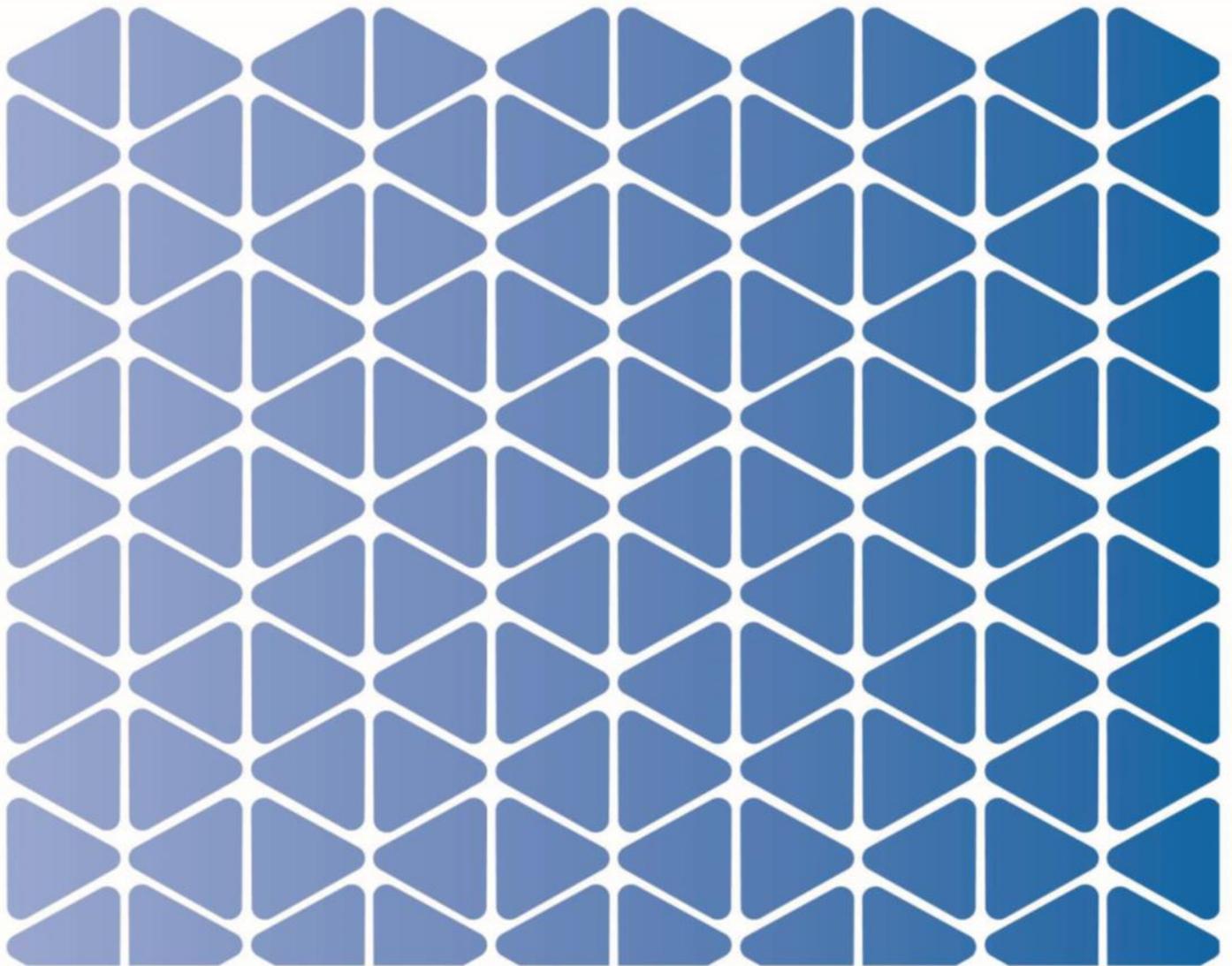




PATIENT INFORMATION

# TESTOSTERONE FOR POSTMENOPAUSAL WOMEN



## Testosterone gel for postmenopausal women with Hypoactive Sexual Desire Disorder

### What is testosterone?

Testosterone is a sex hormone produced naturally in the ovaries and adrenal glands. It is generally considered to be a male hormone, but premenopausal women actually produce 3 times more testosterone than oestrogen. Testosterone levels naturally decline with age; some women do not notice this change where as others are very sensitive to it and require additional testosterone replacement treatment.

You may benefit from a trial of testosterone if you suffer with a low sex drive and have a low testosterone level in your blood.

### What are the benefits of testosterone?

Testosterone is used to treat symptoms of Hypoactive Sexual Desire Disorder (HSDD). This is a female androgen insufficiency affecting 9-15% of postmenopausal women. The symptoms include: low sex drive (libido), decreased receptivity and pleasure, decreased orgasms and vaginal dryness. Low testosterone levels can also lead to: decreased wellbeing and blunted motivation, persistent and unexplained fatigue, decreased bone mineral density and muscular strength and changes in cognition and memory with brain fog. It is worth noting that testosterone replacement does not help everyone.

### How is testosterone treatment given?

In the UK, testosterone is prescribed 'off label' as it is not licenced for women. This means that the manufacturer of the medicine no longer specifies that it can be used for women in this way. Although testosterone is licenced for men, the licence for women was removed in 2012 for commercial reasons, despite numerous studies showing its benefit and safety. In the NHS we prescribe testosterone that is licenced for men, 'off label' at the female dose. **NICE and The British Menopause Society** both recommend considering a trial of testosterone treatment for women suffering with decreased libido and tiredness despite adequate oestrogen replacement. **The dosage directions depend on which brand you receive** – see boxes below:

**Testosterone gel (Tostran® 2%) comes in a canister.  
Use 1 pump (10mg) a pea sized amount, every other day.**

**Testosterone gel (Testogel® 40.5mg) comes in a 2.5g sachet.  
Apply 40.5mg over an 8-day period, the contents of a 2.5g sachet to be divided for daily dosing. One sachet should last 8 days.**

It should be rubbed into a dry non-hairy area most commonly the inner thigh or forearm. It is important to rotate the area to avoid hair growth and to spread it thinly. You need to allow the area to dry prior to dressing and do not wash for 2-3 hours after applying. Also ensure the area does not come into contact with your partner, children or pregnant women and wash your hands well after application. Do not use the amount stated on the packet as this is the dose for men.

### **Before commencing Testosterone**

Prior to starting testosterone it is important to ensure you first have enough oestrogen. This can be topped up with 'HRT' hormone replacement therapy. The safest route to give oestrogen is topically through the skin via a patch or gel. If you have a uterus, you will also need to take a form of progesterone; either locally (Mirena®), orally (utrogestan® tablets) or as a combined patch. If you have any symptoms of vaginal dryness it is also recommended to start topical oestrogen cream or pessaries before commencing testosterone.

Lifestyle must be optimised, as symptoms of low testosterone can be multifactorial. Symptoms can be helped by reducing alcohol intake, increasing daily exercise, improving diet and stopping smoking, increasing sleep and relaxation, and also cognitive behavioural therapy (CBT).

### **Are there any side effects?**

There can be some side effects but these are minimised by the small amount that is used and rotating the area of skin.

Testosterone has NO adverse effects on: blood pressure, lipid profile, breast cancer risk, or the endometrium (lining of the womb). Evidence from 2 year follow-up shows a lower risk of cardiovascular disease.

Other potential but uncommon risks include: increased body hair at the site of application, hirsutism, acne and male pattern hair loss, and rarely deepening of the voice and enlarged clitoris.

There is a lack of long term data in using testosterone in women, but data up to five years shows no adverse effect in healthy women after menopause.

## **Testosterone should not be given in the following cases:**

1. Pregnant or breast feeding
2. Active liver disease
3. History of hormone sensitive breast cancer
4. Competitive athletes
5. Upper normal or high baseline testosterone
6. ER positive breast cancer: avoid or use very cautiously due to the potential conversion of testosterone to oestrogen in the body. Testosterone should be prescribed on an individual basis after full counselling of the possible risk of breast cancer recurrence or progression. There is limited evidence to quantify this risk.

## **Do I need a blood test?**

Blood tests are not able to diagnose whether or not you need testosterone but are used as a safety check to ensure you are not getting too much on top of your own natural levels. Prior to starting testosterone, you should have a blood test to check: your hormone profile (oestradiol, sex hormone binding globulin (SHBG) and testosterone), and to ensure your kidneys and liver are working properly.

## **Follow-up once testosterone has been started**

You will be seen back in the clinic after three months. At this point we will review your symptom control and assess for any signs of androgen excess. Full benefit can sometimes take 3-6 months. Prior to your appointment we will ask you to repeat your blood tests (hormone profile, liver and kidney function), so that we can ensure your testosterone remains in the female range (2-5%).

You will be reviewed again at 6 months with repeat blood tests. If your symptoms have improved, we will then organise for you to have yearly reviews with your GP to monitor your testosterone level and liver function ensuring they remain in the correct range and evaluate your need to continue long-term on an individual basis.

If at the 6 month review there has been no benefit in you symptoms we will stop your testosterone as low libido has many other causes.

## **Further information and references:**

[www.womens-health-concern.org](http://www.womens-health-concern.org)

The British Menopause Society <https://thebms.org.uk>

Primary Care Womens Health forum [www.pcwhf.co.uk](http://www.pcwhf.co.uk)

NICE Guideline [NG23] Menopause: diagnosis and management

**If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.**

### **Patient Experience**

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

### **Feedback**

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

### **Patient Advice and Liaison Service (PALS)**

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

### **How to contact PALS:**

**Telephone Patient Services: 0300 123 1732 or via email at: [wah-tr.PALS@nhs.net](mailto:wah-tr.PALS@nhs.net)**

### **Opening times:**

The PALS telephone lines are open Monday to Friday from 8.30am to 4.00pm. Please be aware that you may need to leave a voicemail message, but we aim to return your call within one working day.

If you are unable to understand this leaflet, please communicate with a member of staff.