HRT formulary and treatment guidance

[APC ClinDoc 010]

For the latest information on interactions and adverse effects, always consult the latest version of the Summary of Product Characteristics (SPC), which can be found at: [http://www.medicines.org.uk/](http://www.medicines.org.uk/)

Approval and Authorisation

<table>
<thead>
<tr>
<th>Approved by</th>
<th>Job Title</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area Prescribing Committee</td>
<td>APC Chair</td>
<td>January 2016</td>
</tr>
</tbody>
</table>

Change History

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Author</th>
<th>Reason</th>
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<tbody>
<tr>
<td>v.1.0</td>
<td>09/2018</td>
<td>-</td>
<td>Updated APC Category</td>
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*This prescribing guideline remains open to review considering any new evidence*

*This guideline should only be viewed online and will no longer be valid if printed off or saved locally*
# Berkshire West CCGs HRT formulary and treatment guidance

## Contents
- Formulary
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  - Contraception, IUS and HRT
- Premature ovarian insufficiency/premature menopause
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## Oral or transdermal HRT—offer choice but avoid oral if
- VTE risks or personal /first degree relative with history
- Poor symptom control with oral
- Bowel disorder /absorption problems /gastric banding
- Lactose intolerance
- History of migraines
- Stroke risks e.g. BMI>30/smoker/sedentary
- History of or concerns of gall stones
- On hepatic enzyme inducing agent including OTC preparations

### First treatment option

### Second line treatment options

## Oestrogen only

**Hysterectomy, 1 prescription charge**

<table>
<thead>
<tr>
<th>HRT Product</th>
<th>Oestrogen</th>
<th>Delivery</th>
<th>Dose</th>
<th>Indication for use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elleste solo</td>
<td>Estradiol</td>
<td>Oral tablets</td>
<td>1 mg, 2mg daily</td>
<td>First line oral treatment option</td>
</tr>
<tr>
<td>Premarin</td>
<td>Conjugated equine oestrogen</td>
<td>Oral tablets</td>
<td>300mcg, 0.625mg, 1.25mg daily</td>
<td>Consider if previously well on conjugated equine oestrogen.</td>
</tr>
<tr>
<td>Evorel</td>
<td>Estradiol</td>
<td>Transdermal patches</td>
<td>25, 50, 75, 100 mcg twice weekly</td>
<td>First line transdermal option</td>
</tr>
<tr>
<td>Elleste Solo Mx</td>
<td>Estradiol</td>
<td>Transdermal patches</td>
<td>40, 80mcg twice weekly</td>
<td>Skin allergy /poor absorption with Evorel, alternative adhesives</td>
</tr>
<tr>
<td>Estradot</td>
<td>Estradiol</td>
<td>Transdermal patches</td>
<td>25, 37.5, 50, 75, 100mcg twice weekly</td>
<td>Smaller sized patches consider for higher doses and petite women</td>
</tr>
<tr>
<td>Sandrena</td>
<td>Estradiol</td>
<td>Transdermal gel</td>
<td>0.5, 1, 1.5 mg/g daily</td>
<td>Patient preference, skin allergy to patches or side effects</td>
</tr>
</tbody>
</table>

## Sequential/cyclical combined HRT

**Uterus present, perimenopausal women, 2 prescription charges, monthly bleed**

<table>
<thead>
<tr>
<th>HRT Product</th>
<th>Oestrogen/progestogen</th>
<th>Delivery</th>
<th>Dose Oestrogen/progestogen</th>
<th>Indication for use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elleste duet</td>
<td>Oestradiol/noretisterone</td>
<td>Oral tablets</td>
<td>1mg/1mg</td>
<td>First line oral treatment option</td>
</tr>
<tr>
<td>Femoston</td>
<td>Oestradiol/dydrogesterone</td>
<td>Oral tablets</td>
<td>1mg/10mg</td>
<td>If cyclical side effects to noretisterone or other progestogen</td>
</tr>
<tr>
<td>Prempak C</td>
<td>Conjugated equine oestrogen/norgestrel</td>
<td>Oral tablets</td>
<td>0.625mg/150mcg 1.25mg/150mcg daily</td>
<td>Consider if previously well on conjugated equine oestrogen.</td>
</tr>
<tr>
<td>Evorel Sequi</td>
<td>Oestradiol/noretisterone</td>
<td>Transdermal patches</td>
<td>50mcg/170mcg</td>
<td>First line transdermal treatment option</td>
</tr>
<tr>
<td>FemSeven Sequi</td>
<td>Oestradiol/levonorgestrel</td>
<td>Transdermal patches</td>
<td>50mcg/10mcg</td>
<td>Skin allergy /poor absorption with Evorel, alternative adhesives</td>
</tr>
<tr>
<td>Oestradiol tablet/patch/gel as above plus adjunctive progestogen/progesterone</td>
<td>Oestradiol plus progestogen/progesterone of choice (see table below)</td>
<td>Side effects with other progestogens, bleeding problems, contraceptive needs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Continuous combined HRT

<table>
<thead>
<tr>
<th>HRT Product</th>
<th>Oestrogen/progestogen</th>
<th>Delivery</th>
<th>Dose Oestrogen/progestogen</th>
<th>Indications for use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kliovance</td>
<td>Oestradiol/norethisterone</td>
<td>Oral</td>
<td>1mg/0.5mg</td>
<td>First line oral treatment option</td>
</tr>
<tr>
<td>Femoston Conti</td>
<td>Oestradiol/dydrogesterone</td>
<td>Oral</td>
<td>1mg/5mg 0.5mg/2.5mg</td>
<td>If side effects to other progestogens</td>
</tr>
<tr>
<td>Premique low dose</td>
<td>Conjugated equine oestrogen/ medroxyprogesterone acetate</td>
<td>Oral</td>
<td>0.3mg/1.5mg</td>
<td>Consider if previously well on conjugated equine oestrogen.</td>
</tr>
<tr>
<td>Indivina</td>
<td>Oestradiol/ Medroxyprogesterone acetate</td>
<td>Oral</td>
<td>1mg/5mg</td>
<td>Combined irregular bleeding with other oral continuous combined HRT with no uterine pathology</td>
</tr>
<tr>
<td>Angeliq</td>
<td>Oestradiol/drospirenone</td>
<td>Oral</td>
<td>1mg/2mg</td>
<td>Bloating, breast tenderness, acne with other progestogens</td>
</tr>
<tr>
<td>Tibolone</td>
<td>Tibolone (synthetic molecule with oestrogen, progestogen and androgenic properties)</td>
<td>Oral</td>
<td>2.5mg</td>
<td>Low libido (also consider post hysterectomy and/or BSO if libido low)</td>
</tr>
<tr>
<td>Evorel Conti</td>
<td>Oestradiol/norethisterone</td>
<td>Transdermal</td>
<td>50mcg/170mcg twice weekly</td>
<td>First line transdermal treatment option</td>
</tr>
<tr>
<td>FemSeven Conti</td>
<td>Oestradiol/levonorgestrel</td>
<td>Transdermal</td>
<td>50mg/10mg once weekly</td>
<td>Skin allergy /poor absorption with Evorel, alternative adhesives</td>
</tr>
<tr>
<td>Oestradiol only tablet/patch/gel (see page 1) plus adjunctive progestogen/progesterone</td>
<td>Oestradiol plus progestogen/progesterone of choice (see table below)</td>
<td></td>
<td></td>
<td>Side effects with other progestogens or bleeding problems</td>
</tr>
</tbody>
</table>

### Topical vaginal oestrogen

<table>
<thead>
<tr>
<th>HRT product</th>
<th>Oestrogen</th>
<th>Delivery</th>
<th>Dose</th>
<th>Indications for use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vagifem</td>
<td>Oestradiol</td>
<td>Vaginal tablet</td>
<td>10mcg as directed</td>
<td>First line topical treatment option</td>
</tr>
<tr>
<td>Gynest/Estriol 0.01%</td>
<td>Oestriol</td>
<td>Vaginal cream</td>
<td>Using applicator as directed</td>
<td>Patient or clinician preference</td>
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<tr>
<td>Estrin</td>
<td>Oestradiol</td>
<td>Vaginal ring</td>
<td>7.5mcg daily over 90 days</td>
<td>Allergies to other topical products, dexterity problems with applicators, patient preference</td>
</tr>
</tbody>
</table>

**Adjunctive progestogen in HRT**—use alongside either oral or transdermal oestrogen for women with uterus to provide endometrial protection.

**Intrauterine system (Mirena)** - NB Licensed for 4 years for HRT use

**Medroxyprogesterone acetate (provera) tablets**
- Cyclical regime—10mg for 12 days each 28 day cycle
- Continuous combined HRT—2.5-5mg daily continuously

**Utrogestan (micronized progesterone) capsules**
- Cyclical regime—200mg orally at bedtime for 12 days each 28 day cycle
- Continuous combined HRT—100mg orally daily continuously at bedtime
Treatment guidance
Adopt an individualised approach to diagnosis, investigation and management of menopause

Diagnosing menopause and need for treatment—both short and long term

- Diagnosis of menopause should be based on the woman’s symptoms and age
  - Healthy women > 45 years with menopausal symptoms, diagnose without laboratory tests if
    the woman has vasomotor symptoms and irregular periods.
    the woman has not had a period for at least 12 months.
    or based on symptoms in woman without a uterus.
  - Consider using FSH if
    the woman is between 40–45 years with menopausal symptoms, including a change in menstrual cycle.
    the woman is younger than 40 years in whom premature menopause is suspected.
  - A pelvic examination should be performed only if clinically indicated and to exclude other possible causes of symptoms.
  - FSH level over 30 IU/L is diagnostic of ovarian decline. Fluctuations of FSH in perimenopause limit its value. FSH should not
    be done if taking combined oestrogen and progestogen contraception or high dose progestogen.
  - Consider HRT to manage menopause symptoms including vasomotor symptoms, psychological symptoms (including low
    mood that arises as result of menopause), altered sexual function and urogenital atrophy.
  - The benefits of HRT are likely to outweigh the risks for women with disruptive symptoms below the age of 60 years or within
    10 years of menopause.
  - In women with premature ovarian insufficiency (premature menopause), systemic HRT is recommended, if not contraindicated,
    until at least the average age of natural menopause (51-52 years) to prevent the early onset of osteoporosis, CVD, Alzheimer’s disease, Parkinsonism and cognitive decline.
  - HRT may be appropriate for prevention of osteoporosis related fractures in women below the age of 60 years or within 10
    years of menopause in symptomatic women or if other bone protection medication is contraindicated.
  - There is no clear evidence that SSRIs or SNRIs ease low mood in menopausal women who have not been diagnosed with depression.

Initiating and managing HRT

- The option of taking HRT is an individual decision made after a consultation with the woman that addresses quality of life, health priorities, risks (including age and time since menopause), benefits and her personal preference.
  - Consider HRT, if not contraindicated, for treatment of vasomotor symptoms, low mood in menopausal women, urogenital atrophy (either topical alone or alongside systemic) and altered sexual function. It will also provide osteoporosis protection.
  - Discuss effectiveness of HRT, risks, benefits, bleeding patterns, side effects.

Patient assessment includes

- History of menopause and other symptoms
- Menstrual history
- Contraceptive needs (HRT is not contraceptive)
- Personal and family medical problems, patient risk factors
  - cancer—breast, bowel, ovarian
  - osteoporosis
  - venous thromboembolism,
  - CV risks
  - other medical problems including migraine
- Concomitant medication including alternative/OTC therapies
- Patient preference for treatment
- Check blood pressure, height, weight, BMI

Choice of route

- Offer patient choice of oral or transdermal. Avoid oral if
  - VTE risks or personal /first degree relative with history of VTE (both provoked and unprovoked)
  - Poor symptom control with oral
  - Bowel disorder /absorption problems /gastric banding,
  - Lactose intolerance
  - History of migraines
  - Stroke risks e.g. BMI>30/smoker/sedentary
  - History of or concerns of gall stones
  - On hepatic enzyme inducing agent including OTC preparations
The dose and duration should be consistent with safety issues and treatment goals. Generally the lowest effective dose is advised for symptom control (see bone protective doses below).

Review after 3 months as symptom control and side effects (including bleeding) can take time to be effective and/or settle, then annually or earlier if concerns.

Encourage women to maintain healthy diet and lifestyle, invite them to seek information at www.menopausematters.co.uk and www.nos.org.uk.

**Topical oestrogen for urogenital atrophy**
- All topical products are low dose oestradiol or estriol. They include oestradiol vaginal tablets (Vagifem), oestradiol vaginal ring (Estring), estriol creams (Gynest/estriol 0.01%, Ovestin) and estriol pessaries (Ortho-Gynest).
- Low postmenopausal oestrogen levels can cause vaginal atrophy and an increased incidence of UTIs. Vaginal oestrogen treats vaginal atrophy and can also prevent recurrent UTI type symptoms in postmenopausal women.
- Caution is required for women with a history of oestrogen receptor positive breast cancer. Estriol 0.01% cream may be prescribed in women with oestrogen receptor positive breast cancer whilst taking tamoxifen, after checking with the oncologist but not in women taking aromatase inhibitors.
- All topical vaginal oestrogen can be used in the long term without adjunctive progestogens and endometrial monitoring.
- Creams and pessaries may affect condom integrity.

**Dose, duration and weaning off HRT**
- As women get older, generally lower oestrogen doses are sufficient for symptom control. Consensus advice is that the lowest effective dose should be used.
- Gradually reducing HRT may limit recurrence of symptoms in short term but will not make a difference to symptoms in long term. (10% of women flush for more than 12 years and some have symptoms in the very long term).
- Consider changing to continuous combined HRT when postmenopausal or 54 years.
- Continuous oestrogen/ cyclical progestogen for 10-14 days in 28 day cycle, giving cyclical progestogen withdrawal bleed
- Consider changing to continuous combined HRT when postmenopausal or 54 years

**Tibolone**
This is a synthetic steroid compound, derived from soy. An amenorrhoea regime for primarily postmenopausal women, it has oestrogenic, progestogenic and androgenic actions. It conserves bone mass and treats vasomotor, psychological and libido problems (due to its androgenic effects). There is an increased risk of breast cancer and venous thromboembolism, broadly similar to combined HRT. Its use in women over 65 years needs to be cautious because of increased stroke risk.

**Contraindications, cautions and risks of HRT**

- Current, past, or suspected breast cancer.
- Known or suspected oestrogen-sensitive cancer.
- Undiagnosed abnormal vaginal bleeding.
- Untreated endometrial hyperplasia.
- Current venous thromboembolism (deep vein thrombosis or pulmonary embolism), unless the woman continues on anticoagulant treatment.
- Active or recent arterial thromboembolic disease (for example angina or myocardial infarction).
- Untreated hypertension.
- Active liver disease with abnormal liver function tests.
- Porphyria cutanea tarda.
- Pregnancy.
- Dubin-Johnson and Rotor syndromes (or monitor closely).
• Cautions for HRT use
  • A personal or first degree relative with any history of venous thromboembolism (whether provoked or unprovoked) see local guidelines on HRT and venous thromboembolism http://orh.oxnet.nhs.uk/Gynaecology/Pages/Guidelines.aspx .
  • Migraines (transdermal preparation starting low dose is advised with dose gradually increased to control symptoms without exacerbating migraines).

• Risks
  • Venous thromboembolism (VTE)
    • The risk of VTE is increased by oral HRT, particularly in the first year of use.
    • The risk associated with transdermal HRT with standard doses is no greater than baseline population risk.
    • Consider transdermal HRT if woman has VTE risk factors including BMI>30.
    • If high risk of VTE including family history consider referring to specialist service. See also local guidelines at http://orh.oxnet.nhs.uk/Gynaecology/Pages/Guidelines.aspx .
  • Cardiovascular disease (CVD)
    • HRT does not increase CVD if started under 60 years or risk of dying of CVD.
    • The presence of CVD risk factors is not a contraindication to HRT if they are optimally managed.
    • The risk of coronary heart disease and stroke for women around menopause varies according to her risk factors.
    • Oestrogen-alone HRT does not increase risk of coronary heart disease.
    • HRT with oestrogen and progestogen is associated with little or no increased risk of coronary heart disease.
    • Oral, not transdermal oestrogen is associated with a small increased risk of stroke but in women <60 years the risk is very low.
  • Diabetes
    • HRT is not associated with an increased risk of developing type 2 diabetes.
    • HRT is not generally associated with adverse effect on blood glucose in women with type 2 diabetes.
    • Consider HRT symptoms in women with type 2 diabetes after considering comorbidities and/or seeking specialist advice.
  • Breast cancer
    • Oestrogen-only HRT is associated with little or no increased risk of breast cancer.
    • Oestrogen and progestogen HRT can be associated with an increased risk of breast cancer, generally the risk is considered low.
    • Any increase in risk is related to duration of HRT and reduces after stopping.
  • Ovarian cancer
    • NICE did not discuss the risk of ovarian cancer in women taking HRT. However, evidence suggests that HRT use may be associated with a small increased risk of ovarian cancer with both oestrogen only and combined HRT but the risk falls after cessation of HRT.

Considerations associated with HRT

• Bleeding patterns on HRT
  • Cyclical (sequential) HRT (Bleeds should start towards end of progestogen or first week of oestrogen only phase)
    • Usually heavier initially but get lighter after 2-3 months.
    • Bleeds generally similar to patient’s natural periods i.e. length and menstrual symptoms.
    • 5-10% of women do not bleed on cyclical HRT due to atrophic endometrium, if there is good symptom response then of no concern, otherwise consider possible poor absorption as reason for amenorrhoea.
    • Strategies for bleeding problems with cyclical regimes include
      • Consider causes e.g. compliance, drug interactions, GI or other absorption problems, pelvic pathology.
      • Heavy or prolonged bleeding – increase or change type of progestogen or reduce oestrogen dose.
      • Bleeding early in progestogen phase – increase dose of progestogen or change type.
      • Painful bleeding – change type of progestogen.
      • Irregular bleeding – change regime or increase progestogen.
  • Continuous combined (COCO) HRT
    • Unpredictable irregular bleeding common for 3-6 months, if settling continue HRT.
    • If heavy or continuing after 6/12 consider investigating.
    • Investigate if new bleeding after 1 year amenorrhoea.
    • Bleeding patterns generally better with low oestrogen dose HRT & as women get older.
    • Strategies for bleeding problems with COCO therapies
      • Bleeding patterns better with lower oestrogen dose.
      • Good compliance essential.
      • Increase progestogen dose.
      • Some women bleed despite atrophic endometrium/normal uterine pathology.
**Lack of efficacy**

<table>
<thead>
<tr>
<th>Causes</th>
<th>How long does HRT take to work?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider the following causes</td>
<td></td>
</tr>
<tr>
<td>- Too soon for symptom response</td>
<td></td>
</tr>
<tr>
<td>- Oestrogen dose not high enough</td>
<td></td>
</tr>
<tr>
<td>- Patient compliance poor</td>
<td></td>
</tr>
<tr>
<td>- Limited absorption/metabolism</td>
<td></td>
</tr>
<tr>
<td>- Woman anxious about taking HRT</td>
<td></td>
</tr>
<tr>
<td>- Symptoms not menopausal</td>
<td></td>
</tr>
<tr>
<td>Wait—side effects generally settle &lt;3 months</td>
<td></td>
</tr>
<tr>
<td>If side effects severe, lower dose</td>
<td></td>
</tr>
<tr>
<td>Change route i.e. from oral to transdermal</td>
<td></td>
</tr>
<tr>
<td>Types of progestogens</td>
<td></td>
</tr>
<tr>
<td>Progestogens are synthetic forms of progesterone, there are two main groups derived from either</td>
<td></td>
</tr>
<tr>
<td>- testosterone (norethisterone, levonorgestrel, norgestrel)</td>
<td></td>
</tr>
<tr>
<td>- progesterone (dydrogesterone, medroxyprogesterone acetate)</td>
<td></td>
</tr>
<tr>
<td>- other options drosiprenone—only available in Angeliq micronized progesterone (Utrogestan)</td>
<td></td>
</tr>
</tbody>
</table>

**Side effects**

- Oestrogen and progestogen can both cause side effects, the cause is more difficult to distinguish in continuous combined preparations.
- Generally progestogen side effects are more problematic than oestrogen, note the two groups of progestogens (see below) as some women may tolerate one type better than the other.
- There is no evidence that HRT causes weight gain. However on average women gain 10kg between 40-60 years independently of menopause.

**Oestrogen side effects**

<table>
<thead>
<tr>
<th></th>
<th>Progestogen side effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast tenderness</td>
<td>PMS type symptoms</td>
</tr>
<tr>
<td>Nipple sensitivity</td>
<td>Mood changes</td>
</tr>
<tr>
<td>Bloating</td>
<td>Breast tenderness</td>
</tr>
<tr>
<td>Leg cramps</td>
<td>Bloating</td>
</tr>
<tr>
<td>Nausea/heartburn</td>
<td>Headaches</td>
</tr>
<tr>
<td>Headaches</td>
<td>Mood changes</td>
</tr>
<tr>
<td>Headaches</td>
<td>Acne/greasy skin</td>
</tr>
</tbody>
</table>

**Progestogen side effects**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PMS type symptoms</td>
<td></td>
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<tr>
<td>Mood changes</td>
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</tr>
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<td>Mood changes</td>
<td></td>
</tr>
<tr>
<td>Acne/greasy skin</td>
<td></td>
</tr>
</tbody>
</table>

**Comparative doses**

These are a rough guide as absorption varies

1mg oral oestradiol=25mcg patch=0.5g Sandrena gel
2mg oral oestradiol=50mg patch=1g Sandrena gel
4mg oral oestradiol=100mcg patch=Sandrena licenced to 1.5g
Equivalent doses of conjugated equine oestrogen to oestradiol are not clear

**Minimum bone protective doses**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>HRT</td>
</tr>
<tr>
<td></td>
<td>Oestradiol oral</td>
</tr>
<tr>
<td></td>
<td>Oestradiol patch</td>
</tr>
<tr>
<td></td>
<td>Oestradiol (Sandrena gel)</td>
</tr>
<tr>
<td></td>
<td>Conjugated equine oestrogens</td>
</tr>
<tr>
<td></td>
<td>1-2mg</td>
</tr>
<tr>
<td></td>
<td>25-50mcg</td>
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<tr>
<td></td>
<td>1g</td>
</tr>
<tr>
<td></td>
<td>0.3-0.625mg</td>
</tr>
</tbody>
</table>

**Contraception, IUS and HRT**

- HRT is not contraceptive and will not prevent spontaneous ovulation in perimenopausal women.
- Women >50 years, use contraception for 1 year after last spontaneous period.
- Women <50 years, continue contraception for 2 years following last spontaneous period.
- Fit, healthy, non-smoking, normotensive women may continue the COCP until 50 years. The POP can be used alongside cyclical HRT.
- Barrier methods become safer in older women as fertility declines, and have a lower failure rate.
- The intra-uterine system (IUS) can be used as the progestogen component of HRT alongside oestrogen to provide contraception, control perimenopausal bleeding problems and provide endometrial protection.
- The IUS is only licensed for 4 years in HRT use.
Premature ovarian insufficiency (POI) / Premature menopause

- Premature menopause is before the age of 40 years (however menopause before 45 years is still considered early).
- Diagnose premature menopause on symptoms, menstrual changes and 2 raised FSH levels over 30 IU/L taken 4-6 weeks apart. Other tests - prolactin, testosterone, SHBG, TTFs, autoimmune screen (specifying ovarian, thyroid and adrenal), chromosome analysis and FMR1 gene (especially for women under 30 or if desiring pregnancy). Consider baseline bone density measurement.
- If there is doubt about the diagnosis of premature menopause, consider referral for specialist advice.
- If no contraindication treat premature menopause (and also early menopause) with hormone replacement, offering the choice of HRT or a combined oral contraceptive pill as appropriate. Explain to these young women the importance of hormone replacement at least until the average age of natural menopause (51-52 years) to prevent early onset of osteoporosis, cardiovascular disease, Alzheimer’s disease, Parkinsonism and cognitive decline.
- Young women often need higher doses of HRT for symptom control (oral oestradiol 3-4mg or transdermal 75-100mcg patches) and to ensure bone and other long term protection.
- Discuss contraception. HRT is not contraceptive. If conception is desirable, less than 5% will spontaneously become pregnant after diagnosis.
- In women < 50 years, HRT is not associated with an increased risk of breast cancer compared to normally menstruating women.

When to refer to specialist service

- Premature ovarian insufficiency menopause. It is likely that most women <40 years will need referral to specialist clinic.
- Complex medical history
- Safety concerns of HRT
- Persistent treatment problems e.g. side effects, lack of efficacy
- Bleeding problems despite following logical changes in bleeding management section above.
- Patient request
- History of hormone dependent cancer and patients with BRCA genes

Patient resources

Menopause Matters website – excellent general menopause information [www.menopausematters.co.uk](http://www.menopausematters.co.uk)
National osteoporosis Society – excellent information on all areas of bone health and treatments [www.nos.org.uk](http://www.nos.org.uk)
Early menopause group- [www.daisynetwork.org.uk](http://www.daisynetwork.org.uk)
Health talk on line – interviews with women, including young women, discussing menopause issues [www.healthtalk.org](http://www.healthtalk.org)
NICE Menopause—Information for the public November 2015 [www.nice.org.uk/guidance/ng23/ifp/chapter/menopause](http://www.nice.org.uk/guidance/ng23/ifp/chapter/menopause)

References/resources

Clinical Knowledge Summaries Menopause October 2015 [http://cks.nice.org.uk/CKS/View/143B8F7C-845E-4C9B-B503-0F42726A3C6C/Menopause-1](http://cks.nice.org.uk/CKS/View/143B8F7C-845E-4C9B-B503-0F42726A3C6C/Menopause-1)
Hickey M, Elliot J and Davison SL. Hormone replacement therapy. BMJ 2012;344:e763

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Issued January 2016: Review date May 2019