

Attachment 1: Product information for AusPAR Esmya Vifor Pharma Pty Ltd PM-2015-00776-1-5
Final 19 October 2016 This Product Information was approved at the time this AusPAR was
published.

PRODUCT INFORMATION - *Esmya*[®]

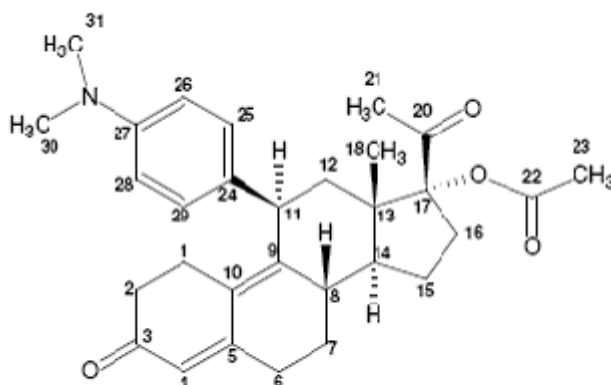
NAME OF THE MEDICINE

Esmya[®] (5 mg ulipristal Acetate Tablet)

Australian Approved Name (AAN): ulipristal Acetate

Chemical name: 17 α -acetoxy-11 β -(4-N,N-dimethylaminophenyl)-19-norpregna-4,9-diene-3,20-dione

Chemical structure:



Molecular formula: C₃₀H₃₇NO₄

Molecular weight: 475.619

CAS number: 126784-99-4

DESCRIPTION

Tablet is a white to off-white, round biconvex tablet engraved with “ES5” on one face.

Each tablet contains 5 mg of ulipristal acetate. Ulipristal acetate is a white to yellowish crystalline powder. It is freely soluble in dichloromethane, soluble in methanol, acetone and ethanol and insoluble in water.

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The tablet also contains the following inactive ingredients: microcrystalline cellulose, mannitol, croscarmellose sodium, talc and magnesium stearate.

PHARMACOLOGY

Pharmacodynamic properties

Pharmacotherapeutic group: Sex hormones and modulators of the genital system, progesterone receptor modulators. ATC code: G03XB02.

Ulipristal acetate is an orally-active synthetic selective progesterone receptor modulator that acts via high-affinity (nanomolar) binding to the human progesterone receptor. Its major metabolite, monodesmethyl ulipristal, has comparable affinity for the progesterone receptor.

Ulipristal acetate also has high affinity for the glucocorticoid receptor and antiglucocorticoid effects have been observed *in vivo* in animals. However, in humans, no such effect has been observed even after repeated administration at a daily dose of 10 mg. Ulipristal acetate has weak affinity for the androgen receptor and negligible affinity for the human oestrogen or and mineralocorticoid receptors.

Fibroids

Ulipristal acetate exerts a direct action on fibroids reducing their size through inhibition of cell proliferation and induction of apoptosis.

Pituitary

A daily dose of ulipristal acetate 5 mg inhibits ovulation in the majority of patients as indicated by progesterone levels maintained at around 0.3 ng/mL.

A daily dose of ulipristal acetate 5 mg partially suppresses FSH levels but serum oestradiol levels are maintained in the mid-follicular range in the majority of patients and are similar to levels in patients who received placebo.

Ulipristal acetate does not affect serum levels of TSH, ACTH or prolactin.

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Endometrium

Ulipristal acetate exerts a direct effect on the endometrium. When daily administration of a 5 mg dose is commenced during a menstrual cycle most subjects (including patients with myoma) will complete their first menstruation but will not menstruate again until after treatment is stopped. When ulipristal acetate treatment is stopped, menstrual cycles generally resume within 4 weeks.

The direct action on the endometrium results in class specific changes in histology termed “Progesterone Receptor Modulator Associated Endometrial Changes” (PAEC). Typically, the histological appearance is an inactive and weakly proliferating epithelium associated with asymmetry of stromal and epithelial growth resulting in prominent cystically dilated glands with admixed oestrogen (mitotic) and progestin (secretory) epithelial effects. Such a pattern has been observed in approximately 60% of patients treated with ulipristal acetate for 3 months. These changes are reversible after treatment cessation. These changes should not be confused with endometrial hyperplasia.

About 5% of patients of reproductive age experiencing heavy menstrual bleeding have an endometrial thickness of greater than 16 mm. In about 10-15% of patients treated with ulipristal acetate the endometrium may thicken (> 16 mm) during the first 3-month treatment course. In case of repeated treatment courses, endometrial thickening was less frequently observed (about 4.9% of patients after treatment course 2, and 3.5% after treatment course 4). This thickening disappears after treatment is withdrawn and menstruation occurs. If endometrial thickness persists after return of menstruations during off-treatment periods or beyond 3 months following the end of treatment courses, it may need to be investigated as per usual clinical practice to exclude other underlying conditions.

Pharmacokinetic properties

Absorption

Following oral administration of a single dose of 5 or 10 mg, ulipristal acetate is rapidly absorbed, with a C_{max} of 23.5 ± 14.2 ng/mL and 50.0 ± 34.4 ng/mL occurring approximately 1 h after ingestion, and with an $AUC_{0-\infty}$ of 61.3 ± 31.7 ng/mL 134.0 ± 83.8 ng.h/mL,

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respectively. Ulipristal acetate is rapidly transformed into a pharmacologically active metabolite with a C_{max} of 9.0 ± 4.4 ng/mL and 20.6 ± 10.9 ng/ml also occurring approximately 1 h after ingestion, and with an $AUC_{0-\infty}$ of 26.0 ± 12.0 ng/mL and 63.6 ± 30.1 ng.h/mL respectively.

The mean absolute bioavailability of ulipristal acetate for a 30 mg dose is 27% [22.0 to 33.0%].

Administration of ulipristal acetate (30 mg tablet) together with a high-fat breakfast resulted in approximately 45% lower mean C_{max} , a delayed t_{max} (from a median of 0.75 hours to 3 hours) and 25% higher mean $AUC_{0-\infty}$ compared with administration in the fasted state. Similar results were obtained for the active mono-N-demethylated metabolite. This kinetic effect of food is not expected to be of clinical relevance for daily administration of ulipristal acetate tablets.

Distribution

Ulipristal acetate is highly bound (>98%) to plasma proteins, including albumin, alpha-1-acid glycoprotein, high density lipoprotein and low density lipoprotein.

Ulipristal acetate and its active mono-N-demethylated metabolite are excreted in breast milk with a mean AUC_t milk/ AUC_t plasma ratio of 0.74 ± 0.32 for ulipristal acetate.

Metabolism

Ulipristal acetate is extensively metabolised to mono-demethylated, di-demethylated and hydroxylated metabolites. The mono-demethylated metabolite is pharmacologically active. *In vitro* data indicate that this is predominantly mediated by the cytochrome P450 3A4 isoform (CYP3A4).

Excretion

The main route of elimination is through faeces and less than 10% is excreted in the urine. The terminal half-life of ulipristal acetate in plasma following a single dose of 5 or 10 mg is estimated to be about 38 hours, with a mean oral clearance (CL/F) of about 100 L/h.

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Special populations

No pharmacokinetic studies with ulipristal acetate have been performed in women with impaired renal or hepatic function. Due to the CYP-mediated metabolism, hepatic impairment is expected to alter the elimination of ulipristal acetate, resulting in increased exposure.

CLINICAL TRIALS

Short-term use (single course of 3 months):

The efficacy of fixed doses of ulipristal acetate 5 mg and 10 mg once daily was evaluated in two Phase 3 randomised, double-blind, 13 week studies recruiting patients with very heavy menstrual bleeding associated with uterine fibroids. Study 1 was double-blind placebo controlled. Patients in this study were required to be anaemic at Study entry (Hb < 10.2 g/dL) and all patients were to receive oral iron 80 mg Fe⁺⁺ in addition to study drug. Study 2 contained the active comparator, leuprorelin 3.75 mg given once per month by intramuscular injection. In Study 2, a double-dummy method was used to maintain the blind. In both studies menstrual blood loss was assessed using the Pictorial Bleeding Assessment Chart (PBAC). A PBAC >100 within the first 8 days of menses is considered to represent excessive menstrual blood loss.

In Study 1, a statistically significant difference was observed in reduction in menstrual blood loss in favour of the patients treated with ulipristal acetate compared to placebo (see Table 1 below), resulting in faster and more efficient correction of anaemia than iron alone. Likewise, patients treated with ulipristal acetate had a greater reduction in myoma size, as assessed by MRI.

In Study 2, the reduction in menstrual blood loss was comparable for the patients treated with ulipristal acetate and the gonadotrophin releasing hormone-agonist leuprorelin (whereas the GnRH agonist approved in Australia for this indication is goserelin). Most patients treated with ulipristal acetate stopped bleeding within the first week of treatment (amenorrhea).

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The size of the three largest myomas was assessed by ultrasound at the end of treatment (Week 13) and for another 25 weeks without treatment in patients who did not have hysterectomy or myomectomy performed. Myoma size reduction was generally maintained during this follow-up period in patients originally treated with ulipristal acetate but some re-growth occurred in patients treated with leuprorelin.

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Table 1: Results of primary and selected secondary efficacy assessments in short-term Phase III studies

Parameter	Study 1			Study 2		
	Placebo N = 48	Ulipristal acetate 5 mg/day N = 95	Ulipristal acetate 10 mg/day N = 94	Leuprorelin 3.75 mg/ month N = 93	Ulipristal acetate 5 mg/day N = 93	Ulipristal acetate 10 mg/day N = 95
Menstrual bleeding						
Median PBAC at baseline	376	386	330	297	286	271
Median change at week 13	-59	-329	-326	-274	-268	-268
Patients in amenorrhoea at week 13	3 (6.3%)	69 (73.4%)¹	76 (81.7%)²	74 (80.4%)	70 (75.3%)	85 (89.5%)
Patients whose menstrual bleeding became normal (PBAC < 75) at week 13	9 (18.8%)	86 (91.5%)¹	86 (92.5%)¹	82 (89.1%)	84 (90.3%)	93 (97.9%)
Median change in myoma volume from baseline to week 13 ^a	+3.0%	-21.2%³	-12.3%⁴	-53.5%	-35.6%	-42.1%

^a In Study 1, change from baseline in total myoma volume was measured by MRI. In Study 2, change in the volume of the three largest myomas was measured by ultrasound. Bold values in shaded squares indicate that there was a significant difference in the comparisons between ulipristal acetate and the control. These were always in favour of ulipristal acetate.

P values: ¹ = <0.001, ² = 0.037, ³ = <0.002, ⁴ = <0.006.

Repeated intermittent use:

The efficacy of repeated treatment courses of fixed doses of ulipristal acetate 5 mg or 10 mg once daily was evaluated in two Phase 3 studies assessing up to 4 intermittent 3-month treatment courses in patients with heavy menstrual bleeding associated with uterine fibroids. Study 3 was an open-label study assessing ulipristal acetate 10 mg, where each of the 3-month treatment was followed by 10 days of double-blind treatment with progestin or

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placebo. Study 4 was a randomised, double-blind clinical study assessing ulipristal acetate 5 mg or 10 mg.

Studies 3 and 4 showed efficacy in controlling uterine fibroid symptoms (e.g. uterine bleeding) and reducing fibroid size after 2 and 4 courses.

In Study 3, treatment efficacy has been shown over > 18 months of repeated intermittent treatment (4 courses of 10 mg once daily), 89.7% of patients were in amenorrhea at the end of the treatment course 4.

In Study 4, 61.9% and 72.7% of patients were in amenorrhea at the end of both treatment course 1 and 2 combined (5 mg dose and 10 mg dose, respectively, p=0.032); 48.7% and 60.5% of patients were in amenorrhea at the end of all four treatment courses combined (5mg dose and 10 mg dose, respectively, p=0.027); at the end of treatment course 4, 158 (69.6%) subjects and 164 (74.5%) subjects were assessed as being in amenorrhea, in the 5 mg dose and 10 mg dose groups respectively (p=0.290).

Table 2: Results of primary and selected secondary efficacy assessments in long term Phase III studies

Parameter	After treatment course 2 (two times 3 months of treatment (intermittent))			After treatment course 4 (four times 3 months of treatment)		
	Study 3 ^a	Study 4		Study 3	Study 4	
Patients starting treatment course 2 or 4	10 mg/day N=132	5 mg/day N= 213	10 mg/day N=207	10 mg/day N=107	5mg/day N=178	10mg/day N=176
Patients in amenorrhea ^{b,c}	N=131	N = 205	N = 197	N=107	N=227	N=220
	116 (88.5%)	152 (74.1%)	162 (82.2%)	96 (89.7%)	158 (69.6%)	164 (74.5%)
Patient with controlled bleeding ^{b,c}	NA	N=199	N=191	NA	N=202	N=192
		175 (87.9%)	168 (88.0%)		148 (73.3%)	144 (75.0%)
Median change in myoma volume from baseline	-63.2%	-54.1% ^a	-58.0% ^a	-72.1%	-71.8%	-72.7%

^a Treatment course 2 assessment corresponds to Treatment course 2 plus one menstrual bleeding for amenorrhea assessment and at the end of treatment course 2 for myoma volume assessment..

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^b Patients with missing values were excluded from the analysis.

^c N and % including withdrawn patients

^d Controlled bleeding was defined as no episodes of heavy bleeding and a maximum of 8 days of bleeding (not including days of spotting) during the last 2 months of a treatment course.

Endometrial findings:

In all Phase III studies including repeated intermittent treatment studies, a total of 7 cases of hyperplasia were observed out of 789 patients with adequate biopsies (0.89%). The vast majority spontaneously reversed to normal endometrium after resumption of menstruation during the off-treatment period. The incidence of hyperplasia did not increase with repeated treatment courses. The observed frequency is in line with control groups and prevalence reported in literature for symptomatic pre-menopausal women of this age group (mean of 40 years).

INDICATION

Ulipristal acetate is indicated for intermittent treatment of moderate to severe symptoms of uterine fibroids in adult women of reproductive age.

CONTRAINDICATIONS

Hypersensitivity to the active substance or to any of the excipients.

Pregnancy and breastfeeding.

Genital bleeding of unknown aetiology or for reasons other than uterine fibroids.

Uterine, cervical, ovarian or breast cancer.

PRECAUTIONS

Ulipristal acetate should only be prescribed after careful diagnosis. Pregnancy should be precluded prior to treatment. If pregnancy is suspected prior to initiation of a new treatment course, a pregnancy test should be performed.

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Contraception

Concomitant use of progestagen only pills, a progestagen releasing intrauterine device or combined oral contraceptive pills is not recommended. Although a majority of women taking a therapeutic dose of ulipristal acetate have anovulation, a non-hormonal contraceptive method is recommended during treatment.

Endometrial changes

Ulipristal acetate has a specific pharmacodynamic action on the endometrium: Changes in the histology of the endometrium may be observed in patients treated with ulipristal acetate. These changes are reversible after treatment cessation.

These histological changes are denoted as “Progesterone Receptor Modulator Associated Endometrial Changes” (PAEC) and should not be mistaken for endometrial hyperplasia (see sections Adverse effects and Pharmacology). In addition, reversible increase of the endometrium thickness may transiently occur under treatment.

In case of repeated intermittent treatment, periodic monitoring of the endometrium is recommended. This includes annual ultrasound to be performed after resumption of menstruation during off-treatment period.

If endometrial thickening is noted, which persists after return of menstruations during off-treatment periods or beyond 3 months following the end of treatment courses, and/or an altered bleeding pattern is noted (see ‘bleeding pattern’), investigation including endometrial biopsy should be performed in order to exclude other underlying conditions, including endometrial malignancy.

In case of hyperplasia (without atypia), monitoring as per usual clinical practice (e.g. a follow-up control 3 months later) would be recommended. In case of atypical hyperplasia, investigation and management as per usual clinical practice should be performed.

The treatment courses should each not exceed 3 months as the risk of adverse impact on the endometrium is unknown if treatment is continued without interruption.

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Long term safety

Long term safety is subject to uncertainty. In the pre-market Phase-3 studies, 446 women were exposed to 5 mg or 10 mg ulipristal for 4 intermittent courses, of whom 53 were exposed to 8 intermittent courses. The safety profile was similar to that for one intermittent course, with the caveat that the numbers were small (i.e., n=53).

Bleeding pattern

Patients should be informed that treatment with ulipristal acetate usually leads to a significant reduction in menstrual blood loss or amenorrhea within the first 10 days of treatment. Should the excessive bleeding persist, patients should notify their physician. Menstrual periods generally return within 4 weeks after the end of each treatment course. If, during repeated intermittent treatment, after the initial reduction in bleeding or amenorrhea, an altered persisting or unexpected bleeding pattern occurs, such as intermenstrual bleeding, investigation of the endometrium including endometrial biopsy should be performed in order to exclude other underlying conditions, including endometrial malignancy.

Repeated intermittent treatment has been studied up to 4 intermittent treatment courses.

Renal impairment

Renal impairment is not expected to significantly alter the elimination of ulipristal acetate. In the absence of specific studies, ulipristal acetate is not recommended for patients with severe renal impairment unless the patient is closely monitored.

Hepatic impairment

There is no therapeutic experience with ulipristal acetate in patients with hepatic impairment. Hepatic impairment is expected to alter the elimination of ulipristal acetate, resulting in increased exposure. This is considered not to be clinically relevant for patients with mildly impaired liver function. Ulipristal acetate is not recommended for use in patients with moderate or severe hepatic impairment unless the patient is closely monitored.

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Concomitant treatments

Co-administration of moderate (e.g. erythromycin, grapefruit juice, verapamil) or potent (e.g. ketoconazole, ritonavir, nefazodone, itraconazole, telithromycin, clarithromycin) CYP3A4 inhibitors and ulipristal acetate is not recommended.

Concomitant use of ulipristal acetate and potent CYP3A4 inducers (e.g. rifampicin, rifabutine, carbamazepine, oxcarbamazepine, phenytoin, fosphenytoin, phenobarbital, primidone, St John's wort, efavirenz, nevirapine, long term use of ritonavir) is not recommended.

Asthma patients

Use in women with severe asthma insufficiently controlled by oral glucocorticoids is not recommended.

Contraception in females

Ulipristal acetate is likely to adversely interact with progestagen only pills, progestagen releasing devices or combined oral contraceptive pills, therefore, concomitant use is not recommended. Although a majority of women taking a therapeutic dose of ulipristal acetate have anovulation, a non-hormonal contraceptive method is recommended during treatment.

Effects on fertility

A majority of women taking a therapeutic dose of ulipristal acetate have anovulation, however, the level of fertility while taking multiple doses of ulipristal acetate has not been studied. Ovulation and menstruation resume usually within 1 month after the end of treatment.

Use in pregnancy – Pregnancy Category D

Ulipristal acetate is contraindicated during pregnancy.

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There is a limited amount of data from the use of Esmya in pregnant women. Available human data regarding pregnancy exposure to Esmya do not suggest any safety concern with use during early pregnancy.

Ulipristal acetate caused embryofoetal lethality in rats, rabbits, guinea pigs and monkeys. These effects are related to the drug's mechanism of action, occurred in the absence of maternotoxicity, and at doses yielding exposure below or a low multiple of that of patients. The safety for a human embryo/foetus is unknown. At doses which were low enough to maintain gestation in the animal species, no teratogenic potential was observed.

Use in lactation

Available toxicological data in animals have shown excretion of ulipristal acetate in milk. Ulipristal acetate is excreted in human milk. The effect on newborn/infants has not been studied. A risk to the newborns/infants cannot be excluded. Ulipristal acetate is contraindicated during breast feeding.

Paediatric use

There is no relevant data on the use of ulipristal acetate 5 mg in the paediatric population. The safety and efficacy of ulipristal acetate in women with symptomatic uterine fibroids was only established in women of 18 years and older.

Genotoxicity

In vitro tests for mutagenicity in bacterial and mammalian cells and for chromosomal damage *in vitro* and *in vivo* (mouse micronucleus test) revealed no genotoxic activity for ulipristal acetate.

Carcinogenicity

Oral carcinogenicity studies were performed with ulipristal acetate in rats (2 years duration) and transgenic mice (6 months). No carcinogenic effect was observed with treatment at up to 10 mg/kg/day in rats (yielding 135-times the plasma AUC in patients after a 5 mg dose) or up to 130 mg/kg/day in mice (630-times the clinical AUC).

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INTERACTIONS WITH OTHER MEDICINES

- Potential for other medicinal products to affect ulipristal acetate:

Hormonal contraceptives

Ulipristal acetate has a steroid structure and acts as a selective progesterone receptor modulator with predominantly inhibitory effects on the progesterone receptor. Thus hormonal contraceptives and progestagens are likely to reduce ulipristal acetate efficacy by competitive action on the progesterone receptor. Therefore concomitant administration of medicinal products containing progestagen is not recommended.

CYP3A4 inhibitors

Following administration of the moderate CYP3A4 inhibitor erythromycin propionate (500 mg twice daily for 9 days) to healthy female volunteers, C_{max} and AUC of ulipristal acetate increased 1.2 and 2.9 fold, respectively; the AUC of the active metabolite of ulipristal acetate increased 1.5 fold while the C_{max} of the active metabolite decreased (0.52 fold change).

Following administration of the potent CYP3A4 inhibitor ketoconazole (400 mg once daily for 7 days) to healthy female volunteers, C_{max} and AUC of ulipristal acetate increased 2 and 5.9 fold, respectively; the AUC of the active metabolite of ulipristal acetate increased 2.4 fold while the C_{max} of the active metabolite decreased (0.53 fold change).

No dose adjustment is considered necessary for administration of ulipristal acetate to patients receiving concomitant mild CYP3A4 inhibitors. Co administration of moderate or potent CYP3A4 inhibitors and ulipristal acetate is not recommended.

CYP3A4 inducers

Administration of the potent CYP3A4 inducer rifampicin (300 mg twice daily for 9 days) to healthy female volunteers markedly decreased C_{max} and AUC of ulipristal acetate and its active metabolite by 90% or more and decreased ulipristal acetate half-life by 2.2-fold corresponding to an approximately 10-fold decrease of ulipristal acetate exposure. Concomitant use of ulipristal acetate and potent CYP3A4 inducers (e.g. rifampicin,

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rifabutin, carbamazepine, oxcarbazepine, phenytoin, fosphenytoin, phenobarbital, primidone, St John's wort, efavirenz, nevirapine, long term use of ritonavir) is not recommended.

Medicinal products affecting gastric pH

Administration of ulipristal acetate (10 mg tablet) together with the proton pump inhibitor esomeprazole (20 mg daily for 6 days) resulted in approximately 65% lower mean C_{max} , a delayed t_{max} (from a median of 0.75 hours to 1.0 hours) and 13% higher mean AUC. This effect of medicinal products that increase gastric pH is not expected to be of clinical relevance for daily administration of ulipristal acetate tablets.

Efflux and uptake proteins

In vitro data indicate that ulipristal acetate and its active metabolite are not substrates of the efflux protein P-gp (ABC1), or the hepatic uptake transporters OATP1B1 or OATP1B3.

- *Potential for ulipristal acetate to affect other medicinal products:*

In vitro data indicate that ulipristal acetate and its active metabolite do not significantly inhibit CYP1A2, 2A6, 2B6, 2C8, 2C9, 2C19, 2D6, 2E1, and 3A4, at clinically relevant concentrations. Thus, administration of ulipristal acetate is unlikely to alter the clearance of medicinal products that are metabolised by these enzymes.

Hormonal contraceptives

Ulipristal acetate may interfere with the action of hormonal contraceptive products (progestagen only, progestagen releasing devices or combined oral contraceptive pills) and progestagen administered for other reasons. Therefore, concomitant administration of medicinal products containing progestagen is not recommended. Medicinal products containing progestagen should not be taken within 12 days after cessation of ulipristal acetate treatment.

P-gp substrates

In vitro data indicate that ulipristal acetate may be an inhibitor of P-gp at clinically relevant concentrations in the gastrointestinal wall during absorption.

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In vivo results show that ulipristal acetate (administered as a single 10 mg tablet) 1.5 hour before administration of the P-gP substrate fexofenadine (60 mg) has no clinically relevant effects on the pharmacokinetic of fexofenadine. It is therefore recommended that co-administration of ulipristal acetate and P-gp substrates (e.g. dabigatran etexilate, digoxin, fexofenadine) should be separated in time by at least 1.5 hours.

Transporters

In vitro data indicate that ulipristal acetate is not an inhibitor of the hepatic and renal uptake transporters OATP1B1, OATP1B3, OCT1, OCT2, OAT1, OAT3, and of the bile salt export pump transporter (BSEP).

In vitro data indicate that ulipristal acetate inhibits BCRP with an IC₅₀ of 8.92 µM. However, based on the peak drug concentrations obtained in patients, no clinically significant inhibition of BCRP at the intestinal or systemic level is predicted.

ADVERSE EFFECTS

Summary of the safety profile

The safety of ulipristal acetate has been evaluated in 1,053 women with uterine fibroids treated with 5 mg or 10 mg ulipristal acetate during Phase III studies. The most common finding in clinical trials was amenorrhea (79.2%), which is considered as a desirable outcome for the patients.

The most frequent adverse reaction was hot flush. The vast majority of adverse reactions were mild and moderate (95.0%), did not lead to discontinuation of the medicinal product (98.0%) and resolved spontaneously.

Amongst these 1,053 women, the safety of repeated intermittent treatment courses (each limited to 3 months) has been evaluated in 551 women with uterine fibroids treated with 5 or 10 mg ulipristal acetate in two Phase III studies (including 446 women exposed to four intermittent treatment courses of whom 53 were exposed to eight intermittent treatment courses) and demonstrated a similar safety profile to that observed for one treatment course.

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Tabulated list of adverse reactions

Based on pooled data from four Phase III studies in patients with uterine fibroids treated for 3 months, the following adverse reactions have been reported. Adverse reactions listed below are classified according to frequency and system organ class. Within each frequency grouping, adverse reactions are presented in order of decreasing seriousness. Frequencies are defined as very common ($\geq 1/10$), common ($\geq 1/100$ to $< 1/10$), uncommon ($\geq 1/1,000$ to $< 1/100$), rare ($\geq 1/10,000$ to $< 1/1,000$), very rare ($< 1/10,000$) and not known (cannot be estimated from available data).

System Organ Class	Adverse reactions during treatment course 1			
	Very common	Common	Uncommon	Rare
Psychiatric disorders			Anxiety Emotional disorder	
Nervous system disorders		Headache*	Dizziness	
Ear and labyrinth disorders		Vertigo		
Respiratory, thoracic and mediastinal disorders				Epistaxis
Gastrointestinal disorders		Abdominal pain Nausea	Dry mouth Constipation	Dyspepsia Flatulence
Skin and subcutaneous tissue disorders		Acne	Alopecia** Dry skin Hyperhidrosis	
Musculoskeletal and connective tissue disorders		Musculoskeletal pain	Back pain	
Renal and urinary disorders			Urinary incontinence	

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System Organ Class	Adverse reactions during treatment course 1			Rare
	Very common	Common	Uncommon	
Reproductive system and breast disorders	Amenorrhea Endometrial thickening*	Hot flush* Pelvic pain Ovarian cyst* Breast tenderness/pain	Uterine haemorrhage* Metrorrhagia Genital discharge Breast discomfort	Ovarian cyst ruptured Breast swelling
General disorders and administration site conditions		Fatigue	Oedema Asthenia	
Investigations		Weight increased	Blood cholesterol increased Blood triglycerides increased	

* see section "Description of selected adverse reactions"

** The verbatim term "mild hair loss" was coded to the term "alopecia"

When comparing repeated treatment courses, overall adverse reactions rate was less frequent in subsequent treatment courses than during the first one and each adverse reaction was less frequent or remained in the same frequency category (except for dyspepsia which was classified as uncommon in treatment course 3 based on one patient occurrence).

Description of selected adverse reactions:

Endometrial thickening

In 10-15% of patients, thickening of the endometrium (> 16 mm by ultrasound or MRI at end of treatment) was observed with ulipristal acetate by the end of the first 3-month treatment course. In subsequent treatment courses, endometrial thickening was less frequently observed (4.9% and 3.5% of patients by the end of second and fourth treatment course, respectively). The endometrial thickening reverses when treatment is stopped and menstrual periods resume.

In addition, reversible changes to the endometrium are denoted PAEC and are different from endometrial hyperplasia. If hysterectomy or endometrial biopsy specimens are sent for

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histology, then the pathologist should be informed that the patient has taken ulipristal acetate.

Hot flush

Hot flushes were reported by 8.1% of patients but the rates varied across trials. In the active comparator controlled study the rates were 24% (10.5% moderate or severe) for ulipristal acetate and 60.4% (39.6% moderate or severe) for leuprorelin treated patients (whereas the GnRH agonist approved in Australia for this indication is goserelin). In the placebo-controlled study, the rate of hot flushes was 1.0% for ulipristal acetate and 0% for placebo. In the first 3-month treatment course of the two long term Phase III trials, the frequency was 5.3% and 5.8% for ulipristal acetate, respectively.

Headache

Mild or moderate severity headache was reported in 5.8% of patients.

Ovarian cyst

Functional ovarian cysts were observed during and after treatment in 1.0% of patients and in most of the cases spontaneously disappeared within a few weeks.

Uterine haemorrhage

Patients with heavy menstrual bleeding due to uterine fibroids are at risk of excessive bleeding, which may require surgical intervention. A few cases have been reported during ulipristal acetate treatment or within 2 3 months after ulipristal acetate treatment was stopped.

DOSAGE AND ADMINISTRATION

The treatment consists of one tablet of 5 mg to be taken orally once daily for treatment courses of up to 3 months each.

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Esmya treatment should only be initiated by or after a consultation with a gynaecologist. Follow-up could then be managed by a primary care doctor, with gynaecologist review as clinically indicated.

Treatments should only be initiated when menstruation has occurred:

- The first treatment course should start during the first week of menstruation.
- Re-treatment courses should start at the earliest during the first week of the second menstruation following the previous treatment course completion

The treating physician should explain to the patient of the requirement for treatment free intervals.

Repeated intermittent treatment has been studied up to 4 intermittent treatment courses.

If a patient misses a dose, the patient should take ulipristal acetate as soon as possible. If the dose was missed by more than 12 hours, the patient should not take the missed dose and simply resume the usual dosing schedule.

Special populations

Renal impairment: No dose adjustment is recommended in patients with mild or moderate renal impairment. In the absence of specific studies, ulipristal acetate is not recommended in patients with severe renal impairment unless the patient is closely monitored.

Hepatic impairment: No dose adjustment is recommended for patients with mild hepatic impairment. In the absence of specific studies, ulipristal acetate is not recommended in patients with moderate or severe hepatic impairment unless the patient is closely monitored.

Paediatric population: There are no relevant data on the use of ulipristal acetate 5 mg in the paediatric population, as uterine fibroids occur in adult women. The safety and efficacy of ulipristal acetate was only established in women with symptomatic uterine fibroids aged 18 years and older.

**Attachment 1: Product information for AusPAR Esmya Vifor Pharma Pty Ltd PM-2015-00776-1-5
Final 19 October 2016 This Product Information was approved at the time this AusPAR was
published.**

PRODUCT INFORMATION - *Esmya*[®]

Method of administration

Tablets may be taken with or without food.

OVERDOSAGE

Experience with ulipristal acetate overdose is limited.

Single doses up to 200 mg and daily doses of 50 mg for 10 consecutive days were administered to a limited number of subjects, and no severe or serious adverse reactions were reported.

For information on the management of overdose, contact the Poisons Information Centre on 13 11 26 (Australia).

PRESENTATION AND STORAGE CONDITIONS

PVC/PE/PVDC-Aluminium blister or PVC/PVDC-Aluminium blister.

Pack of 28 and 84 tablets.

Store below 30°C. Keep the blister in the outer carton in order to protect from light.

NAME AND ADDRESS OF THE SPONSOR

Vifor Pharma Pty Ltd

Level 8, 80 Dorcas Street

Southbank, Melbourne VIC 3006

Australia

POISON SCHEDULE OF THE MEDICINE

S4

DATE OF FIRST INCLUSION IN THE AUSTRALIAN REGISTER OF THERAPEUTIC GOODS (THE ARTG)

17 May 2016

DATE OF MOST RECENT AMENDMENT

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PRODUCT INFORMATION - *Esmya*[®]

TBC

The prescriber must ensure that consent and treatment of the patient is in accordance with the appropriate state or territory legislation.