burden and reduced costs.

We propose a study to evaluate the effectiveness of IVM/ICSI.

In this multicenter randomised clinical trial we will compare two IVM/ICSI cycles versus one conventional IVF/ICSI cycle in a period of three months.

The trial will be preceded by a pilot study of 50 non-randomised IVM cycles. A total of 450 patients will be included. The primary endpoint will be ongoing pregnancy rate. Secondary endpoints will be live birth rate, multiple pregnancy rate, clinical pregnancy rate, embryo quality, occurrence of adverse events as OHSS, patients' quality of life and costs per livebirth.

### **Doel van het onderzoek**

A randomized controlled trial to compare the following strategies: two IVM-ICSI cycles or one COH-IVF/ICSI cycle. These strategies are expected to have comparable outcomes for ongoing pregnancy rates and direct costs (treatment costs). IVM is expected to have favourable outcomes for indirect costs (less complications) and quality of life scores.

Our hypothesis is the non-inferiority of the IVM-ICSI strategy to the COH-IVF or COH-ICSI strategy.

## **Onderzoeksopzet**

N/A

## **Onderzoeksproduct en/of interventie**

2 IVM/ICSI cycles or 1 COH/IVF or COH/ICSI cycle.

## **Contactpersonen**

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## **Deelname eisen**

### **Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)**

1. Women with PCOS according to the Rotterdam Criteria (The Rotterdam ESHRE/ASRM-Sponsored PCOS consensus workshop group, 2004) which did not achieve an ongoing pregnancy after ovulation induction (with clomiphene citrate or LEO and rFSH);
2. Women with an IVF or ICSI indication and increased risk for developing OHSS (history of OHSS or cycle cancellation for imminent OHSS).

## **Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)**

1. Woman or partner younger than 18 years and woman older than 38 years;
2. Unable to speak or read the Dutch language;
3. Medical contraindication for pregnancy or childbirth;
4. Positive serology for Hepatitis B, C or HIV;
5. Diminished ovarian reserve: early follicular serum FSH > 10 IU/l and/or poor response during earlier COH/IVF or COH/ICSI with  $\geq$  150 IU rFSH/day;
6. Persisting ovarian cysts > 30 mm diameter.

## **Onderzoeksopzet**

### **Opzet**

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	Geneesmiddel

### **Deelname**

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	01-01-2010
Aantal proefpersonen:	450
Type:	Verwachte startdatum

## **Ethische beoordeling**

Positief advies	
Datum:	17-06-2010

Soort:

Eerste indiening

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

### In overige registers

Register	ID
NTR-new	NL2248
NTR-old	NTR2375
Ander register	ISRCTN : 61229302
ISRCTN	ISRCTN wordt niet meer aangevraagd.

## Resultaten

### Samenvatting resultaten

N/A