HRT Medication Review: Could you Prescribe Femoston[®]?

estradiol/dydrogesterone





Key points to consider if switching women from other HRT products to Femoston[®]

Transdermal to **Femoston®**

🛞 – Venous Thromboembolism (VTE)

The baseline risk of VTE is **16 per 10,000** women years and the addition of oral hormone replacement therapy (HRT) increases the risk **by 9 in 10,000** women years.¹ If a woman is at increased risk of venous thromboembolism (VTE), the British Menopause Society (BMS) and NICE guideline recommend a transdermal HRT.^{2,3}

Observational studies suggest that dosage, route of administration, and types of estrogen and **progestogen may impact the associated VTE risk**. In a recent case-control study, a combination of **Femoston® and Femoston® conti** (a combination of oral estradiol with dydrogesterone) was associated with a **lower**

risk of VTE compared to other oral preparations.¹

🛞 – Breast Cancer

With regards to breast cancer risk, observational studies have demonstrated there are **no differences between the route of administration: transdermal vs. oral.**⁴⁻⁶

However, observational studies have shown that **different** progestogens in HRT are associated with different levels of risks.⁴⁻⁶

- Individualised Approach

BMS and NICE guideline highlight the importance of considering a woman's personal choice and preferences.^{2,3}

Progestogenic Side-Effect Profiles¹³

Other Oral HRT to Femoston[®]

VTE –

The occurrence of VTE associated with Femoston[®] and Femoston[®] conti is uncommon (between 1/100 and 1/1,000).⁷⁻¹⁰ In a recent case-control study, a combination of **Femoston[®] and Femoston[®] Conti** (a combination of oral estradiol with dydrogesterone) was associated with a **lower risk of VTE compared to other oral preparations.**¹

— Breast Cancer

Observational studies have shown that **estradiol + dydrogesterone** may be associated with a **lower risk of breast cancer compared** with **other synthetic progestogens.**⁴⁻⁶

Side-Effects

Femoston[®] and Femoston[®]-conti contains 17β -estradiol and dydrogesterone.⁷⁻¹⁰ **Dydrogesterone does not stimulate** the following receptors: **oestrogenic, androgenic, or glucocorticoid.**¹¹⁻¹³

For a lower dose preparation, $Femoston^{\odot}$ Conti 0.5 mg is the lowest oral dose available on the market. $^{\rm 14}$

Progestogen	Progestogenic	Estrogenic	Androgenic	Antiandrogenic	Glucocorticoid	Anti-mineralocorticoid
Progesterone	+	-	-	±	+	+
Dydrogesterone	+	-	-	±	-	±
Drospirenone	+	-	-	+	-	+
MPA*	+	-	±	-	+	-
Norethisterone	+	+	+	-	-	-
Levonorgestrel	+	-	+	-	-	-

+ Effective; ± Weakly effective; - Not effective

*MPA: Medroxyprogesterone acetate.



Consider the progestogen...

Breast Cancer

The overall evidence shows an increased risk of breast cancer in women taking combined oestrogen-progestogen or oestrogen-only HRT, that is dependent on the duration of taking HRT.7-10

The Women's Health Initiative study (WHI), and a meta-analysis are consistent in finding an increased risk of breast cancer in women taking combined oestrogen-progestogen for HRT which becomes apparent after about 3 (1-4) years.7-10

Additional results of observational studies and the recent meta-analysis show that different progestogens may have different risk profiles when it comes to breast cancer risk.4-6

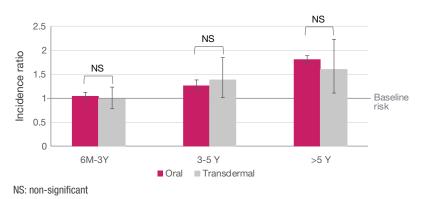
Method:⁶

A French cohort study which included 80,377 postmenopausal women between 40-65 years of age, assessed and compared the risk of breast cancer with an average follow-up of 8.1 years.

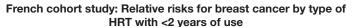
Result:

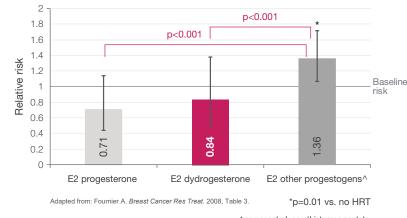
- There are no differences between the route of administration: transdermal vs. oral.
- The increased risk of breast cancer became significant with the use of E2+other progestogens at <2 years of use.
- At the same time point, the risk was significantly lower with E2+dydrogesterone, (Femoston® and Femoston® Conti) compared to HRTs containing other synthetic progestogens.

Finnish Data: Standardised incidence ratio of invasive breast cancer among women using oestrogen-progestogen therapy according to the route of administration and duration of use⁴



Conclusion: A Finnish Cohort study, which included 221,551 postmenopausal women, reported that there was no difference between the route of administration (oral vs. transdermal) when it comes to breast cancer risk.





Anomegestrol norethisterone acetate

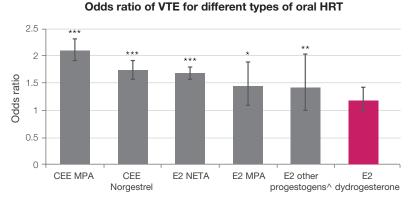
Venous Thromboembolism (VTE)

Method:¹

Two nested case-control analysis using UK-based Clinical Practice Research Datalink and QResearch to assess the association between risk of VTE and use of different types of HRT. Study included 80,396 women aged 40-79 with a primary diagnosis of VTE between 1998 and 2017, matched to 391,494 female controls.

Result:

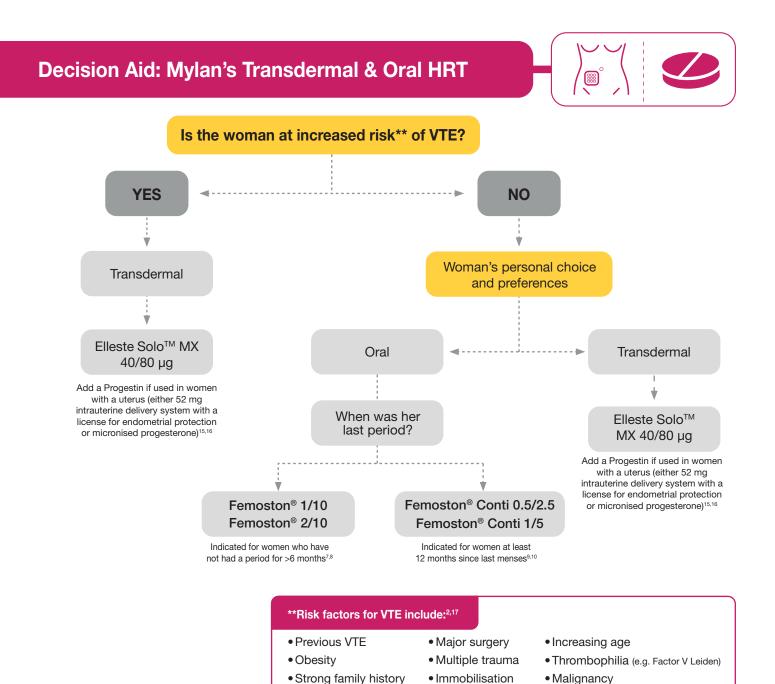
In this analysis, among the oral combinations, estradiol and dydrogesterone was associated with a lower risk of VTE compared to preparations containing other progestogens.



*p=0.01, **p=0.05, ***p<0.001 vs. no HRT ^HRTs containing norgestrel and drospirenone

E2: Estradiol NETA: Norethisterone acetate MPA: Medroxyprogesterone acetate CEE: Conjugated equine oestrogen

medroxyprogesterone acetate



Product Name	17ß estradiol dose	Dydrogesterone dose	Pack
femoston [®] estradiol / dydrogesterone	1 mg	10 mg	3 x 28
femoston estradiol / dydrogesterone	2 mg	10 mg	3 x 28
femoston-conti	0.5 mg	2.5 mg	3 x 28
femoston-conti	1 mg	5 mg	3 x 28
Elleste™	40 µg	Oestrogen-only	8 x patches
Elleste™	80 µg	Oestrogen-only	8 x patches

References

- Vinogradova Y, et al. BMJ 2019; 364:k4810 Use of hormone replacement therapy and risk of
- venous thromboembolism: nested case-control studies using the Qresearch and CPRM databases Hamoda H, Panay N, Pedder H, et al. The British Menopause Society & Women's Health Concern 2 2020 recommendations on hormone replacement therapy in menopausal women. Post Reprod Health. 2020:2053369120957514. doi: 10.1177/2053369120957514. Epub ahead of print. PMID: 33045914.
- NICE Guideline [NG23] Menopause: diagnosis and management -3
- https://www.nice.org.uk/guidance/ng23 (Last accessed December 2020).
- Lyvtinen H. et al. ObstetGynecol 2009:113:65-73 Breast cancer risk in postmenopausal women 4 using oestradiol-progestogen therapy.
- Collaborative Group on Hormonal Factors in Breast Cancer. Lancet 2019; published online 5 August 29, 2019. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)31709-X/ fulltext (Last accessed December 2020).



PRESCRIBING INFORMATION (combined)

Femoston® 1/10 mg film-coated tablets Femoston® 2/10 mg film-coated tablets

Femoston®-conti 0.5 mg/2.5 mg film-coated tablets Femoston®-conti 1 mg/5 mg film-coated tablets Refer to the Summary of Product Characteristics for full information.

femoston-conti

Heter to the Summary of Product Characteristics for full information. Presentation: Femoston-conti 0.5 mg/2.5 mg film-coated tablets containing 0.5 mg estradiol (as hemihydrate) and 2.5 mg dydrogesterone. Femoston-conti 1 mg/5 mg film-coated tablets containing 1 mg estradiol (as hemihydrate) and 5 mg dydrogesterone. Femoston-conti 1 mg Sim Gradet tablets containing 1 mg estradiol (as hemihydrate) or a combination of 1 mg estradiol (as hemihydrate) and 10 mg dydrogesterone. Femoston 2/10 mg film-coated tablets containing 2 mg estradiol (as hemihydrate) or a combination of 2 mg estradiol (as hemihydrate) and 10 mg dydrogesterone. Indication: Femoston-conti 0.5 mg/2.5 mg and 1 mg/5 mg film-coated tablets; Hormone replacement therapy (HRT) for oestrogen deficiency symptoms in postmenopausal women at least 12 months since last menses. Femoston 1/10 mg and 2/10 mg film-coated tablets; Hormone replacement therapy (HRT) for coated tablets; Hormone replacement therapy (HRT) for oestrogen deficiency symptoms in postmenopausal women at least 12 months since last menses. Femoston 1/10 mg and 2/10 mg film-coated tablets; Hormone replacement therapy (HRT) for coated tablets; Bosage and administration: Femoston-conti 0.5 mg/2.5 mg and 1 mg/5 mg film-coated tablets; approved for the prevention of osteoporosis. Dosage and administration: Femoston-conti 0.5 mg/2.5 mg and 1 mg/5 mg film-coated tablets; given as a continuous combined HRT every day without a break between packs. Dosage is one tablet per day for a 28 day cycle. Continuous Dosage and administration: Perinsion-Contro sing/2-5 mg/2-5 mg/2-The minimized of the request of the induct databased of the induct and an analysis in the induct and the induct Dispersions and meminguina contraints are present of nave previously occurring and/or nave previous hypothese aggravated utiling pregnancy or previous hormone treatment. Therapy should be discontinued in case a contraindication is discovered and in the following situations: jaundice or deterioration in liver function, significant increase in blood pressure, new onset of migraine-type headache, pregnancy investigate breakthrough bleeding. An increased risk of breast cancer has been reported that is dependent on the length of treatment. HRT can increase the density of mammographic images which may affect radiological detection of breast cancer. The use of oestrogen-only or combined oestrogen-progestogen HRT has been associated with a slightly increased risk of ovarian cancer. HRT is associated with an increased relative risk of venous



PRESCRIBING INFORMATION ELLESTE™ (estradiol +/- norethisterone acetate) Please refer to Summary of Product Characteristics (SmPC)

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- 6. Fournier A, et al. Breast Cancer Res Treat. 2008;107:103-11.
- Femoston® 1/10 mg Summary of Product Characteristics. Femoston[®] 2/10 mg Summary of Product Characteristics.
- 8. Femoston®-conti 0.5 mg/2.5 mg Summary of Product Characteristics. 9.
- 10. Femoston®-conti 1 mg/5 mg Summary of Product Characteristics
- Menopause Matters https://www.menopausematters.co.uk/sideeffects.php. (Last accessed 11. December 2020)
- Panay N, et al. Human Reproduction Update. 1997;3(2):159-71.
- Schindler AE, Campagnoli C, Druckmann R, et al. Classification and pharmacology of progestins. Maturitas. 2008;61(1–2):171–80. 13.
- 14.
- 15.
- Mylan, data on file 2020. Elleste Solo™ MX 40µg Summary of Product Characteristics. Elleste Solo™ MX 80µg Summary of Product Characteristics. 16.
- 17. Anderson FA, Spencer FA. Circulation. 2003;107(Suppl.1):1-9.

thromboembolism (VTE) i.e. deep vein thrombosis or pulmonary embolism. Patients with known thrombophilic states have an increased risk of VTE and HRT may add to this risk. HRT is therefore contraindicated in these patients Generally recognised risk factors for VTE include: use of oestrogens, older age, major surgery, prolonged immobilisation, obesity (BMI)-30 kg/m²), pregnancy/postpartum period, systemic lupus cythematosus (SLC), and cancer. If VTE develops after initiating therapy, the drug should be discontinued. Oestrogens may cause fluid retention, and therefore patients with cardiac or renal dysfunction should be carefully observed. Relative risk of coronary artery disease is raised with oestrogen-progestogen therapy, but randomised controlled trials have not shown an increase with oestrogen-only therapy. The use of oestrogen-only and oestrogen-progestogen therapy is associated with an up to 1.5-fold increased relative risk of ischaemic stroke. Patients with rare hereitlary problems of galactose intolerance, total lactase deficiency or glucose-galactose malabsorption should not take this medicine. Oestrogen-progestogen combination treatment is not a contraceptive. Interaction with other medicinal products: The metabolism of oestrogens and progestogens may be increased by concomitant use of P450 enzymes such as anticomulsants and anti-infectives. Ritonavir, nelfinavir and herbal preparations containing SL. John's Wort may induce the metabolism of oestrogens and progestogens may be increased by to concentrate use of the affected substances up to toxic levels. Careful drug monitoring might be indicated and a dosage decrease of facrolimus, fentanyl, cyclosporine A and theophylline. This may lead to a increased plasma level of the affected substances up to toxic levels. Careful drug monitoring might be indicated, abdominal pain, back pain, breast pain/tenderness. Common: Vaginal candidiasis, depression, nervousness, migraine, dizziness, nausea, vomiting, flatuience, allergic skin reactions (e.g. rash, ur

Marketing Authorisation Holder: Mylan Products Ltd., 20 Station Close, Potters Bar, Herts, EN6 1TL, UK. Marketing Authorisation Number: Femoston 1/10 mg film-coated tablets PL 46302/0035; Femoston 2/10 mg film-coated tablets PL 46302/0036; Femoston-conti 0.5 mg/2.5 mg film-coated tablets PL 46302/0037; Femoston-conti 1 mg/5 mg film-coated tablets PL 46302/0038 Basic NHS price: Femoston-conti £24.43 (84 tablets) & Femoston £16.16 (84 tablets) Legal Category: POM Date of Last Revision: October 2020

Veeva Reference: FEM-2020-0409

The SmPC for this product, including adverse reactions, precautions, contra-indications, and method of use can befound at: http://www.mhra.gov.uk/Safetyinformation/Medicinesinformation/SPCandPILs/index.htm and from Mylan Medical Information, Building 4, Trident Place, Hatfield Business Park, Mosquito Way, Hatfield, Hertfordshire, AL10 9UL, phone no. 01707 853000, Email: info@mylan.co.uk

Adverse Drug Reactions should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard or search for MIRA Yellow Card in the Google Play or Apple App Store. Adverse events should be reported to UK Pharmacovigilance, Mylan, Building 4, Trident Place, Hatfield Business Park, Mosquito Way, Hatfield, Hertfordshire, AL10 9UL, on phone no. +44 (0) 800 121 8267, Email: ukpharmacovigilance@mylan.com

obesity, systemic lupus erythematosus, immobilisation, major trauma and major surgery. Consider discontinuing HRT 4-6 weeks before elective surgery requiring immobilisation. Therapy should be discontinued if VTE develops after initiating surgery. There is an increased risk of carlovascular morbidity during the first year of use of HRT. HRT is associated with an up to 1.5-fold increased risk of stroke. Long term use of oestrogens in women has been associated with an increased risk of ovarian cancer. Oestrogens may cause fluid retention. Women with pre-existing hypertriglyceridemia should be followed closely (risk of pancreatitis). Certain endocrine tests may be affected. No evidence for improvement in cognitive function. Increased risk of gallbladder disease. Liver tumours leading to intra-abdominal haemorrhage have been reported. Patients with rare hereditary disorders of galactose incluseal eligic reactions. May interact with other medicines. Please refer SmPC for further information. Interaction with other medicinal products: The metabolism of oestrogens and progestogens may be increased by concornilant use of substances known to induce drug-metabolising enzymes, specifically cytochrome PA50, such as anticonvilsants (e.g. phenobaritia, phenytoin, carbamazepine) and anti-infectives (e.g. rifampicin, rifabutin, nevirapine, efaviren2). Ritonavi, telaprevi, neffinavir and herdal preparations containing St John's Wort may induce the metabolism of oestrogens and progestogens. Please refer SmPC for further information. Interaction with ve and/or to use machines. Under Side effects: Very common side effects (>1/10): Exptema, itching: uterine bleeding: breast tenderness, ownmornhoem, emstrual disorder. Common side effects (>1/10): Headache, verget na and tendemess, dysmenorrhoea, aggravation of eligiese; charledine, weight therease of decracese; eedem c, change in noiculding anxiety and depressive mod; change in hiddo. Other side effects include: Vaginal candidasis; vomiting; albidader disease; pancreatitis, gallstone

Legal Category: POM

Legal Category: POM Marketing Authorisation Numbers and Basic NHS Price: Elleste Solo[™] 1mg: PL 46302/0169; 3 x 28 film-coated tablets 55.06. Elleste Solo[™] 2mg: PL 46302/0170; 3 x 28 film-coated tablets £5.06. Elleste Solo[™] MX 40 mcg: PL 46302/0167; 8 patches £5.19. Elleste Solo[™] MX 80 mcg: PL 46302/0168; 8 patches £5.99. Elleste Duet[™] 1mg: PL 46302/0164; 3 x 28 film-coated tablets £9.20. Elleste Duet[™] 2mg: PL 46302/0165; 3 x 28 film-coated tablets £9.20. Elleste Duet[™] Conti: PL 46302/0166; 3 x 28 film-coated tablets £17.02. MAH: Mylan Products Ltd. Further information is available on request from: Mylan Products Ltd., Station Close, Potters Bar, Herts, EN6 1LT. Tel. 01707 853000 Date of Last Revision: October 2020 Veeva Reference: ELL-2020-0087

The SmPC for this product, including adverse reactions, precautions, contra-indications, and method of use can be found at: http://www. mhra.gov.uk/Safetyinformation/Medicinesinformation/SPCandPlLs/index.htm and from Mylan Medical Information, Building 4, Trident Place, Hatfield Business Park, Mosquito Way, Hatfield, Hertfordshire, AL10 9UL, phone no. 01707 853000, Email: info@mylan.co.uk

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