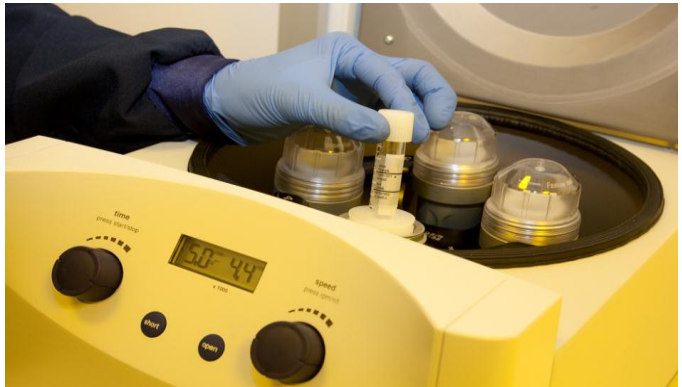
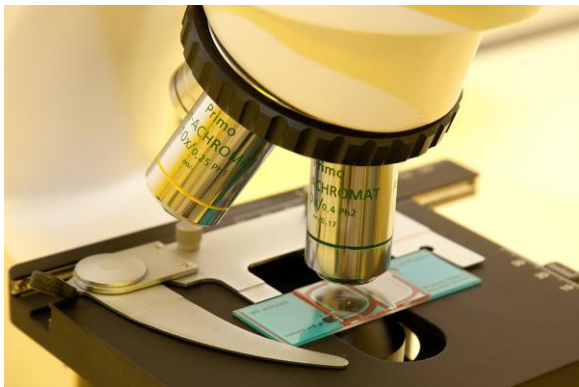


# Cambridge IVF



## Diagnostic semen analysis – Information for Patients



## Introduction

You have been asked to produce a sample of your semen for testing at the Andrology Laboratory at Cambridge IVF or Ipswich IVF. This may be a single test or as part of a series of tests being performed on you and your partner to assess your chances of achieving a pregnancy as a couple.

Semen analysis is the examination of your semen using a microscope to determine how many sperm are present, if they are moving correctly and if they look healthy. The results of the analysis help us to determine whether or not a 'male factor' plays a part in the reason why you have not conceived naturally. It's important to realise that although we get a lot of useful information from one semen sample, the quality of the sample can vary markedly from one sample to the next in any man so it's likely that you will be asked to provide more than one semen sample as part of your fertility investigations to help your doctor come to a diagnosis.

## What do I have to do?

**Firstly**, you need to ensure that your doctor has provided you with a completed semen analysis referral form indicating a request for a diagnostic semen analysis. You can either produce your sample at Cambridge IVF or, if you live within 30 minutes travel time of Cambridge IVF you have the option to produce the sample at home. We will provide you with a suitable sterile container upon arrival or you can collect your container from Cambridge IVF prior to your appointment if you wish to produce at home. We will only accept samples produced into our own containers as we know these are fit for purpose and will not compromise the quality of the sample.

**Secondly**, you need to telephone the Andrology Service on 01223 349017 and arrange an appointment time to produce your sample for analysis. **Please note there may be a wait of up to four weeks before we are able to offer you an appointment but we will make every effort to accommodate you as soon as possible.**

In order to get the best sample from you, we require you to abstain from any sexual activity (including masturbation) for between two and five days (but in no case more than seven days) prior to your appointment date. If you have been unwell and had a raised temperature in the last 3 months it is important that you let us know as this can affect the quality of your sperm sample.

In both Cambridge and Ipswich we have quiet and discrete rooms available for you in which you can produce your sample.





**Normal Opening Hours**

Our opening hours are as follows;

|                  | Cambridge Laboratory | Ipswich Laboratory |
|------------------|----------------------|--------------------|
| <b>Monday</b>    | 09:00 – 15:00        | Closed             |
| <b>Tuesday</b>   | 08:00 – 18:30        | 08:30 – 14:30      |
| <b>Wednesday</b> | 09:00 – 15:00        | 08:30 – 14:30      |
| <b>Thursday</b>  | 08:00 – 18:30        | 08:30 – 14:30      |
| <b>Friday</b>    | 09:00 – 15:00        | Closed             |
| <b>Saturday</b>  | Closed               | Closed             |
| <b>Sunday</b>    | Closed               | Closed             |

Cambridge IVF does **not** operate a sample 'drop in service' at either laboratory as semen analysis is a time critical test and specimens must be produced and analysed at appropriate and pre-arranged times. If you arrive more than 30 minutes after your allocated appointment time or do not have your referral form with you, we will be unable to perform your test and you may have to re-book the appointment. You should therefore give yourself plenty of time to arrive, especially if travelling by car. We do have ample free parking onsite in Cambridge but the roads surrounding Cambridge can sometimes be unexpectedly congested. In Ipswich the most convenient car park is Car Park 'G' which is pay and display. If you cannot keep your appointment time for any reason please call and we will re-book your appointment for the next mutually convenient time and date.

**How do I collect the sample?**

Samples are either produced on site at in one of our dedicated sample rooms or at home in certain cases. Although our rooms are well proportioned we suggest that you produce your sample on your own; we do not recommend your partner accompanies you into the room although they are very welcome to wait for you in our waiting area.

- Firstly ensure that you have booked an appointment time
- Ensure that you have been provided with a completed semen analysis request form from your doctor and they have indicated the test required is a **diagnostic semen analysis**. Your form should have your name, date of birth, NHS number, partners name and partner's date of birth (if applicable)
- Abstain from any sexual activity for two to five days but for no more than seven



- At your allocated appointment time a member of our laboratory team will greet you from the waiting area, check your referral form is completed correctly and provide you with an appropriately labelled sample container (or collect the sample from you if you produced the sample at home). If you are producing the sample on site, we will show you to the private sample room in which you can produce your sample
- If you are producing at home please bring along photo ID such as a driving license or passport so we can confirm your identity otherwise we cannot accept your sample for analysis
- Thoroughly wash, rinse and dry your penis, testicles and hands before you produce the sample
- If producing the sample at home; masturbate and collect the sample into the container making sure you tightly cap it and place it in the self sealing bag provided. Immediately transport the sample to the laboratory keeping it close to the body for example in a jacket pocket during transportation
- If producing on site, masturbate and collect the sample into the container making sure you tightly cap it.
  - **In Cambridge**, place it in the hatch to the laboratory (along with your completed referral form). Close the hatch and press the switch to let the lab team know your sample is ready for collection.
  - **In Ipswich**, place the sample in a sealed plastic sample bag and leave as instructed in the sample room with your completed referral form. Press the 'doorbell' and leave; the lab team will collect your sample from the production room.
- Complete the bottom part of the referral form; we need this information to ensure we get as much accurate information from your semen analysis as possible. If any of this information is missing we will not be able to accept the sample so it's **very important** that you take the time to check it's completed correctly
- Inform us if any of the sample is missed during production. Most of the sperm in the ejaculate are contained in the first part. If you do miss some of the sample we may ask you to repeat the test to ensure an accurate result can be provided to your referring doctor





Our production rooms have been designed to be comfortable and private and a video system is available to you should you wish to use it. In Cambridge, a hatch system links each room directly to the laboratory to allow easy delivery of your sample. In Ipswich a 'doorbell' system is in use to inform the lab when your sample is ready. Further site-specific instructions will be given to you by our team before you produce the sample at your chosen location.

Please note that masturbation is the only recommended method for collecting the sample 'cleanly' for analysis. The withdrawal method is not recommended as it is likely that some of the sample will be lost and may in any case be contaminated. The first part of the ejaculate contains most of the sperm so this is particularly important. Ordinary condoms cannot be used as these contain a spermicide which will kill any sperm in the ejaculate.

If you have any problems producing your sample or need to change an appointment please give us a call, we will happily arrange another appointment for you.

## How will my sample be tested?

We look at the important sperm factors which when combined together will give us an indication of your ability to conceive:

- **Sperm volume**

We record the actual volume in millilitres of the semen sample provided. We do not expect you to fill the container; we would expect an ejaculate to be around 2.5 ml but some men will produce more or less semen and still have a completely normal semen analysis

- **Sperm concentration (sperm count)**

Reported as millions of sperm per millilitre of semen. We use a microscope and a special counting chamber to count the number of sperm in the sample



- **Sperm motility**

Sperm are graded on their ability to swim in a progressive manner. The sperm are grouped into four categories with the strongest swimmers (grade 'a') being the most fertile.

- **Sperm morphology**

The shape and size of the sperm are assessed using our microscope to determine the percentage of sperm in the sample with a 'normal' appearance.

- **Seminal pH (measure of acidity/alkalinity)**

The pH of the sample should be greater than 7.2

- **Assessment of non-sperm cells in semen sample**

We check for the presence of non-sperm cells such as red and white blood cells in your sample and will report if these are present in numbers which are clinically significant and could indicate further investigations are required.

- **Anti-sperm antibodies (if requested)**

Anti-sperm antibodies cause sperm to stick together and prevent them from swimming properly. They are seen in approximately 5% of cases and may be indicated by serious testicular sports injuries or vasectomy reversal operations.

In addition we may have been asked to perform a **sperm preparation test** (otherwise known as a 'test wash'). This involves a washing procedure aimed at harvesting the best quality sperm from your sample for use in assisted conception treatment. This test can only be requested by a fertility specialist as indicated on the referral form. If you have been asked to have this test performed please inform us when you telephone to make your appointment.

## How will I get my results?

A written report will be sent to your referring doctor within ten working days of your test appointment. Try not to become too anxious if your GP is unable to answer all of your questions, it may be that they need to contact Cambridge IVF for more information or advice. For reasons of confidentiality we will never give out results over the telephone so please understand the good reasons why any such request will be politely declined.



## **I have been asked to repeat my test – what is going on?**

It is not unusual for us to request a repeat analysis. This will most likely be because more than one of the factors listed above is found to be borderline or below the normal range or it could be because your sample was incomplete. Although this may be shocking news it's important you realise that abnormalities within your sample can occur for a number of reasons, eg previous illness, stress or medication. With this in mind we use the results of the second analysis to confirm if the findings of the first test were accurate or due to other factors.

## **I have had a poor result, what happens now?**

Discovering that you have an undiagnosed fertility issue will no doubt come as a great shock to you. It is important to realise that this news in the vast majority of cases does not mean you will not be able to father a child. Assisted conception procedures have improved dramatically in recent years and as a specialist fertility treatment centre we are also well placed to offer you both initial support and ongoing assisted conception treatment with your partner following the diagnosis. We work with qualified independent counsellors who are available to you and have experience of working with men in similar situations. Please contact us on 01223 349010 if you feel you would like an appointment to speak with our counsellor.

## **I have been diagnosed with Retrograde Ejaculation (RE) – what is that?**

Some sperm tests show a very low volume of semen is being produced. In such cases we suspect that a rare problem known as retrograde ejaculation (RE) may be occurring. RE results in the semen being ejaculated into the bladder due to a weakness in the muscles surrounding the neck of the bladder which normally close during ejaculation propelling the sperm forwards. RE is more common in men with spinal injuries or diabetes. If your referring clinician already suspects you may have the condition this will be indicated to you and on your referral form and you should mention this to us when you telephone to book your appointment.

Checking for RE is a straightforward procedure. Before you attend for your appointment you should;

1. The evening before your appointment mix one teaspoon of sodium bicarbonate powder in a half pint of water or juice, stir until it dissolves and drink.
2. Eat and drink normally at breakfast.



3. Prepare a second sodium bicarbonate solution as described above and drink this one hour before your appointment time.
4. Attend Cambridge IVF and produce your sample for analysis (note RE samples must always be produced onsite; it is not possible to arrange such samples for production at home).

More detailed information will be provided for you when you attend for your semen analysis.

### **Research activities – what can you do to help?**

It is our common practice to dispose of the part of your sample we do not use during the analysis by incineration. There are often opportunities for us to use your sample for research activities to allow us to further develop the services we can offer our patients and contribute to the global evidence base.

Should we have any research projects ongoing at the time you attend Cambridge IVF we may give you some information explaining the research we are doing and ask for your consent to use the part of your sample we would otherwise discard after your semen analysis for research purposes. No viable samples would ever be stored or used for the treatment of other people and all research samples are coded and anonymised prior to releasing any data for publication.

### **Our commitment to quality in our service**

The laboratory team at Cambridge IVF have a combined experience of over 40 years in performing the range of tests which in combination provide a complete and accurate semen analysis. All tests are performed in accordance with the guidance set out by the World Health Organisation (WHO), the British Andrology Society (BAS) and the Association of Biomedical Anthologists (ABA). The laboratory subscribes to the National External Quality Assurance Scheme (UKNEQAS) for Reproductive Science.

### **Queries or complaints**

If you have any questions regarding any part of the Andrology Service provided by Cambridge IVF please do not hesitate to contact us using any of the contact details on the back of this information at any time between the hours of 08:30 and 16:30. If you are unhappy with any part of the service or wish to speak to someone about an issue relating to your care please contact our lead clinical scientist or if you prefer, the Patient Liaison Service (PALS) at Addenbrooke's Hospital, who you can reach by emailing [pals@addenbrookes.nhs.uk](mailto:pals@addenbrookes.nhs.uk) or telephoning extension 2756 at Addenbrooke's Hospital.







**Finding Cambridge IVF in Trumpington**

**Please note that Cambridge IVF is not located on the main CUH Campus.**

We are very easy to access by car, public transport and bicycle. When approaching from Trumpington Road, look out for Bidwells Estate Agent (next to the Shell garage) on the corner of Maris Lane. Kefford House is immediately behind this complex of buildings and shares a car park with them.

**Getting here by car**

The clinic is just off Trumpington Road, easily accessible from the M11 and A11 if coming from outside Cambridge. There is plenty of free parking at the centre indicated by yellow parking bays marked with a 'K'. It is important that you use these parking spaces and not the others which are allocated to other buildings. You can also park at the Trumpington Park and Ride and take a bus. There is a stop close to the centre on Trumpington Road (see below).

**Cycling to Cambridge IVF**

There is ample covered cycle racking provided directly outside of Cambridge IVF for those wishing to cycle.

**Public transport – Getting to Cambridge IVF by bus or train**

The Trumpington Park and Ride service (Stage Coach Route 88) stops at Anstey Way, on the corner of Maris Lane going towards Cambridge. You can get the same bus from Downing Street in Cambridge city centre. **Note:** *The guided bus service from the Park and Ride to Addenbrooke's hospital does not pass Cambridge IVF.*

The Stagecoach 'Citi 7' bus runs between Cambridge city centre and Trumpington, stopping at the Anstey Way stop. This service stops at the Cambridge Railway station. A taxi rank is also available at the station.



## Finding Cambridge IVF at Ipswich Hospital

The Cambridge IVF andrology service is located in the Central Zone, in the Gynaecology Clinic on the 1<sup>st</sup> floor. This is clearly signposted. A map of the hospital is available [online](http://www.ipswichhospital.nhs.uk/findingyourwayandmaps/hospital-map.htm), please see <http://www.ipswichhospital.nhs.uk/findingyourwayandmaps/hospital-map.htm>.

## Getting here by car

The address for Ipswich Hospital is; Heath Road **Ipswich** Suffolk IP4 5PD. Please park in car park G. Please note that parking charges apply (pay and display). Your appointment should not last longer than one hour.

## Public transport

Please visit

<http://www.ipswichhospital.nhs.uk/findingyourwayandmaps/navigation.htm>

for more information on finding your way as well as information about how to get the hospital by public transport.

*If you require any further information regarding the clinic and available treatments please contact us on 01223 349010 or e-mail us at [enquiries@cambridgeivf.org.uk](mailto:enquiries@cambridgeivf.org.uk). Visit our website at [www.cambridge-ivf.org.uk](http://www.cambridge-ivf.org.uk).*

