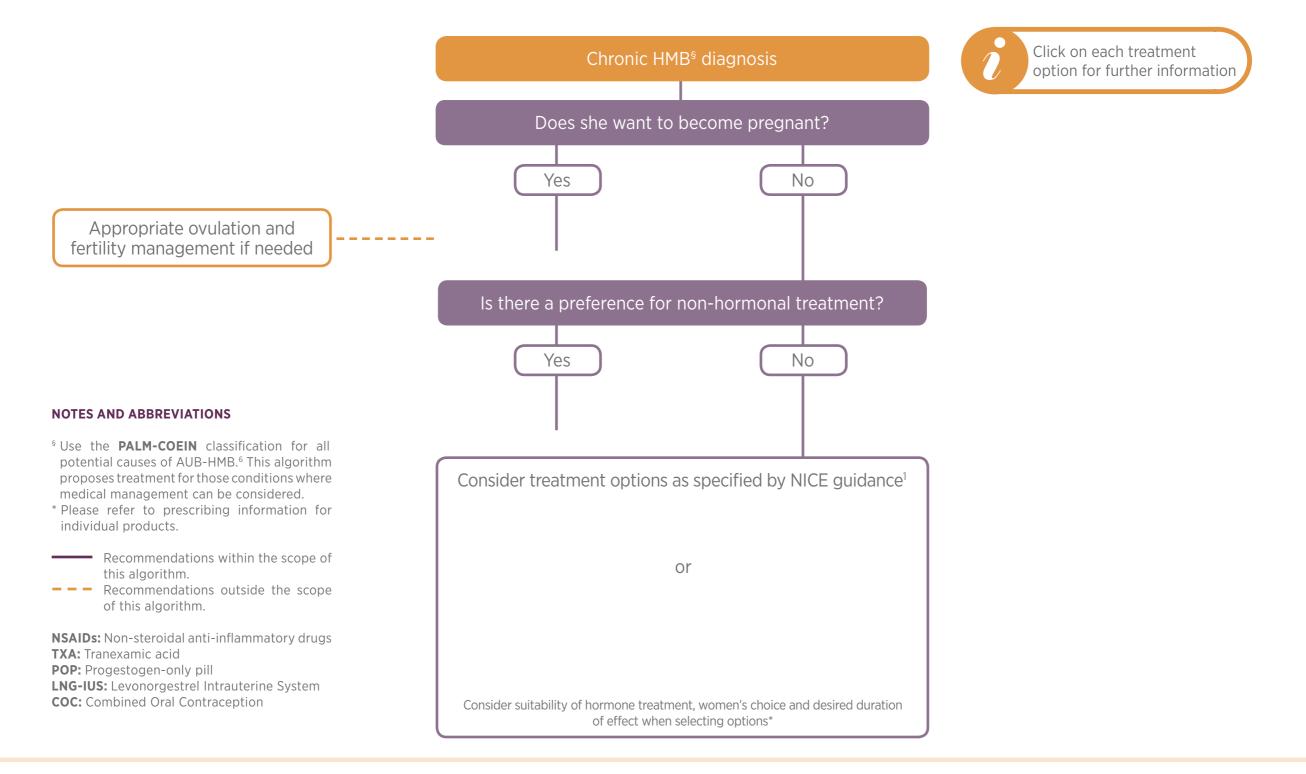
The **HELP treatment algorithm** for chronic HMB



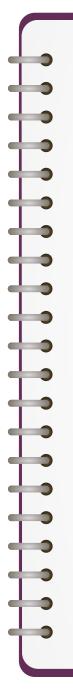


1. NICE Heavy Menstrual Bleeding guideline 88, 2018; 2. Bitzer J, et al. Obstet Gynecol Surv 2015;70(2):115-30; 3. Coulter A, et al. Int J Technol Assess Health Care 1995;11(3):456-471; 4. Kaunitz AM, Inki P. Drugs 2012;72 (2):193-215; 5. Endrikat J, et al. Arch Gynecol Obstet 2012;285:117-21; 6. Munro MG, et al. Int J Gynecol Obstet 2011;113(1):3-13.

The HELP protocol has been adapted in UK to reflect the 2018 updated NICE guidelines The HELP group is a panel of the physicans of 12 countries with experts interes in Heavy Menstural Bleading (HMB) support Bayer

Non-steroidal anti-inflammatory drugs (NSAIDs)





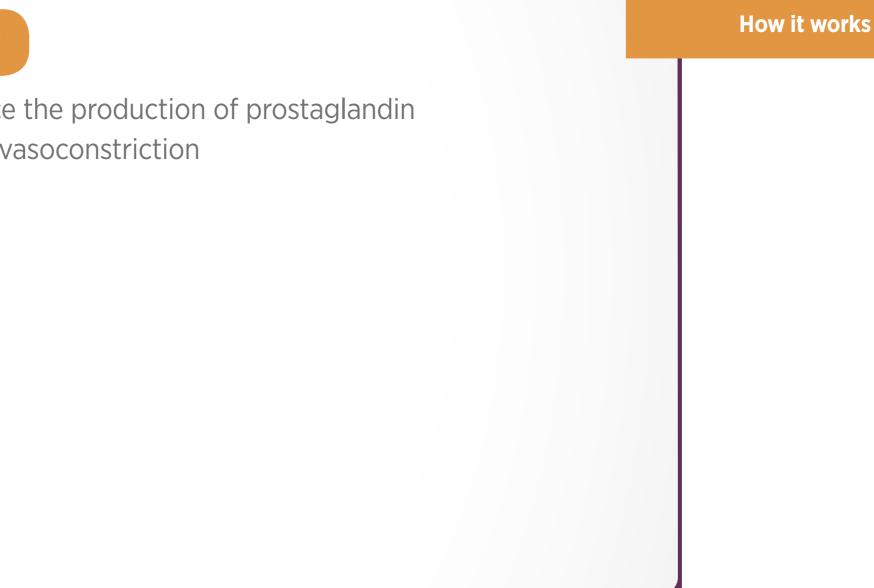
- ✓ Addresses bleeding and pain
- Tablets are taken orally from day 1, or just before, until heavy blood loss has stopped¹
- Results show similar values for mefenamic acid, diclofenac and naproxen¹

Non-steroidal anti-inflammatory drugs (NSAIDs)



How it works¹

NSAIDs reduce the production of prostaglandin and promote vasoconstriction



Non-steroidal anti-inflammatory drugs (NSAIDs)



How well it works¹⁻⁴

- Efficacy in reducing Menstrual Blood Loss (MBL) varies widely according to type of NSAID, dosage used and duration of use
- A reduction of 16.2% to 29% in MBL is cited in the literature¹

How well it works (including effect of MBL)

1. Coulter A, et al . *Int J of Technol Assess Health Care* 1995;11(3):456-471; 2. NICE *Heavy Menstrual Bleeding guideline* 88, 2018; 3. Bitzer J, et al. *Obstet Gynecol Survey*, In Press November 2014; 4. Lethaby A, et al. *Cochrane Database Syst Rev* 2007;4:CD000400.

Non-steroidal anti-inflammatory drugs (NSAIDs)



Usefulness¹

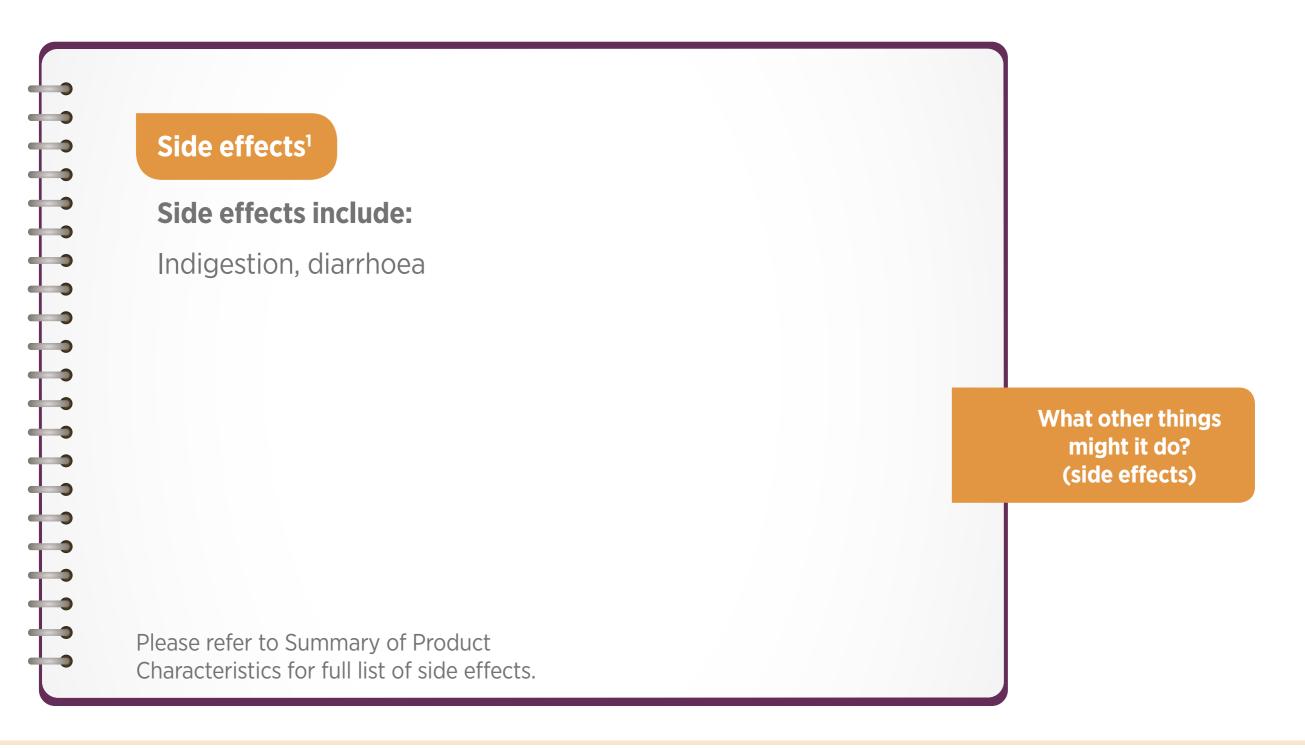
Can be used:

- when further investigations or other treatment is being organised or considered as an interim measure
- where fertility preservation is required
- when hormonal treatments are not acceptable
- when pain is also a problem
- only at or around the time of a period

Will it be useful?

Non-steroidal anti-inflammatory drugs (NSAIDs)





1. Ibuprofen SmPC www.medicines.ie

Non-steroidal anti-inflammatory drugs (NSAIDs)



Clinical considerations¹⁻³

- No contraceptive effect
- There is a risk of GI and cardiovascular events
- Treatment should be stopped if no symptomatic improvement is seen within 3 menstrual cycles

Background clinical considerations

Tranexamic acid



- Slightly better effect on bleeding compared to NSAIDs but does not have an impact on pain^{1,2}
- ✓ 1g 3-4 times per day as long as needed for up to 4 days, a total dose of 4g daily should not be exceeded²

Tranexamic acid



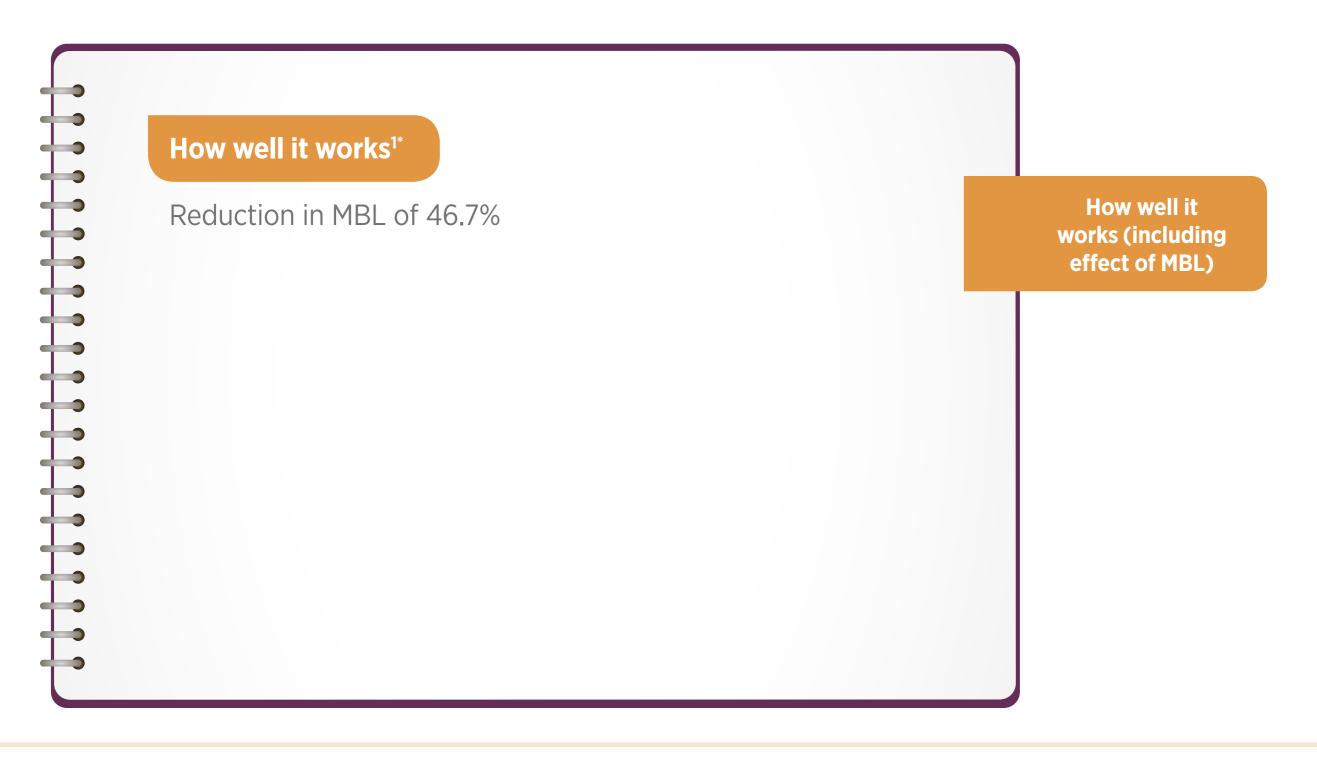
How it works

How it works¹

Tranexamic acid is a competitive inhibitor of plasminogen activator binding, therefore acting as an antifibrinolytic

Tranexamic acid





*Small clinical studies monitoring MBL over two to three cycles; studies vary according to inclusion criteria, comparator, dosing, duration of treatment, assessment of MBL 1. Coulter A et al. *International Journal of Technology Assessment in Health Care* 1995;11(3):456–71.

Tranexamic acid



Usefulness¹

Can be used:

- when further investigations or other treatment is being organised or considered as an interim measure
- where fertility preservation is required
- when hormonal treatments are not acceptable

Will it be useful?

Tranexamic acid





1. Cyklokapron 500mg tablets SmPC www.medicines.ie ; 2. NICE Heavy Menstrual Bleeding guideline 88, 2018; 3. Singh S, et al. SOGC Clinical Practice Guideline. J Obstet Gynaecol Can 2013;35(5 eSuppl):S1-S28;

Tranexamic acid



Clinical considerations¹⁻³

- Rapid onset of action
- No contraceptive effect
- Treatment should be stopped if no symptomatic improvement is seen within 3 menstrual cycles
- Tranexamic acid does not treat painful periods
- Tranexamic acid is contraindicated in patients with a history of thrombosis

Background clinical considerations

Levonorgestrel intrauterine system (LNG-IUS)





- Intrauterine system initially releasing 20 µg of levonorgestrel directly into the endometrium every day¹
- ✓ Up to 96% blood reduction²⁻⁶
- ✓ Lasts for 5 years

^{1.} Mirena - Bayer Ltd Mirena (52mg Intrauterine system levonorgestrel) SmPC www.medicines.ie.

^{2.} NICE Heavy Menstrual Bleeding guideline 88, 2018;

^{3.} Fox KE. Curr Med Res Opin 2012;28(9):1517-1525;

^{4.} Kaunitz AM, Inki P. Drugs 2012;72 (2):193-215;

^{5.} Endrikat J, et al. Arch Gynecol Obstet. 2012;285:117-21;

^{6.} Hurskainen R, et al. JAMA 2004;291(12):1456-1463. The HELP group is a panel of physicians of 12 countries with expert interest in Heavy Menstrual Bleeding (HMB) supported by Bayer

Levonorgestrel intrauterine system (LNG-IUS)



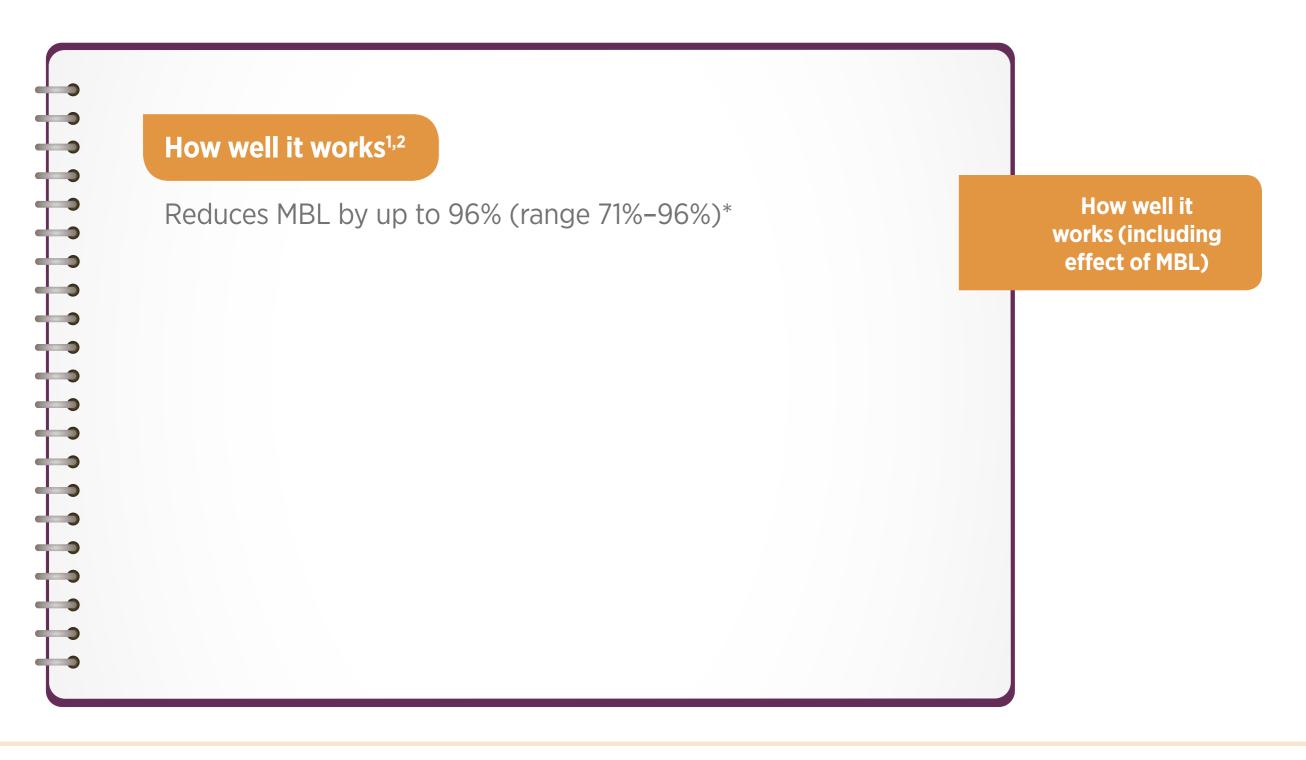
How it works

How it works¹⁻³

Prevents endometrial proliferation which in turn reduces mean uterine vascular density

Levonorgestrel intrauterine system (LNG-IUS)





*Studies vary according to inclusion criteria, comparator, dosing, duration of treatment, assessment of MBL 1. NICE *Heavy Menstrual Bleeding guideline 88*, 2018; 2. Fox KE. *Curr Med Res Opin* 2012;28(9):1517-1525;

Levonorgestrel intrauterine system (LNG-IUS)



Usefulness¹⁻⁵

- Contraceptive effect
- Associated with:
- a significant increase in levels of haemoglobin and ferritin
- a significant improvement in most Health Related Quality of Life (HR-QoL) over 5 years (at least comparable to those achieved with hysterectomy or endometrial ablation)

No impact on future fertility⁵

Will it be useful?

NICE Heavy Menstrual Bleeding guideline 88, 2018;
Kaunitz AM, Inki P. Drugs 2012;72 (2):193-215;
Endrikat J, et al. Arch Gynecol Obstet. 2012;285:117-21;

^{4.} Hurskainen R, *et al. JAMA* 2004;291(12):1456-1463.

^{5.} Mirena- Bayer Ltd Mirena (52mg Intrauterine system levonorgestrel) SmPC www.medicines.ie

Levonorgestrel intrauterine system (LNG-IUS)



Side effects^{1,2}

Side effects include:

Uterine/vaginal bleeding including spotting, oligomenorrhoea, amenorrhoea

What other things might it do? (side effects)

Please refer to Summary of Product Characteristics for full list of side effects.

Levonorgestrel intrauterine system (LNG-IUS)



Clinical considerations^{1,2}

Oligomenorrhea and Amenorrhea in 57% and 16% of women respectively at 12 months¹

- A uterine perforation rate of 0.14% was reported in the recent EURAS-IUD study
- Provides contraception

Background clinical considerations

Combined Oral Contraceptives (COCs)





- Combination of oestrogen and progestogen
- ✓ Possible dosing regimens include 21/7 and 26/2^{1,2}

Combined Oral Contraceptives (COCs)



How it works ¹⁻³	How it wo
Suppress ovulation and prevent endometrial proliferation	

1. NICE Heavy Menstrual Bleeding guideline 88, 2018;

2. Fraser IS, et al. *Hum Reprod* 2011;26:2698-708.

3. Bitzer J, et al. Medical management of heavy menstrual bleeding: a comprehensive review of the literature. Obstet Gynecol Surv. 2015 Feb;70(2):115-30.

Combined Oral Contraceptives (COCs)



How well it works¹⁻⁴

There are a limited number of studies involving the use of COCs in HMB²

Reductions in MBL of up to 43% at three months are reported in small studies involving unlicensed COCs*

Reductions in median MBL of 88% are reported in studies of E2V/DNG in the treatment of HMB⁺

E2V/DNG - Estradiol Valerate & Dienogest LNG/EE - Levonorgestrel & Ethinyl Estradiol How well it works (including effect of MBL)

*Studies vary according to inclusion criteria, comparator, dosing, duration of treatment, assessment of MBL¹ ⁺E2V/DNG is licensed for the treatment of HMB³ 1. NICE *Heavy Menstrual Bleeding guideline 88*, 2018;

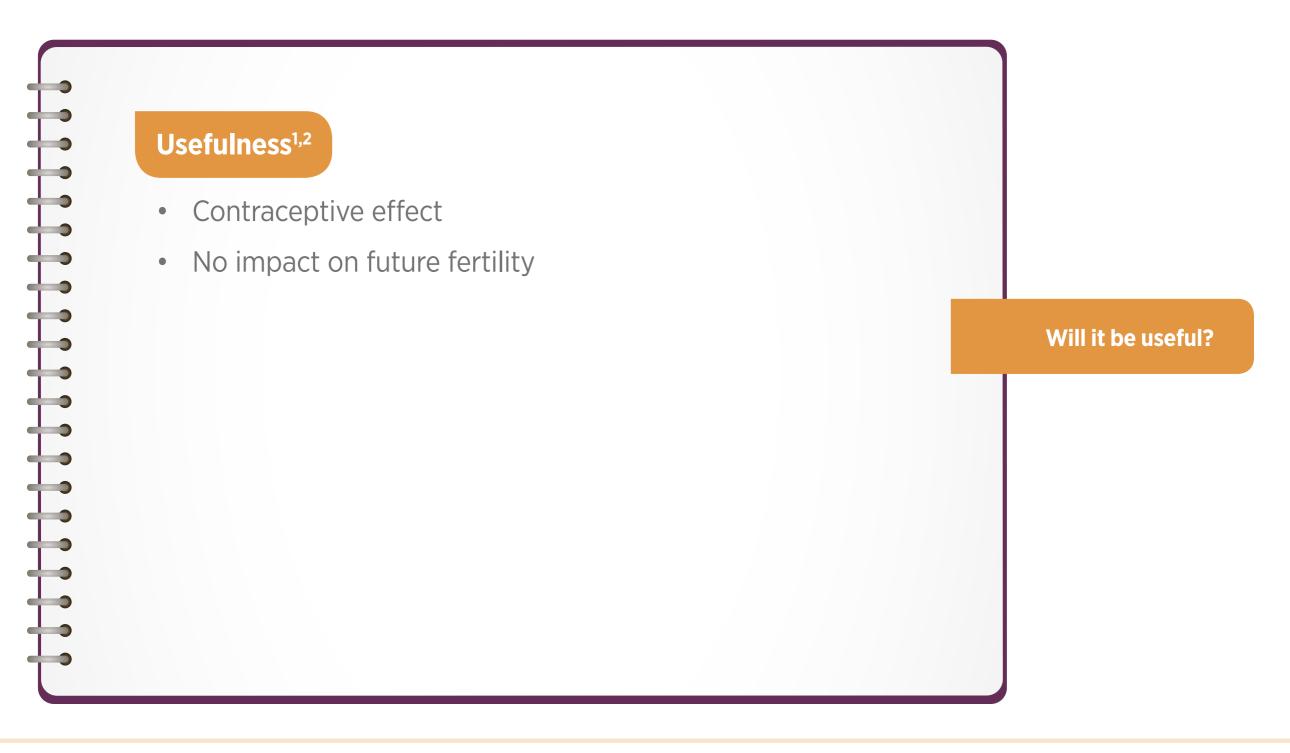
2. Fraser IS, et al. Hum Reprod 2011;26:2698-708.

3. Qlaria (estradiol valerate/dienogest) - Bayer Ltd. - Qlaria SmPC www.medicines.ie

4. Microlite - Bayer Ltd. Microlite 100/20mg tablets SmPC www.medicines.ie

Combined Oral Contraceptives (COCs)





Combined Oral Contraceptives (COCs)



Side effects¹⁻⁴

Side effects include:

Mood changes, headaches, nausea, fluid retention, breast tenderness

What other things might it do? (side effects)

Please refer to Summary of Product Characteristics for full list of side effects.

1. NICE Heavy Menstrual Bleeding guideline 88, 2018;

2. Fraser IS, et al. Hum Reprod 2011;26:2698-708.

3. Qlaria (estradiol valerate/dienogest) - Bayer Ltd. - Qlaria SmPC www.medicines.ie

4. Microlite - Bayer Ltd. Microlite 100/20mg tablets SmPC www.medicines.ie

Combined Oral Contraceptives (COCs)



Clinical considerations¹⁻⁴

 2 COCs (E2V/DNG, LNG/EE) are licensed for the treatment of HMB and are supported by clinical data in this indication

E2V/DNG - Estradiol Valerate & Dienogest LNG/EE - Levonorgestrel & Ethinyl Estradiol

2. Fraser IS, et al. Hum Reprod 2011;26:2698-708.

Background clinical considerations

^{1.} NICE Heavy Menstrual Bleeding guideline 88, 2018;

^{3.} Qlaria (estradiol valerate/dienogest) - Bayer Ltd. - Qlaria SmPC www.medicines.ie

^{4.} Microlite - Bayer Ltd. Microlite 100/20mg tablets SmPC www.medicines.ie

Oral progestogens





- ✓ No oestrogen involved
- ✓ Oral progestogens, medroxyprogesterone acetate [2.5-10mg for 5 to 10 days]¹⁻²

Oral progestogens



How it works ¹	How it wor
Suppress ovulation and prevent endometrial proliferation	

Oral progestogens



How well it works¹

One RCT (n = 44) reported an 83% reduction in MBL with long-course use of oral progestogens

Short-course oral progestogens (i.e. luteal phase only) have no effect on MBL and should not be used for the treatment of HMB How well it works (including effect of MBL)

Oral progestogens



Usefulness¹

- Achievement of menstrual regularity in women with anovulatory bleeding
- When oestrogen-containing preparations are contraindicated



Oral progestogens



Side effects¹

Side effects include:

Weight gain, bloating, breast tenderness, headaches, acne

Please refer to Summary of Product Characteristics for full list of side effects. What other things might it do? (side effects)

1. Provera SmPC www.medicines.ie

Oral progestogens



