

# **THE SHEFFIELD AREA PRESCRIBING GROUP**

## **Shared Care Protocol**

**For**

### **Topical testosterone replacement therapy in post-menopausal women**

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# **Shared Care Protocol**

## **Topical testosterone replacement therapy in post-menopausal women**

### **Statement of Purpose**

This shared care protocol (SCP) has been written to enable the continuation of care by primary care clinicians of women initiated on topical testosterone preparations for the management of post-menopausal symptoms by the menopause clinic at STHFT, where this is appropriate and in the patients' best interests.

This is an unlicensed indication and this SCP does **not** cover the licensed indication of adult male hypogonadism. Prescribers should note the GMC guidance 'Good practice in prescribing and managing medicines and devices' on [shared care](#) and [prescribing unlicensed medicines](#).

This SCP does not preclude primary care prescribers from initiating testosterone without referral to the menopause clinic, provided they have the knowledge and competency to do so. For these prescribers, the SCP provides a prescribing guideline and the relevant requirements under responsibilities of the specialist and primary care clinician should be undertaken.

### **Responsibilities of specialist clinician**

- To discuss benefits and side effects of treatment with the patient/carer and obtain informed consent, in line with national guidance; this is particularly important as the indication is unlicensed.
- To provide patient / carer with contact details for support and help if required.
- To direct the patient / carer to information sources (for details see [Information for patients](#)) including the Women's Health Concern [testosterone replacement factsheet](#)
- To initiate topical testosterone replacement in appropriate patients.
- To monitor as detailed [below](#).
- To prescribe the first month's supply and monitor until patient stable.
- To contact patient's primary care prescriber to request prescribing and, once stable, monitoring under shared care and send a link to or copy of the shared care protocol.
- To advise the primary care prescriber regarding dosage and continuation of treatment, including the duration of treatment.
- To discuss any concerns with the primary care prescriber regarding the patient's therapy.
- The patient to normally remain under the specialists' care, but if on-going specialist co-ordination of the patient's care is not required an individual care plan should be agreed on a case by case basis. This may include access to advice and intervention of the specialist in a timelier manner than via a new referral.

### **Responsibilities of the primary care clinician**

- To refer appropriate patients to the menopause clinic for assessment.
- To contact the requesting specialists if concerns in joining in shared care arrangements; it will be presumed by the referring specialist that the primary care team is operating under this shared care protocol. Should the primary care prescriber feel unable to act under this shared care protocol they should discuss with the specialist requesting the care in the first instance.

If, after discussion, they still feel unable to prescribe then the primary care clinician must notify the specialist in writing.

- To report any serious adverse reaction to the appropriate bodies e.g. [MHRA](#) and the referring specialist.
- To continue to prescribe for the patient as advised by the specialist.
- Ensure monitoring as indicated in monitoring section [below](#).
- To inform the specialist if the patient discontinues treatment or monitoring for any reason.
- To seek the advice of the specialist if any concerns with the patient's therapy.
- To conduct an annual medication review or more frequent if required.
- In the event that the primary care prescriber is not able to prescribe, or where the SCP is agreed but the specialist is still prescribing certain items e.g. hospital only product, the primary care prescriber will provide the specialist with full details of existing therapy promptly by a secure method on request.
- For medication supplied from another provider prescribers are advised to follow recommendations for [Recording Specialist Issued Drugs on Clinical Practice Systems](#).

## Responsibilities of Patients or Carers

- To be fully involved in, and in agreement with, the decision to move to shared care.
- To attend hospital and primary care clinic appointments (in person or by telephone) and to bring monitoring information e.g. blood test results (if required). Failure to attend will potentially result in the medication being stopped.
- Present rapidly to the primary care prescriber or specialist should the clinical condition significantly worsen.
- Report any suspected adverse effects to their specialist or primary care prescriber whilst taking testosterone.
- To read the information on the menopause and use of testosterone (for details see [Information for patients](#)).
- To apply the topical testosterone as prescribed.
- Inform the specialist, primary care prescriber or community pharmacist dispensing their prescriptions of any other medication being taken – including over-the-counter medication.

## Indication

Testosterone replacement in post-menopausal women (medical or surgical or physiological menopause), who present with loss of libido or inadequate symptom control on conventional hormone replacement therapy (HRT).

Testosterone levels naturally decline through a woman's lifespan. Loss of testosterone is particularly marked after surgical or medical menopause. Testosterone contributes to libido, arousal and orgasm by increasing dopamine levels. Testosterone also maintains muscle and bone strength, cognition and mental well-being. Reduced testosterone levels may lead to: loss of libido, difficulties achieving orgasm, fatigue, loss of motivation.

There are currently no licensed products for testosterone replacement in women in the UK.

Available preparations that may be used (out of licence/ 'off label') include: Testogel® gel sachet 50mg/5g; Testogel® pump dispenser 16.2mg/g; Tostran® 2% pump; Testim® gel tube 50mg/5g.

National guidance:

NICE guidance NG23 [www.nice.org.uk/guidance/ng23](http://www.nice.org.uk/guidance/ng23)

British Menopause Society (BMS) – Testosterone replacement in menopause 2019

## Selection of patients

Post-menopausal women with loss of libido and/or inadequate symptom control on oestrogen containing HRT; testosterone may be used with or without systemic HRT. The urogenital tissues should be adequately oestrogenised in women with vulvovaginal atrophy/genitourinary syndrome of the menopause e.g. through use of vaginal oestrogen, to avoid dyspareunia.

Excluding patients – see [contra-indications](#) below:

## Dosage

The starting dose is approximately 5mg per day; this can be delivered as follows:

Testogel® transdermal gel 5g sachet contains 50mg testosterone – 1/10 sachet per day (5mg testosterone)

Testoge® pump dispenser 16.2 mg testosterone/g of gel - 1 metered dose (20mg testosterone) twice weekly **or** ½ metered dose (10mg testosterone) 4 x per week.

Tostran® – 2% pump canister - 1 metered dose on alternate days – 1 depression of cannister delivers 0.5mg gel (10mg testosterone)

Testim® transdermal gel 50mg/5g - apply ¼ tube alternate days (12.5mg testosterone in ¼ tube) **or** 1/10 tube per day (5mg testosterone)

See [additional information](#)

Duration of use should be individualised and benefits/risks evaluated at least on an annual basis.

## Contra-indications

- During pregnancy and breast feeding
- Active liver disease
- History of hormone sensitive breast cancer (exceptions may be made for those with intractable symptoms)
- Competitive athletes
- Women with upper normal or high baseline testosterone / free androgen index (FAI) levels
- Women with hypersensitivity to active ingredients or excipients.

## Side –effects

Clinical trials have demonstrated that, as long as appropriate female physiological doses are prescribed, adverse androgenic effects are not problematic and virilising problems do not occur. Reported adverse effects are shown below; if thought to be linked to treatment, the

primary care clinician should contact the specialist for advice on reducing the dose or stopping the treatment.

- Increased body hair at the site of application - occasional problem - spread more thinly, rotate site of application, reduce dose
- Generalised hirsutism – uncommon - reduce dose/stop
- Alopecia, male pattern baldness, hair loss – uncommon – reduce dose/stop
- Acne, greasy skin – uncommon - reduce dose/stop
- Deepening of voice – rare - reduce dose/stop
- Enlargement of clitoris - rare – reduce dose stop
- Localised skin reactions

The long-term side effects of testosterone usage in women are unknown. However, RCTs and meta analyses have not shown an increased risk of cardiovascular disease or breast cancer but longer-term trials are needed.

## Monitoring

Response to testosterone is highly variable due to varying absorption and metabolism. Side effects are uncommon when levels are kept in the physiological range.

### Specialist monitoring

Serum testosterone, sex hormone binding globulin and free androgen index (FAI) to be measured prior to commencement of testosterone therapy and after 3 months of treatment. Repeat levels 2-3 monthly until stable. This will be organised and reviewed by the menopause clinic.

Monitor symptom relief – stop testosterone after 6 months if physiological levels have been raised within normal range, six months treatment has been tried without improvement in symptoms.

### Primary care clinician monitoring

Annual free androgen index (FAI), when stable, symptom and side effect review for those who continue to use testosterone.

Aim for FAI <5%

Abnormally raised FAI: if a single FAI is raised beyond the laboratory normal range in the absence of symptoms, do not modify the dose; repeat the FAI and contact the specialist with this result if it is also abnormal.

If appropriate report any serious adverse reaction to the MHRA, using the [yellow card](#) system.

## Interactions

Please refer to the current BNF and the SPC.

## **Additional information**

Avoid skin to skin contact with applications to prevent testosterone transfer to others, especially pregnant women and children.  
Apply testosterone with clean hands to clean, dry skin on lower abdomen or upper thighs.

Wash hands immediately after application

Do not cover skin for 3-5 minutes until dry.

Tostran® pump - do not wash site for 2 hours.  
Testogel® pump dispenser - do not wash site for 2 hours.  
Testogel® sachet – do not wash the site for 1 hour.  
Testim® gel - do not wash site for 6 hours.

## **Re-Referral guidelines**

Refer back to Dr Stillwell or referring specialist at the menopause clinic as needed: for symptom control, discussion re medication, side effects etc.

## **Contacts for Support, education and information**

Dr Sue Stillwell  
Menopause Lead  
Jessop Wing  
Royal Hallamshire Hospital  
Sheffield

Secretary Lesley Mercer- Colposcopy office – Jessop wing  
Tel 0114 2268300

[Susanstillwell@nhs.net](mailto:Susanstillwell@nhs.net)

[www.thebms.org.uk](http://www.thebms.org.uk) British menopause society – Tools for clinicians testosterone replacement in menopause – information for GPs and other health professionals.  
<https://thebms.org.uk/publications/tools-for-clinicians/testosterone-replacement-in-menopause/>

### **Information for patients:**

<https://www.womens-health-concern.org/> factsheets – testosterone for women  
<https://www.womens-health-concern.org/help-and-advice/factsheets/testosterone-for-women/>

[Rockmymenopause.com](http://Rockmymenopause.com) Rock My Menopause is a public campaign of the Primary Care Women's Health Forum ([PCWHF](http://PCWHF))

[Menopausedoctor.co.uk](http://Menopausedoctor.co.uk)

Note: These sources are recommended to assist patients with their understanding and management of the menopause, HRT and use of testosterone. Neither the CCG nor STH is responsible for their content.

## Equality and Diversity

The SCP is only applicable in the management of menopause and therefore only applies to ciswomen. There is a Sheffield pathway for testosterone replacement for men and a SYB ICS collaborative care protocol for transmen.

## References

Achilli C et al. Efficacy and safety of transdermal testosterone in postmenopausal women with hypoactive sexual desire disorder; a systematic review and meta-analysis.

[Fertil Steril 2017; 107\(2\):475-482](#)

Barber RJ, Panay N, Fenton A, International Menopause Society (IMS) writing group. 2016 IMS Recommendations on women's midlife health and hormone therapy.

[Climacteric. 2016; 19\(2\):109-150](#)

Islam RM et al. Safety and efficacy of testosterone for women: a systematic review and meta-analysis of RCT data.

[Lancet 2019; 7 \(10\):754-766](#)

NICE NG23: Menopause Diagnosis and management

[www.nice.org.uk/guidance/ng23](http://www.nice.org.uk/guidance/ng23)

British Menopause Society (BMS) – Testosterone replacement in menopause 2019

<https://thebms.org.uk/publications/tools-for-clinicians/testosterone-replacement-in-menopause/>

MHRA: Off-label or unlicensed use of medicines; prescribers responsibilities.

<https://www.gov.uk/drug-safety-update/off-label-or-unlicensed-use-of-medicines-prescribers-responsibilities>

NHS England Responsibility for prescribing between Primary & Secondary/Tertiary Care (January 2018)

<https://www.england.nhs.uk/wp-content/uploads/2018/03/responsibility-prescribing-between-primary-secondary-care-v2.pdf>

Full details of prescribing information on topical testosterone products is given in the manufacturers summary of product characteristics (SPCs), available from

[www.medicines.org.uk](http://www.medicines.org.uk) ; however, note these refer to the licensed use in male hypogonadism.