The freeze-all strategy in IVF: who benefits?

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To test the hypothesis that in women undergoing IVF/ICSI a freeze-all strategy results in higher ongoing pregnancy rates and is more cost-effective compared to a fresh embryo

transfer.

Ethical review Approved WMO **Status** Will not start

Health condition type Sexual function and fertility disorders

Study type Interventional

Summary

ID

NL-OMON42754

Source

ToetsingOnline

Brief title

Freeze-all

Condition

Sexual function and fertility disorders

Synonym

infertility, subfertility

Research involving

Human

Sponsors and support

Primary sponsor: Academisch Medisch Centrum

Source(s) of monetary or material Support: ZonMw

Intervention

Keyword: endometrium, IVF, progesterone, thawed embryo

Outcome measures

Primary outcome

Ongoing pregnancy rate per woman and progesterone serum level at day of ovulation trigger.

Secondary outcome

- 1. multiple ongoing pregnancy rates
- 2. live birth rates
- 3. cumulative ongoing pregnancy rates
- 4. time to pregnancy
- 5. costs
- 6. health-related quality of life (HRQL)
- 7. embryologic parameters: morphology, implantation rate
- 8. freeze-thaw survival per centre
- 9. endometrial parameters: thickness, appearance

Study description

Background summary

Ovarian hyperstimulation does not only lead to the maturation of multiple oocytes but also causes changes in the endometrium that hamper endometrium receptivity thereby creating suboptimal implantation chances for the transferred embryo. Disengagement of the ovarian hyperstimulation from the embryo transfer by freezing all embryos followed by a transfer in a subsequent unstimulated cycle, overcomes this problem. It is not known which women benefit most from disengagement.

Study objective

To test the hypothesis that in women undergoing IVF/ICSI a freeze-all strategy results in higher ongoing pregnancy rates and is more cost-effective compared to a fresh embryo transfer.

Study design

multicentre marker-RCT with a cost-effectiveness analysis.

Intervention

Cryopreservation of all embryos at day 3-4 and postponed first transfer of the embryo in an unstimulated cycle. Cryopreservation of all supernumerary embryos and transser in unstimulated cycles. In both study arms a blood sample on the day of ovulation trigger is mandatory to measure serum progesterone as a marker for endometrium receptivity.

Study burden and risks

No incapacitated subjects nor minors are involved in this study. No risks additional to standard treatment are associated with the study. Benefits of participating in the study are potential higher pregnancy chances in the freeze-all arm.

Contacts

Public

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Scientific

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

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

Inclusion criteria

Women between 18 and 43 years of age who start their first IVF/ICSI.

Exclusion criteria

- 1. Women undergoing a PGD cycle.
- 2. Women undergoing IVF in a modified natural cycle.
- 3. Women undergoing IVF for oocyte donation
- 4. Women undergoing *rescue* IVF after overstimulation during IUI treatment.
- 5. Not able or willing to provide informed consent

Study design

Design

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Treatment

Recruitment

NL

Recruitment status: Will not start

Enrollment: 900

Type: Anticipated

Ethics review

Approved WMO

Date: 08-07-2015

Application type: First submission

Review commission: METC Amsterdam UMC

Approved WMO

Date: 13-10-2015

Application type: Amendment

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

ID: 25760 Source: NTR

Title:

In other registers

Register ID

CCMO NL53643.018.15 OMON NL-OMON25760