

## Gender affirming hormones – testosterone

Testosterone is a masculinising hormone commonly used for gender affirmation. This information sheet outlines how to access testosterone, what to expect, possible side effects, and the permanent changes to your body that you need to be aware of.

At Equinox we practice the 'Informed consent model of care' for gender affirming hormones. We partner with you to ensure that the hormones are tailored to your needs and monitored carefully to prevent any medical problems.

By the time you discuss gender affirmation with your GP it is likely you will have already done your own research about hormone therapies. Hormone prescribing in Australia may be different to hormone prescribing in other countries. For example, some of the commonly used medications for gender affirmation in the USA are not available in Australia.

In Australia testosterone is available in different forms - injections, gels, creams, and patches.

### How do I access testosterone?

Gender affirming hormones are usually prescribed by GP's, endocrinologists, paediatricians and sexual health doctors. In Australia, there is a legal requirement that if you are under 18yo you require written permission from all your legal parents or guardians. If you are under 18yo you will also require a mental health check in and review prior to commencing hormones with a psychologist or psychiatrist. This is to ensure you are able to give informed consent and have no significant psychiatric issues that require stabilisation prior to commencing hormones.

### What will happen to my body when I take testosterone?

Body changes may happen very quickly after commencing testosterone. Most people will be looking noticeably different within 3-6 months.

Changes you may experience within a few weeks:

- Increase in clitoris size (bottom growth)
- Increased libido (sex drive)
- Feeling hungry
- Oily skin
- Acne

Changes you may experience within a few months:

- **Hair growth on face and body (this is permanent)**
- Increased muscle bulk
- Body fat redistribution (less curvy shape, fat moves from hips and buttocks to abdomen)
- **Deeper voice (this is permanent)**
- Cessation of menstrual bleeds (periods stop)

Longer term changes:

- **Hair loss (baldness) may occur (permanent)**
- **Reduced fertility**
- Reduction in size of breast tissue
- Dryness and irritation of the vagina (front hole)

### **Are the changes permanent?**

Voice deepening is permanent, even if you stop hormones.

If you experience male pattern balding (loss of hair on your head) that can be permanent.

### **Can I avoid injections?**

If you prefer not to have injections, there are testosterone gels and creams available.

### **How often do I have to take testosterone?**

Testosterone is usually given by an injection into your buttock muscle by a doctor or nurse every 3 months. Fortnightly injections are sometimes an option and these can be self-administered (you give your own shot). Testosterone gels and creams are usually applied daily. Ask your GP about the pros and cons of each option.

### **How long do I take testosterone for?**

Testosterone therapy is usually life-long. However, you can stop or reduce hormone doses at any time, for any reason.

### **Is it safe?**

There aren't many long-term studies looking at the safety of gender affirming hormones. However, testosterone is a commonly used medication in Australia and is considered to be safe when prescribed under medical supervision.

Testosterone can cause an increase in your number of red blood cells. If the red blood cell number is too high the blood becomes thickened and can lead to a medical condition called 'polycythaemia'. Polycythaemia can cause headaches, fatigue and blood clots. Your doctor will ensure that your red blood cell levels are checked regularly to check for polycythaemia and to prevent any problems.

Testosterone can cause (or worsen) sleep apnoea. Sleep apnoea is a condition where you snore at night, and don't get enough oxygen while you are sleeping. Sleep apnoea can cause daytime fatigue and heart problems. It is more common in people who are overweight or already have sleep apnoea.

There is conflicting data about the risk of testosterone on cardiovascular disease. It may increase your risk of having a heart attack or stroke (these conditions are more common in men than women). It can make your cholesterol levels higher. It's important to have regular check-ups and blood tests when taking hormones. It's really important to stop smoking or vaping, eat healthily, and exercise regularly.

### **Will testosterone cause side effects or make me sick?**

Testosterone can cause serious side effects such as blood clots and liver damage, however these side effects are rare.

Acne is common - particularly during the first two years.

Some people notice vocal fatigue - a hoarseness or tiring of the voice throughout the day. That can be problematic for people who need to project their voice, for example a teacher or a referee.

Testosterone injections are usually given into the buttock or thigh and can be painful afterwards. There is a rare side effect called 'pulmonary oil micro-embolism' where a small amount of oil from the injection is deposited into the lungs immediately after the injection causing coughing and shortness of breath. This is not dangerous and will usually resolve within ten minutes.

Dryness or irritation of the vagina (front hole) is common on testosterone. If this occurs there are creams available to help.

Some people develop pelvic pain or cramps when taking testosterone. It's important to let your GP know if you experience any pain or bleeding when taking testosterone.

### **Will testosterone make me depressed?**

Some people experience mood swings on testosterone, particularly as a dose is wearing off after an injection. This can be a particular issue with the fortnightly injections. Generally, mental health improves for most people when they commence gender affirming hormone therapy.

### **Do I need to quit smoking?**

YES! Testosterone + smoking can be very dangerous – it may increase your risk of heart disease, stroke, and blood clots. Talk to your GP if you need any help with quitting smoking.

### **Will testosterone affect my fertility?**

We don't know how much testosterone affects fertility. Many trans people have successful pregnancies. If you decide to carry a pregnancy in the future, you would need to take a break from your testosterone for several months (before and during the pregnancy). This is because if you fall pregnant whilst taking testosterone it can cause birth defects or abnormalities in the baby.

Some people opt to freeze eggs before they start testosterone. This involves a procedure similar to IVF where you take hormones to stimulate your ovaries to produce several eggs. The eggs are then collected and frozen for later use. Talk to your GP for more details.

### **Can I fall pregnant on testosterone?**

Yes! Although your periods are likely to stop on testosterone, there is a possibility of breakthrough ovulation (your ovary releasing an egg). This means you can fall pregnant even when you're not having a regular bleed. Talk to your GP about contraception options and regular sexual health check-ups.

### **Monitoring testosterone levels**

Your GP will let you know how often to come in for a check-up and blood tests. Check-ups are usually 3 monthly initially, and 6 monthly in the longer term. Check-ups include blood pressure, height, and weight checks.

### **Do I need to tell my other doctors I'm taking testosterone?**

It's important to let your treating doctors and specialists know about all medications you are taking. There's a risk of interactions with other medications, and confusion with blood test interpretation.

### **Is testosterone expensive?**

No. In Australia the three-monthly testosterone injections, and daily gels and creams are covered by the Pharmaceutical Benefits Scheme (PBS) for residents with a medicare card. Expect to spend around \$10-30 per month. The price for health care card and pension card holders is around \$7 a month. The fortnightly injections cost around \$50 a month and are not subsidised by PBS.

To access the reduced (PBS) price you will need to be seen at least once by another specialist doctor - usually an endocrinologist or sexual health doctor. We can arrange this for you.

### **Can I travel with testosterone?**

You may require a doctor's letter if travelling with testosterone, needles, or syringes. Your GP can organise this for you.

### **I'm already taking testosterone (self-medding). Will my doctor be angry?**

It's important to let your doctor know about any medications you are taking so they can support your health and wellbeing. You won't be in trouble!

### **Do I need a mammogram?**

Everyone with breast tissue, including trans people, should attend for 2 yearly mammograms from age 50y-69 years. Sometimes mammograms are recommended at a younger age if there are people in your family with breast cancer. Even after 'Top surgery' a small amount of breast tissue is usually left behind. In this case a chest examination may be recommended instead of a mammogram. Your GP will be able to do this for you.

### **Do I need a cervical screening test (previously called PAP smear)**

Everyone with a cervix should have regular screening to prevent cervical cancer. These tests are recommended every 5 years from the age of 25-74 years. You have the option to self-collect your own cervical test and avoid an examination. It is quick, painless, and easy. Your GP will be able to explain the options.

### **Can I stop hormones?**

Yes! You can stop hormones at any time for any reason. It's your body and your decision. After a few weeks your body shape may be similar to how you looked before hormones. Your period will usually start up again after 3-6 months. **Voice changes, facial hair, balding, and infertility may be permanent.**

## Consent form for testosterone therapy

Name.....

Age.....

Date of birth.....

**As a result of taking testosterone, I expect to experience the following permanent changes:**

- Deeper voice
- Clitoris enlargement (bottom growth)
- Increased hair on my body and face
- Decreased fertility. I may become permanently infertile after prolonged treatment. I have considered my options regarding egg storage.

**As a result of taking testosterone, I expect to experience:**

- Increased muscle bulk and strength
- Increased libido (sex drive)
- Decreased fat around my hips, increased abdominal fat
- Cessation of menstrual periods

**I understand that side effects and possible risks of testosterone include:**

- Acne (especially first 2 years)
- Weight gain
- Polycythaemia (thicker blood due to increase in red blood cells)
- Blood clots
- Sleep apnoea
- Breast cancer
- Liver problems
- High cholesterol
- Higher risk of heart attack or stroke
- Mood swings

I have read and understood this document.

I understand that the effects of long-term use of testosterone are not fully known.

I understand that the rates of change and amount of change that testosterone can produce are very variable from person to person.

I have had the implications of testosterone therapy explained to me in full by

Dr .....and have had ample opportunity to ask questions.

Signed .....Date.....

**Additional consent for those aged under 18 years:**

Parent / legal guardian name

.....

Parent / legal guardian name

.....

We have read and understood this document about testosterone for gender affirmation. We have had the implications of testosterone therapy explained in full by

Dr..... and have had ample opportunity to ask questions.

We give consent for our child, ..... to take gender affirming hormones. We believe this is in their best interest, that they have persistent gender dysphoria, and that they are mature enough to make their own informed decisions. This includes an understanding of permanent side effects with testosterone therapy such as deep voice, reduced fertility, and increased body hair.

Signed by Parents / Guardians:

.....Date.....

.....Date.....

I, Dr .....am satisfied that  
.....has persistent and well documented gender dysphoria, and is able to give informed consent for gender affirming hormone treatment.

Signed.....Date.....