effective when it matters most

But emergency contraception has.

ellaOne®

30mg tablet contains ulipristal acetate and is indicated for emergency contraception within 120 hours (5 days) of unprotected sexual intercourse or contraceptive failure.
ellaOne® (30mg ulipristal acetate) is an emergency contraceptive pill (ECP), now available in pharmacy without a prescription in Europe.

The OTC availability of emergency contraceptive pills is critical to increase access and minimise any delay in taking them. This is especially significant given that emergency contraceptive pills are more effective the sooner they are taken after unprotected intercourse.

The advice of pharmacy staff and emergency contraceptive efficacy are the two most important factors in the choice of emergency contraceptive pill.¹

This brochure has been developed to help you learn more about ellaOne®. This brochure is for healthcare professionals only. It is aimed at community pharmacists in the European Union, pharmacy assistants and anyone in the pharmacy team who may dispense emergency contraception.

It will help you to be fully informed, make confident recommendations and give appropriate advice to women requesting emergency contraception in your pharmacy.

It will also help you give appropriate counselling on ellaOne® as well as subsequent contraceptive care, to support the best health outcomes.
Top ten things you should know about ellaOne®

1. ellaOne® should be taken as soon as possible after unprotected sexual intercourse (UPSI), but no later than 120 hours (5 days) after UPSI or contraceptive failure.

2. ellaOne® is not an abortifacient.

3. Contains 30mg ulipristal acetate, and was specifically developed for emergency contraception.

4. ellaOne® is an emergency contraceptive pill intended to prevent pregnancy after unprotected sexual intercourse (UPSI) or contraceptive failure.

5. ellaOne® is for women of child bearing age who want to avoid unintended pregnancy.

6. ellaOne® can delay ovulation even when ovulation is about to happen (when risk of fertilisation is highest).

7. ellaOne® is the most effective emergency contraceptive pill in preventing unintended pregnancy when used in the first 72 hours after unprotected sex.

8. ellaOne® is well tolerated.

9. After using ellaOne® it is recommended that a reliable barrier method of contraception is used until the next menstrual period starts, even if the woman is taking regular hormonal contraception.

10. ellaOne® should not be taken by women who are hypersensitive to the active substance or to any of the excipients.

References
2. ellaOne® European Union Summary of Product Characteristics.
3. ellaOne® European Union Patient Information Leaflet.
Useful terms and acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC</td>
<td>Emergency Contraception</td>
</tr>
<tr>
<td>ECP</td>
<td>Emergency Contraceptive Pill</td>
</tr>
<tr>
<td>FSH</td>
<td>Follicle Stimulating Hormone</td>
</tr>
<tr>
<td>GP</td>
<td>General Practitioner (family doctor)</td>
</tr>
<tr>
<td>GPP</td>
<td>Good Pharmacy Practice</td>
</tr>
<tr>
<td>IUD</td>
<td>IntraUterine Device</td>
</tr>
<tr>
<td>LH</td>
<td>Luteinising Hormone</td>
</tr>
<tr>
<td>OC</td>
<td>Oral Contraceptive</td>
</tr>
<tr>
<td>OTC</td>
<td>Over The Counter</td>
</tr>
<tr>
<td>SPRM</td>
<td>Selective Progesterone Receptor Modulator</td>
</tr>
<tr>
<td>UPSI</td>
<td>UnProtected Sexual Intercourse</td>
</tr>
</tbody>
</table>
This booklet is divided into chapters. It has been written so that you can use it as a complete training package on emergency contraception, or if you just wish to update your knowledge about ellaOne®, you can start at chapter 5.

Here is a brief overview of what each chapter contains:

**Chapter 1: Menstrual cycle theory, unpredictability of ovulation, the concept of 'conception risk' period, from ovulation, to fertilisation, to pregnancy**

**Chapter 2: Unintended pregnancies, a public health challenge**
- Definition and frequency of unintended pregnancy
- Causes of unintended pregnancy
- Unintended pregnancy often happens when contraception is being used
- Impact of unintended pregnancy
- Unintended pregnancy and age

**Chapter 3: Reproductive physiology: the theory**
- Menstrual cycle theory
- Unpredictability of ovulation
- The concept of 'conception risk' period
- From ovulation, to fertilisation, to pregnancy

**Chapter 4: Emergency contraception**
- Definition of ‘emergency contraception’ (EC)
- Overview of emergency contraception history
- The different EC options in Europe
- Mechanism of action of oral EC
- Emergency contraception myths
- Conditions under which women can access EC
- Level of use in Europe
- The role of the pharmacist in providing emergency contraception
Overview

Chapter 5: ellaOne® (30mg ulipristal acetate) - Page 32
- What is ellaOne®: indication, posology and precautions for use
- Why is ellaOne® an advance?
- ellaOne® delays ovulation when it matters most
- Efficacy of ellaOne® vs levonorgestrel
- ellaOne® safety profile
- Contraindications

Chapter 6: Pharmacist’s role - Page 41
- Good practice at the counter - key messages for your counselling
- Cases to learn from
- A positive attitude
- Training your pharmacy team
- Avoiding confusion with regular contraception

Chapter 7: self-test - Page 50
- Self-test questions
Unintended pregnancies result from unprotected sex where no children, or no more children are desired.

44%

It has been estimated that 44% of pregnancies in Europe are unintended.¹

This figure may seem surprising. However, during most of a woman’s reproductive life she is likely to be trying to avoid pregnancy. Therefore the period during which a pregnancy would be considered unintended is much longer than the period during which she would be actively trying to become pregnant.

Two thirds of unintended pregnancies end via abortion, a quarter end in birth and about 11% miscarry.¹ In [Country name TBC] xx% of pregnancies are unintended.₃ Ref to be added at localisation stage

Unintended pregnancy results from unprotected sexual intercourse (UPSI). UPSI is common.³

These frequent acts of UPSI are not happening in a distinct sub-population, but happen in women irrespective of age, income, education level and marital status.³
Unprotected sexual intercourse can happen, even when a couple consciously tries to prevent it.

UPSI can result from a couple not using any contraception, including ‘withdrawal’. It can also happen when they consciously try to prevent it. For example UPSI can happen as a result of:

- Accidental condom problems (breakage, slippage, not on in time)
- Oral contraceptive (OC) problems e.g. forgotten pill
- A temporary break from the usual contraceptive
- Forgetting to apply a patch or insert a vaginal ring

UPSI can also happen as a result of violence (rape).

The majority of women say that there are no particular circumstances that could explain their lack of contraception or contraception failure. Only a minority recognised that some factors may have influenced their behaviour, making contraceptive failure more likely. These factors included a new partner or relationship breakdown, travel, influence of alcohol or using a new contraceptive method.
Although unintended pregnancy happens most often when no contraception is used, two studies show that it also happens when it is claimed that contraception is being used.\textsuperscript{5,6}

In fact, over 30% of unintended pregnancies happened when women were using highly effective contraceptive methods like the pill or IUD.\textsuperscript{5}

It can be calculated that ‘contraceptive interruption’ is inevitable in a woman’s life, where she is trying to prevent pregnancy from the time she is about 17 years old (mean age of first sexual intercourse) until she is about 50. If she is on the pill she will need to take about 8000 tablets correctly. It is unsurprising that she sometimes forgets tablets or makes mistakes.

Adapted from Bajos N et al. 2003. This study included 897 unintended pregnancies. Reasons for contraceptive pill failure included taking tablets late, missed pills, illness, medication, vomiting or no explanation. Reasons for IUD failure included wrong position, the IUD falling out, illness or medication, or no explanation. Reasons for condom failure included tearing, slipping off, no contraception used on that occasion or no explanation.
Impact of unintended pregnancies on public health

For individual women and their partners, families, and communities the consequences of unintended pregnancy are significant.

Compared with intended pregnancy, unintended pregnancies have a potential public health impact.

A US study shows the positive effect, on health and welfare costs, of reducing unintended pregnancy:

“Through the provision of effective methods of contraception to low-income individuals who have limited access to these services elsewhere, California’s family planning program averted an estimated 205,000 unintended pregnancies, averting nearly 94,000 live births and 79,000 abortions. The program saved federal, state, and local governments over $1.1 billion within 2 years after a pregnancy and $2.2 billion up to 5 years after.”

<table>
<thead>
<tr>
<th>POTENTIAL HEALTH IMPACT, COMPARED WITH INTENDED PREGNANCY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Women</strong></td>
</tr>
<tr>
<td>■ More likely to behave in a way that could increase the risks to their baby e.g. smoking and alcohol use during pregnancy⁷</td>
</tr>
<tr>
<td>■ Later pre-natal care⁸</td>
</tr>
<tr>
<td>■ Increased risk of antenatal and postnatal depression⁷</td>
</tr>
<tr>
<td>■ Greater mood disturbance e.g. greater anxiety at 12 months post partum⁷</td>
</tr>
<tr>
<td>■ Disruption of the life of a woman, education missed, careers missed, stress and consequences for her life⁹</td>
</tr>
<tr>
<td><strong>Children</strong></td>
</tr>
<tr>
<td>■ Increased risk of poor school performance or neglect⁷</td>
</tr>
<tr>
<td>■ Where the mother is &lt;17 years their children start school with deficits in cognition, knowledge and language development (even where background characteristics are accounted for)⁹</td>
</tr>
<tr>
<td>■ More likely to require psychiatric treatment (including in-patient) at any time in life (this study followed children for up to 35 years)¹⁰</td>
</tr>
<tr>
<td><strong>Relationships</strong></td>
</tr>
<tr>
<td>■ In couples, lower levels of positive interaction at 3, 12 and 24 months after birth⁷</td>
</tr>
</tbody>
</table>

On the macro level, the public health, health systems, and economic impact of unintended pregnancy are also considerable¹¹

A US study shows the positive effect, on health and welfare costs, of reducing unintended pregnancy:

“Through the provision of effective methods of contraception to low-income individuals who have limited access to these services elsewhere, California’s family planning program averted an estimated 205,000 unintended pregnancies, averting nearly 94,000 live births and 79,000 abortions. The program saved federal, state, and local governments over $1.1 billion within 2 years after a pregnancy and $2.2 billion up to 5 years after.”

ellaOne®
Unintended pregnancy can affect women of all ages

Unintended pregnancy happens at all reproductive ages, with a peak in women aged 20-24 years. During a woman’s mid-20s it is quite usual for relationships and contraception to be changing. Condoms are frequently used. It is important to recognise that these factors inevitably put women in this age bracket at risk of unintended pregnancy, despite responsible attitudes and sensible use of contraception.

44% of pregnancies in Europe are unintended\(^1\)

Anyone can experience UPSI - even those who normally use contraception responsibly\(^3\)

30% of sexually active women aged 16-45 report having at least one UPSI in the last 12 months\(^3\)

References

2. Individual country unintended pregnancy rate. Local sources to be added at localisation stage.
Chapter 3:

Reproductive physiology: the theory

Menstrual cycle

The follicular phase (stages 1-4 on the diagram)

The follicular phase starts on the first day of menstruation and ends with ovulation. Prompted by the hypothalamus, the pituitary gland releases follicle stimulating hormone (FSH). This hormone stimulates the ovary to produce several follicles (tiny nodules or cysts) on the surface. Each follicle houses an immature ovum. Usually, only one follicle will deliver an ovum, while the others die. The growth of the follicles stimulates the endometrium to thicken in preparation for possible pregnancy.

1. Bleeding begins on day one of the follicular phase.
2. FSH increases slightly, stimulating the development of several oocyte-containing follicles.
3. FSH levels decrease - only one or two follicles continue to develop.
4. Developing follicles release oestrogen - thickens the endometrium in the rest of the menstrual cycle.
5. LH and FSH levels increase dramatically. High LH stimulates ovulation.
6. The ruptured follicle forms the corpus luteum, which produces large amounts of progesterone.
7. In the absence of fertilisation, the corpus luteum degenerates. The loss of progesterone production, combined with decreased levels of oestrogen, initiates a new menstrual cycle.
**The ovulatory phase (stages 5 on the diagram)**

Ovulation is the release of a mature ovum from the ovary’s surface in response to rising levels of luteinising hormone (LH) and FSH.\(^1\) When the LH reaches a peak it triggers the rupture of the developing follicle to release the mature ovum: ovulation; with no LH surge, ovulation does not occur.\(^1\) The released ovum is funnelled into the fallopian tube and towards the uterus by waves of small, hair-like projections. The life span of the typical ovum is only around 24 hours.\(^3\) Unless it meets a sperm during this time, it will die.

**The luteal phase (stages 6-8 on the diagram)**

Upon the release of the ovum, the ruptured follicle stays on the surface of the ovary. The follicle transforms into a structure known as the corpus luteum, which releases progesterone and small amounts of oestrogen.\(^1,2\) The thickened lining of the uterus is maintained and waits for a fertilised ovum to implant.\(^1\) If this happens the implanted ovum will start to produce human chorionic gonadotropin, detectable in a urine test for pregnancy.\(^4\) If pregnancy doesn’t happen, the corpus luteum regresses, usually around day 22 in a 28-day cycle.\(^1\) The drop in progesterone levels causes the endometrium to break down and menstruation begins again.\(^1\)
The reality: the timing of ovulation is unpredictable

After unprotected sexual intercourse sperm can survive for approximately 5 days within the female reproductive tract. This means that during the average woman’s menstrual cycle there are six days when intercourse can result in pregnancy; this ‘fertile window’ is the five days before ovulation plus the day of ovulation.

So when is the fertile window? Current evidence challenges the simplified ‘text book’ understanding of the menstrual cycle shown on the previous page. We now know that ovulation only happens on day 14 of a 28 day cycle in about 12% of cases. The variability of ovulation is large - it can happen from day 11 to day 21. Because sperm stay viable for up to 5 days, the period over which conception is likely to occur runs from day 6 to day 21 for regularly cycling women. If the cycle is not regular, there is a risk of ovulation happening even later in the cycle. The conception risk period does not end before day 28 of their cycle. This shows that there is no such thing as a risk free period.

Women are at risk of conception during:

The 5 days before ovum release...

...and the day of ovum release

1 2 3 4 5 6
Ovulation also varies from cycle to cycle. Although the risk of pregnancy exists most of the time, women may underestimate the risk of pregnancy. This lack of awareness of pregnancy risk may be the most important barrier to emergency contraception use.

*Period in which a woman has a higher than 10% risk of being in her fertile window.
The highest risk of pregnancy is when ovulation happens shortly after UPSI\(^9\)

Sperm viability declines over time. This means that the risk of conception is highest during the first three days following unprotected sex or contraceptive failure.\(^9\)

Therefore, to avoid unwanted pregnancy, it is critical to avoid ovulation (happening shortly after UPSI) by using EC as soon as possible.
Since a woman can never know when she has ovulated, working out the exact point of fertilisation is also impossible. What we do know is that implantation occurs 6-12 days after fertilisation. Once implantation is complete, pregnancy is established.

Pregnancy begins once the fertilised ovum is implanted in the womb. This happens 6-12 days after intercourse.

Pregnancy begins when a fertilised ovum has been implanted in the wall of a woman's uterus. This definition is critical to distinguishing between a contraceptive that prevents pregnancy and an abortifacient that terminates it.

When women have unprotected intercourse, they are not immediately pregnant. Pregnancy can only occur a minimum of 6 days after intercourse (when a fertilised egg implants in the uterus).

Many women don’t understand when pregnancy begins. They believe it starts the moment they had UPSI. Within 5 days of UPSI a woman cannot be pregnant from that UPSI, because implantation cannot yet have occurred. Due to misunderstandings about this, women can feel guilty about using EC because they wrongly believe it to be a form of abortion.
Key message summary for Chapter 3

- Ovulation is highly unpredictable
- Conception risk is present during most of the cycle
- The highest risk of pregnancy is when ovulation happens shortly after UPSI
- Pregnancy begins when a fertilised egg has been implanted in the wall of a woman’s uterus, 6-12 days after intercourse
- Within 5 days of UPSI a woman cannot be pregnant from that UPSI, because implantation cannot yet have occurred

References
Emergency contraception

Definition

Emergency contraception (EC) is defined as the use of any drug or device after unprotected intercourse to prevent an unintended pregnancy.¹

It is an ‘after-sex’ or ‘back-up’ contraception solution.

It is also commonly known as the ‘morning-after pill’ or ‘day-after pill’.

When emergency contraception is used?

Emergency contraception can best prevent pregnancies when used soon after intercourse. It provides an important back-up in cases of unprotected intercourse, or contraceptive accident (such as forgotten pills, torn condoms) and after rape or coerced sex.²

How women might explain their need for EC

- Condom broke or slipped off
- Missed pill, forgot to insert contraceptive ring or apply patch
- Diaphragm or cap slipped out of place
- Failure of withdrawal method
- No contraception used
- They were forced to have unprotected sex
The idea of EC is not new. Investigation into post-coital contraception began in the 1920s.

1920s
It was first discovered that high-dose oestrogens interfered with pregnancy in mammals.\(^3 \text{,}^4\)

1970s
In 1972 Dr Albert Yuzpe, a Canadian physician, described a post-coital contraceptive regimen comprising both an oestrogen and a progestin; The ‘Yuzpe method’. In 1976, the Copper IUD was first used for EC.

1980s
The ‘Yuzpe method’ was still the dominant form of EC even if it was not a dedicated product (specifically dosed, packaged and marketed for post-coital use) and had a high level of some side effects.

1990s
The World Health Organization (WHO) conducted a clinical trial comparing the Yuzpe regimen with a progestin-only method. The progestin used in the method was levonorgestrel. In 1999, levonorgestrel was manufactured and sold as EC in several countries.

ellaOne® was specifically developed for emergency contraception. This advanced product was launched in 2009 in the EU and is now available in 70 countries.
Types of emergency contraception

Current EC solutions are:

- Fitted, as an intrauterine device
- Oral, as a tablet

The IUD which is suitable for EC is a Copper-T IUD

IUDs are considered the most effective EC option, but they may not be a practical option for many women. The advantage of an IUD is that it provides an ongoing contraceptive solution. But when speed is of the essence, women may not want to rush a decision to fit this long-acting reversible contraceptive (LARC).

The Copper-T IUD can be fitted up to 120 hours (5 days) after unprotected sex. Its use is restricted by its availability and the need to be inserted by a skilled healthcare professional.

Women who may need a copper IUD for emergency contraception must be advised to contact a GP or family planning service as a matter of urgency. Pharmacists should direct women to a local service known to provide IUDs.

Copper IUD is considered the most effective EC method, but in a situation where you need to act very quickly, IUD fitting takes time and involves an invasive and sometimes uncomfortable procedure.

There are two oral ECs available

- One containing levonorgestrel, which was first made available in 1999
- One containing ulipristal acetate (ellaOne®), which was launched in 2009. Unlike other ECs, it was specifically developed for EC

The mechanism of action of oral ECs is to inhibit or postpone ovulation, so that no ovum is released. Oral ECs are also called ECPs (Emergency Contraceptive Pills).
**Mechanism of action of emergency contraceptive pills**

ECPs work by **inhibiting** or **delaying** ovulation (the release of an ovum), so that fertilisation cannot take place.²,⁹

Emergency contraceptive pills will not prevent pregnancy in 100% of cases.⁹ This is because there is a chance that the woman has already just ovulated when she takes an emergency contraceptive pill.¹⁰ Taking emergency contraceptive pills as soon as possible after unprotected sex gives the best chance of success.¹¹

ECPs have no effect on fertilisation if ovulation has already happened. They do not interfere with an implanted ovum (pregnancy),²,⁹ so they do not cause abortion.¹¹

ECPs are suitable for women of reproductive age and have a good safety profile.²,⁹ ECPs do not protect from sexually transmitted infections (STIs).¹¹

As ECPs work by inhibiting or delaying ovulation, they are not 100% effective. If ovulation has just occurred before unprotected intercourse, ECPs will not be effective. Therefore, ECPs are back-up contraception solutions, which do not replace a regular contraceptive method.

**Dispelling myths about oral, or hormonal emergency contraception**

- Several studies have shown that facilitating access to EC does not increase sexual or contraceptive risk-taking behaviour.²
- A number of studies show that women and adolescents with greater access to EC are not more likely to engage in unprotected intercourse, and are more likely to adopt an ongoing contraceptive method after EC use.¹²,¹³
- Use of ECPs has no effect on future fertility.²,⁹
- There is no indication that ECPs harm a developing foetus if they are mistakenly taken early in pregnancy.²,⁸
- ECPs do not interrupt an existing pregnancy.²,⁹
- Women find the label and instructions easy to understand.²,¹⁴
- ECPs do not protect against STIs.¹¹ Only condoms protect against sexually transmitted infections
- ECPs do not provide contraceptive cover for unprotected intercourse in the days after intake.¹¹
Level of EC use in the European Union

30%

30% of women aged 16-45 year old reported at least one UPSI in the last 12 months.\textsuperscript{15}

76%

76% of these did not use emergency contraception, putting themselves at risk of unintended pregnancy.\textsuperscript{15}

Use of EC after UPSI in women aged 16-45\textsuperscript{15}

<table>
<thead>
<tr>
<th>Percentage of women</th>
<th>Women who did not use EC (n=1621)</th>
<th>Women who used EC (n=508)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>76%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Adapted from HRA data on file: HRA Pharma Report. Women and emergency contraception in 2012: A European Survey. UPSI was defined as sex without contraception, or contraception failure, in women who did not intend to get pregnant. (n=2129)\textsuperscript{15}
The reasons given for not using EC included:

- Lack of awareness of pregnancy risk
- Lack of immediate connection to EC – did not think about it
- Lack of knowledge about time-related efficacy
- Access issues
- Misconceptions about EC or fear of being judged/embarrassment

EC provides women with a last chance to prevent pregnancy after unprotected sex, yet it is still largely underused.

**Women who take EC understand they need to act fast**

- Of those who took EC, the vast majority (87%) took it within 24 hours with just 10% waiting until the second day. Intake of EC after 72 hours is rare.
- To ensure maximum efficacy, it is important to take EC as soon as possible after UPSI.
Pharmacists play a key role in providing ECPs

Pharmacists are front line health care providers around the world. For many people they are the first point of contact with the health system. ECPs are available without a prescription directly from pharmacists in most European countries, making pharmacists key EC providers in these settings.16

ellaOne® is the only ECP with European marketing authorisation allowing it to be available as a non-prescription medicine in 29 European Union countries. It is readily available over the counter, either directly from a store shelf (Sweden, Norway and the Netherlands) or from a pharmacist, without a prescription.

The OTC availability of ECPs is critical to increase access and minimise delay of intake. This is especially significant given that ECPs are more effective the sooner they are taken after unprotected intercourse.

When a woman must visit a doctor or other appropriate healthcare provider before she can get an ECP, she often has to make two trips:

- One to a clinic to obtain a prescription
- A second to a pharmacist to fill the prescription

This presents a significant barrier for many women, especially those who do not have transport, or who live in rural areas, without easy access to doctors or pharmacies. Having to make two trips before she can obtain an ECP causes a delay in intake. In addition, the need for a prescription makes access to ECPs on weekends and at night (when many contraceptive mishaps occur) more difficult.
Pharmacists offer advantages in terms of location, convenience and opening times. OTC availability of ECPs means that women only have to make one trip. This means women can get an ECP within 24 hours of unprotected intercourse, when treatment is known to be most effective. Women may also like the anonymity of the pharmacy as they can feel embarrassed about needing emergency contraception.

An International Pharmaceutical Federation (FIP) paper on the pharmacists’ role in improving maternal, newborn, and child health highlights the benefits of pharmacy ECP involvement:

- When women obtain ECP from a pharmacy instead of a physician or clinic, there are cost-savings for both private and public payers
- Pharmacists promote dialogue on contraceptive alternatives and influence the beliefs and the outcomes through effective counselling on ECPs. The supply of emergency contraception from pharmacies is accompanied by patient education from pharmacists, who have expertise on this topic
- Pharmacists provide information to patients at the time of ECP dispensing, which allows women to understand proper use of this medicine. Pharmacists ensure consistency of information about ECPs, in particular for women less than 16 years of age
Pharmacy access to ECPs has not led to negative consequences

When EC is available through pharmacies without a prescription, the use of the medication increases compared to when it is available from doctors, clinics or hospitals. Increased access to EC through pharmacies does not have a negative impact on the use of other forms of contraception.

Studies show that women and adolescents with greater access to EC are more likely to adopt an ongoing contraceptive method after EC use. It has been shown that non-prescription availability leads to greater levels of use. However, this increase in use:

- Does not lead to increased rates of STIs
- Does not increase sexual risk-taking behavior in adolescents
- Does not lead to increased frequency of unprotected sex
- Does not lead to decreased use of other contraceptive methods
- Does not lead to decreased use of contraception, including the most effective methods such as hormonal methods, and condoms

Women’s EC experience is actually a motivating factor leading to more consistent use of regular contraception

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**Contraceptive use change to more reliable methods after ECP intake**

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly effective</td>
<td></td>
</tr>
<tr>
<td>methods</td>
<td>46%</td>
</tr>
<tr>
<td>Non-highly effective</td>
<td>39%</td>
</tr>
<tr>
<td>methods</td>
<td></td>
</tr>
<tr>
<td>No method</td>
<td>15%</td>
</tr>
</tbody>
</table>

Contraceptive use at the time of emergency contraception intake

Contraceptive use after 6 months after emergency contraception intake

Adapted from Moreau C et al. 2009. A cohort study of 2863 women in France, with 272 instances of ECP use.

Highly effective methods: birth control pill and long acting methods.

Non-highly effective methods: condoms and other barrier methods.
Good Pharmacy Practice can include:

- Asking the right questions; avoiding unnecessary, personal or intrusive questioning
- Providing quality advice in a sensitive way, without lecturing
- Providing an environment where women feel comfortable and not judged

The quality of the pharmacy interaction is an important determinant of proper use, leading to fewer unwanted pregnancies and appropriate use of the product. It is also likely to be an important factor in the event of a future UPSI.
Emergency contraception (EC) is defined as the use of any drug or device after an unprotected intercourse or contraceptive failure to prevent an unintended pregnancy. There are three types of emergency contraception; copper T-IUD, levonorgestrel (2x 0.75mg / 1.5mg) and ellaOne® (ulipristal acetate 30mg). ECPs work by inhibiting or delaying ovulation. It should be taken as soon as possible after unprotected intercourse or contraceptive failure. Oral emergency contraception is an emergency method that works after unprotected sex but before pregnancy. It does not interrupt an existing pregnancy. It does not cause abortion. EC is underused - 76% of women who had at least one UPSI did not use EC. Women who use EC understand that they need to act fast with 87% taking it in the first 24 hours after UPSI. The ability of pharmacists to dispense emergency contraception without prescription increases the number of women that receive this medication within 24 hours. It is all the more important because ECPs are more effective the sooner they are taken after unprotected intercourse.

References
9. ellaOne® European Union Summary of Product Characteristics.
14. ellaOne® readability testing TBC.
Chapter 5: ellaOne® (30mg ulipristal acetate)

 ellaOne® - specifically developed for emergency contraception

- ellaOne® is an emergency contraception pill which contains 30mg ulipristal acetate, which was specifically developed for EC.
- Ulipristal acetate is an orally-active selective progesterone receptor modulator (SPRM).
- Having undergone a centralised European Union (EU) authorisation process, it first became available as a prescription medicine in the EU in 2009.
- Since then it has been made available in over 50 countries as a prescription medicine and now for pharmacy supply, without prescription across the EU.
- ellaOne® works by inhibiting or delaying ovulation.

What is ellaOne®?

- ellaOne® is an emergency contraceptive pill intended to prevent pregnancy after unprotected sexual intercourse or contraceptive failure.
- ellaOne® should be taken as soon as possible, but no later than 120 hours (5 days) after UPSI or contraceptive failure.
- ellaOne® is for women of reproductive age who want to avoid unintended pregnancy.

How to use ellaOne®

- The treatment consists of one tablet to be taken orally as soon as possible after UPSI or contraceptive failure.
- ellaOne® does not offer protection from pregnancy for subsequent acts of unprotected sex. Women should be advised to use a reliable barrier method until their next menstrual period.
  
  Although the use of ellaOne® does not contraindicate the continued use of regular hormonal contraception, ellaOne® may reduce its contraceptive action. Therefore, if a woman wishes to start or continue using hormonal contraception, she can do so after using ellaOne®, however, she should be advised to use a reliable barrier method until the next menstrual period.

- The tablet can be taken with or without food.
- If vomiting occurs within 3 hours of ellaOne® intake, another tablet should be taken.
- ellaOne® can be taken at any time during the menstrual cycle.
What ellaOne® is not:²

- ellaOne® is not a regular contraceptive, it is for occasional use only.²
  In any case, women should be advised to adopt a regular method of contraception
- ellaOne® does not cause an abortion. It does not interrupt an existing pregnancy²
- ellaOne® does not protect from sexually transmitted infections³

Why is ellaOne® an advance?

To understand better why ellaOne® is an advanced ECP solution, remember that:

- Despite the common “textbook” definition of the menstrual cycle, the timing of ovulation is unpredictable (See chapter 3)⁴
- The highest risk of becoming pregnant is when unprotected intercourse happens close to ovulation (See chapter 3)⁵
- Unlike other ECPs, ellaOne® can inhibit or delay ovulation when ovulation is close to happening⁶

And ellaOne® is now available directly from pharmacy without prescription.

- ellaOne® has been granted OTC status in the European Union⁷
Ovulation is a result of a surge in luteinising hormone (LH).
ellaOne® delays ovulation by inhibiting or delaying the LH surge.⁶

- If the woman is due to ovulate tomorrow, or the next day, after unprotected sex, when the risk of pregnancy is highest, only ellaOne® can delay ovulation⁶.

- This is when LH has started to surge but has not yet peaked. At this time levonorgestrel will not prevent the follicle from rupturing, whereas ellaOne® is highly effective¹.

**Intake after LH surge, but before peak⁶**

Adapted from Brache V et al. 2013. A pooled analysis of three studies including a total of 163 cycles.

 ellaOne® intake has a 79% chance of delaying ovulation beyond the lifespan of the sperm⁶.
If she is due to ovulate 3 or more days after unprotected intercourse, both ellaOne® and levonorgestrel can delay ovulation. However, ellaOne® remains more effective in preventing follicle rupture and therefore unintended pregnancy.

**Intake before LH surge**

![Diagram showing the proportion of unruptured follicles 5 days post treatment](image)

Even if she ovulates more than 3 days later, ellaOne® is more effective.

- ** ellaOne®**
  - n=34
  - 100% ovum remains in the follicle

- **Levonorgestrel**
  - n=48
  - 25% ovum released while sperm still viable

- **Placebo**
  - n=50
  - 0% ovum released while sperm still viable

*p*=0.0026

Adapted from Brache V et al. 2013. A pooled analysis of three studies including a total of 163 cycles.
If the woman has already ovulated, or is due to ovulate, in the immediate 24 hours after unprotected intercourse, no emergency contraceptive pill will help. This is because LH has already peaked, meaning the ovulation process is at a point where it cannot be stopped, or has already happened.

This explains why:

- Speed of emergency contraceptive pill intake is critical
- Emergency contraception is not 100% effective

**Intake after LH peak**

<table>
<thead>
<tr>
<th>Proportion of unruptured follicles 5 days post treatment</th>
<th>Neither ellaOne® nor levonorgestrel will be effective if she ovulates today</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>8% ellaOne® n=34</td>
</tr>
<tr>
<td></td>
<td>9% Levonorgestrel n=48</td>
</tr>
<tr>
<td></td>
<td>4% Placebo n=50</td>
</tr>
</tbody>
</table>

Adapted from Brache V et al. 2013. A pooled analysis of three studies including a total of 163 cycles.

**ellaOne® can delay ovulation even when it is about to happen (when risk of fertilisation is highest)**
Efficacy of ellaOne® vs levonorgestrel

ellaOne® significantly reduces the risk of unintended pregnancy vs levonorgestrel®

A meta-analysis of the two head-to-head trials comparing ellaOne® with levonorgestrel showed that the risk of pregnancy was significantly reduced with ulipristal acetate compared with levonorgestrel.⁸

For a woman who comes to you for help, what does this mean?

Her risk of getting pregnant:

<table>
<thead>
<tr>
<th>Intake within 24 hours of unprotected intercourse</th>
<th>WITH NO INTERVENTION</th>
<th>WITH LEVONORGESTREL</th>
<th>WITH ellaOne®</th>
<th>DIFFERENCE BETWEEN ellaOne® AND LEVONORGESTREL</th>
<th>p=0.035</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5%</td>
<td>2.3%</td>
<td>0.9%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intake within 72 hours of unprotected intercourse</th>
<th>WITH NO INTERVENTION</th>
<th>WITH LEVONORGESTREL</th>
<th>WITH ellaOne®</th>
<th>DIFFERENCE BETWEEN ellaOne® AND LEVONORGESTREL</th>
<th>p=0.046</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5%</td>
<td>2.2%</td>
<td>1.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Two comparative non-inferiority studies showed ellaOne® is at least as effective in preventing pregnancy as levonorgestrel⁸,⁹
One of the criteria for a medicine to become available as an OTC is to be well tolerated. With ellaOne®:

- The vast majority of adverse events recorded during clinical trials in 2637 women were mild or moderate and resolved spontaneously
- The most commonly reported adverse reactions were headache, nausea, abdominal pain and dysmenorrhea
- The safety profile is comparable to levonorgestrel

Most frequent adverse events in clinical trials

<table>
<thead>
<tr>
<th>Adverse Event</th>
<th>Ulipristal acetate (n=1104)</th>
<th>Levonorgestrel (n=1117)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache</td>
<td>n=213</td>
<td>n=211</td>
</tr>
<tr>
<td>Dysmenorrhoea</td>
<td>n=142</td>
<td>n=160</td>
</tr>
<tr>
<td>Nausea</td>
<td>n=141</td>
<td>n=126</td>
</tr>
<tr>
<td>Fatigue</td>
<td>n=41</td>
<td>n=61</td>
</tr>
<tr>
<td>Dizziness</td>
<td>n=57</td>
<td>n=55</td>
</tr>
<tr>
<td>Abdominal pain</td>
<td>n=75</td>
<td>n=75</td>
</tr>
<tr>
<td>Upper abdominal</td>
<td>n=37</td>
<td>n=46</td>
</tr>
<tr>
<td>Back pain</td>
<td>n=27</td>
<td>n=35</td>
</tr>
</tbody>
</table>

Adapted from Glasier A et al. 2010. A randomised, multicentre, non-inferiority trial of 2221 women.

ellaOne® effect on the menstrual cycle

Most women had their next menstrual period at the expected time (74.6% within ± 7 days of expected time).

- Early period – 6.8% had their period more than 7 days earlier than expected
- Late period – 18.5% had a delay of more than 7 days

A minority of women (8.7%) reported intermenstrual bleeding lasting an average of 2.4 days. The majority was reported as spotting (88.2%).

Only 0.4% reported heavy intermenstrual bleeding.
For full details of adverse events refer to the ellaOne® European Union Summary of Product Characteristics.

Adverse events should be reported. Healthcare professionals are asked to report any suspect adverse events via their national reporting system. Adverse events should also be reported to HRA Pharma at pharmacovigilance@hra-pharma.com.

**Use of ellaOne® by minors**

ellaOne® can be used by women of reproductive age. Adolescent pregnancy is a recognised public health concern. EC constitutes an important tool in the arsenal of contraceptive option to reduce the risk of unintended pregnancies. ellaOne® is suitable for any woman of childbearing age, including adolescents.²
Precautions for use

Potential pregnancy

If there is any reason to believe that the woman may already have an established pregnancy, she should be referred to a doctor.2

ellaOne® is not intended for use during pregnancy and should not be taken by any woman suspected or known to be pregnant.2

However, ellaOne® does not interrupt an existing pregnancy2

Women may believe they are pregnant from the moment of unprotected sex, so asking “Could you be pregnant?” is unhelpful. More specific questions e.g. “Is your menstrual period due or late?” will be more helpful. If the woman’s period is late, or in case of symptoms of pregnancy, she should do a pregnancy test or be referred to a doctor before taking ellaOne®.

ellaOne® does not prevent pregnancy in every case

If the woman’s next menstrual period is more than 7 days late, or abnormal in character, or if there are symptoms suggestive of pregnancy, or in case of doubt, a pregnancy test should be performed. It is important that any pregnancy in a woman who has taken ellaOne® be reported to www.hra-pregnancy-registry.com. The purpose of this web-based registry is to collect safety information from women who have taken ellaOne® during pregnancy or who become pregnant after ellaOne® intake. All patient data collected will remain anonymous.

ellaOne® is for occasional use only

It should in no instance replace a regular contraceptive method. In any case, women should be advised to adopt a regular method of contraception.

After using ellaOne®, women should be advised to use a reliable barrier method until their next menstrual period.

If a woman wishes to initiate or continue using hormonal contraception, she can do so after using ellaOne®, however she should be advised to use a reliable barrier method until her next menstrual period.

Please report any case of pregnancy exposed to ellaOne® on:
www.hra-pregnancy-registry.com
Women who must not take ellaOne®

As with any drug, ellaOne® has some contraindications. ellaOne® should not be taken by women who:

- Are hypersensitive to the active substance or to any of the excipients

Always refer to the ellaOne® European Union Summary of Product Characteristics if you are in any doubt.

Situations where ellaOne® is not recommended

- Severe asthma treated by oral glucocorticoids
- Severe hepatic impairment
- For women taking CYP3A4 inducers
- For women with long-term use of ritonavir
- Concomitant use of EC containing levonorgestrel
- Breastfeeding is not recommended for one week after ellaOne® intake
ellaOne®:

- Contains 30mg ulipristal acetate, and was specifically developed for EC.
- Is taken as a single tablet, which can prevent pregnancy by delaying ovulation.
- Should be taken as soon as possible after UPSI, but no later than 120 hours after UPSI.
- Is most effective within the first 24 hours, which is when most women seek EC.
- Is the only ECP which can delay ovulation close to ovulation, when the risk of pregnancy is highest.
- Is well tolerated.
- Is the most effective solution you can give to a woman who wants to avoid unintended pregnancy.
- Three million doses taken in prescription use – now licensed for use without prescription in 29 EU countries.

References

2. ellaOne® European Union Summary of Product Characteristics.
3. ellaOne® Patient Information Leaflet.
A woman comes to your pharmacy and asks for the morning-after pill.

- If you had unprotected sex in the last 5 days, and you wish to avoid becoming pregnant, you are right to ask for the emergency contraception pill.\(^1\)\(^2\)
- Emergency contraception pills work by inhibiting or postponing ovulation (release of an egg)\(^1\)\(^2\) so sperm will not find an egg to fertilise before they die.
- Ask her when her last period was and whether it was normal for her.
- Ask if she is taking other medication.

You should take emergency contraception as soon as possible\(^1\)\(^2\) because it is most effective when used as soon as possible after unprotected sex\(^3\).

A rapid return to fertility is likely following treatment with an emergency contraceptive pill.

- A barrier method of contraception must be used until your next period – even if you are continuing with an oral method of contraception (OC).\(^1\)
- The emergency contraceptive pill is for occasional use only: it should not be used to replace a regular contraceptive method.\(^1\)\(^2\) Oral emergency contraception is not 100% effective and its efficacy is lower than a regular contraceptive method.\(^1\)\(^2\)
- Please see your doctor to discuss the various regular contraceptive options.
- You should continue or start regular contraception to prevent pregnancy in the future.\(^1\) Emergency contraceptive pills do not protect from STIs.\(^4\)
- Only condoms protect against STIs.

If vomiting occurs within 3 hours of emergency contraception intake, you should take another tablet as soon as possible.\(^1\)

After taking an emergency contraceptive pill, menstrual periods can sometimes occur earlier or later than expected by a few days.\(^1\)

If your period is more than five days late or pregnancy is suspected for any other reason (symptoms of pregnancy, abnormal bleeding at the expected date of menstrual period) or any other reason, you should do a pregnancy test or visit your doctor to make sure you are not pregnant.\(^1\)
The woman asks | I had sex and the condom tore. Can I have a tablet of ellaOne®?
---|---
Response | Did this happen in the last 5 days? If you had unprotected sex in the last 5 days, I can give you ellaOne®.
| If you have unprotected sex after taking ellaOne®, it will not stop you from becoming pregnant. Therefore it is important that you use condoms until your next period even if you are on the regular contraceptive pill.
| You should also know that ellaOne® doesn’t protect you from STIs and it is not a regular form of contraception.
| If you do not have a regular contraceptive method, visit your doctor or family planning clinic. They can advise which option is most suitable for you.
Learning points | ■ ellaOne® can be taken by women of any reproductive age. No difference in safety or efficacy has been shown in adolescents compared to adult women.
| ■ ellaOne® is not regular contraception and will not provide contraceptive protection for subsequent acts of unprotected intercourse.
**CASE 2**  
BARBARA, 28 YEARS OLD, AFRAID OF ABORTION

<table>
<thead>
<tr>
<th>The woman asks</th>
<th>Will it cause a sort of abortion?</th>
</tr>
</thead>
</table>
| Response       | No absolutely not. It will not cause an abortion.  
It is a contraceptive.  
ellaOne®, like other emergency contraceptive pills, has nothing to do with abortion.® ellaOne® works by delaying egg release so that sperm doesn’t meet egg so you can’t get pregnant.1 |
| Learning points | ■ Reassure women that ellaOne® is not an abortive pill4 |

**CASE 3**  
GEMMA, 22 YEARS OLD, LATE PERIOD AFTER TAKING ELLAONE®

<table>
<thead>
<tr>
<th>The woman asks</th>
<th>I took ellaOne® 9 days ago. My period should have started 3 days ago, but it has still not come. I am worried that I am pregnant. What should I do?</th>
</tr>
</thead>
</table>
| Response       | It is good that you have asked me about your concern. After taking ellaOne® your period usually comes on time, but it can also come a few days earlier, or a few days later than expected.4  
If your period has still not come a full week after you expected it, you should do a pregnancy test or visit your doctor to make sure you are not pregnant.4 |
| Learning points | ■ Reassure women that ellaOne® may cause their periods to be early or late4  
■ Advise women to take a pregnancy test, or see their doctor, if their period is over 7 days late4 |
### CASE 4  
**ERIN, 33 YEARS OLD, BREASTFEEDING HER BABY**

<table>
<thead>
<tr>
<th>The woman asks</th>
<th>I would like ellaOne® but I am breastfeeding my baby. Can I have it?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Response</strong></td>
<td>You can take ellaOne®, but you should not breastfeed your baby for 7 days after you take it. During this time you should pump and discard your breast milk so your milk production continues and you can start breast feeding again after 7 days.^-4</td>
</tr>
</tbody>
</table>
| **Learning points** | ■ Breastfeeding women can take ellaOne®^4  
■ Breastfeeding should be interrupted for one week after taking ellaOne®^4 |

### CASE 5  
**KATE, 27 YEARS OLD, MISSED PILLS**

<table>
<thead>
<tr>
<th>The woman asks</th>
<th>I would like ellaOne® please. We visited friends in another part of the country and I forgot to take my regular contraceptive pill yesterday morning.</th>
</tr>
</thead>
</table>
| **Response**   | Forgetting to take your pills can happen and it is good that you have asked for advice.  
You can take ellaOne® now, or as soon as possible. You should continue your regular contraceptive pill on the correct day and continue until the end of the blister pack.^4 Until your next menstrual period ALSO use condoms for sex.^4 |
| **Learning points** | ■ As in all cases, women who need EC because of ‘missed pill’ should take ellaOne® as soon as possible^4  
■ Women should be advised to continue their usual contraceptive pill until the end of the blister pack AND ALSO use a reliable barrier method until their next period^4 |
**CASE 6**  
**CAROL, 36 YEARS OLD, NOT SURE IF AT RISK**

The woman asks  
I had sex last night and the condom came off. I am not sure if I’m at risk of getting pregnant? It's only been 9 days since my last period started. Should I take ellaOne®?

Response  
If you think you run a risk of getting pregnant than it is wise to use emergency contraception like ellaOne®. Ovulation can happen any day during your menstrual cycle. I advise you to take ellaOne® as soon as possible to delay ovulation.

Learning points  
- Ovulation is unpredictable and can happen any day during the cycle
- ellaOne® can be taken at any time during the cycle if a risk of pregnancy exists

---

**CASE 7**  
**SANDRA, 24 YEARS OLD, MULTIPLE INTAKES OF ELLAONE®**

The woman asks  
Can I take ellaOne® again even though I took it 8 days ago and it is not yet time for my next period?

Response  
ellaOne® is a back-up method for preventing pregnancy after unprotected sex or contraceptive failure. It should only be used occasionally. It has been shown that multiple intakes in the same cycle were well tolerated. However, you should use a regular contraceptive method, because it is more effective in preventing pregnancy.

Learning points  
- ellaOne is for occasional use only. It doesn’t replace a regular contraceptive method
Discussing emergency contraception can be distressing for women and it can also be uncomfortable for pharmacists.

You can help by:

- Being matter-of-fact
- Making their experience as easy as possible
- Offering them a more private place to talk if possible
- Using customer’s language e.g. Morning-after pill, day-after pill
- Having a warm and positive approach

You can use the good practice at the counter guide as a framework for your conversation.

Customer satisfaction and comfort in discussing ECPs with a pharmacist can be very high.6

A positive attitude

Sexuality and sexual behaviour are sensitive topics. They are part of our most private lives. When a woman asks for emergency contraception, she is disclosing that she had sexual intercourse and that the couple did not use, or had a problem with, their contraception.

When it comes to emergency contraception, some pharmacists can be confronted with his or her own prejudices. It is important to remember that couples and individuals have a right to decide freely and responsibly the timing and number of their children.7 Women who seek emergency contraception are behaving responsibly by taking steps to avoid unintended pregnancy. They need a warm approach. Treating all women in this way is always good practice, especially as some women may have been coerced to have sex (but not necessarily be disclosing this fact to you).
Unprotected sex or contraceptive failure can happen to anyone, for a number of different reasons

IT CAN HAPPEN TO ANYONE

| Over a woman’s fertile life it would be most unusual if there were not occasional lapses in contraceptive cover | Human behaviour is complex and sometimes unpredictable |
| Love (and sex) is unpredictable, but dealing with unexpected events sensibly is the responsible thing to do | If she’s having sex she needs reliable contraception – including emergency contraception (provided within national guidelines where they exist) |

Women may stop their regular contraception for many reasons, including because they have no established partner

Training your pharmacy team

Fast access to ellaOne® after UPSI is important. When women come to your pharmacy seeking emergency contraception it essential that your team know how to respond, so that women get the help they need to avoid unintended pregnancy.

Your team should know:

- Your pharmacy offers EC
- Whether women requesting EC must be referred to a pharmacist or if it can be dispensed by any team member
- Your aim is to offer women EC with as little fuss as possible

In training sessions you could develop more examples or role-play the scenarios to build the team’s confidence so they can deal with requests for EC smoothly.
You can encourage your team to make the process of obtaining ellaOne® as fuss-free as possible. They should recognise that this may be an emotional time for the woman. In a large EU survey 50% of women said they found seeking EC embarrassing, so a welcoming, professional approach is appropriate. Other women may ask for EC in a way that may make you or your team members feel uncomfortable, maybe by providing too many intimate details or having a loud or brazen manner. Exploring ways to deal with this can also form part of a training role-play.

**Avoiding confusion between EC and regular contraception**

- It is important that women understand that ellaOne® is not a regular form of contraception.
- EC is not 100% effective and it is not as effective as a regular contraceptive method.

It is critical women understand that ellaOne® will not protect them from pregnancy if they have unprotected sex again after taking ellaOne®. They should use a reliable barrier contraceptive method until their next menstrual period, even if they are taking a regular contraceptive pill. EC is not contraindicated to women using oral contraceptives but they should read the leaflet inside the pack to find out about continuing use of oral contraceptives in the month that they use ellaOne®. The European Union package leaflet is also available online at [ellaone.com](http://ellaone.com).
Key message summary for Chapter 6

- Use the ‘Good practice at the counter guide’ in your ellaOne® consultations
- Help make the experience of getting EC as simple as possible
- Train your pharmacy team how to deal with EC requests
- Avoid improper use of ellaOne® by explaining that ellaOne® is not a regular form of contraception

References
1. ellaOne® European Union Summary of Product Characteristics.
4. ellaOne® European Union Patient Information Leaflet.
1. Which of the following statements about timing of ovulation is NOT true?
   - A. 90% of women ovulate on day 14 of a 28 day cycle, making their fertile window day 9-14
   - B. Women with a regular cycle can ovulate any time from day 6-21
   - C. The timing of the fertile window can be highly unpredictable
   - D. Ovulation is unpredictable

2. Can ellaOne® delay follicular rupture even when given in the late follicular phase, at the time when ovulation is imminent?
   - A. Yes, it can still postpone ovulation for 5 days
   - B. Yes, for at least 10 days
   - C. Yes, for at least 7 days
   - D. No

3. Which of the following statements is NOT true?
   - A. ellaOne® is significantly more effective than levonorgestrel when taken 0-24 hours after UPSI
   - B. ellaOne® is significantly more effective than levonorgestrel when taken 0-72 hours after UPSI
   - C. ellaOne® should not be used beyond 72 hours after UPSI
   - D. ellaOne® can be taken up to 5 days after UPSI

4. Who must not take ellaOne®?
   - A. Women who are hypersensitive to the active substance or any of the excipients
   - B. Women who are younger than 20 or older than 40
   - C. Women who are on an oral contraceptive
   - D. All of the above

5. What advice would you give about sex after ellaOne®?
   - A. Do not have sex until your next period after taking ellaOne®
   - B. Explain that a barrier method of contraception must be used until the next period – even if the woman continues with her oral method of contraception
   - C. Explain that ellaOne® will protect the woman until her next period
   - D. Explain that a barrier method must be used for 5 days after taking ellaOne®
6. What would you advise about return to fertility following ellaOne®?
   - A. Fertility will not return to normal
   - B. Fertility will return to normal eventually
   - C. A slow return to fertility is likely
   - D. A rapid return to fertility is likely, so contraception is important. A barrier method should be used until her next period

7. What is the most important factor in EC provision?
   - A. The speed of intake, ideally within 24 hours of UPSI
   - B. Providing the woman with adequate pharmacy counselling
   - C. Having a warm and non-judgmental approach
   - D. Making the experience as easy as possible

8. How would you reassure a woman who asks if ellaOne® is the same as abortion?
   - A. Tell them that ellaOne® works by postponing ovulation (release of an egg). It is not abortive, and it cannot stop a pregnancy that has already started
   - B. Ask them to read the Patient Information Leaflet

9. Is ellaOne® suitable for breastfeeding women?
   - A. Yes, but they have to interrupt breastfeeding for 1 week and you should recommend that they express and discard their breast milk in order to stimulate lactation
   - B. Yes, but they have to interrupt breastfeeding for one month
   - C. Breastfeeding is not recommended for 3 days after ellaOne® intake
   - D. ellaOne® is not recommended in women who are breastfeeding
10. Which of the following drugs cannot be used concomitantly with ellaOne®?
   □ A. CYP3A4 inducers
   □ B. Long term use of Ritonavir
   □ C. EC containing levonorgestrel
   □ D. All of the above

11. What advice would you give to women about their next period after taking ellaOne®?
   □ A. It is usually early
   □ B. It is usually late
   □ C. It can be earlier or later than expected by a few days, but if more than a week late you should do a pregnancy test
   □ D. It is fine if you miss your next period

12. How soon should you advise a woman to take ellaOne®?
   □ A. As soon as she gets home
   □ B. When she has her next meal
   □ C. As soon as possible – even in the pharmacy
   □ D. Before she goes to bed
### Answers

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td>A. NOT TRUE: 90% of women ovulate on day 14 of a 28 day cycle, making their fertile window day 9-14(^1)</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>A. ellaOne(^\text{®}) can delay follicular rupture for at least 5 days(^2)</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>C. NOT TRUE: ellaOne(^\text{®}) should not be used beyond 72 hours after UPSI.(^3,4) In fact ellaOne(^\text{®}) can be used up to 120 hours after UPSI(^4)</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>A. Women who are hypersensitive to the active substance or any of the excipients must not take ellaOne(^\text{®})(^4)</td>
</tr>
<tr>
<td><strong>5</strong></td>
<td>B. Explain that a barrier method of contraception must be used until the next period – even if the woman continues with her oral method of contraception(^4)</td>
</tr>
<tr>
<td><strong>6</strong></td>
<td>D. A rapid return to fertility is likely, so contraception is important(^4)</td>
</tr>
<tr>
<td><strong>7</strong></td>
<td>A. The speed of access, ideally within 24 hours of UPSI(^4)</td>
</tr>
<tr>
<td><strong>8</strong></td>
<td>A. Tell them that ellaOne(^\text{®}) works by inhibiting or postponing ovulation (release of an egg). It is not abortive, and it cannot stop a pregnancy that has already started(^4)</td>
</tr>
<tr>
<td><strong>9</strong></td>
<td>A. Breastfeeding is not recommended for one week after ellaOne(^\text{®})(^4)</td>
</tr>
<tr>
<td><strong>10</strong></td>
<td>D. All of the above(^4)</td>
</tr>
<tr>
<td><strong>11</strong></td>
<td>C. It can be earlier or later than expected by a few days(^4)</td>
</tr>
<tr>
<td><strong>12</strong></td>
<td>C. As soon as possible – even in the pharmacy(^4)</td>
</tr>
</tbody>
</table>

### References

4. ellaOne\(^\text{®}\) European Union Summary of Product Characteristics.
Further information for your customers

ellaOne.com

ellaOne®

1 tablet

ellaOne® 30 mg tablet

Ulipristal acetate

Emergency contraception

Take one tablet as soon as possible after unprotected sex or contraceptive failure
Summary of Product Characteristics
(Experimental Union)

1. NAME OF THE MEDICINAL PRODUCT
ellaOne 30 mg tablet

2. QUALITATIVE AND QUANTITATIVE COMPOSITION
Each tablet contains 30 mg ulipristal acetate.
Exipients with known effect:
Each tablet contains 237 mg of lactose (as monohydrate).
For the full list of excipients, see section 6.1

3. PHARMACEUTICAL FORM
Tablet
White to off-white, round curved tablet engraved with code “ella” on both faces

4. CLINICAL PARTICULARS
4.1 Therapeutic indications
Emergency contraception within 120 hours (5 days) of unprotected sexual intercourse or contraceptive failure.

4.2 Posology and method of administration
Posology
The treatment consists of one tablet to be taken orally as soon as possible, but no later than 120 hours (5 days) after unprotected intercourse or contraceptive failure.
ellaOne can be taken at any time during the menstrual cycle.
If vomiting occurs within 3 hours of ellaOne intake, another tablet should be taken.
If a woman’s menstrual period is late or in case of symptoms of pregnancy, pregnancy should be excluded before ellaOne is administered.

Special populations
Renal impairment
No dose adjustment is necessary.
Hepatic impairment
In the absence of specific studies, no alternate dose recommendations for ellaOne can be made.
Severe hepatic impairment
In the absence of specific studies, ellaOne is not recommended.
Paediatric population
There is no relevant use of ellaOne for children of prepubertal age in the indication emergency contraception.
Adolescents: ellaOne is suitable for any woman of child bearing age, including adolescents. No differences in safety or efficacy have been shown compared to adult women aged 18 and older (see section 5.1).

Method of administration
Oral use.
The tablet can be taken with or without food.

4.3 Contraindications
Hypersensitivity to the active substance or to any of the excipients listed in section 6.1

4.4 Special warnings and precautions for use
ellaOne is for occasional use only. It should in no instance replace a regular contraceptive method.
In any case, women should be advised to adopt a regular contraceptive method after using ellaOne.
ellaOne is not intended for use during pregnancy and should not be taken by any woman suspected or known to be pregnant. However, ellaOne does not interrupt an existing pregnancy (see section 4.6).
ellaOne does not prevent pregnancy in every case.
In case the next menstrual period is more than 7 days late, if the menstrual period is abnormal in character or if there are symptoms suggestive of pregnancy or in case of doubt, a pregnancy test should be performed. As with any pregnancy, the possibility of an ectopic pregnancy should be considered. It is important to know that the occurrence of uterine bleeding does not rule out ectopic pregnancy. Women who become pregnant after taking ellaOne should contact their doctor (see section 4.6). ellaOne inhibits or postpones ovulation (see section 5.1). If ovulation has already occurred, ellaOne is no longer effective. The timing of ovulation cannot be predicted and therefore ellaOne should be taken as soon as possible after unprotected intercourse.
No data are available on the efficacy of ellaOne when taken more than 120 hours (5 days) after unprotected intercourse.

Limited and inconclusive data suggest that there may be reduced efficacy of ellaOne with increasing body weight or body mass index (BMI) (see section 5.1). In all women, emergency contraception should be taken as soon as possible after unprotected intercourse, regardless of the woman’s body weight or BMI.

After ellaOne intake menstrual periods can sometimes occur a few days earlier or later than expected. In approximately 7% of the women, menstrual periods occurred more than 7 days earlier than expected. In 18.5% of the women a delay of more than 7 days occurred, and in 4% the delay was greater than 20 days.
Concomitant use of ulipristal acetate and emergency contraception containing levonorgestrel is not recommended (see section 4.5).

Contraception after ellaOne intake
ellaOne is an emergency contraceptive that decreases pregnancy risk after unprotected intercourse but does not confer contraceptive protection for subsequent acts of intercourse. Therefore, after using emergency contraception, women should be advised to use a reliable barrier method until their next menstrual period.
Although the use of ellaOne does not concomitantly be prescribed for subsequent acts of intercourse, and in 4% the delay was greater than 20 days.

4.5 Interaction with other medicinal products and other forms of interaction
Potential for other medicinal products to affect ulipristal acetate
Ulipristal acetate is metabolized by CYP3A4 in vitro.
– CYP3A4 inducers
In vivo results show that the administration of ulipristal acetate with a strong CYP3A4 inducer such as rifampicin markedly decreases C_{max} and AUC of ulipristal acetate by 90% or more and decreases ulipristal acetate half-life by 2.2-fold corresponding to an approximately 10-fold decrease of ulipristal acetate exposure. Concomitant use of ellaOne with CYP3A4 inducers (e.g. rifampicin, phenytoin, phenobarbital, carbamazepine, efavirenz, fosphenytoine, nevirapine, oxicarbamazine, primidone, rifabutin, St John’s wort/Hypericum perforatum) therefore reduces plasma concentrations of ulipristal acetate and may result in a decreased efficacy of ellaOne and is therefore not recommended (see section 4.4).
– CYP3A4 inhibitors
In vivo results show that administration of ulipristal acetate with a potent and a moderate CYP3A4 inhibitor increased C_{max} and AUC of ulipristal acetate with a maximum of 2- and 5.9-fold, respectively. The effects of CYP3A4 inhibitors are unlikely to have any clinical consequences.
The CYP3A4 inhibitor ritonavir can also have an inducing effect on CYP3A4 when ritonavir is used for a longer period. In such cases ritonavir might reduce plasma concentrations of ulipristal acetate. Concomitant use is therefore not recommended (see section 4.4). Enzyme induction worsens stability and slows down the plasma concentrations of ulipristal acetate may occur even if a woman has stopped taking an enzyme inducer within the last 23 weeks.

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. The clinical relevance of this interaction for single dose administration of ulipristal acetate as emergency contraception is not known.

Potential for other medicinal products to affect other medicinal products
Hormonal contraceptives
Because ulipristal acetate binds to the progesterone receptor with high affinity, it may interfere with the action of progestogen-containing medicinal products:
– Contraceptive action of combined hormonal contraceptives and progestogen-only contraception may be reduced
– Concomitant use of ulipristal acetate and emergency contraception containing levonorgestrel is not recommended (see section 4.4).

In vitro data indicate that ulipristal acetate and its active metabolite do not significantly inhibit CYP3A4 and 3A4, at clinically relevant concentrations. After single dose administration of CYP3A4 inhibitors such as ritonavir may result in a decreased efficacy of ellaOne and is therefore not recommended (see section 4.4).

In vitro data indicate that ulipristal acetate may be an inhibitor of P-gp at clinically relevant concentrations. Results in vivo with the P-gp substrate fexofenadine were inconclusive. The effects of the P-gp substrates are unlikely to have any clinical consequences.

P-gp (P-glycoprotein) substrates
In vitro data indicate that ulipristal acetate may be an inhibitor of P-gp at clinically relevant concentrations. Results in vivo with the P-gp substrate fexofenadine were inconclusive. The effects of the P-gp substrates are unlikely to have any clinical consequences.
4.6 Fertility, pregnancy and lactation

**Pregnancy**
ellaOne is not intended for use during pregnancy and should not be taken by any woman suspected or known to be pregnant (see section 4.2).
ellaOne does not interrupt an existing pregnancy.
Pregnancy may occasionally occur after ellaOne intake. Although no teratogenic potential has been observed, animal data are insufficient with regard to reproduction toxicity (see section 5.3). Limited human data regarding pregnancy exposure to ellaOne do not suggest any safety concern. Nevertheless it is important that any pregnancy in a woman who has taken ellaOne be reported to www.hra-pregnancy-registry.com. The purpose of this web-based registry is to collect safety information from women who have taken ellaOne during pregnancy or who become pregnant after ellaOne intake. All patient data collected will remain anonymous.

**Breast-feeding**
Ulipristal acetate is excreted in breast milk (see section 5.2). The effect on newborn/infants has not been studied. A risk to the breastfed child cannot be excluded. After intake of ellaOne, breastfeeding is not recommended for one week. During this time it is recommended to express and discard the breast milk in order to stimulate lactation.

**Fertility**
A rapid return of fertility is likely following treatment with ellaOne for emergency contraception. Women should be advised to use a reliable barrier method for all subsequent acts of intercourse until the next menstrual period.

4.7 Effects on ability to drive and use machines
ellaOne may have minor or moderate influence on the ability to drive or use machines: mild to moderate dizziness is common after ellaOne intake, somnolence and blurred vision are uncommon; disturbance in attention has been rarely reported. The patient should be informed not to drive or use machines if they are experiencing such symptoms (see section 4.8).

4.8 Undesirable effects

**Summary of the safety profile**
The most commonly reported adverse reactions were headache, nausea, abdominal pain and dysmenorrhea.
Safety of ulipristal acetate has been evaluated in 4,718 women during the clinical development program.

<table>
<thead>
<tr>
<th>System Organ Class</th>
<th>Very common</th>
<th>Common</th>
<th>Uncommon</th>
<th>Rare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infections and infestations</td>
<td>Influenza</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metabolism and nutrition disorders</td>
<td>Appetite disorders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatric disorders</td>
<td>Mood disorders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nervous system disorders</td>
<td>Headache</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye disorders</td>
<td>Visual disturbance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gastrointestinal disorders</td>
<td>Nausea*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin and subcutaneous tissue disorders</td>
<td>Acne</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Musculoskeletal and connective tissue disorders</td>
<td>Myalgia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reproductive system and breast disorders</td>
<td>Dysmenorrhea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General disorders and administration site conditions</td>
<td>Fatigue</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Symptom which could also be related to an undiagnosed pregnancy (or related complications)
Adolescents: the safety profile observed in women less than 18 years old in studies and post-marketing is similar to the safety profile in adults during the phase III program (Section 4.2).

Post-marketing experience: the adverse reactions spontaneously reported in post-marketing experience were similar in nature and frequency to the safety profile described during the phase III program.

Description of selected adverse reactions

The majority of women (74.6%) in the phase III studies had their next menstrual period at the expected time or within ± 7 days, while 6.8% experienced menses more than 7 days earlier than expected and 18.5% had a delay of more than 7 days beyond the anticipated onset of menses. The delay was greater than 20 days in 4% of the women.

A minority (8.7%) of women reported intermenstrual bleeding lasting an average of 2.4 days. In a majority of cases (88.2%), this bleeding was reported as spotting. Among the women who received ellaOne in the phase III studies, only 0.4% reported heavy intermenstrual bleeding.

In the phase III studies, 82 women entered a study more than once and therefore received more than one dose of ellaOne (73 women enrolled twice and 9 enrolled three times). There were no safety differences in these subjects in terms of incidence and severity of adverse events, change in duration or volume of menses or incidence of intermenstrual bleeding.

Reporting of suspected adverse reactions


4.9 Overdose

Experience with ulipristal acetate overdose is limited. Single doses up to 200 mg have been used in women without safety concern. Such high doses were well-tolerated; however, these women had a shortened menstrual cycle (uterine bleeding occurring 2-3 days earlier than would be expected) and in some women, the duration of bleeding was prolonged, although not excessive in amount (spotting). There are no antidotes and further treatment should be symptomatic.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Sex hormones and modulators of the genital system, emergency contraceptives. ATC code: G03AD02.

Ulipristal acetate is an orally-active synthetic selective progesterone receptor modulator which acts via high-affinity binding to the human progesterone receptor. When used for emergency contraception the mechanism of action is inhibition or delay of ovulation via suppression of the LH surge. Pharmacodynamic data show that even when taken immediately before ovulation is scheduled to occur (when LH has already started to rise), ulipristal acetate is able to postpone follicular rupture for at least 5 days in 78.6% of cases (p<0.005 vs. levonorgestrel and vs. placebo) (see Table).

5.2 Pharmacokinetic properties

Absorption

Following oral administration of a single 30 mg dose, ulipristal acetate is rapidly absorbed, with a peak plasma concentration of 176 ± 89 ng/ml occurring approximately 1 hour (0.5 - 2.0 hours) after ingestion, with an AUC0-24 of 556 ± 260 ng.h/ml.

Administration of ulipristal acetate together with a high-fat breakfast resulted in approximately 45% lower mean Cmax, a delayed Tmax (from a median of 0.75 hours to 3 hours) and 25% higher mean AUC0-24 compared with administration in the fasted state. Similar results were obtained for the active mono-demethylated metabolite.

Distribution

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

Ulipristal acetate is a lipoophilic compound and is distributed in breast milk, with a mean daily excretion of 13.35 µg (0-24 hours), 2.16 µg (24-48 hours), 1.06 µg (48-72 hours), 0.58 µg (72-96 hours), and 0.31 µg (96-120 hours).

In vitro data indicate that ulipristal acetate may be an inhibitor of BCRP (Breast Cancer Resistance Protein) transporters at the intestinal level. The effects of ulipristal acetate on BCRP are unlikely to have any clinical consequences.

Ulipristal acetate is not a substrate for either OATP1B1 or OATP1B3.

Biotransformation/elimination

Ulipristal acetate is extensively metabolized 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 CYP3A4, and to a small extent by CYP1A2 and CYP2A6. The terminal half-life of ulipristal acetate in plasma following a single 30 mg dose is estimated to 32.4 ± 6.3 hours, with a mean oral clearance (CL/F) of 76.8 ± 64.0 L/h.

It has minimal affinity to the androgen receptor and no affinity for the human estrogen or mineralocorticoid receptors.

Results from two independent randomized controlled trials (see Table) showed the efficacy of ulipristal acetate to be non-inferior to that of levonorgestrel in women who presented for emergency contraception between 0 and 72 hours after unprotected intercourse or contraceptive failure. When the data from the two trials were combined via meta-analysis, the risk of pregnancy with ulipristal acetate was significantly reduced compared to levonorgestrel (p=0.046).

<table>
<thead>
<tr>
<th>Randomized controlled trial</th>
<th>Pregnancy rate (%) within 72h of unprotected intercourse or contraceptive failure</th>
<th>Odds ratio [95% CI] of pregnancy risk, ulipristal acetate vs levonorgestrel†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ulipristal acetate</td>
<td>wrought of 72h of unprotected intercourse or contraceptive failure</td>
<td>0.50 [0.18-1.24]</td>
</tr>
<tr>
<td>Levonorgestrel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HRA2914-507</td>
<td>0.91 (7/773)</td>
<td>1.68 (13/773)</td>
</tr>
<tr>
<td>HRA2914-513</td>
<td>1.78 (15/844)</td>
<td>2.59 (22/852)</td>
</tr>
<tr>
<td>Meta-analisis</td>
<td>1.36 (22/1617)</td>
<td>2.15 (35/1625)</td>
</tr>
<tr>
<td></td>
<td>0.58 [0.33-0.99]</td>
<td></td>
</tr>
</tbody>
</table>

2. Glasier et al, Lancet 2010

Two trials provide efficacy data on ellaOne used up to 120 hours after unprotected intercourse. In an open-label clinical trial, which enrolled women who presented for emergency contraception and were treated with ulipristal acetate between 48 and 120 hours after unprotected intercourse, a pregnancy rate of 2.1% (26/1241) was observed. In addition, the second comparative trial described above also provides data on 100 women treated with ellaOne from 72 to 120 hours after unprotected intercourse, in whom no pregnancies were observed.

Limited and inconclusive data from clinical trials suggest a possible trend for a reduced contraceptive efficacy of ulipristal acetate with high body weight or BMI (see section 4.4). The meta-analysis of the four clinical studies conducted with ulipristal acetate presented below excluded women who had further acts of unprotected intercourse.
Special populations
No pharmacokinetic studies with ulipristal acetate have been performed in females with impaired renal or hepatic function.

5.3 Preclinical safety data
Non-clinical data reveal no special hazard for humans based on conventional studies of safety pharmacology, repeated dose toxicity, and genotoxicity. Most findings in general toxicity studies were related to its mechanism of action as a modulator of progesterone and glucocorticoid receptors, with antiprogesterone activity observed at exposures similar to therapeutic levels.

Information from reproductive toxicity studies is limited due to the absence of exposure measurement in these studies. Ulipristal acetate has an embryolethal effect in rats, rabbits (at repeated doses above 1 mg/kg) and in monkeys. At these repeated doses, the safety for a human embryo is unknown. At doses which were low enough to maintain gestation in the animal species, no teratogenic effects were observed. Carcinogenicity studies (in rats and mice) showed that ulipristal acetate is not carcinogenic.

6. PHARMACEUTICAL PARTICULARS
6.1 List of excipients
Lactose monohydrate
Povidone K30
Croscarmellose sodium
Magnesium stearate

6.2 Incompatibilities
Not applicable

6.3 Shelf life
3 years

6.4 Special precautions for storage
Store below 25°C. Store in the original packaging to protect from moisture. Keep the blister in the outer carton to protect from light.

6.5 Nature and contents of container
PVC-PE-PVDC-Aluminium blister of 1 tablet.
The carton contains one blister of one tablet.

6.6 Special precautions for disposal
No special requirements

7. MARKETING AUTHORISATION HOLDER
Laboratoire HRA Pharma
15, rue Béranger
F-75003 Paris
France

8. MARKETING AUTHORISATION NUMBER(S)
EU/1/09/522/001

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION
Date of first authorisation: 15 May 2009
Date of latest renewal: 20 May 2014

10. DATE OF REVISION OF THE TEXT
Date of revision: January 2015
Detailed information on this medicinal product is available on the website of the European Medicines Agency (EMA) http://www.ema.europa.eu.
Further information on the clinical development of ellaOne®

<table>
<thead>
<tr>
<th>TOPICS</th>
<th>CLINICAL STUDY</th>
<th>METHODOLOGY</th>
<th>SAMPLE</th>
<th>MESSAGE AND RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition of the problem</td>
<td>Wilcox¹</td>
<td>Prospective cohort study¹</td>
<td>221 healthy women who were planning a pregnancy¹</td>
<td>The timing of their fertile window can be highly unpredictable so unprotected sex carries a risk at any time¹</td>
</tr>
</tbody>
</table>
| Mechanism of action   | Brache²        | Analysis of pooled data from three randomised trials of emergency contraception regimes² | 163 women²                                | 1° UPA postpones ovulation²  
2° UPA delays ovulation for at least 5 days in a higher proportion of women than LNG (p=0.0001) when given in the advance follicular phase² |
| Efficacy              | Creinin³       | Randomised, double blind, comparative study of UPA vs LNG contraception with pregnancy as a primary outcome measure³ | 1546 women³                                | UPA is at least as effective as LNG in preventing pregnancies³⁴ |
|                       | Glasier⁴       | Randomised single blind comparative EC trial of UPA vs LNG⁴ | 1696 women received EC within 72h of sexual intercourse⁴ | More pregnancies are prevented with UPA than LNG when taken in the first 72h (p=0.046)⁴ |
|                       | Glasier, Crenin⁴ | Pooled analysis⁴                                   | 3445 women⁴                                | UPA is well tolerated in more than 1000 women treated. Similar adverse event profile as LNG³ |
| Safety                | Glasier⁴       | Randomised single blind comparative EC trial of UPA vs LNG⁴ | 1696 women received EC within 72h of sexual intercourse⁴ |                                                                      |
|                       | Epidemiology study to be published |                                                                   |                                              |                                                                      |

References
If you have had unprotected sexual intercourse (UPSI), you can lower your risk of pregnancy by using emergency contraception. There's no safe time - you can get pregnant by having sex at any time in your menstrual cycle.

If it happens to you, ask your pharmacist for an emergency contraceptive pill, they are here to help.

References
1. ellaOne® European Union Summary of Product Characteristics.
2. Levonorgestrel Summary of Product Characteristics.