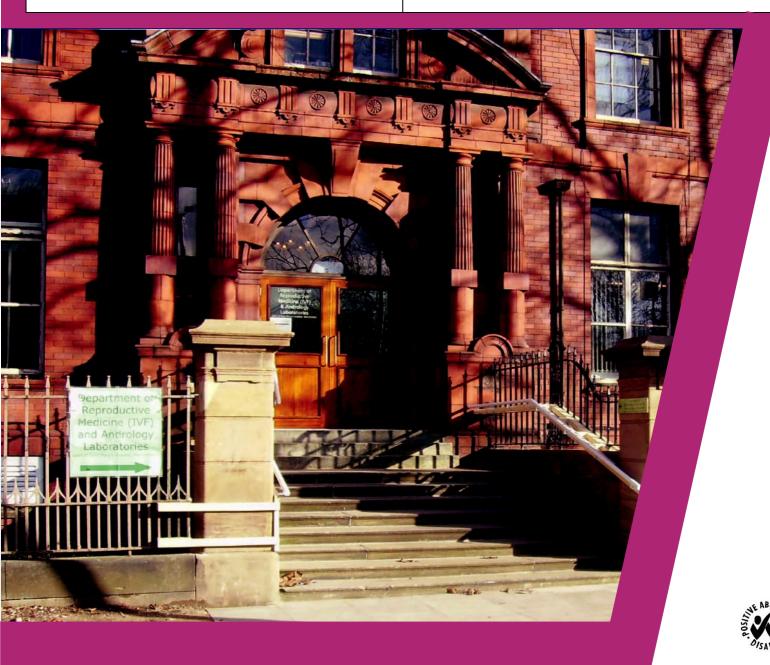


**Saint Mary's Hospital Division of Reproductive Medicine** 

# Long Down Regulated (Agonist) Cycle Booklet

Please bring this booklet with you to every appointment

| Patient Name: | Hospital Number: |
|---------------|------------------|
|               |                  |









| 1  | Overview   | 2  |
|----|--|----|
| 2  | Buserelin chart  | 3  |
| 3  | Stimulation Drug Chart   | 6  |
| 4  | Your final injection   | 7  |
| 5  | Buserelin  | 8  |
| 6  | Menopur  | 9  |
| 7  | Gonasi   | 11 |
| 8  | Progesterone   | 12 |
| 9  | Bemfola  | 13 |
| 10 | Sedation for IVF: Information for patients having egg recovery | 14 |
| 11 | Own notes  | 15 |





#### 1. Overview

The first injection that you will administer is called Buserelin. Buserelin is used to temporarily suppress your hormones before ovarian stimulation begins. Your Buserelin injections will start during the luteal phase of your menstrual cycle (approximately day 21) and will continue daily until you have been advised that you are ready for your egg collection. You should administer the injections at the same time every day between 7.00 am–10.00 am.

After approximately 2 weeks of Buserelin you will attend the unit for a blood test to check that your oestrogen and luteinising hormone are low. If your blood test result is satisfactory, you will be advised to start a daily stimulation injection. There are different types of stimulation drugs some common ones used are Bemfola and Menopur. They are all similar in their effects. Your stimulation injection usually begins within a few days of this blood test. The stimulation injections encourage the development of several follicles within each ovary. Response does vary but is mostly dependent upon the number of small follicles that the woman has in her ovaries at the start of each menstrual cycle. These small follicles are counted on a baseline ultrasound scan before starting treatment as this is a good predictor of the number of mature follicles that we will be able to stimulate. You will take your stimulation injection alongside your Buserelin injection.

Once you have started the stimulation injection, you will be monitored by scans. You will be advised if you require a blood test. Blood is taken to check your oestrogen level. This gives an indication as to how your ovaries are responding to the stimulation drug. Monitoring usually starts on day 10 of stimulation. You may be required to attend every 2-3 days for an internal scan to assess how your follicles are growing. This monitoring will continue until 3 or more follicles are at the optimum size of 17-20mm. The doctor will decide when this is.

Blood tests are taken between 7.45 am and 8.30 am in the morning to ensure that we get the results back by lunchtime. Scans are carried out from 8.30 am and you will be given the earliest available appointment. Once your blood and/or scan results have been reviewed, you may be required to alter the dose of your stimulation drug. If an alteration is required, you will receive a phone call in the afternoon from one of the nurses who will inform you of your new dose.

If you do not receive a telephone call to alter your dose, please continue taking your stimulation drug at the same dose. It is important that you are contactable throughout the whole of your treatment. Please provide alternative contact numbers where required.

Usually, it takes 10-14 days of stimulation until you are ready to take your final injection in preparation for your egg collection. As everybody responds differently, you may find that you are ready earlier or later than this. On the day that your follicles are at the optimum size, you will be asked to administer your final injection that night. The final injection is called Gonasi and helps to mature your eggs in preparation for collection. Gonasi must be taken at the specific time given to you, which will be approximately 35-36 hours prior to your egg collection. It is important that your take this injection at the time provided. If you miss this time slot please **DO NOT** take it at any other time. Contact the Department the following day and where possible this will be re-arranged. Please note that missing your final injection or taking it at the wrong time could result in failure or cancellation of your treatment.

You must fast from 12 midnight the night before your egg collection. This means no food or drink, including chewing gum. On the day of your egg collection you will be required to report to Ward 90, which is located on the first floor of the Old Saint Mary's building, at 7.30 am. On this day your partner will be required to provide a semen sample, unless frozen or donor sperm is being used.



Prior to providing this sample, 2-5 days of abstinence from intercourse or ejaculation is required Following the egg collection and before you are discharged from the ward you will be informed how many eggs were collected.

The day after your egg collection, a member of the embryology team will contact you to inform you if and how many of your eggs fertilised. They will also inform you when to come back to the unit for embryo replacement, which will usually take place 2, 3 or 5 days after the egg collection.

If your eggs fertilise successfully and you are having a fresh embryo transfer, you will be required to start a form of luteal support (progesterone) the morning after egg collection. The nurse will instruct you how to take this.

If you have any questions or concerns throughout treatment, please ring the nurses on (0161) 276 6000 option 2. You may be required to leave a message but all calls will be returned.



#### 2. Buserelin Chart

| Date | Buserelin | Please tick |
|------|-----------|-------------|
|      | 0.25ml    |             |
|      |           |             |
|      |           |             |
|      |           |             |
|      |           |             |
|      |           |             |

| Paperwork completed by:  |  |
|--|--|
| Name and signature:  |  |
|  |  |
| Please attend for a blood test between 7.45 am and 8.30 am on: |  |

If you have not started a period by the day before you are due for this blood test, please contact the unit on (0161) 276 6000 option 2.

Please choose a convenient time between 7.00 am and 10.00 am to take your injections. You must stick to this time throughout your treatment.





## 3. Stimulation drug chart

| Day of      |      |           | Stimulation | Blood tests and  |
|-------------|------|-----------|-------------|------------------|
|             | Date | Buserelin |             |                  |
| stimulation |      |           | drug:       | ultrasound scans |
| 1           |      | 0.25ml    |             |                  |
| 2           |      | 0.25ml    |             |                  |
| 3           |      | 0.25ml    |             |                  |
| 4           |      | 0.25ml    |             |                  |
| 5           |      | 0.25ml    |             |                  |
| 6           |      | 0.25ml    |             |                  |
| 7           |      | 0.25ml    |             |                  |
| 8           |      | 0.25ml    |             |                  |
| 9           |      |           |             |                  |
| 10          |      |           |             |                  |
| 11          |      |           |             |                  |
| 12          |      |           |             |                  |
| 13          |      |           |             |                  |
| 14          |      |           |             |                  |
| 15          |      |           |             |                  |
| 16          |      |           |             |                  |

| Paperwork completed by: |  |
|-------------------------|--|
| Name and signature:     |  |

If required, please attend for all blood tests between 7.45 am and 8.30 am. The nurse will inform you of when you need to attend for your blood tests. Please write down the date in your chart above.

You will be booked for scans on alternate days from day 10 of stimulation.

Scan times will be confirmed once stimulation has been started.

Once you start your stimulation drug please do not stop this unless advised to do so by a nurse or doctor. It takes approximately 10-14 days of stimulation until you are ready for your final (trigger) injection.





## 4. Your final injection

| Gonasi | 5,000                     | ) IU | 10,000 IU |  |
|--------|---------------------------|------|-----------|--|
|        | Injection to be given at: |      |           |  |
|        | n/pm                      |      |           |  |
|        | On: Day                   | Date |           |  |

Please report to Ward 90 with your partner at 7.30 am on the date given to you over the telephone.

#### Please bring:

- Dressing gown
- Slippers
- Sanitary towels
- Something to read

#### **DON'T FORGET!**

- Nothing to eat or drink from 12 midnight the night before your egg collection.
   This includes no chewing gum.
- Partner to abstain from ejaculation for 2-5 days if providing a semen sample on the day of egg collection.
- Leave valuables at home.
- Do not wear make-up or jewellery. Do not wear nail varnish or false nails.



#### 5. Buserelin

#### What does it do?

Buserelin is a drug that causes ovarian suppression. It works by acting on the pituitary gland in your brain to stop the production of natural hormones that control the release of eggs from your ovaries.

#### Possible side effects:

- Mood swings.
- Hot flushes.
- Vaginal dryness.
- Headaches.
- Nausea.
- Local irritation at injection site.

#### How to use Buserelin:

- 1) Remove Buserelin vial from the box.
- 2) Flick the blue cap off the lid (this does not need to be replaced afterwards).
- 3) Take out a needle from the pack you were given.
- 4) Remove the orange cap from needle.
- 5) Pierce grey bung of Buserelin with the needle.
- 6) Tip the vial upside down.
- 7) Pull down the plunger to just past your required dose.
- 8) Remove the needle from the vial.
- 9) With the needle pointing upwards, flick the syringe so that any air bubbles move to the top.
- 10) Push the plunger up and push out the air, ensuring the top of the black plunger lines up with your required dose.
- 11) Pinch an inch of fat below your belly button.
- 12) Inject the needle at a 45 degree angle
- 13) Push the plunger to give yourself the whole injection.
- 14) Remove the needle and dispose of it in the sharps bin that you have been provided with.
- 15) Put the remaining Buserelin in the refrigerator. Discard used open vial after 14 days.

#### **Storage information**

Buserelin needs to be stored in a refrigerator once opened.



## Manchester University NHS Foundation Trust

## 6. Menopur

#### What does it do?

Menopur stimulates the follicles in your ovaries, with the aim of an egg developing within each follicle.

#### Possible side effects:

- Local irritation at injection site.
- Ovarian Hyperstimulation Syndrome (OHSS).

#### Signs/symptoms to look out for include:

- Abdominal swelling/pain.
- Shortness of breath.
- Extreme thirst.
- Nausea/vomiting.
- Headaches.
- Problems passing urine (small amounts or none at all).

If you experience any of these symptoms, you must inform a nurse at the unit as soon as possible. If the unit is closed, please telephone the Emergency Gynaecology Unit (in the main hospital) on (0161) 276 6204.

## **How to prepare Menopur:**

- 1) Remove the product from the box.
- 2) Open the top tray, which will contain pre-filled syringes of water, a vial of powder and a needle.
- 3) Remove the powder vial from the tray.
- 4) Flick the blue cap off.
- 5) Remove the grey lid off the pre-filled syringe of water and twist the orange needle on to the top.
- 6) Push the needle through the grey bung on the powder vial.
- 7) Push all the water into the vial of powder. If you have two pre-filled syringes of water, remove the needle from the first syringe and attach it to the second and inject into the vial of powder.
- 8) The powder should all dissolve. If not completely dissolved, give the vial a gentle roll. Do not shake.





## **How to inject Menopur:**

- 1) Take a needle from the large box.
- 2) Remove needle from the packaging and remove the clear lid.
- 3) Pierce the grey bung and tip the vial upside down.
- 4) Pull down plunger to just past your required dose.
- 5) With the needle pointing upwards, flick the syringe so that any air bubbles move to the top.
- 6) Push plunger up and push out the air, ensuring the top of the black plunger lines up with your required dose.
- 7) Pinch an inch of skin below your belly button.
- 8) Inject at a 45 degree angle.
- 9) Inject the full dose.
- 10) Remove the needle.
- 11) Dispose in sharps bin provided.
- 12) Put the remaining solution of Menopur in the cupboard for your next dose.

## **Storage Information**

Before reconstitution, store in a refrigerator (2°C - 8°C) in its original container to protect from light.

After reconstitution, the solution may be stored for a maximum of 28 days at not more than 25°C.

Do not freeze.



#### 7. Gonasi



#### What does it do?

Gonasi is your final injection and is used to mature the egg within the follicle.

#### Possible side effects:

- Headaches.
- Feeling restless or irritable.
- Depression.
- Breast tenderness or swelling.
- Local irritation at injection site.
- Exacerbation of OHSS symptoms.

#### How to use Gonasi:

- 1. Remove the glass vial from the box.
- 2. Take pre-filled syringe of water and remove cap.
- 3. Attach the larger green needle to the end of pre-filled syringe of water.
- 4. Pierce the grey bung with the needle and push all the water into the vial.
- 5. Once the powder has completed dissolved, draw up the solution back into the syringe.
- 6. Remove the large needle and place into sharps bin.
- 7. Attach small grey needle to syringe.
- 8. With the needle pointing towards the ceiling, flick the syringe so that air bubbles move to the top.
- 9. Push the plunger up so that no air is left in the syringe.
- 10. Pinch an inch of fat below your belly button.
- 11. Inject at 45 degree angle.
- 12. Push plunger down to administer all Gonasi
- 13. Dispose needle and syringe into sharps bin.

## **Storage Information**

Store in a dry place below 25 degrees centigrade.







## 8. Progesterone (luteal support)

This is often given in the form of a vaginal or rectal suppository.

#### What does it do?

Progesterone is a natural female hormone, produced in the body.

It used in IVF treatment to help support the endometrium (lining of the womb) and a possible early pregnancy.

#### Possible side effects:

- Diarrhoea.
- Flatulence (wind).
- · Soreness in your vagina or rectum.
- Headaches.

After using progesterone you may notice some leakage after the pessary has dissolved. Do not worry; this is quite normal when using medicines that are inserted into the vagina or rectum.

#### How to use

Always wash your hands before and after inserting the pessary.

To insert into the:

**Vagina** – place the pessary between the lips of the vagina and gently push the pessary upwards and backwards using your finger. Or applicator if one is available. Insert as far as it feels comfortable.

**Rectum** – gently push the pessary into the rectum foe about one inch. Your muscles will hold the pessary in place when it is in far enough. Squeeze your buttocks together for a few seconds. **This route can only be used with Cyclogest pessaries.** 

## **Storage information**

Store below 25 degrees centigrade in a dry place.



#### 9. Bemfola



#### What does it do?

Bemfola stimulates the follicles in your ovaries, with the aim of an egg developing within each follicle.

#### Possible side effects:

- 1. Local irritation at injection site.
- 2. Ovarian Hyperstimulation Syndrome (OHSS).

## Signs/symptoms to look out for include:

- Abdominal swelling/pain.
- Shortness of breath.
- Extreme thirst.
- Nausea/vomiting.
- Headaches.
- Problems passing urine (small amounts or none at all).

If you experience any of these symptoms, you must inform a nurse at the unit as soon as possible. If the unit is closed, please telephone the Emergency Gynaecology Unit (in the main hospital) on (0161) 276 6204.

#### How to use Bemfola:

- 1. Take the syringe and needle out of the box.
- 2. Wash your hands and remove the peel tab from the injection needle.
- 3. Align the injection needle with the pen and gently push in. You will hear a click.
- 4. Remove the outer needle protection cap
- 5. Remove the inner needle protection cap.
- 6. Hold the pen with the needle pointing upright. Tap the pen slightly in order to make eventual air bubbles rise.
- 7. Push the dosage plunger until it stops and a small amount of fluid is seen. If a small amount of fluid is not seen the pen should not be used.
- 8. Turn the dosage plunger until the prescribed dose is aligned with the middle of the indent.
- 9. Pinch an inch of fat below your belly button.
- 10. Inject Bemfola at a 90 degrees angle.
- 11. Push the plunger until it stops.
- 12. Wait 5 seconds then remove the injection needle.
- 13. Dispose of the needle into the sharps bin provided.

## Storage information

Store Bemfola in the refrigerator.

Do not freeze.

Store in the original packaging to protect from light.

Once opened, it may be stored at or below 25°C for a maximum for 28 days.







## 10. Sedation in IVF: Information for Patients having Egg Recovery

During the process of egg recovery the surgeon will place a scanning probe into the vagina in a very similar way to your previous scans. A fine needle is then inserted alongside the probe. When the needle is used to suck out the ripened eggs a momentary discomfort often occurs once for each ovary. To help with this it is routine practice to use intravenous sedation and a short acting and very powerful pain relieving medication together rather than general anaesthetic. You will therefore be sedated and not fully unconscious. This is very safe.

You may have had a general anaesthetic in the past and feel you will not cope with sedation. Whilst there are some surgical reasons for general anaesthetic, these are rare and your surgeon will advise you if this is necessary. The vast majority of patients in the UK and throughout the world have sedation to enable egg recovery and are very satisfied with it. Sedation is recommended and preferred as the method for this procedure by the National Institute for Health and Clinical Excellence (NICE) and is our technique of choice in this unit. In a recent survey, well over 95% of patients were very happy with their experience and would have sedation again if it was needed. They also benefitted from low rates of nausea and vomiting and a shorter recovery and stay in hospital - often leaving by lunchtime.

During the procedure you will be fully monitored, which is routine. The surgeon will reassure you if necessary during the egg recovery procedure, but it is best to relax with the sedation and allow the surgeon to proceed.

Although the majority of our sedated patients do not remember any detail of the procedure itself or any discomfort, it is important that you understand that with sedation there is a possibility that you may remember some events during surgery and that you may feel the probe and possibly a little discomfort. Only with general anaesthetic would you be completely unaware.

We would strongly recommend that sedation is our preferred method for egg recovery. After a short period of recovery and a bite to eat and a drink the ward nurses will ensure that you are safe to leave us. Typically the whole process takes about 30 minutes, however if you do require a general anaesthesia you would take longer to recover and may have to stay in hospital longer; this is because the dose of anaesthetic is larger and is often different.

Please remember that you should not operate any machine, drive or sign important documents until the day after as your judgement may be impaired. This applies to both sedation and anaesthetic.

Please ask the fertility nurses if you have any questions about what will happen to you.





| riease use this space to make your own notes. | NHS Foundation Trus |
|---|---------------------|
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |
|   |                     |