# TRansvaginal Ultrasonography versus Saline sonography Trial in patients having their IVF treatment - TRUST-IVF study

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>
25/05/2012	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
16/08/2012	Completed	Results
Last Edited	Condition category	Individual participant data
14/08/2020	Pregnancy and Childbirth	<ul><li>Record updated in last year</li></ul>

# Plain English summary of protocol

Background and study aims

In vitro fertilisation (IVF) is a technique used to help people with fertility problems to have a baby. Before undergoing IVF, the shape of the woman's uterine cavity (the space inside the uterus) must be checked for abnormalities. The detection and treatment of uterine cavity abnormalities can increase the success rate of IVF treatment. A 2-D transvaginal ultrasound scan (2-D TVS) is a simple tool for finding uterine cavity abnormalities. It involves scanning with an ultrasound probe placed inside the vagina. Saline infusion sonography (SIS) is a test where a small volume of saline (salt solution) is inserted into the uterus to allow the lining of the uterus to be clearly seen on an ultrasound scan. We can obtain more information about the uterine cavity from SIS. The aim of this study is to find out whether performing a SIS before starting an IVF cycle improves the likelihood of achieving a live birth, compared with the use of 2-D TVS.

## Who can participate?

Women under the age of 40 and undergoing their first or second IVF treatment cycle.

# What does the study involve?

All participants undergo a 2-D TVS. If the initial scan is normal, the participants are then randomly allocated to undergo either SIS or another 2-D TVS before commencing their IVF treatment. After 12 months the number of live births in both groups is recorded.

What are the possible benefits and risks of participating?

Using SIS may increase the chances of finding and treating uterine cavity abnormalities. There is a minimal risk of infection and pain with SIS. However, this risk is minimised with infection screening and taking analgesia (painkillers) before the procedure.

Where is the study run from?

The Assisted Conception Unit at Guy's Hospital (UK)

When is the study starting and how long is it expected to run for? June 2012 to June 2015

Who is funding the study?
The Assisted Conception Unit at Guy's Hospital (UK)

Who is the main contact? Mr Yacoub Khalaf yakoub.khalaf@kcl.ac.uk

# **Contact information**

# Type(s)

Scientific

#### Contact name

Mr Yacoub Khalaf

#### Contact details

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# Additional identifiers

**Protocol serial number** N/A

# Study information

#### Scientific Title

A randomised controlled trial comparing Transvaginal Ultrasonography versus Saline sonography Trial in patients having their IVF treatment - TRUST-IVF study

# Acronym

TRUST-IVF

#### **Study objectives**

The pregnancy rate in the SIS group is no different to pregnancy rate in the 2-D transvaginal ultrasound scan (2-D TVS) control group. The alternative hypothesis is that pregnancy rate in the Saline sonography (SIS) group is equal to or higher than pregnancy rate in the control group.

The evaluation of the shape and regularity of the uterine cavity is one of the basic steps in the workup of infertile couples before in vitro fertilisation (IVF). Uterine cavity abnormalities have

been reported to be more prevalent in subfertile women and are estimated to be the etiologic factor in as many as 10-15% of couples seeking treatment. The detection and treatment of these intrauterine pathologies can potentially increase the success rates of IVF treatment.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

NRES committee London- Riverside; South west Research Ethics Committee, Bristol, 17/01/2012, ref: 11/LO/1591

## Study design

Prospective randomised controlled trial

## Primary study design

Interventional

# Study type(s)

Treatment

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

In vitro fertilisation (IVF)

#### **Interventions**

All women recruited for the trial will undergo a 2-D TVS. If the initial scan is normal, the participants will then undergo randomisation to receive SIS or another 2-D TVS before commencing their treatment.

Saline infusion sonography arm: A SIS is a well-tolerated internal examination that uses a fine catheter, which is passed through the cervix by initially performing a speculum examination. A small amount of saline (5-10 ml) is passed through the catheter and a transvaginal scan is performed at the same time to examine the lining and shape of the womb cavity. The procedure usually takes approximately 10 minutes to complete. After the scan, if there are any abnormalities identified, the patient will be listed for surgery to have the abnormality removed.

Transvaginal scan: A transvaginal scan is an internal scan which is routinely performed as a part of the infertility investigations. The patient will be asked to empty their bladder and lie down on a couch with the legs on stirrups. A doctor or nurse will perform the transvaginal scan. They will be taking measurements of the uterus and ovaries and any other additional pathology. This procedure should take no longer than 10 minutes.

The follow up for all the treatment arms is 12 months.

# Intervention Type

Procedure/Surgery

# Primary outcome(s)

Livebirth rate

Key secondary outcome(s))

- 1. Clinical pregnancy rate
- 2. Implantation rate
- 3. Uterine anomaly rate

#### Completion date

15/06/2015

# **Eligibility**

# Key inclusion criteria

- 1. Women undergoing their first and second IVF/ ICSI (Intra Cytoplasmic Sperm Injection) treatment
- 2. Women under the age of 40 and undergoing their first or second IVF cycle will be eligible to participate in the trial

## Participant type(s)

Patient

# Healthy volunteers allowed

No

#### Age group

Adult

#### Sex

Female

#### Key exclusion criteria

- 1. Women aged more than 40 years (women aged 41 years or more).
- 2. Known submucous fibroids, polyps, intrauterine adhesions or uterine surgery
- 3. Untreated Hydrosalpinges (women whose hydrosalpinges have been treated with clipping, salpingectomy or ligation will be included)
- 4. Recurrent implantation failure defined as patients undergoing three or more IVF cycles

#### Date of first enrolment

01/07/2012

#### Date of final enrolment

15/06/2015

# Locations

#### Countries of recruitment

**United Kingdom** 

England

# Study participating centre Guy's Hospital London United Kingdom SE1 9RT

# Sponsor information

# Organisation

Guy's Hospital (UK)

#### **ROR**

https://ror.org/04r33pf22

# Funder(s)

# Funder type

Hospital/treatment centre

#### **Funder Name**

Guy's Hospital - Assisted Conception Unit (UK)

# **Results and Publications**

Individual participant data (IPD) sharing plan

# IPD sharing plan summary

Not provided at time of registration

## **Study outputs**

Output type Details Date created Date added Peer reviewed? Patient-facing?

Participant information sheet Participant information sheet 11/11/2025

11/11/2025 11/11/2025 No

Yes