

# In Vitro Maturation as part of the treatment of infertility in women with PolyCystic Ovaries. Is priming with hCG favourable? A prospective randomized study

<b>Submission date</b> 27/03/2007	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 15/05/2007	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 10/10/2014	<b>Condition category</b> Pregnancy and Childbirth	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

Dr Mikael Tang-Pedersen

### Contact details

Fertility Clinic  
Department of Obstetrics and Gynaecology  
Odense University Hospital  
Soendre Boulevard 29  
Odense C  
Denmark  
5000  
+45 6541 1572  
[mikael.tang-pedersen@ouh.regionsyddanmark.dk](mailto:mikael.tang-pedersen@ouh.regionsyddanmark.dk)

## Additional identifiers

EudraCT/CTIS number

IRAS number

**ClinicalTrials.gov number**

**Secondary identifying numbers**

OUHIVMproj-1-pco-hcg

## **Study information**

**Scientific Title**

**Acronym**

IVM-PCO-project-OUH

**Study objectives**

Antral ovarian follicles are possibly sensitive for priming with hCG, due to expression of LH-receptors in granulosa cells. The in vitro maturation process might benefit from priming with hCG before aspiration of small follicles (<11 mm). The size of the follicles, measured by ultrasound scanning, and serum concentration of various hormones, will be related to the outcome of the treatment in each group (hCG vs no hCG).

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

The scientific ethical committee for the counties of Funen and Vejle, 11/04/2006, ref: VF 20050163

**Study design**

Prospective open-label randomized controlled trial

**Primary study design**

Interventional

**Secondary study design**

Randomised controlled trial

**Study setting(s)**

Hospital

**Study type(s)**

Treatment

**Participant information sheet**

**Health condition(s) or problem(s) studied**

Infertility and PCO.

**Interventions**

hCG-injection vs no injection 36 hours before aspiration of oocytes.

Randomization is performed by a nurse two days before aspiration of immature oocytes. Block randomization is used, at a size of 50 (25+25) patients.

## **Intervention Type**

Other

## **Phase**

Not Applicable

## **Primary outcome measure**

Primary outcome measures amended as of 26/06/2007:

1. Maturation rate (number of mature [M2] oocytes per number of aspirated oocytes) at 30 and 46 hours
2. Fertilization rate (number of fertilized oocytes per number of matured oocytes) at 46 and 70 hours

Primary outcome measures provided at time of registration:

1. Maturation rate (number of mature [M2] oocytes per number of aspirated oocytes)
2. Fertilization rate (number of fertilized oocytes per number of matured oocytes)

## **Secondary outcome measures**

Secondary outcome measures amended as of 26/06/2007:

1. Number of transferable embryos with normal development on day 2 after fertilization, as a fraction of aspirated, matured and fertilized oocytes in IVF and Intra Cytoplasmic Sperm Injection (ICSI) groups
2. Maturation rate in relation to follicle size (46 hours after maturation)
3. Maturation rate in relation to serum concentrations of various hormones, measured on various cycle days and days of randomization and aspiration

Secondary outcome measures provided at time of registration:

1. Number of transferable embryos with normal development on day 2 after fertilization, as a fraction of aspirated, matured and fertilized oocytes in IVF and Intra Cytoplasmic Sperm Injection (ICSI) groups
2. Maturation rate in relation to follicle size
3. Maturation rate in relation to serum concentrations of various hormones, measured on various cycle days and days of randomization and aspiration

## **Overall study start date**

01/04/2006

## **Completion date**

01/01/2009

# **Eligibility**

## **Key inclusion criteria**

1. Women with PolyCystic Ovaries (PCO) according to Rotterdam criteria (2003)
2. Referred to the Fertility Clinic, Odense University Hospital
3. Candidates for IVF-treatment according to the standards of the Fertility Clinic

## **Participant type(s)**

Patient

**Age group**

Adult

**Sex**

Female

**Target number of participants**

200

**Key exclusion criteria**

1. Normal ovarian morphology
2. Manifest diseases requiring medication e.g. diabetes mellitus
3. Endocrine diseases, e.g. hyperprolactinaemia, hyper- and hypothyroidism
4. Abuse of drugs or alcohol
5. More than two previous IVF treatments

**Date of first enrolment**

01/04/2006

**Date of final enrolment**

01/01/2009

## **Locations**

**Countries of recruitment**

Denmark

**Study participating centre**

**Fertility Clinic**

Odense C

Denmark

5000

## **Sponsor information**

**Organisation**

Odense University Hospital (Denmark)

**Sponsor details**

c/o Prof Lars G Westergaard

Fertility Clinic

Department of Obstetrics and Gynaecology

Odense University Hospital

Soendre Boulevard 29  
Odense C  
Denmark  
5000

**Sponsor type**

Hospital/treatment centre

**ROR**

<https://ror.org/00ey0ed83>

## **Funder(s)**

**Funder type**

Not defined

**Funder Name**

Fertility Clinic, Department of Obstetrics and Gynaecology , Odense University Hospital (Denmark)

**Funder Name**

University of Southern Denmark (Denmark)

**Funder Name**

MediCult (manufacturer of laboratory IVM-medium) (Denmark)

## **Results and Publications**

**Publication and dissemination plan**

Not provided at time of registration

**Intention to publish date**

**Individual participant data (IPD) sharing plan**

**IPD sharing plan summary**

Not provided at time of registration