

# Infertility Investigations

## Patient Information

FERTILITY  
FUSION 



The Patient Information Leaflets page on the Trust website is available on the link:  
<https://www.wwl.nhs.uk/patient-information-leaflets> or scan the QR code.

Author ID: CPH/EB  
Leaflet ref: FF 002  
Version: 7  
Leaflet title: Infertility Investigations  
Last review: October 2021  
Expiry Date: October 2023



**Please be aware that all tests are by appointment only. To arrange tests contact the unit on 01257 256251 Monday to Friday 8am to 4pm**

## **Infertility Blood Tests**

**You will be advised to have some or all the following tests:**

### **Day 2-4 Bloods and Day 21 Progesterone**

These routine blood tests are usually obtained between days' two to four of your menstrual cycle (where day one is the first day of bleeding) and a further test taken on Day 21 of the cycle.

Here are some useful definitions:

- Amenorrhoea – No periods for six months or more.
- Oligomenorrhoea – When the periods are occurring three to four times per year.
- Irregular cycle – Periods that vary in length.

The following blood test results are used to investigate whether the ovaries are functioning normally, to check if ovulation is occurring (production of an egg) each month and also to help determine which fertility treatments to offer.

**AMH (Anti-Mullerian Hormone)** - Women are born with their lifetime supply of eggs, and these gradually decrease in both quality and quantity with age. AMH is a hormone secreted by cells in developing egg sacs (follicles). The level of AMH in a woman's blood is generally a good indicator of her ovarian reserve.

**FSH (Follicle Stimulating Hormone)** - Follicle-stimulating hormone (FSH) helps control a woman's menstrual cycle and the production of eggs. The FSH test is done on the second to fourth day of the menstrual cycle and can be used to evaluate whether the ovaries are functioning properly. FSH stimulates the ovaries to produce follicles, which are fluid filled sacs, which grow, develop, and release an egg.

**LH (Luteinising Hormone)** - In women, luteinising hormone (LH) is linked to ovarian hormone production and egg maturation. It causes the follicles to grow, mature and be released ready for fertilisation. It reaches its highest level (the LH surge) in the middle of the menstrual cycle, i.e. days 12 to 14 of a 28 day cycle approx. 37 to 40 hours before ovulation occurs.

**Prolactin** - Prolactin is a hormone produced by the pituitary gland (in the base of the brain) and may be requested if your periods are irregular or absent.

**Thyroid Function** - Thyroid gland abnormalities can affect fertility, even affecting ovulation and the frequency of the periods. Treating hypothyroidism (underactive thyroid) would be an important part of any effort to correct infertility. Thyroid stimulating hormone

(TSH) is vital for regulating your metabolism, through the production of thyroxine. Many fertility specialists prefer the TSH to be in the lower half of the normal range.

**Rubella (German measles) antibody levels** - It is important to look for evidence of immunity, as rubella infections in pregnancy can lead to various abnormalities of the developing baby. If you are not immune, then vaccination can be arranged.

**Androgens** – These are male hormones, which are present in small quantities in women. The most well-known androgen is Testosterone, and its levels may be higher in women with polycystic ovarian syndrome (PCOS). High levels of testosterone can result in acne and abnormal hair growth (hirsutism).

**Progesterone** - Progesterone is a female hormone produced by the ovaries during ovulation. It causes the endometrial lining of the uterus to get thicker, making it receptive for a fertilised egg. In a regular 28 day cycle, the day 21 progesterone result is used to determine if ovulation is occurring. Progesterone levels increase towards the end of the woman's menstrual cycle, reaching a maximum level seven days before the start of the next period.

## Semen Testing

**Please be aware that all tests are by appointment only. To arrange tests contact the lab directly 01257 256251.**

Semen samples should be produced by masturbation into a container provided by the clinic.

For optimum results we recommend three days abstinence from sex and masturbation before sample production but no more than 6 days abstinence.

It is possible to improve sperm function by following some simple guidelines based on the common knowledge that testicular function is impaired by excessive heat. Excessive hot baths and saunas should be avoided, as well as tight underwear or trousers. Smoking and excessive alcohol intake will impair sperm production, as can illnesses such as colds and flu.

Semen tests are arranged by appointment only. The results are sometimes available by telephone but will otherwise be given to you to at your next appointment with the consultant.

## Ultrasound Scans

The trans-vaginal (internal) Ultrasound scan is one of several diagnostic tests performed when assessing your fertility. The scan can give extremely useful information about your womb (uterus), ovaries and ovarian reserve that will help make decisions about your fertility management.

It is important that you have an empty bladder for this test, so it is advisable to go to the toilet immediately before your scan.

The examination will take approximately five to 10 minutes and is similar to having a smear test. A probe is inserted into the vagina and images of the womb (uterus) and ovaries can be seen on the scan monitor.

As the scan takes place in real time the scan results can very often be given to you straight away.

## HyCoSy

**Please be aware that all tests are by appointment only. To arrange tests contact the unit on 01257 256251.**

Hysterosalpingo-contrast-sonography (usually shortened to HyCoSy) is a simple and well-tolerated ultrasound procedure used to assess the patency of the fallopian tubes, as well as detect abnormalities of the uterus and endometrium

This test is carried out in the first 14 days of your cycle (after the period has stopped) and you will need to have a Chlamydia swab test and also your partners semen analysis will need to have been satisfactory before the procedure can be performed. As a screening test, it is very good at diagnosing normal tubes. It does not tell you if the tubes are blocked. If we are still unsure about the tubes after the HyCoSy has been performed, you may be offered a laparoscopy and dye test that would be performed on a later date.

To arrange the HyCoSy you will need to contact Fertility Fusion at Wrightington Hospital on the first day of your period (please telephone between 10:00 am and 4:00 pm Monday to Friday), the telephone number is 01257 256251 and you will be given an appropriate date and time to attend. If you do not have periods, then alternative arrangements will be made with you.

For this procedure it is advisable to take two Paracetamol tablets (each 500mg) and two Ibuprofen tablets (each 200mg) one hour before your test.

## Procedure

The Doctor or Fertility Nurse Specialist will explain the procedure to you prior to the examination. Firstly, a transvaginal (internal) scan is carried out to look for any abnormality of your uterus, tubes, and ovaries. Following this, a speculum is passed into the vagina (like taking a smear) and a thin tube, called a catheter, is inserted through your cervix (neck of the womb) into the uterus. This may take a couple of minutes and can sometimes be a little uncomfortable. Once the catheter is in place the speculum can be removed. The ultrasound probe is then placed into the vagina and the contrast agent injected very slowly into the catheter, allowing the Doctor or Fertility Nurse Specialist to observe flow in the

fallopian tubes. This information will assist planning your infertility treatment. The whole procedure will take between 10 to 20 minutes.

**If you have any questions or are unsure of anything, please ask.**

### **Side effects**

You may feel a period-like discomfort whilst the contrast is injected into the womb. This discomfort normally lasts for a few minutes. Other symptoms that you may get are sweating, nausea, headaches, and dizziness. You may also have spotting for a couple of days after the procedure.

### **Contact information**

Fertility Fusion  
Wrightington Hospital  
Hall Lane  
Appley Bridge  
Wigan  
WN6 9EP

Telephone number for Fertility Fusion, Wrightington Hospital is 01257 256251

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## Comments, Compliments or Complaints

The Patient Relations/Patient Advice and Liaison Service (PALS) Department provides confidential on the spot advice, information and support to patients, relatives, friends, and carers.

## Contact Us

Tel: 01942 822376 (Monday to Friday 9am to 4pm)

The Patient Relations/PALS Manager  
Wrightington, Wigan and Leigh Teaching Hospitals NHS Foundation Trust  
Royal Albert Edward Infirmary  
Wigan Lane  
Wigan WN1 2NN

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## Ask 3 Questions

Become more involved in decisions about your healthcare. You may be asked to make choices about your treatment. To begin with, try to make sure you get the answers to three key questions:

1. What are my options?
2. What are the pros and cons of each option for me?
3. How do I get support to help me make a decision that is right for me?



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## How We Use Your Information

For details on how we collect, use, and store the information we hold about you, please see patient information leaflet, Ref. **Corp 006** How we use your information, this can be found on the Patient Information Leaflets page on the Trust website, see details on the front cover.

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This leaflet is also available in audio, large print, Braille, and other languages upon request. For more information, please ask in the department/ward.

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