Frimley Health and Care

TESTOSTERONE TRANSDERMAL GEL FOR LOW LIBIDO IN MENOPAUSAL & POST-MENOPAUSAL WOMEN

INFORMATION FOR PRIMARY CARE PRESCRIBERS

Introduction

The National Institute for Health and Care Excellence (NICE NG23: Menopause: diagnosis and management and a global position statement) guidelines state that testosterone supplementation can be considered for menopausal women with low sexual desire if hormone replacement therapy (HRT) alone is not effective. The British Menopause Society (BMS) 2016 recommendations advise that this indication could be extended to include menopausal women with low sexual desire and tiredness.

Testosterone gel for low libido in menopausal and post-menopausal women is an unlicensed indication and prescribing in primary care should only be undertaken on the recommendation of a menopause specialist or a primary care clinician/general practitioner familiar with current guidance.
A biopsychosocial approach should be taken to assess contributory factors such as psychosexual, physical, iatrogenic and environment circumstances.
Prior to commencing a trial of testosterone, women should have been taking conventional HRT for at least 6 months and the oestrogen dose should have been optimised. If under the care of a specialist, the patient should be on a stable dose before the GP is requested to take over prescribing.

Note: Tibolone is the only licensed product for low libido.

Background

Testosterone is a normal and important female hormone. Young women produce three to four times the amount of testosterone than they do oestrogen. Reduced or lack of libido is very common in menopausal women. Testosterone levels naturally decline throughout a woman's lifespan, by approximately 55% from 18-62 years followed by a small increase around 70 years. Loss of testosterone can be particularly profound after surgical and medical menopause and premature ovarian insufficiency but can be significant after natural menopause in some women.

Monitoring

- It is recommended that **total testosterone levels** are checked before treatment to establish a baseline for future monitoring and to ensure that levels are not in the upper range before treatment is commenced. Total testosterone levels provide a more accurate representation of therapeutic response than free testosterone, or the calculated Free Androgen Index (FAI).
- Free testosterone assays are not recommended as reliability and correlation with clinical outcomes has not been confirmed.
- If Free Androgen Index (FAI) has been measured, it should be noted that under 5% is the normal physiological range for women.

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- Repeat total testosterone levels at 3-4 months to demonstrate if there has been an increase in levels, though clinical response is of paramount importance. Ongoing monitoring is also useful to demonstrate that total testosterone levels are being maintained within the normal female physiological range using the laboratory reference range where the test is carried out.

Treatment

- The British Menopause Society recommends a 3-6 month trial of testosterone therapy to fully evaluate the effectiveness of treatment.
- Treatment should be discontinued if there is no improvement in symptoms .
- Duration of use should be individualised and evaluated at least on an annual basis, weighing up the benefits and risks, as per HRT advice from all menopause societies.
- NICE Guideline [NG23] recommends that each treatment for short-term menopausal symptoms should be reviewed at around 3 months to assess efficacy and tolerability (to be carried out by initiating clinician). Then annually, unless there are clinical indications for an earlier review, such as treatment ineffectiveness, side-effects or adverse events.
- It is estimated that women will remain on treatment for approximately 5 years.

Vaginal Oestrogen: When treating low sexual desire/arousal, it is also important that urogenital tissues are adequately oestrogenised in women with vulvovaginal atrophy / genitourinary syndrome of the menopause e.g. through use of vaginal oestrogen in order to avoid dyspareunia.

The following testosterone preparations are available (subject to supply):

Tostran® (2% testosterone gel in a canister containing 60g)
Starting dose: 1 metered pump of 0.5g = 10mg on alternate days – each canister should last 240 days.
Please note that a twice weekly dose may be sufficient for some women- start low and go slow.

Testogel® (40.5mg testosterone in 2.5g sachet)
Starting dose: 1/8th of a sachet/day = 5mg/day i.e. each sachet should last 8 days. The sachet should be stored in the fridge.

Application instructions:

- Women should be adequately counselled on application instructions to ensure appropriate usage.
- A small pea-size amount is applied daily IN THE MORNING and spread over lower abdomen/upper thigh and allowed to dry. The application site should be rotated to reduce the potential for hair growth.
- The tube can be re-capped or the open sachet should be closed with a clip.

- It is not necessary to rub it into the skin. The alcohol evaporates and the testosterone is absorbed into the upper layers of the skin. The testosterone is then gradually released into the circulation over the next 24 hours.
- Allow 3 - 5 minutes to dry before dressing.
- Wash hands with soap and water after application.
- Skin contact with partners or children should be avoided until dry.

Adverse Effects

- Women should be adequately counselled on possible adverse effects.
- Response to testosterone with regards to efficacy and adverse effects is highly variable, most likely due to varying absorption, metabolism, SHBG levels and sensitivity to testosterone. If adverse effects are thought to be linked to testosterone, reduce dosage or stop treatment.
- Occasionally, increased body hair at the site of application may occur, in which case, spread more thinly, vary the site of application, and/or reduce dosage.
- Generalised hirsutism (uncommon); alopecia, male pattern hair loss (uncommon); acne and greasy skin (uncommon); deepening of voice (rare); enlarged clitoris (rare)

Contraindications and cautions

- History of hormone sensitive breast cancer – off label exceptions to this may be agreed in fully informed women with intractable symptoms not responding to alternatives
- Endometrial cancer
- History of liver tumours or active liver disease
- Hypercalcaemia
- Known hypersensitivity to the active substance or any of the excipients listed in the SPC (see individual product SPCs)
- Pregnancy or breast-feeding

Cautions

- Competitive athletes – care must be taken to maintain levels well within the female physiological range
- Women with upper normal or high baseline testosterone levels / FAI.

Interactions

- Warfarin- testosterone may increase the anticoagulant effect- monitor INR especially when the treatment is started, stopped or the dose adjusted.
- ACTH or corticosteroids- increased likelihood of oedema; use with caution, particularly in patients with cardiac, renal or hepatic disease.
- Anti-diabetic medicines- androgens may improve glucose tolerance and decrease the need for insulin or other anti-diabetic medicines. Monitor patients at the beginning or end of treatment.

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- Spironolactone due to anti-androgen properties.

Testosterone is a Schedule 4 Controlled Drug – Part II and the recommended prescribed quantity should not exceed 30 days unless exceptionally, to cover a justifiable clinical need and after consideration of any risk, a prescription can be issued for a longer period. The reasons for the decision should be recorded on the patient's notes.

Women should be counselled that testosterone transdermal gel for low libido in menopausal & post-menopausal women is an unlicensed indication and it is good practice to ensure this is documented in the patient record e.g 'Prescription of medication for unlicensed indication'

Private to NHS Care

- GPs should only take on prescribing of testosterone Gel for low sexual desire in post-menopausal women if the patient's clinical circumstances meet the initiation criteria set out in the BMS Toolkit and NICE CG23 guidance.
- As with all recommendations to prescribe from a private consultant/specialist, GPs do not have to take on prescribing if in their clinical judgment they do not think it is medically appropriate for the patient or they are unwilling to accept clinical responsibility for prescribing the medication.
- Patients should be advised that requests to prescribe AndroFeme [Lawley Pharma] (1% testosterone cream) following a private consultation, will need to be funded privately. AndroFeme is not currently available on the NHS and is being imported from Western Australia by special license from the MHRA.

References:

NICE NG23: Menopause: diagnosis and management. Last updated: 05 December 2019

British Menopause Society Toolkit
BMS Tools for Clinicians - British Menopause Society (thebms.org.uk)

British Menopause Society Guidelines. Testosterone replacement in menopause. May 2022.
08-BMS-TfC-Testosterone-replacement-in-menopause-DEC2022-A.pdf (thebms.org.uk)

Tostran® SPC. Tostran 2% Gel - Summary of Product Characteristics (SmPC) - (emc) (medicines.org.uk) Last updated on www.medicines.org.uk Feb 2020

Testogel® SPC. TESTOGEL 40.5 mg, transdermal gel in sachet - Summary of Product Characteristics (SmPC) - (emc) (medicines.org.uk) Last updated on www.medicines.org.uk Feb 2022

British National Formulary, "Testosterone"[Online] Testosterone | Drugs | BNF | NICE [Accessed Dec 2022]
Joint position statement by the British Menopause Society, Royal College of Obstetricians and Gynaecologists and Society for Endocrinology on best practice recommendations for the care of women experiencing the menopause. Post Reproductive Health 2022, Vol. 0(0) 1–2

Global Consensus Position Statement on the Use of Testosterone Therapy for Women, 2019
Full article: Global Consensus Position Statement on the Use of Testosterone Therapy for Women (tandfonline.com)

Acknowledgements

Adapted from the following guidelines and factsheets.

Bedfordshire, Luton and Milton Keynes Area Prescribing Committee (BLMK APC) Testosterone Gel for low sexual desire in postmenopausal women – Fact Sheet
Version 1.2, November 2022 Testosterone-Fact-Sheet-update-Nov-2022.pdf (icb.nhs.uk)

Nottinghamshire Area Prescribing Committee
Testosterone for low libido in postmenopausal women Information Sheet for Primary Care Prescribers
testosterone-for-postmenopausal-women.pdf (nottsapc.nhs.uk)

Dorset Medicines Advisory Group
GUIDELINE FOR THE OFF-LABEL USE OF TESTOSTERONE (TESTIM® OR TESTOGEL®) IN POSTMENOPAUSAL WOMEN Dorset Testosterone guideline April 22.pdf

West Essex Clinical Commissioning Group GP Fact Sheet – Testosterone gel for women in the menopause
Testosterone gel GP fact sheet (westessexccg.nhs.uk)

Lancashire & South Cumbria Medicines Management Group
Shared Care Guideline Drug: Testosterone (transdermal) As supplementation for postmenopausal women with low sexual desire if HRT alone is not effective
testosterone-shared-care-guideline-female-sexual-dysfunction-final-for-website.pdf (lancsmmg.nhs.uk)

Oxfordshire Clinical Commissioning Group
Oxfordshire HRT formulary and treatment guidance HRT Formulary and Treatment Guidance.pdf (sitekit.net)