



# Emergency Contraception: The Facts Every Pro-life Advocate Should Know

There has been a lot of talk in pro-life circles about emergency contraception being "abortifacient," and in particular about the Affordable Care Act "mandating the provision of abortion-inducing drugs." We would like to take this opportunity to discuss the mechanisms of action of emergency contraception pills and clear up some misunderstandings.

## **1. Plan B does not cause abortions.**

The best available evidence indicates that **levonorgestrel emergency contraception pills**, often known as **LNG ECPs** or **Plan B**, have no mechanism of action other than prevention of fertilization<sup>1</sup>. Plan B stops ovulation, and may also inhibit sperm transport. Studies designed specifically to test whether LNG ECPs prevent implantation found no evidence that they do.

## **2. Whatever definition of pregnancy or abortion is being used, Plan B still does not cause abortions.**

Abortion advocates often dismiss claims that EC is abortifacient by saying that it does not disrupt an "established pregnancy," meaning that it has no effect upon an implanted embryo. The definition of "pregnancy" used by the American Medical Association and the American College of Obstetricians and Gynecologists, among other medical authorities, refers to the specific physical relationship between a woman and the child she's carrying that begins when the embryo implants. Some have charged that this definition of pregnancy is politically motivated.<sup>2</sup> Whether or not that is the case, this definition is nonetheless in common use, so be aware of that.

Although the term "abortion" is often used in everyday language to refer to the killing of an embryo or fetus, in medical terminology it specifically means the ending of an established pregnancy (i.e., after implantation) with resulting death of the embryo or fetus. But of course, it is the induced death of the embryo or fetus, not the ending of the pregnancy *per se*, that pro-lifers object to. To aid in communication, it might be helpful to use the term "contragestive" when referring to a substance or device that prevents gestation of an already-conceived embryo. Contragestives are not abortifacient in the strictest sense of that term, but neither are they contraceptive in the sense of preventing conception.

What you need to know is **that the best available studies provide no evidence that EC does anything but prevent fertilization**. In fact, there is strong evidence that Plan B can only prevent fertilization. It is not abortifacient by anyone's definition. It is not contragestive. It is contraceptive.



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### **3. Product labeling which states that Plan B may inhibit implantation is based on out-of-date information.**

Opponents of EC often point to the product labeling that says "In addition, it may inhibit implantation (by altering the endometrium)."<sup>3</sup> However, that language is based on what was known at the time that the product and labeling were submitted to the FDA for approval. At that time, there was still speculation that it might prevent implantation. Subsequent research has found no post-fertilization mechanism of action for LNG-ECP. Since drug labeling changes must go through an FDA approval process, the label simply hasn't kept up with current science.

In November 2013, the manufacturer of the European ECP Norlevo changed its labeling to reflect the scientific consensus on its mechanism of action.<sup>4</sup> Norlevo is identical to Plan B.

### **4. Emergency contraception works after intercourse because fertilization does not take place immediately, and can be prevented if ovulation is prevented.**

Contrary to popular belief, a woman does not have to be ovulating at the time of intercourse in order to conceive. Sperm can live up to five days in a woman's reproductive tract. Thus, conception can take place even if a woman ovulates several days after intercourse. EC works by preventing ovulation if it has not already taken place.

### **5. ella has not been studied as extensively as Plan B, but has not been shown to prevent implantation at the dosage used for EC.**

Ulipristal acetate, also known as UPA or by its brand name of ella, is effective for a longer period of time after intercourse than Plan B. The reason is that UPA is capable of delaying ovulation even after the luteinizing hormone (LH) surge, when ovulation is imminent, whereas Plan B is only effective when taken before the LH surge.

UPA is chemically similar to mifepristone, also known as RU-486. Because of this, many people have assumed that it must also induce abortion. Drugs in this class administered at high or repeated doses<sup>5</sup> cause changes to the endometrium that *may* theoretically impair implantation. However, ella is a relatively low dose of ulipristal administered once. One study has shown that if administered shortly after ovulation, UPA can decrease endometrial thickness by  $0.6 \pm 2.2$ mm.<sup>6</sup> Although some researchers who consider prevention of implantation to be contraception viewed that as an indication that ulipristal could be used as a "contraceptive," in fact it has not been demonstrated that this relatively small effect on the endometrium is enough to inhibit implantation. Only one of the 61 women in the study, on a dose more than 3 times that used in ella, had what was considered a thin endometrium (less than 6 mm).



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Concerns have also been expressed about the possibility that ella could cause miscarriage. So far, women taking ella have been found to have miscarriage rates in line with the rate in the general population.<sup>7,8</sup>

The mechanism of action of UPA has not been thoroughly described and women who are unwilling to risk even the possibility of a contragestive effect should avoid it. However, it cannot be factually stated that a single dose of 30 mg of UPA, as used in ella, is known to have any mechanism other than the prevention of fertilization.

### **6. That UPA could theoretically be used off-label in higher doses to induce abortions doesn't mean that it can't be used for non-abortive purposes.**

Methotrexate can be used to induce abortion. Does that mean that it shouldn't have been approved to treat cancer and autoimmune diseases?<sup>9</sup> And of course, sleeping pills -- even ones sold over the counter -- can be used to commit suicide. The possibility that a drug can be abused doesn't mean that it should never be used.

<sup>1</sup> [http://www.cecinfo.org/custom-content/uploads/2012/12/ICEC\\_FIGO\\_MoA\\_Statement\\_March\\_2012.pdf](http://www.cecinfo.org/custom-content/uploads/2012/12/ICEC_FIGO_MoA_Statement_March_2012.pdf)

<sup>2</sup> <http://www.all.org/article/index/id/MjUxNQ>

<sup>3</sup> <http://www.planbonestep.com/pdf/PlanBOneStepFullProductInformation.pdf>

<sup>4</sup> <https://www.documentcloud.org/documents/838673-new-norlevo-leaflet.html>

<sup>5</sup> [http://ec.princeton.edu/news/Glasier\\_2010\\_-\\_UPA.pdf](http://ec.princeton.edu/news/Glasier_2010_-_UPA.pdf)

<sup>6</sup> <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2911236/>

<sup>7</sup> [http://ec.princeton.edu/news/Glasier\\_2010\\_-\\_UPA.pdf](http://ec.princeton.edu/news/Glasier_2010_-_UPA.pdf)

<sup>8</sup> [http://ec.princeton.edu/news/Fine\\_2010\\_-\\_UPA.pdf](http://ec.princeton.edu/news/Fine_2010_-_UPA.pdf)

<sup>9</sup> <http://www.nlm.nih.gov/medlineplus/druginfo/meds/a682019.html>

