# Guidance on the management of menopause in primary care

Menopause is a biological stage in a woman's life when menstruation ceases permanently due to the loss of ovarian follicular activity. The average age of the natural menopause is 51 years, but can occur much earlier or later. Menopause occurring before the age of 45 is called early menopause and before the age of 40 is premature menopause. Late menopause may also occur, but by the age of 54 years 80% of women will have stopped having periods. See appendix 4 for further definitions.

This guideline is aimed at assisting GPs in the diagnosis and treatment of menopause. Practitioners should adopt an **individualised approach** at all stages of diagnosis, investigation and management of menopause. These recommendations are based on NICE guidance NG23 Menopause: diagnosis and management.

## HISTORY

### Symptoms of menopause

- Change in menstrual cycle
- Vasomotor symptoms (hot flushes, sweats)
- Musculoskeletal (joint and muscle pain)
- Mood (low mood)
- Urogenital (vaginal dryness)
- Sexual difficulties (low sexual desire)

### Other relevant factors in the history

- Determine last menstrual period and current bleeding pattern
- Assess risk factors for breast cancer, osteoporosis, venous thromboembolism (VTE) and heart disease
- Determine treatment priorities for patient
- Assess contraception need (and fertility intentions)
- Determine lifestyle factors – diet, exercise, alcohol intake and smoking
- Cancer screening status
- Relevant medical, social and drug history

## DIAGNOSIS OF MENOPAUSE

### Clinical Diagnosis

In otherwise **healthy women over 45 years with menopausal symptoms,** the diagnosis of menopause should be without laboratory tests and based on the following clinical presentations:

- Vasomotor symptoms and irregular periods – perimenopause.
- Amenorrhoea for more than 12 months in women not using hormonal contraception.
- Menopausal symptoms for a woman without a uterus.

### Laboratory Diagnosis

Follicle-stimulating hormone (FSH) fluctuates considerably over short periods of time during the years leading up to menopause and so blood levels are not a helpful addition to what is a clinical diagnosis. Consider using a FSH test to diagnose menopause **only in women:**

- Aged 40-45 years with menopausal symptoms such as vasomotor and associated with a change in their menstrual cycle.
- Aged under 40 years in whom primary ovarian insufficiency is suspected.

- Age >45 for a woman using progestogen methods of contraception who is amenorrhoeic to help decide about the need to continue contraception. This is not useful for women using the combined pill as this will affect FSH levels (and probably suppress menopausal symptoms).

As a general guide, FSH > 30 units/L indicates a degree of ovarian insufficiency but not necessarily sterility; review need for contraception and be cautious when counselling women with potential premature ovarian insufficiency. Take into consideration that FSH measurement may be inaccurate in women who are taking hormonal treatments, for example high dose progestogens for the treatment of heavy periods or combined contraception.

## MANAGEMENT OF MENOPAUSE

**General advice**

Give information and advice about:

- Stages of menopause
- Symptoms and diagnosis
- Lifestyle advice and diet modification
- Benefits vs risks of treatments (see appendices 1 and 2)
- Long-term health implications of menopause
- Treatment options

**Treatment options can be divided into:**

- Hormonal e.g. hormone replacement therapy (HRT)
- Non-hormonal e.g. clonidine
- Non-pharmaceutical e.g. cognitive behavioural therapy (CBT)
- Lifestyle advice

## Hormonal treatment

**Treatment choice and dosing**

- The type of HRT most suited to a woman will depend on a variety of factors, including her symptoms, her stage in the menopausal process, and whether or not she has had a hysterectomy.
- Non-hysterectomised women require both oestrogen and progestogen replacement which offers endometrial protection. Women who have had a hysterectomy can receive unopposed oestrogen only therapy.
- There are two types of oestrogen replacement - natural oestrogens have a more appropriate profile for hormone replacement therapy than synthetic oestrogens.
    - **Natural oestrogens:** estradiol (oestradiol), estrone (oestrone) and estriol (oestriol).
    - **Synthetic oestrogens:** ethinylestradiol (ethinyloestradiol) and mestranol.

**Types of HRT**

- **Unopposed oestrogen** – suitable for continuous use in women without a uterus.
- **Combined oestrogen + progestogen** – for women with a uterus. Oestrogen relieves typical menopausal symptoms such as hot flushes. Progestogens are added to reduce the increased risk of endometrial hyperplasia and cancer which occurs with unopposed oestrogen.
    - **Sequential combined HRT** mimics the normal menstrual cycle with withdrawal bleed at the end of each cycle. It is used in perimenopause and during the first year or two after menopause.
    - **Continuous combined HRT** contains continuous progestogen with oestrogen, so there is no withdrawal bleed. It is not suitable for perimenopausal women or within 12 months of the

last menstrual period. Usually, women start on sequential combined HRT and change to continuous combined HRT later.

- **Tibolone** is a synthetic steroidal compound with oestrogenic, progestogenic and androgenic activity. It is taken continuously and there is no withdrawal bleed.

**Hormone replacement therapy prescribing principles**

- Use an individualised approach involving women themselves in making their decisions about treatment.
- Use the lowest effective dose of HRT to control menopausal symptoms.
- Through individualised assessment, establish whether HRT will be given via oral, transdermal, subcutaneous or vaginal routes.
- Progestogen should always be given in combination with oestrogen in non-hysterectomised women to ensure adequate endometrial protection. The risk of endometrial hyperplasia and carcinoma is increased when systemic oestrogens are administered alone for prolonged periods.
- Mirena® (levonorgestrel intrauterine delivery system) provides contraception, and can be used in combination with oral or transdermal unopposed oestrogen preparations without additional exogenous progestogens. Mirena® should only be inserted by an appropriately trained practitioner and is licensed for 4 years for HRT.
- Consider the timing and length of time for which HRT will be prescribed - the risks and benefits of long-term use of HRT should be assessed for each woman at regular intervals. Prescribing HRT for 5 years in women under 60 years does not confer significant additional risks.
- Allow 3 months of treatment until changing regime as side effects can take some time to subside.
- Women may choose to discontinue therapy as either a sudden or gradual process.
- Consider what (if any) monitoring might be needed when prescribing HRT.

*N.B. HRT is not indicated as first line primary prevention of osteoporosis for asymptomatic women – bisphosphonates and other pharmaceutical agents should be considered as alternative particularly in women over 60 years old. HRT does not prevent coronary heart disease or protect against a decline in cognitive function and it should not be prescribed for these purposes.*

**Information for women commencing hormone replacement therapy**

- Reinforce the importance of adherence to medication for maximum benefit.
- Inform non-hysterectomised women on HRT that the progestogen component of therapy is essential.
- Inform women of the bleeding pattern that will occur with the chosen regime and emphasise that irregular bleeding is common in the first 3-6 months.
- Discuss risks and benefits of selected treatment.
- For the treatment of menopausal symptoms, the benefits of short-term HRT outweigh the risks in the majority of women, especially in those aged under 60 years. Experience of treating women over 65 years with HRT is limited.
- HRT does not prevent coronary heart disease or protect against a decline in cognitive function and it should not be prescribed for these purposes.
- Remind women to continue with breast and cervical cancer screening programmes as per guidelines.
- Provide Information about fertility and/or contraception if appropriate - remind women at the perimenopausal stage that HRT is not a contraceptive and that contraceptive precautions are still necessary.

**Table 1. Management of oestrogenic and progestogenic side effects (adapted from Menopause Matters)**

| **Oestrogenic side effects** |
|---|

| Symptoms | | Management |
|---|---|---|
| Breast symptoms: breast tenderness, enlargement | | If appropriate, try a lower dose of oestrogen. Over-the-counter (OTC) evening primrose oil or starflower oil may be of benefit. Note these preparations are **not to be prescribed on NHS prescriptions.** |
| Gastrointestinal symptoms: bloating, nausea | | Take with food or consider an alternative route. |
| Other symptoms: leg cramps, headache | | Change oestrogen type or route. |
| **Progestogenic side effects** | | |
| **Symptoms** | **Management** | **Alternative preparations** |
| Headache, depressed mood, premenstrual syndrome (PMS) type symptoms, breast tenderness, lower abdominal pain, acne/greasy skin | Change to a different progestogen | **Testosterone derived** – Norethisterone, Norgestrol or Levonogestrel<br>**Progesterone derived** - Medroxyprogesterone |
| | Change route | Progestogen by Mirena® or vaginal gel may reduce side effects |
| | Change drug class or regime | • If postmenopausal and on sequential regime, change to continuous combined with a lower dose progestogen<br>• If using continuous combined try sequential regimen where progestogen is given on fewer days of the month<br>• Try tibolone*<br>• Micronised progesterone such as Utrogestan® - may be indicated for high risk women or those with progestagenic side effects. |

* **Tibolone** can be used as a continuous combined therapy for hormone replacement. It is effective in improving menopausal symptoms and has bone-protective properties. It has combined oestrogenic, progestogenic and androgenic properties. No additional progestogen is needed. It can be useful for women who are experiencing loss of libido due to androgenic properties. The same indications and cautions apply to tibolone as other HRT.

## Non-hormonal treatments

**Clonidine**

Clonidine is a non-hormonal treatment mainly used in hypertension treatment. However it can be used to treat vasomotor symptoms in menopause with reasonable effect for women in whom HRT is contraindicated.

**Selective serotonin reuptake inhibitors**

There is no clear evidence that selective serotonin reuptake inhibitors (SSRIs) or serotonin and norepinephrine reuptake inhibitors (SNRIs) ease low mood in menopausal women without a diagnosis of depression.

## Non-pharmaceutical management

**Complementary therapies and unregulated preparations**

- There is some evidence that isoflavones or black cohosh may relieve vasomotor symptoms, however, multiple preparations are available and their quality, purity and safety is uncertain. Preparations may vary and interactions with other medicines have been reported.
- Advise patients that although St John's Wort may relieve vasomotor symptoms, there is uncertainty about dose, persistence of effect, variation, and there may be potentially serious drug interactions.
- Explain to patients that the safety and efficacy of unregulated compounded bioidentical are unknown.
- Explain to patients that these preparations are not available on NHS prescriptions – **women should be advised to purchase these preparations OTC.**

**Cognitive behavioural therapy**

Cognitive behavioural therapy has been shown to have some effect in the management of vasomotor symptoms. It can also be useful in managing depression and anxiety that may be associated with menopause.

**Lifestyle advice**
This should include adequate calcium and vitamin D intake for bone health, smoking cessation and avoidance of excessive alcohol consumption.

## REVIEW AND REFERRAL

- Discuss the importance of national health screening.
- Review at 3 months to assess efficacy and tolerability of treatment.
- Review annually thereafter unless there are clinical indications for an earlier review (such as treatment ineffectiveness, side effects or adverse events). Blood pressure and weight should be checked. Consider alternative osteoporosis treatments.

**Consider referring women to a healthcare professional with expertise in menopause if:**

- There are menopausal symptoms and contraindications or risks of HRT (e.g. history of breast cancer).
- There is uncertainty about the most suitable treatment options for their menopausal symptoms.

**Referral pathways**
Specialist menopause advice can be obtained through referral to the Ivy Community Gynaecology Clinic. Email referrals or queries to the Community Gynaecology email huh-tr.communitygynaecology@nhs.net

***If a woman presents with unexplained/abnormal vaginal bleeding and is over the age of 45, they should be referred to the fast track Homerton gynaecology service for investigation.***

## RESOURCES FOR PATIENTS

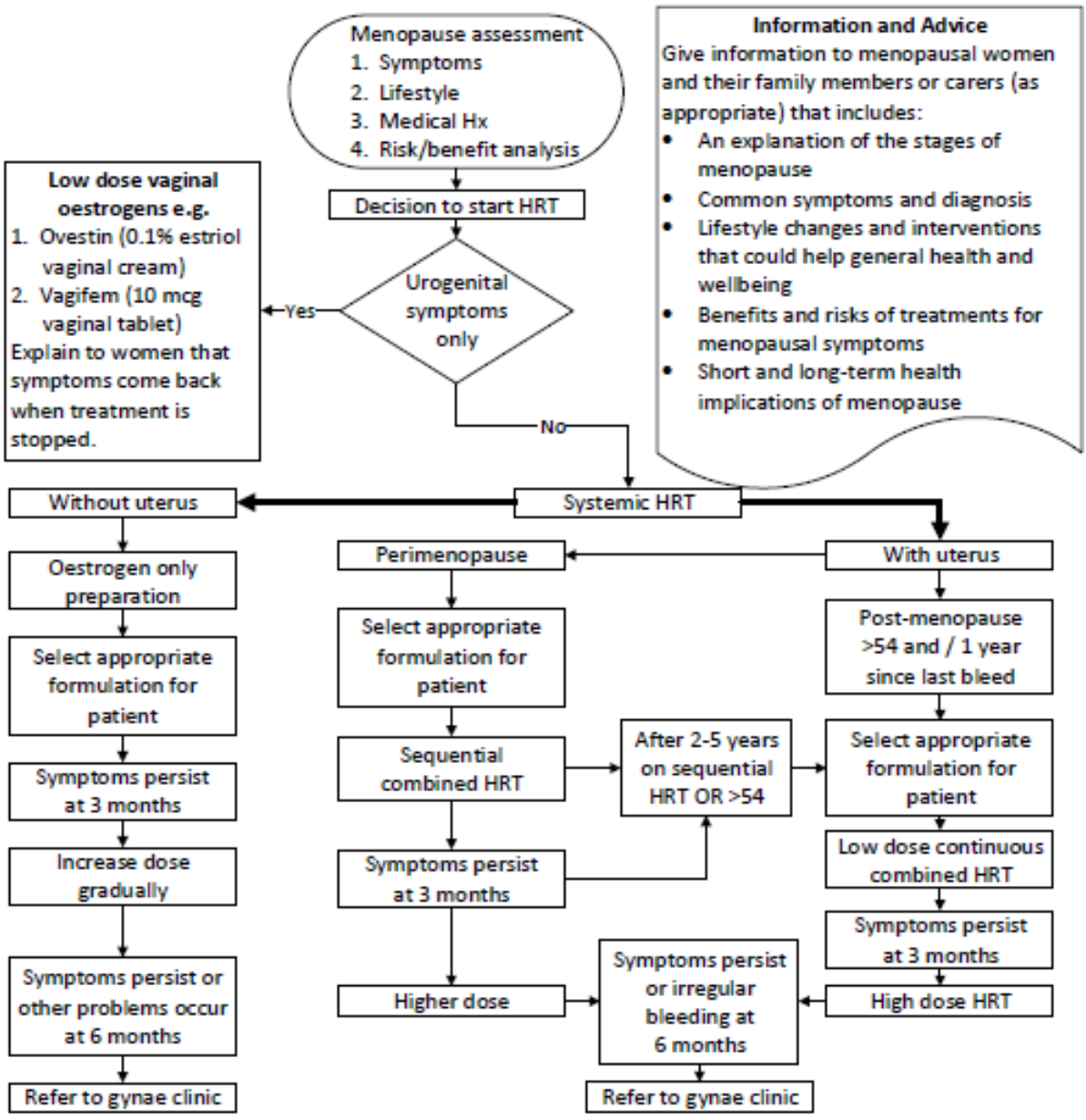
Use materials such as NICE's information for the public, NHS Menopause article and the Women's Health Concern leaflet to help support women to make informed decisions when advising them about HRT. Other useful resources can also be found on the Menopause Matters website http://www.menopausematters.co.uk

Hands Inc is a Hackney based charity that offers courses and other forms of menopause support including CBT https://reclaimthemenopause.com

**References**

1. National Institute for Health and Care Excellence (Nov 2015) Menopause: diagnosis and management. NICE guideline NG23. Available at https://www.nice.org.uk/guidance/ng23 [accessed 30/06/2017].
2. PrescQIPP (Apr 2017) Bulletin 182 Menopause. Available at https://www.prescqipp.info/resources/category/365-menopause [accessed 30/06/2017].
3. Menopause Matters (updated Feb 2015) HRT: side effects. Available at http://www.menopausematters.co.uk/sideeffects.php [accessed 30/06/2017].
4. BNF on Formulary Complete edition 73 (Jun 2017). Available at https://ebnf.homerton.nhs.uk [accessed 08/06/2017].
5. MIMS available at http://www.mims.co.uk [accessed 30/06/2017].

**City and Hackney menopause pathway**




**Lifestyle advice to control symptoms**

**HOT FLUSHES and NIGHT SWEATS:**

- Taking regular exercise and losing weight (if applicable) may reduce the severity and frequency of flushes.
- Wearing lighter clothing, sleeping in a cooler room, reducing stress, and avoiding possible triggers (such as spicy foods, caffeine, smoking and alcohol) may also be helpful in reducing these symptoms.

**SLEEP DISTURBANCES:**

- Avoiding exercise late in the day and maintaining a regular bedtime can improve sleep.

**MOOD AND ANXIETY DISTURBANCES:**

- Adequate sleep, regular physical activity, and relaxation exercises may help.

**COGNITIVE SYMPTOMS:**

- Exercise and good sleep hygiene may improve subjective cognitive symptoms.

| | Unopposed oestrogen (1 prescription charge) | Sequential combined (2 prescription charges) | Continuous combined (1 prescription charge) |
|---|---|---|---|
| Oral standard strength (1mg) | Elleste® Solo 1mg | Elleste Duet 1mg | Kliofem® |
| Oral higher strength (2mg) | Elleste Solo 2mg | Elleste® Duet 2mg | Kliovance® |
| Patch | Evorel® (all strengths) | Evorel® Sequi | Evorel® Conti |
| Adjunctive progestogen to be considered in women who have had hysterectomy for previous endometriosis, as endometrial foci may remain despite hysterectomy. Provera® 10 mg daily for the last 14 days of each 28-day oestrogen HRT cycle | | | |

**Table 2. Oral hormone replacement therapy products (prices according to MIMS and BNF, accessed November 2018)**

| Brand | Active ingredients | Form | Cost/28d | Prescribing notes |
|---|---|---|---|---|
| **Sequential combined - oestrogen + progestogen (2 prescription charges)**<br>Use in women with a uterus in perimenopause and during the first year or two after menopause. Mimics the normal menstrual cycle with monthly bleed. | | | | |
| Elleste-Duet® 1-mg | Estradiol 1mg + Norethisterone acetate 1mg | Tablets | £3.07 | |
| Elleste-Duet® 2-mg | Estradiol 2mg + Norethisterone acetate 1mg | Tablets | £3.07 | Menopausal symptoms and osteoporosis prophylaxis. |
| Cyclo-progynova® | Estradiol valerate 2mg + Norgestrel 500microgram | Tablets | £3.11 | |
| **Continuous combined – oestrogen + progestogen (1 prescription charge)**<br>Use in women with a uterus. Not suitable for perimenopausal women or within 12 months of last menstrual period. Cycle free (no monthly bleed). | | | | |
| Kliofem® | Estradiol 2mg + Norethisterone acetate 1mg | Tablets | £3.81 | If changing from cyclical HRT, begin treatment at the end of scheduled bleed. |
| Kliovance® | Estradiol 1mg<br>Norethisterone acetate 500microgram | Tablets | £4.40 | |
| Elleste-Duet Conti® | Estradiol 2mg + Norethisterone acetate 1mg | Tablets | £5.67 | |
| **Unopposed oestrogen continuous (1 prescription charge)**<br>Suitable for use in women without a uterus. Add cyclical progestogen for 12–14 days of each cycle in women with a uterus. | | | | |
| Elleste-Solo® 1-mg | Estradiol 1mg | Tablets | £1.69 | |
| Elleste-Solo® 2-mg | Estradiol 2mg | Tablets | £1.69 | |
| **Continuous mixed oestrogenic, progestogenic and weak androgenic activity (1 prescription charge)** | | | | |
| Livial® | Tibolone | Tablets | £10.36 | Unsuitable for use in premenopause (unless being treated with gonadotrophin-releasing hormone analogue) and as (or with) an oral contraceptive; also unsuitable for use within 12 months of last menstrual period (may cause irregular bleeding). If transferring from cyclical HRT, start at end of regimen; if transferring from continuous-combined HRT, start at any time. |
| **Adjunctive progestogen (1 prescription charge)** | | | | |
| Provera® 10mg | Medroxyprogesterone acetate 10mg | Tablets | £3.46 | Use during the last 14 days of each 28-day oestrogen HRT cycle. |
| Utrogestan® | Micronised progesterone 100mg | Capsules | £4.10<br>£4.28 | 200 mg once daily on days 15–26 of each 28-day oestrogen HRT cycle, **alternatively** 100 mg once daily on days 1–25 of each 28-day oestrogen HRT cycle for a continuous combined regime. |
| Mirena® | Levonorgestrel 20 micrograms/24 hours | Intra-uterine system | 1 device = £88.00 | Insert during last days of menstruation or withdrawal bleeding or any time if amenorrhoeic, effective for 4 years. |

**Table 3. Oral hormone replacement therapy products being discontinued**

| Brand | Active ingredients | Form | Alternative brands |
|---|---|---|---|
| Premique®<br>(continuous combined) | Conjugated oestrogens 625microgram<br>Medroxyprogesterone acetate 1.5mg | Tablets | **1st line** – Kliofem®<br>**2nd line** – Kliovance® |
| Prempak-C® 0.625 Calendar pack<br>(sequential combined) | Conjugated oestrogens 625microgram<br>Norgestrel 150microgram | Tablets | Elleste-Duet® 2-mg |
| Prempak-C 1.25 Calendar pack<br>(sequential combined) | Conjugated oestrogens 1.25mg<br>Norgestrel 0.15mg | Tablets | Elleste-Duet® 2-mg |

**Table 4. Hormone replacement transdermal products (prices according to MIMS and BNF, accessed November 2018)**

| Brand | Active ingredients | Form | Dose | Cost per pack |
|---|---|---|---|---|
| **Use in women with a uterus** | | | | |
| Evorel® Conti (continuous combined) | Estradiol approx. 50 micrograms/24 hours and norethisterone acetate approx. 170 micrograms/24 hours. | Patches | 1 patch to be applied twice weekly continuously. | 8-patch pack = £13.00<br>24-patch pack = £37.22<br>**1 prescription charge** |
| Evorel® Sequi combination pack (sequential combined) | *Evorel®* - Estradiol approx. 50 micrograms/24 hours.<br>*Evorel® Conti* - estradiol approx. 50 micrograms/24 hours and norethisterone acetate approx. 170 micrograms/24 hours. | 2 different patches | 1 Evorel® 50 patch to be applied twice weekly for 2 weeks, starting within 5 days of onset of menstruation (or at any time if cycles have ceased or are infrequent), followed by 1 Evorel® Conti patch twice weekly for 2 weeks; subsequent courses are repeated without interval. | 8-patch pack = £11.09<br>**2 prescription charges** |
| **Unopposed oestrogen continuous – use in women without a uterus (1 prescription charge)** | | | | |
| Evorel® 25 | Estradiol, '25' patch (releasing approx. 25 micrograms/24 hours) | | Menopausal symptoms and osteoporosis prophylaxis.<br>1 patch to be applied twice weekly continuously starting within 5 days of onset of menstruation (or at any time if cycles have ceased or are infrequent), with cyclical progestogen for 12–14 days of each cycle in women with a uterus; therapy should be initiated with Evorel 50 patch; subsequently adjust according to response; dose may be reduced to Evorel 25 patch after first month if necessary for menopausal symptoms | 8-patch pack = £3.42 |
| Evorel® 50 | Estradiol, '50' patch (releasing approx. 50 micrograms/24 hours) | | | 8-patch pack = £3.88<br>24-patch pack = £11.66 |
| Evorel® 75 | Estradiol, '75' patch (releasing approx. 75 micrograms/24 hours) | | | 8-patch pack = £4.12 |
| Evorel® 100 | Estradiol, '100' patch (releasing approx. 100 micrograms/24 hours) | | | 8-patch pack = £4.28 |
| Oestrogel® 0.06% | Estradiol 600 micrograms/g | | Apply 1.5 mg (2 pumps) once daily continuously, increased if necessary up to 3 mg after 1 month continuously. One pump actuation from the dispenser, or half the prescribed dose, should be applied to each arm/shoulder (or thigh). Do not apply on or near the breasts. The area of application should be as large as possible at least 750cm$^2$. | 80g = £4.80 |

N.B The patches should be applied to clean, dry, healthy, intact skin; they should not be applied on or near the breasts. Each application should be made to a different area of the skin, on the trunk below the waist. Transdermal products can also be used in continuous regime with a daily progestogen for women who have been amenorrhoeic for more than a year and who require a more tailored regime to minimise side effects. Accepted progestogens include Mirena® IUS, or daily Utrogestan® or Provera®.

**Table 5. Intravaginal hormone replacement therapy products (prices according to MIMS and BNF, accessed November 2018)**

| Brand | Active ingredients | Form | Dose | Cost/pack | Prescribing notes |
|---|---|---|---|---|---|
| Estring® | Estradiol approx. 7.5 micrograms/24 hours | Vaginal ring | To be inserted into upper third of vagina and worn continuously; replace after 3 months; max. duration of continuous treatment is 2 years. | 1-ring pack = £31.42 | Postmenopausal urogenital conditions (not suitable for vasomotor symptoms or osteoporosis prophylaxis). |
| Ovestin® 0.1% | Estriol 0.5mg per 1 applicatorful | Intravaginal cream with applicator | Insert 1 applicatorful daily for 2-3 weeks and then reduce to 1 applicatorful twice a week. | 15g = £4.45 | Effect on latex condoms and diaphragms not yet known. Discontinue every 2-3 months for 4 weeks to assess need for further treatment. |
| Gynest® 0.01% (Marlborough Pharmaceuticals Ltd) | Estriol 0.5mg per 1 applicatorful | Intravaginal cream with applicator | Insert 1 applicatorful daily, preferably in the evening until improvement occurs, and then reduce to 1 applicatorful twice a week. | 80g = £4.67 | **Contains arachis (peanut) oil.** Attempts to discontinue should be made at 3–6 month intervals with re-examination. |
| Vagifem® | Estradiol 10 microgram | Vaginal tablets with applicators | Insert 1 vaginal tablet daily for 2 weeks then reduce to 1 tablet twice weekly | 24-applicator pack = £16.72 | No evidence of damage to latex condoms and diaphragms. |

## Appendix 1: Management of short-term menopausal symptoms

Treatment should be adapted as needed according to a woman's symptoms. These recommendations do not cover Premature Ovarian Insufficiency (POI)

**Vasomotor symptoms**

- Offer women HRT for vasomotor symptoms after discussing with them the short-term (up to 5 years) and longer-term benefits and risks.
- Do not routinely offer SSRIs or SNRIs or clonidine as first-line treatment for vasomotor symptoms alone.
- Paroxetine, venlafaxine, and gabapentin may give some relief in vasomotor symptoms in women unable to take HRT.
- There is some evidence that isoflavones or black cohosh may relieve vasomotor symptoms, however multiple preparations are available and safety is uncertain and interactions with other medicines have been reported.
- Cognitive behavioural therapy (CBT) has been shown to be effective for vasomotor symptoms.

**Psychological symptoms**

- Consider HRT to alleviate low mood that arises as a result of the menopause.
- Consider CBT to alleviate low mood or anxiety that arises as a result of the menopause.
- There is no clear evidence that SSRIs or SNRIs ease low mood in menopausal women who have not been diagnosed with depression. Consider referral for mental health assessment in women with severe depression.

**Altered Sexual function**

- Low libido around the menopause may respond to HRT preparations. An androgenic progestogen containing HRT may be preferable.
- Testosterone supplementation may be considered for menopausal women with low sexual desire if HRT alone is not effective (unlicensed indication). If offered, it should be prescribed by **specialists** after obtaining and documenting informed consent.
- Tibolone has a weak androgenic effect which may benefit mood and libido.

**Urogenital atrophy**

- Vaginal oestrogen:
    - Should be offered to women with urogenital atrophy (including those on systemic HRT) and continue treatment for as long as needed to relieve symptoms.
    - Should be considered for women who have urinary symptoms – increased frequency, dysuria when UTI excluded.
    - Should be considered in women with urogenital atrophy in whom systemic HRT is contraindicated, after seeking advice from a healthcare professional with expertise in menopause.
    - If vaginal oestrogen does not relieve symptoms of urogenital atrophy, consider increasing the dose after seeking advice from a healthcare professional with expertise in menopause.

- Explain to women with urogenital atrophy that symptoms often come back when treatment is stopped, adverse effects from vaginal oestrogen are very rare and women should report unscheduled vaginal bleeding to their GP.
- Advise women with vaginal dryness that moisturisers and lubricants can be used alone or in addition to vaginal oestrogen. Moisturisers are more physiological than lubricant gels and are a reasonable alternative to local oestrogens. **Women should be advised to purchase these products OTC.**
- Non hormonal moisturisers should be first line in a woman who has bad breast cancer. Local ostrogens should only be used after specialist discussion. **Women should be advised to purchase these products OTC.**
- Do not offer routine monitoring of endometrial thickness during treatment for urogenital atrophy.

## Appendix 2: Long-term risks of hormone replacement therapy

Clinicians should discuss individual risk factors with each patient before initiating HRT. A helpful patient information leaflet can be found at: http://www.womens-health-concern.org/_wpress/wp-content/uploads/2015/12/WHC-FACTSHEET-HRT-BenefitsRisks.pdf

For absolute rates of risk for different types of HRT compared with no HRT refer to NICE guidelines: NICE guidance NG23 Menopause: diagnosis and management section 1.5

**Venous Thromboembolism**

- The risk of VTE is increased by oral HRT compared with baseline population risk. Oral oestrogens increase risk 1-3 fold and oral progestogens 2-4 fold.
- The risk associated with transdermal HRT given at standard therapeutic doses is no greater than baseline population risk.
- Consider transdermal rather than oral HRT for menopausal women who are at increased risk of VTE, including those with a BMI over 30 kg/$m^2$.
- Consider referring menopausal women at high risk of VTE (for example, those with a strong family history of VTE or a hereditary thrombophilia) to a haematologist for assessment before considering HRT.

**Cardiovascular disease**

- HRT does not increase cardiovascular disease risk when started in women aged under 60 years and does not affect the risk of dying from cardiovascular disease.
- Be aware that the presence of cardiovascular risk factors is not a contraindication to HRT as long as they are optimally managed.
- The baseline risk of coronary heart disease and stroke for women around menopausal age varies from one woman to another according to the presence of cardiovascular risk factors.
- Hormone replacement therapy with oestrogen alone is associated with no, or reduced, risk of coronary heart disease.
- Hormone replacement therapy with oestrogen and progestogen is associated with little or no increase in the risk of coronary heart disease.
- Taking oral (but not transdermal) oestrogen is associated with a small increase in the risk of stroke. Baseline risk in women under 60 years is very low.
- Limited evidence that HRT may improve muscle mass and strength.

**Type 2 diabetes**

- Hormone replacement therapy (either orally or transdermally) is not associated with an increased risk of developing type 2 diabetes.
- Hormone replacement therapy is not generally associated with an adverse effect on blood glucose control.
- Consider HRT for menopausal symptoms in women with type 2 diabetes after taking comorbidities into account and seeking specialist advice if needed.

**Breast Cancer**

- The baseline risk of breast cancer for women around menopausal age varies according to the presence of underlying risk factors.
- Hormone replacement therapy with oestrogen alone is associated with little or no change in the risk of breast cancer.
- Hormone replacement therapy with oestrogen and progestogen can be associated with an increase in the risk of breast cancer.
- Any increase in the risk of breast cancer is related to treatment duration and reduces after stopping HRT.

## Osteoporosis

- Give women advice on bone health and discuss these issues at review appointments.
- Explain to women that their risk of fragility fracture is decreased while taking HRT and that this benefit is maintained during treatment, but decreases once treatment stops, and may continue for longer in women who take HRT for longer.

## Appendix 3: Specific scenarios

**Women with or at high risk of breast cancer**

See section 1.13 of the NICE guideline on early and locally advanced breast cancer and section 1.7 of the NICE guideline on familial breast cancer.

Offer menopausal women with, or at high risk of, breast cancer:

- Information on all available non HRT treatment options.
- Information that the SSRIs paroxetine and fluoxetine should not be offered to women with breast cancer who are taking tamoxifen.
- Women in whom non hormonal treatments are ineffective at controlling symptoms should be referred to a healthcare professional with expertise in menopause and/or oncology specialist

**Premature ovarian insufficiency**

***Diagnosis***

- Take into account the woman's clinical history when diagnosing premature ovarian insufficiency.
- Diagnose premature ovarian insufficiency in women aged under 40 years based on menopausal symptoms, including no or infrequent periods (taking into account whether the woman has a uterus) and elevated FSH levels on 2 blood samples taken 4–6 weeks apart.
- Do not diagnose premature ovarian insufficiency on the basis of a single blood test.
- Do not routinely use anti-Müllerian hormone testing to diagnose premature ovarian insufficiency.
- If there is doubt about the diagnosis of premature ovarian insufficiency, refer the woman to a specialist with expertise in menopause or reproductive medicine.

***Management***

- Offer sex steroid replacement with a choice of HRT or a combined hormonal contraceptive to women with premature ovarian insufficiency, unless contraindicated (for example, in women with hormone-sensitive cancer).
- Explain to women with premature ovarian insufficiency:
    - The importance of starting hormonal treatment either with HRT or a combined hormonal contraceptive and continuing treatment until at least the age of natural menopause (unless contraindicated).
    - That the baseline population risk of diseases such as breast cancer and cardiovascular disease increases with age and is very low in women aged under 40.
    - That HRT may have a beneficial effect on blood pressure when compared with a combined oral contraceptive.
    - That both HRT and combined oral contraceptives offer bone protection.
    - That HRT is not a contraceptive.
- Give advice to women with premature ovarian insufficiency and contraindications to hormonal contraception; include information on bone, cardiovascular health and symptom management.
- Consider referring women with premature ovarian insufficiency to healthcare professionals who have the relevant experience to help them manage all aspects of physical and psychosocial health related to their condition.

## Appendix 4: Definitions

**Menopause** - a biological stage in a woman's life that occurs when she stops menstruating and reaches the end of her natural reproductive life. Usually it is defined as having occurred when a woman has not had a period for 12 consecutive months (for women reaching menopause naturally). The changes associated with menopause occur when the ovaries stop maturing eggs and secreting oestrogen and progesterone.

**Perimenopause -** the time in which a woman has irregular cycles of ovulation and menstruation leading up to menopause and continuing until 12 months after her final period. The perimenopause is also known as the menopausal transition or climacteric.

**Postmenopause** - the time after menopause has occurred, starting when a woman has not had a period for 12 consecutive months.

**Menopausal women** - this includes women in perimenopause and postmenopause.

**Premature ovarian insufficiency** - menopause occurring before the age of 40 years (also known as premature ovarian failure or premature menopause). It can occur naturally or as a result of medical or surgical treatment.

**Bioidentical hormone therapy –** unregulated custom-compounded recipes prepared by a pharmacist following an individual prescriber's order for a specific patient.