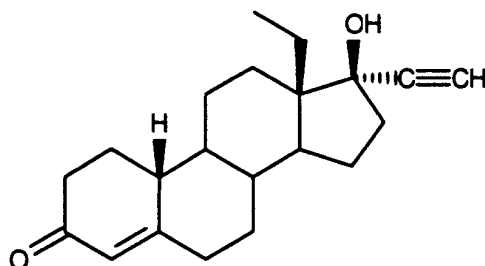


## PRODUCT INFORMATION

### JAYDESS®

#### NAME OF THE MEDICINE

Levonorgestrel is a white or almost white, odourless or almost odourless, crystalline powder. It is insoluble in water or hexane, slightly soluble in ethanol or acetone, and sparingly soluble in methylene chloride. The chemical name is 13 $\beta$ -ethyl-17 $\beta$ -hydroxy-18, 19-dinor-17 $\alpha$ -pregn-4-en-20-yn-3-one. The CAS registry number for levonorgestrel is 797-63-7.



Chemical formula: C<sub>21</sub>H<sub>28</sub>O<sub>2</sub>

Molecular weight: 312.44582 g/mol

Melting Point: 232-239°C

#### DESCRIPTION

Jaydess is an intrauterine delivery system (IUS) that contains 13.5 mg levonorgestrel as the active ingredient.

Jaydess consists of a whitish or pale yellow drug core covered with a semi-opaque membrane, which is mounted on the vertical stem of a T-body. In addition, the vertical stem contains a silver ring located close to the horizontal arms. The T-body has a loop at one end of the vertical stem and two horizontal arms at the other end. Removal threads are attached to the loop. The vertical stem of the IUS is loaded in the insertion tube at the tip of the inserter. The IUS and inserter are essentially free of visible impurities.

Jaydess contains the following excipients: dimethylsiloxane/methylvinylsiloxane cross linked elastomer, colloidal anhydrous silica, polyethylene, barium sulfate, iron oxide black CI77499 and silver.

#### PHARMACOLOGY

##### Pharmacodynamics

Levonorgestrel is a potent progestin of the 19-nortestosterone class which possesses characteristic gestagenic properties such as endometrial transformation (development of a secretory endometrium), antigonadotropic action and antioestrogenic effects. The antioestrogenic activity of levonorgestrel is not the result of direct oestrogen antagonism, since

levonorgestrel does not bind to the oestrogen receptor *in vitro*, but the result of modification of peripheral oestrogenic effects. Levonorgestrel does not possess antiandrogenic or glucocorticoid properties, but does have marked partial androgenic activity.

Levonorgestrel is used in gynaecology as the progestogenic component in combined oral contraceptives and for contraception in progestogen-only pills. Levonorgestrel can also be administered into the uterine cavity with an intrauterine delivery system such as Jaydess. This allows a very low daily dosage, as the hormone is released directly into the target organ.

Jaydess has mainly local progestogenic effects in the uterine cavity. The high levonorgestrel concentration in the endometrium down-regulates the endometrial synthesis of oestrogen and progesterone receptors. The endometrium becomes relatively insensitive to the circulating oestradiol and a strong anti-proliferative effect is seen. Morphological changes of the endometrium and a weak local foreign body reaction were observed during use. Thickening of the cervical mucus prevents passage of the sperm through the cervical canal. The local milieu of the uterus and of the fallopian tubes inhibits sperm mobility and function, preventing fertilisation.

### Pharmacokinetics

Levonorgestrel is released locally into the uterine cavity. Estimated *in vivo* release rates for different points in time are provided in Table 1 below.

**Table 1: Estimated *in vivo* release rates**

Time	Estimated <i>in vivo</i> release rate (µg/24 hrs)
24 days after insertion	14
60 days after insertion	10
3 years after insertion	5
Average over 3 years	6

### Absorption

Following insertion, levonorgestrel is released from the IUS into the uterine cavity without delay based on serum concentration measurements. Maximum serum concentrations of levonorgestrel are reached within the first two weeks after insertion of Jaydess. Seven days after insertion, a mean levonorgestrel concentration of 162 pg/ml was determined. Thereafter serum concentrations of levonorgestrel decline over time to reach mean concentrations of 59 pg/ml after 3 years. With the use of an levonorgestrel intrauterine delivery system (LNG-IUS), the high local drug exposure in the uterine cavity leads to a strong concentration gradient from the endometrium to the myometrium (gradient endometrium to myometrium >100-fold), and to low concentrations of levonorgestrel in serum (gradient endometrium to serum >1000-fold).

### Distribution

Levonorgestrel is bound non-specifically to serum albumin and specifically to SHBG (sex-hormone-binding globulin). Less than 2% of the circulating levonorgestrel is present as free steroid. Levonorgestrel binds with high affinity to SHBG. Accordingly, the concentration of

SHBG in serum affects the free fraction and the total levonorgestrel concentration. Lower SHBG concentrations result in a decrease in the total levonorgestrel concentration in serum and an increase in the proportion of free levonorgestrel. The concentration of SHBG declined by a mean value of approximately 15% during the first month after insertion of Jaydess and remains relatively stable over the 3 year period of use. The mean apparent volume of distribution of levonorgestrel is about 106 L.

Body weight has also been shown to affect systemic levonorgestrel concentration i.e. low body weight increases levonorgestrel concentration.

#### *Metabolism*

Levonorgestrel is extensively metabolised. The major metabolites in plasma are the unconjugated and conjugated forms of  $3\alpha$ ,  $5\beta$ -tetrahydrolevonorgestrel. Based on *in vitro* and *in vivo* studies, CYP3A4 is the main enzyme involved in the metabolism of levonorgestrel. CYP2E1, CYP2C19 and CYP2C9 may also be involved, but to a smaller extent.

#### *Excretion*

The total clearance of levonorgestrel from plasma is approximately 1.0 mL/min/kg. Only trace amounts of levonorgestrel are excreted in unchanged form. The metabolites are excreted in faeces and urine at an excretion ratio of about 1. The excretion half-life is about 1 day.

#### *Linearity/Non-linearity*

The pharmacokinetics of levonorgestrel are dependent on the concentration of SHBG which itself is influenced by oestrogens and androgens. During the first month of use of Jaydess, a mean SHBG decrease of approximately 15% was observed which leads to a decrease of levonorgestrel in serum indicating non-linear pharmacokinetics of levonorgestrel with regard to time. Based on the mainly local action of Jaydess, no impact on the efficacy of Jaydess is expected.

## **CLINICAL TRIALS**

A multicentre, open-label, randomised Phase III study (A52238) was conducted to evaluate the efficacy and safety of two doses of levonorgestrel-releasing IUS in women for long-term reversible contraception. The duration of the study was a maximum of three years for Jaydess with an optional extension phase for the IUS containing the higher dose. A total of 2884 women with an insertion attempt were included in the efficacy and safety assessment of Jaydess and the higher dose LNG IUS (1:1 randomisation).

The contraceptive efficacy of Jaydess has been evaluated in a clinical study with 1432 women aged 18-35 including 38.8% (556) nulliparous women of whom 83.6% (465) were nulligravid using Jaydess. The study evaluated contraceptive efficacy with the following parameters: the number of unintended pregnancies, Pearl Index (PI) and cumulative failure rates, as well as bleeding pattern, pharmacodynamics, pharmacokinetic and safety parameters.

### **Table 2: PIs by year of treatment for women 18 to 35 years of age, 3-year and Year 1 PIs by subgroup and treatment, unadjusted, study A52238**

**Attachment 1: Product information for AusPAR Jaydess (intrauterine drug delivery system), levonorgestrel, Bayer Australia Ltd PM-2012-01933-3-5 Date of Finalisation 5 February 2014. This Product Information was approved at the time this AusPAR was published.**

	No. of women/no. of pregnancies	Relevant exposure time (wy)	Pearl Index (unadj.)	Upper 95% CL
<b>PI by year of treatment and over 3 years, women 18 to 35 years of age<sup>a</sup></b>				
Year 1 PI	1432 / 5	1217.78	<b>0.41</b>	0.96
Year 2 PI	1162 / 3	1015.67	<b>0.30</b>	0.86
Year 3 PI	960 / 2	825.17	<b>0.24</b>	0.88
3-year PI	1432 / 10	3058.62	<b>0.33</b>	0.60

CL = confidence limit, PI = Pearl Index, wy = women years (1 wy = 365 days)

<sup>a</sup> Includes all the women in the study, age range at screening was 18 to 35 years

The one year Pearl Index was 0.41 and the Pearl Index after 3 years was 0.33. The failure rate was approximately 0.4% at 1 year and the cumulative failure rate was approximately 0.9% at 3 years. The failure rate also includes pregnancies due to undetected expulsions and perforations. Because the use of Jaydess does not require daily intake compliance by the users, the pregnancy rates in “typical use” are similar to those observed in controlled clinical trials (“perfect use”). The use of Jaydess does not alter the course of the future fertility. In a Phase II study with 3 different doses of LNG-IUSs including Jaydess (A46796), 25 of 29 women (86.2%) for whom follow up was available wishing to become pregnant conceived within 12 months after removal of the system.

With Jaydess, the alterations in menstrual patterns are a result of the direct action of levonorgestrel on the endometrium and do not reflect the ovarian cycle. There is no clear difference in follicle development, ovulation or oestradiol and progesterone production in women with different bleeding patterns. In the process of inhibition of the endometrial proliferation, there can be an initial increase of spotting during the first months of use. Thereafter, the strong suppression of the endometrium results in the reduction of the duration and volume of menstrual bleeding during use of Jaydess. Scanty flow frequently develops into oligomenorrhea or amenorrhea. Ovarian function remains normal and oestradiol levels are maintained, even when women are amenorrhoeic.

Ovulation was observed in the majority of the subset of subjects studied (A52238 and A46796). Evidence of ovulation was seen in 34 out of 35 women in the first year, in 26 out of 27 women in the second year, and in all 27 women in the third year.

## INDICATIONS

Contraception for up to 3 years.

## CONTRAINDICATIONS

- Pregnancy
- Acute or recurrent pelvic inflammatory disease or conditions associated with increased risk for pelvic infections
- Lower genital tract infection
- Postpartum endometritis or infected abortion during the past three months
- Cervicitis
- Cervical intraepithelial neoplasia

- Uterine or cervical malignancy
- Progestogen-dependent tumours
- Abnormal vaginal bleeding of unknown etiology
- Congenital or acquired uterine anomaly including fibroids which would interfere with insertion and/or retention of the intrauterine system (i.e. if they distort the uterine cavity)
- Acute liver disease or liver tumour
- Hypersensitivity to the active substance or to any of the excipients

## **PRECAUTIONS**

Jaydess should be used with caution after specialist consultation, or removal of the system should be considered if any of the following conditions exist or arise for the first time:

- migraine, focal migraine with asymmetrical visual loss or other symptoms indicating transient cerebral ischaemia
- exceptionally severe headache
- jaundice
- marked increase of blood pressure
- severe arterial disease such as stroke or myocardial infarction

Data on use with Jaydess in nulliparous women is limited to approximately 36% of the study population.

### **Thrombosis**

In women using progestogen-only pills some recent epidemiological studies indicated that there may be a slightly increased risk of venous thromboembolism, but the results were statistically not significant.

However, appropriate diagnostic and therapeutic measures should be undertaken immediately if there are symptoms or signs of thrombosis. Symptoms of venous or arterial thrombosis can include: unilateral leg pain and/or swelling; sudden severe pain in the chest, whether or not it radiates to the left arm; sudden breathlessness; sudden onset of coughing; any unusual, severe, prolonged headache; sudden, partial or complete loss of vision; diplopia; slurred speech or aphasia; vertigo; collapse with or without focal seizure; weakness or very marked numbness suddenly affecting one side or one part of the body; motor disturbances; "acute" abdomen. Symptoms or signs indicating retinal thrombosis are: unexplained partial or complete loss of vision, onset of proptosis or diplopia, papilloedema, or retinal vascular lesions.

There is no consensus about the possible role of varicose veins and superficial thrombophlebitis in venous thromboembolism.

### **Tumours**

A meta-analysis from 54 epidemiological studies reported that there is a slightly increased relative risk (RR = 1.24) of having breast cancer diagnosed in women who are currently using combined oral contraceptives (COCs), mainly using oestrogen-progestogen preparations. The excess risk gradually disappears during the course of the 10 years after cessation of COC use. Because breast cancer is rare in women under 40 years of age, the excess number of breast cancer diagnoses in current and recent COC users is small in relation to the overall risk of

breast cancer. The risk of having breast cancer diagnosed in progestogen-only pill users is possibly of similar magnitude to that associated with COC. However, for progestogen-only preparations, the evidence is based on much smaller populations of users and so is less conclusive than that for COCs. These studies do not provide evidence for causation. The observed pattern of increased risk may be due to an earlier diagnosis of breast cancer in OC users, the biological effects of OCs or a combination of both. The breast cancers diagnosed in ever-users tend to be less advanced clinically than the cancers diagnosed in never-users.

Since a biological effect cannot be excluded, an individual benefit-risk assessment should be made in women in whom breast cancer is diagnosed while using Jaydess. Removal of Jaydess should be considered.

Irregular bleeding may be a symptom of underlying pathologies such as endometrial polyps, hyperplasia or cancer. Endometrial pathology should therefore be excluded before insertion of Jaydess (see also Medical Examination/Consultation).

### **Heart Disease**

Jaydess should be used with caution in women who have congenital heart disease or valvular heart disease and who are at risk of infective endocarditis.

### **Diabetes**

Low-dose levonorgestrel may affect glucose tolerance, and the blood glucose concentration should be monitored in diabetic users of Jaydess. However, there is generally no need to alter the therapeutic regimen in Type I diabetics using LNG-IUS.

### **Infrequent Bleeding**

Infrequent bleeding and/or amenorrhea develops gradually in about 22.3 % and 11.6 % of users, respectively. Pregnancy should be considered if menstruation does not occur within six weeks of the onset of previous menstruation. A repeated pregnancy test is not necessary in subjects who remain amenorrhoeic unless indicated by other signs of pregnancy.

### **Pelvic Infection**

While Jaydess and the inserter as such are sterile they may, due to bacterial contamination during insertion, become a vehicle for microbial transport in the upper genital tract. Pelvic infection has been reported during use of any IUS or IUD. In clinical trials, pelvic inflammatory disease was observed more frequently at the beginning of Jaydess use, which is consistent with published data for copper IUDs, where the highest rate of pelvic inflammatory disease occurs during the first 3 weeks after insertion and decreases thereafter.

Patients should be fully evaluated for risk factors associated with pelvic infection (e.g. multiple sexual partners, sexually transmitted infections, prior history of PID). Pelvic infections such as pelvic inflammatory disease may have serious consequences and it may impair fertility and increase the risk of ectopic pregnancy.

As with other gynaecological or surgical procedures, severe infection or sepsis (including group A *Streptococcal* sepsis) can occur following IUD insertion.

If a woman experiences recurrent endometritis or pelvic inflammatory disease or if an acute infection is severe or does not respond to treatment, Jaydess must be removed.

Bacteriological examinations are indicated and monitoring is recommended, even with discrete symptoms indicative of infections.

### **Expulsion**

In clinical trials with Jaydess, the incidence of expulsion was low and in the same range as that reported for other IUDs and IUSs. Symptoms of the partial or complete expulsion of Jaydess may include bleeding or pain. However, partial or complete expulsion can occur without the woman noticing it, leading to decrease or loss of contraceptive protection. As Jaydess typically decreases menstrual bleeding over time, an increase of menstrual bleeding may be indicative of an expulsion.

A partially expelled Jaydess should be removed. A new system can be inserted at that time provided pregnancy has been excluded.

A woman should be advised how to check the threads of Jaydess and to contact her healthcare provider if the threads cannot be felt.

### **Perforation**

Perforation or penetration of the uterine corpus or cervix by an intrauterine contraceptive may occur rarely, most often during insertion and may decrease the effectiveness of Jaydess. Excessive pain or bleeding during insertion or while Jaydess is *in situ* may be indicative of a perforation. Such occurrences and/or lost threads should be further investigated. Should a perforation occur, the system must be removed. The risk of perforations is increased in breastfeeding women, and may be increased in post-partum insertions (see DOSAGE AND ADMINISTRATION) and in women with a fixed retroverted uterus.

### **Ectopic Pregnancy**

Women with a previous history of ectopic pregnancy, tubal surgery or pelvic infection carry an increased risk of ectopic pregnancy. The possibility of ectopic pregnancy should be considered in the case of lower abdominal pain - especially in connection with missed periods or if an amenorrhoeic woman starts bleeding. Women who become pregnant while using Jaydess should be evaluated for ectopic pregnancy. The absolute risk of ectopic pregnancy in Jaydess users is low. However, when a woman becomes pregnant with Jaydess *in situ* the relative likelihood of this pregnancy being ectopic is increased and urgent assessment is required (see ADVERSE EFFECTS). In the event of an unplanned pregnancy, see also "Use in Pregnancy".

The overall incidence of ectopic pregnancy with Jaydess is approximately 0.11 per 100 women-years. This rate is lower than in women not using any contraception (0.3-0.5 per 100 women years).

### **Sexually Transmitted Diseases**

Jaydess does not protect against HIV infection (AIDS) and other sexually transmitted diseases (STDs). The woman should be advised that additional measures, e.g. condoms, are needed to prevent the transmission of STDs.

### **Lost Threads**

If the removal threads are not visible at the cervix on follow-up examinations, pregnancy must be excluded. The threads may have been drawn up into the uterus or cervical canal and may reappear during the next menstrual period. If pregnancy has been excluded, the threads may usually be located by gently probing the cervical canal with a suitable instrument. If they cannot be found, the system may have been expelled. Ultrasound exam may be used to ascertain the position of the system. If ultrasound is not available or is not successful, X-ray may be used to locate Jaydess.

### **Ovarian Cysts/Enlarged Ovarian Follicles**

Since the contraceptive effect of Jaydess is mainly due to its local effects within the uterus, there is generally no change in ovulatory function, including regular follicular development, oocyte release and follicular atresia in women of fertile age. Sometimes atresia of the follicle is delayed and folliculogenesis may continue. These enlarged follicles cannot be distinguished clinically from ovarian cysts and have been reported as adverse drug reactions in approximately 13.2% of women using Jaydess including ovarian cyst, haemorrhagic ovarian cyst and ruptured ovarian cyst. Most of these follicles are asymptomatic, although some may be accompanied by pelvic pain or dyspareunia.

In most cases, the enlarged follicles resolve spontaneously over two to three months' observation. Should an enlarged follicle fail to resolve spontaneously, continued ultrasound monitoring and other diagnostic/therapeutic measures may be appropriate. Rarely, surgical intervention may be required.

### **Magnetic Resonance Imaging (MRI)**

Non-clinical testing has demonstrated that women may be scanned after placement of Jaydess ('MR conditional') under the following conditions:

- Static magnetic field of 3-Tesla or less,
- Spatial gradient field of 36,000 Gauss/cm (T/m) or less
- Maximum whole body averaged specific absorption rate (SAR) of 4W/kg in the First Level Controlled mode for 15 minutes of continuous scanning

In a non-clinical setting under these conditions, the maximum temperature rise at the site of Jaydess was 1.8°C, produced at a maximum whole body averaged specific absorption rate (SAR) of 2.9W/kg, for 15 minutes of MR scanning at 3T using a transmit/receive body coil. A small amount of imaging artefact may occur if the area of interest is in the exact same area or relatively close to the position of the Jaydess IUS.

No clinical data are currently available in women using Jaydess undergoing MRI.

### **Effects on Fertility**

The use of an LNG-IUS does not alter the course of future fertility. Upon removal of the LNG-IUS, women return to their normal fertility (see Pharmacodynamics).

### **Use in Pregnancy (Category B3)**

The insertion of Jaydess in pregnant women is contraindicated (see CONTRAINDICATIONS).



Because of the intrauterine administration and the local exposure to levonorgestrel, the possible occurrence of virilising effects in a female fetus should be taken into consideration. Clinical experience of the outcomes of pregnancies under Jaydess treatment is limited due to the high contraceptive efficacy. Women should be informed that, to date, there is no evidence of birth defects caused by LNG-IUS use in cases where pregnancy continues to term with the LNG-IUS in place.

When levonorgestrel-impregnated silastic devices were introduced into the uteri of pregnant rabbits, the incidence of late fetal resorption was increased when compared to sham-operated controls. There were no other effects on the fetuses that could be attributed specifically to the device or to levonorgestrel.

#### *Unplanned Pregnancy*

If a woman becomes pregnant while using Jaydess, removal of the system is recommended since any intrauterine contraceptive left *in situ* may increase the risk of abortion and pre-term labour. Removal of Jaydess or probing of the uterus may also result in spontaneous abortion. Ectopic pregnancy should be excluded. If the woman wishes to continue the pregnancy and the system cannot be withdrawn, she should be informed about the risks and the possible consequences of premature birth to the infant. The course of such a pregnancy should be closely monitored. The woman should be instructed to report all symptoms that suggest complications of the pregnancy, like cramping abdominal pain with fever.

#### **Use in Lactation**

In general, there appears to be no deleterious effect on infant growth or development when using any progestogen-only method after six weeks postpartum. An LNG-IUS does not affect the quantity or quality of breast milk. Small amounts of progestogen (about 0.1 % of the levonorgestrel dose) pass into the breast milk in nursing mothers.

#### **Paediatric Use**

Safety and efficacy has not been studied in women aged below 18. Use of this product before menarche is not indicated.

#### **Use in the Elderly**

There is no indication for the use of Jaydess in postmenopausal women.

#### **Patients with Hepatic Impairment**

Jaydess has not been studied in women with hepatic impairment. Jaydess is contraindicated in women with acute liver disease or liver tumour (see CONTRAINDICATIONS).

#### **Patients with Renal Impairment**

Jaydess has not been studied in women with renal impairment.

#### **Genotoxicity**

The genotoxic potential of levonorgestrel has not been fully investigated, although limited data available to date suggest that it does not appear to be genotoxic. Saline, water, ethanol and/or DMSO extracts of the silver ring, elastomer, polyethylene or drug-elastomer components of Jaydess were without mutagenic activity in bacteria. Further assays for genotoxicity (*e.g.*,

mouse lymphoma assay, *in vivo* micronucleus test) conducted with extracts of the device materials, were also negative.

### **Carcinogenicity**

No studies on the carcinogenic potential of Jaydess have been performed.

A long-term study with orally administered levonorgestrel in dogs showed an increased incidence of mammary tumours, although a similar effect was not apparent in studies in mice, rats or monkeys. The occurrence of these mammary tumours in dogs may be due in part to a hormonal feedback mechanism. The clinical relevance of these findings is uncertain.

It should be borne in mind that sexual steroids can promote the growth of certain hormone-dependent tissues and tumours.

Some studies suggest that combination oral contraceptive use has been associated with an increase in the risk of cervical intraepithelial neoplasia in some populations of women but there continues to be controversy about the extent to which this finding is attributable to the confounding effects of sexual behaviour and other factors such as human papilloma virus (HPV). Benign hepatic adenomas have been found to be associated with the use of oral contraceptives containing levonorgestrel. Although benign, hepatic adenomas may rupture and cause death through intra-abdominal haemorrhage. The contribution of the progestin component of oral contraceptives to the development of hepatic adenomas is not known.

### **INTERACTIONS WITH OTHER MEDICINES**

Interactions can occur with drugs that induce hepatic microsomal enzymes, specifically cytochrome P450 enzymes, and may therefore increase the metabolism of levonorgestrel, resulting in increased clearance of sex hormones (e.g. phenytoin, barbiturates, primidone, carbamazepine, rifampicin, rifabutin, nevirapine, efavirenz, bosentan, and possibly also oxcarbazepine, topiramate, felbamate, griseofulvin and products containing the herbal remedy St. John's wort).

On the other hand, substances known to inhibit drug-metabolising enzymes (e.g. itraconazole, ketoconazole) may increase serum concentrations of levonorgestrel.

The influence of these drugs on the efficacy of Jaydess is not known, but it is not believed to be of major importance due to the local mechanism of action.

### **ADVERSE EFFECTS**

The majority of women experience changes in menstrual bleeding pattern after insertion of Jaydess. Over time, the frequency of amenorrhoea and infrequent bleeding increases, and the frequency of both prolonged and frequent bleeding decreases. The following bleeding patterns were observed in clinical trials with Jaydess:

- During the first 90 day reference period, less than 1% of women experienced amenorrhoea, 8% infrequent bleeding, 31% frequent bleeding and 59% prolonged bleeding\*.

**Attachment 1: Product information for AusPAR Jaydess (intrauterine drug delivery system), levonorgestrel, Bayer Australia Ltd PM-2012-01933-3-5 Date of Finalisation 5 February 2014. This Product Information was approved at the time this AusPAR was published.**

- During the second 90 day reference period, 3% of women experienced amenorrhea, 19% infrequent bleeding, 12% frequent bleeding and 17% prolonged bleeding\*.
- At the end of year 1, 6% of women experienced amenorrhea, 20% infrequent bleeding, 8% frequent bleeding and 9% prolonged bleeding\*.
- At the end of year 3, 12% of women experienced amenorrhea, 22% infrequent bleeding, 4% frequent bleeding and 3% prolonged bleeding\*.

\*Subjects with prolonged bleeding may also be included in one of the other categories (excl. amenorrhea).

The frequencies of treatment-emergent adverse events (adverse reactions) reported with Jaydess are summarised in the table below. Within each frequency grouping, undesirable effects are presented in order of decreasing seriousness. The table below reports treatment-emergent adverse events (adverse reactions) by MedDRA system organ classes (MedDRA SOCs). The frequencies are crude incidences of the events observed in clinical trials for the indication contraception in 1672 women (3820.65 women-years).

Frequencies are defined as:

Very common	(≥ 1/10)
Common	(≥ 1/100 to < 1/10)
Uncommon	(≥ 1/1,000 to < 1/100)
Rare	(≥ 1/10,000 to < 1/1,000)

**Table 3: Treatment-emergent adverse events (adverse reactions) in Phase II and III clinical trials**

System Organ Class (MedDRA)	Very Common	Common	Uncommon	Rare
<b>Psychiatric disorders</b>		Depressed mood/ Depression		
<b>Nervous system disorders</b>	Headache	Migraine		
<b>Gastrointestinal disorders</b>	Abdominal/ pelvic pain	Nausea		
<b>Skin and subcutaneous tissue disorders</b>	Acne/ Seborrhoea	Alopecia	Hirsutism	
<b>Reproductive system and breast disorders</b>	Bleeding changes including increased and decreased menstrual bleeding, spotting, oligomenorrhoea and amenorrhoea Ovarian cyst* Vulvovaginitis	Upper genital tract infection Dysmenorrhea Breast pain/ discomfort Device expulsion (complete and partial) Genital discharge		Uterine perforation

\* Ovarian cysts had to be reported as AEs if they were abnormal, non-functional cysts and/or had a diameter > 3 cm on ultrasound examination.

With the use of another LNG-IUS, cases of hypersensitivity including rash, urticaria and angioedema have been reported.

If a woman becomes pregnant while using Jaydess, the relative risk of ectopic pregnancy is increased.

The removal threads may be felt by the partner during intercourse.

Clinical trials with Jaydess excluded breastfeeding women. A post authorisation safety study with other IUDs/IUSs showed an increased risk of perforation in breastfeeding women.

The following ADRs have been reported in connection with the insertion or removal procedure of Jaydess: Procedural pain, procedural bleeding, insertion-related vasovagal reaction with dizziness or syncope. The procedure may precipitate a seizure in an epileptic patient.

For other IUDs, cases of sepsis (including group A *Streptococcal* sepsis) have been reported following insertion (see PRECAUTIONS).

## **DOSAGE AND ADMINISTRATION**

Jaydess is inserted into the uterine cavity and is effective for up to three years.

The *in vivo* release rate is approximately 14 µg/24 hours after 24 days and is reduced to approximately 10 µg/24 hours after 60 days. It then declines progressively to 5 µg/24 hours after three years. The average levonorgestrel *in vivo* release rate is approximately 6 µg/24 hours over the period of three years.

Jaydess, when inserted according to the insertion instructions, has a failure rate of approximately 0.4% at 1 year and a cumulative failure rate of approximately 0.9% at 3 years. The failure rate also includes pregnancies due to undetected expulsions and uterine perforations.

Care must therefore be given to adequate training in the correct insertion technique and the availability of appropriate instruments for the insertion of Jaydess.

### **Medical Examination/Consultation**

Before insertion, the woman must be informed of the efficacy, risks and side effects of Jaydess. A physical examination including pelvic examination, examination of the breasts, and a cervical smear should be performed. Standard testing procedures should be used to exclude pregnancy and sexually transmitted diseases, and genital infections must have been successfully treated. The position of the uterus and the size of the uterine cavity should be determined. Fundal positioning of Jaydess is particularly important in order to ensure uniform exposure of the endometrium to the progestogen, prevent expulsion and maximise efficacy. Therefore, the instructions for insertion should be followed carefully. Insertion and removal may be associated with some pain and bleeding. The procedure may precipitate fainting as a vasovagal reaction, or a seizure in an epileptic patient. The woman should be re-examined 4 to 12 weeks after insertion and once a year thereafter, or more frequently if clinically indicated.

Emphasis should be given to training in the correct insertion technique.

Irregular bleeding and spotting are common in the first months of therapy with all LNG-IUSs including Jaydess. If bleeding becomes heavier and/or more irregular over time, appropriate diagnostic measures should be taken as irregular bleeding may be a symptom of endometrial polyps, hyperplasia or cancer.

### **Insertion and Removal/Replacement**

It is recommended that Jaydess should only be inserted by physicians/healthcare professionals who are experienced in IUS insertions and/or have undergone training on the Jaydess insertion procedure.

Jaydess is to be inserted into the uterine cavity within seven days of the onset of menstruation. Jaydess can be replaced by a new system at any time in the cycle. Jaydess can also be inserted immediately after first trimester abortion.

Postpartum insertions should be postponed until the uterus is fully involuted, however not earlier than six weeks after delivery. If involution is substantially delayed, consider waiting until 12 weeks postpartum.

In case of a difficult insertion and/or exceptional pain or bleeding during or after insertion, physical examination and ultrasound should be performed immediately to exclude perforation. Jaydess is not suitable for use as a post-coital contraceptive.

Jaydess can be distinguished from other IUSs by the visibility of the silver ring on ultrasound. The T-frame of Jaydess contains barium sulphate which makes it visible in X-ray examination.

Jaydess is removed by gently pulling on the threads with forceps. If the threads are not visible and the system is found to be in the uterine cavity on ultrasound exam, it may be removed using narrow forceps. This may require dilatation of the cervical canal or surgical intervention.

The system should be removed no later than by the end of the third year. If the woman wishes to continue using the same method, a new system can be inserted immediately following removal of the original system.

If pregnancy is not desired, the removal should be carried out within seven days of the onset of menstruation, provided the woman is still experiencing regular menses. If the system is removed at some other time during the cycle and the woman has had intercourse within a week, she is at risk of pregnancy unless a new system is inserted immediately following removal. It is important to use another form of contraception in the week leading up to the removal of Jaydess.

After removal of Jaydess, the system should be examined to ensure that it is intact.

### **Instructions for Use/Handling**

Jaydess is supplied in a sterile pack which should not be opened until required for insertion. The exposed product should be handled using aseptic techniques. If the seal of the sterile package is broken, or appears compromised, the product should not be used.

Special instructions for insertion are in the package.

### **Paediatric Use**

Safety and efficacy has not been studied in women aged below 18. Use of this product before menarche is not indicated.

### **Use in the Elderly**

There is no indication for the use of Jaydess in postmenopausal women.

### **Patients with Hepatic Impairment**

Jaydess has not been studied in women with hepatic impairment. Jaydess is contraindicated in women with acute liver disease or liver tumour (see CONTRAINDICATIONS).

### **Patients with Renal Impairment**

Jaydess has not been studied in women with renal impairment.

### **OVERDOSAGE**

Not applicable for this product.

### **PRESENTATION AND STORAGE CONDITIONS**

Jaydess is supplied within an inserter in a sterile package, which should not be opened until needed for insertion. Do not re-sterilise. Jaydess is for single use only. Do not use if the inner package is damaged or open. Do not insert after the expiry month and year shown on the label.

A discarded or removed IUS should be treated as medicinal waste, since it may contain hormone remnants.

Each pack contains one intrauterine system. Jaydess is packaged in a thermoformed blister package with a peelable lid.

Store below 30°C.

### **NAME AND ADDRESS OF SPONSOR**

Bayer Australia Ltd  
ABN 22 000 138 714  
875 Pacific Highway  
Pymble NSW 2073

### **POISON SCHEDULE OF THE MEDICINE**

Prescription Only Medicine

### **DATE OF FIRST INCLUSION IN THE ARTG**

18 September 2013

**Attachment 1: Product information for AusPAR Jaydess (intrauterine drug delivery system), levonorgestrel, Bayer Australia Ltd PM-2012-01933-3-5 Date of Finalisation 5 February 2014. This Product Information was approved at the time this AusPAR was published.**

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