# The Real Dangers and Side-Effects of the Contraceptive Yaz

A discussion of alternative, perhaps safer, forms of contraception.

Tag Words: Yaz, danger of Yaz, birth control methods, contraceptives

Authors: Mercedes Safarpour, Kristen Ryan, Jordan Zavatsky with Julie M. Fagan, Ph.D.

#### **Summary**

There are many types and brands of contraceptives, one of which is Bayer's best-selling product called Yaz. Unbeknownst to the young women taking Yaz, as prescribed to them by their doctor, are the life-threatening side-effects of this drug, the most serious of these is the increased risk of blood clots and possible death. People have filed over 10,000 claims and lawsuits against Bayer, trying to remove Yaz/Yasmin/Ocella from the market, but have thus far failed. Our intent is to inform women about the dangers of this drug and to provide awareness of other, perhaps safer, contraceptives.

**Video Links:** <a href="https://www.youtube.com/watch?v=7SYm8">https://www.youtube.com/watch?v=7SYm8</a> S bjY <a href="https://www.youtube.com/watch?v=ywAutGiMPv4">https://www.youtube.com/watch?v=ywAutGiMPv4</a>

# **Introduction** (MS)

Our goal is to inhibit women's use of dangerous and harmful forms of contraception. In an effort to inform women and girls about what Yaz, or, the "magic pill" is capable of, we would like to have them think about why you should think twice before taking just any prescription recommendation from your doctor. This concerns many women because more than 99% of women 15-44 years old that have had sexual intercourse, have used at least one contraceptive method. A whopping 64% of these women who practice contraception use non-permanent methods such as hormonal methods; the pill and female sterilization are the most commonly used since 1982. As of 2010, the most popular contraceptive method choice, which comprises 27.5% of all contraceptive users, is the pill. The most common method of birth control among the 3.2 million teenage women who use contraceptives, rely on the pill (53%). All pharmaceuticals have side-effects, but when the most popular pill has been found to have such life-threatening effects, something needs to be done. Attempts to remove this drug from the market have failed, and young women taking Yaz are not being adequately informed about the potential risks and complications. Many women rely on this form of birthcontrol, and they should be given safer, alternative choices. Bayer has been taken to court to get Yaz removed from the market, and had no such luck up until now. There are over 10,000 lawsuits against Bayer for this product. Yaz is Bayer's highest selling product with over \$1.8 billion dollars in revenue annually. People have filed claims and lawsuits against Bayer, trying to remove Yaz (and its generic forms) from the market and/or improving warnings about side effects, but have so far all failed. By spreading the word and informing women about the dangers of taking Yaz, we hope that women will quit the use of Yaz, and seek information and prescriptions for alternative, safer forms of contraception. We want women to think twice before just taking a prescription recommendation from their doctor, you should be fully informed about any drug you are ingesting daily. We will making an

informative flyer for campus health centers, in hopes that we can add to the current solutions and help the movement towards women being more aware of these side-effects; By publishing a link to our video on a Facebook forum website and on USA Health Today, it will also help spread the word to unknowing victims of this harmful contraceptive. If we rebroadcast the dangers of Yaz to everyone, we can potentially save women's lives if we can convince them to discontinue use.

http://www.guttmacher.org/pubs/fb contr use.html

#### **About Yaz (MS)**

Yaz is a medication manufactured by the German pharmaceutical company, Bayer. Yaz is Bayer Pharmaceutical's top-selling contraceptive amongst women ages 15-30, which generates \$1.8 billion dollars annually. Yaz (and its generic forms) are different from all other oral contraceptives in that they contain the active ingredient, drospirenone, which is a "newer progestin", or synthetic hormone. Yaz is a formulation of drospirenone and ethinyl-estradiol; a common ingredient in many oral contraceptives. Drospirenone is the ingredient linked to the complications. Unique to Yaz and its generics, such as Ocella, Zarah, Beyaz, Yasmin, Zveda, Gianvi, Loryna, and Yaz 28. Drospirenone is linked to increased risk for blood clots, as well as increased potassium levels in women, which also leads to heart problems. The difference between Yaz (and its generics) and other forms of oral contraceptives is drospirenone.

Yaz is attractive to a vast array of women because the manufacturers claim it is 99% effective in preventing pregnancy. Yaz also treats PMDD, a severe form of PMS, and has thus earned the reputation of being a "magic pill". Yaz also claims to treat moderate acne in women as young as 14 years old. Knowing this, if you are looking for a birth control pill, Yaz really does sound like the perfect "magic pill". What women need to know is that this is still a prescription pill, and that means you should know more about what's in it if you want to take it. It's hard to bring yourself around to the fact that your doctor isn't always right. It's your body and it is your decision about what to take and what not to. A thing as personal as birth control should be a decision you really think about and research before making any decisions. You should familiarize yourself with this, or any contraceptive. It's best to search for information on the various contraceptives and then ask your physicians questions. You have the right to request that the doctor prescribe another contraceptive. It is always good to get their opinion, but that's all it is. It is ultimately your decision and your body and you should be well informed.

• While other birth control pills also have side-effects, the risks associated with taking Yaz are life-threatening. What's more disturbing is that Yaz and Yasmin control 25% of the oral birth control market in the United States. If there is so much evidence against this pill, how can people still be filling their prescriptions? If Yaz was just as safe as other pills, then why haven't we heard about any of these horrible side-effects being experienced from other birth control pills? With Yaz, there has been multiple horrific instances of: stroke, heart attack, pulmonary embolism, deep vein thrombosis, gallbladder disease and other potentially life-threatening side effects, such as blindness, experienced by young girls and women alike from taking Yaz.

http://www.aboutlawsuits.com/beyaz-birth-control-approved-13048/#sthash.IRjkCZtE.dpuf http://www.yaz-us.com/

# **Bayer's Comeback "Alternative", Beyaz (MS)**

The FDA approved a new birth control pill from Bayer Healthcare Pharmaceuticals, Inc., which includes a folate supplement. The new pill, which will be marketed as Beyaz, was approved amid growing concerns about the increased risk of blood clots and other injuries from side effects of Yaz and Yasmin birth control, which contain the same "fourth" generation progestin that will be used in Beyaz. Bayer acted quickly here, amidst growing concerns about increased risk of blood clots and other injuries from Yaz and Yasmin, and started to focus on their marketing for their "new" pill.

Bayer advertised their new contraceptive as a "safer" version of their previous best-selling drug, Yaz, and named it Beyaz. Beyaz, like Yaz, claims to be:

- 99% effective to prevent pregnancy
- treats PMDD (severe form of PMS)
- treat moderate acne in women at least 14 years old
- same active ingredients: ethinyl estradiol and drospirenone (the "new progestin")

#### Bayer claims that Beyaz also:

Provides a daily dose of folate supplementation, which is recommended for women in their reproductive years. Folate lowers the risk of having rare neural tube birth defects in a pregnancy occurring during Beyaz use or shortly after stopping.

It is important for young women to understand that this improved form of Yaz still causes the harmful cardiac problems with blood clots or increased potassium levels. All they did was add folate supplement to "improve" Yaz.

Both Beyaz and Yaz indicate in their warnings that: "In addition, drospirenone is a different kind of hormone that for some may increase potassium too much." However, things that "may" increase potassium levels are drugs that some people may take everyday: "NSAIDs—ibuprofen (Motrin®, Advil®), naproxen (Aleve® and others) when taken long-term and daily for arthritis or other problems, potassium-sparing diuretics (spironolactone and others), potassium supplementation, ACE inhibitors (Capoten®, Vasotec®, Zestril®, and others), angiotensin-II receptor antagonists (Cozaar®, Diovan®, Avapro®, and others), aldosterone antagonists, and heparin."

If anyone bothered to stop and read about how this pill was different, they'd realize that this was the same exact harmful pill with an added vitamin! This vitamin, folate, can be taken in many other forms, you don't need to take this harmful birth control to get adequate levels of folate! Bayer created a distraction from the horrific side-effects surfacing from its "magic pill". In a form of panic, they hoped that it would suffocate the bad publicity for their best-seller. For some it worked, but sales have dropped since. This should be a lesson to not be fooled by pharmaceutical companies that are trying to take advantage of the aloof public.

http://www.topdruglawsuits.com/lawsuit-settlements/beyaz-lawsuits/3107-beyaz-side-effects-just-as-dangerous-as-yasminyaz

# What is drospirenone? How does it work? (JZ)

As aforementioned drospirenone is a synthetic version of the female hormone, progesterone, also referred to as a progestin. It is the main, active ingredient unique to Yaz and all of its descendents. It is used in oral contraceptives to prevent pregnancy by preventing the release of eggs from the ovaries and changing the cervical mucus and the lining. Drospirenone also results in reduced retention of water as well as tenderness of breasts, and curbs the prevalence of acne. Drospirenone is unique among progestins used in oral contraceptives in that it has both antimineralocorticoid and antiandrogenic activities contributing to the selling point abilities of the drug.

Through its affinity for the mineralocorticoid receptor, drospirenone acts as an aldosterone receptor antagonist. Aldosterone may be involved with hemostasis, leading to a decrease in coagulability. Therefore, the antimineralocorticoid properties of drospirenone could in turn lead to hypercoagulability, creating a possible mechanism for the increased risk of venous thromboembolism, deep vein thrombosis and pulmonary embolism. In addition to these blood clotting side effects, are others potential health risks that are played down by Bayer. These include stroke, heart attack, gallbladder disease, pancreatitis, and even death.

YAZ and the novel progestin drospirenone; Journal of Reproductive Medicine. 53(9 Suppl):721-8, 2008 Sep. From MEDLINE, a database of the U.S. National Library of Medicine

#### **Drospirenone related blood clots (JZ)**

As early as November 2009 the FDA had reports of 993 cases of pulmonary embolism (PE), 487 cases of deep vein thrombosis and 229 cases of other blood clots for drospirenone and ethinyl estradiol combined. As of 2012 the American College of Obstetricians and Gynecologists acknowledged the early safety reports that suggested a higher risk of venous thromboembolism associated with the use of oral contraceptives that contain drospirenone compared with oral contraceptives that contain other progestins. The ACOG also mentioned two large studies (one large Dutch case—control study and one cohort study from Denmark) also reported increased risks of venous thromboembolism with use of drospirenone-containing drugs compared with levonorgestrel (another progestin) containing ones. Despite these findings, the ACOG suggests methodological limitations like potential misclassification and detection biases.

The FDA has not yet reached a conclusion, but remains concerned, about the potential increased risk of blood clots with the use of drospirenone-containing birth control pills. FDA has completed its review of the two 2011 studies that evaluated the risk of blood clots for women who use drospirenone-containing birth control pills. FDA is continuing its review of a separate FDA-funded study that evaluated the risk of blood clots in users of several different hormonal birth control products (contraceptives). Preliminary results of the FDA-funded study suggest an approximately 1.5-fold increase in the risk of blood clots for women who use drospirenone-containing birth control pills compared to users of other hormonal contraceptives. Currently more than 1,100 Yaz users or families of women who have taken Yaz have filed lawsuits across the country alleging that Yaz, Yasmin, and Ocella have caused harm.

http://www.acog.org/Resources%20And%20Publications/Committee%20Opinions/Committee%20on%20Gynecologic%20Practice/Risk%20of%20Venous%20Thromboembolism.aspx

# The basics behind potassium's role in the body (KR)

Potassium is a very important mineral/macronutrient for the proper function of all cells, tissues, and organs in the human body. K+, is the main intracellular cation inside all cells, responsible for maintaining fluid, electrolyte, and acid-base balance in blood and tissues. The balance is maintained by ion-channel pumps. These ion-pumps move Sodium out of the cell, and Potassium in, in a 3:2 ratio. Sodium, which has a negative charge builds up outside the cells, and Potassium with a positive charge builds up inside the cells. The varying concentrations of these ions inside and out cause an electrical gradient along the cell membranes, known as membrane potential. The membrane potential created by these ions allows for the creation of action potentials, or electrical discharges, up and down the cell membranes. These ions pretty much make our cells able to conduct electricity. The ability for cells to produce this electricity is crucial for the body to send and receive neural signals, thereby controlling muscle contraction etc. Because of this, potassium is crucial to nerve and cardiovascular function. The ratio of Na- and K+ ions inside and out of the cell is extremely important, and any changes in this can have detrimental effects on cell signaling. If potassium levels increase faster than the kidney's can remove it, you will disrupt the ionic balance of Potassium in the cells.

# **How Potassium Levels are Affected by Drospirenone** (KR)

Drugs such as drospirenone directly affect levels of Potassium by interfering with kidney function. If the kidneys cannot remove potassium, the ion will build up in the bloodstream and cause adverse health effects as described above. The risk of potassium linked health problems, such as heart attack are so great, from this drug alone, that the FDA demanded Bayer to put this information on their drug packaging and labeling.

A buildup of potassium is known as hyperalkemia. Symptoms of this, include tingling of the hands and feet, muscular weakness, and at extremes, paralysis. You can see directly how a change in potassium, and therefore a change in the ability to produce electrical signals can cause these symptoms. The biggest effect, I think, is on cardiac function and blood flow. Muscle contraction solely relies on these signals and any abnormal increase in potassium can have a direct effect on the most important muscle of all, the heart. Potassium not only helps control muscle contraction in the heart, but also blood pressure. Deviations from normal potassium levels cause irregular heartbeating, or arrhythmias, which can be life-threatening.

#### **Current status of Drospirenone drugs (JZ)**

Listed below is FDA approved oral contraceptives containing Drospirenone and it's respective information:

(Brand name, generic name) -- manufacturer/distributor

Links to drug labels.

**Beyaz**, (Drospirenone 3 mg, ethinyl estradiol 0.02 mg and levomefolate calcium 0.451 mg)-Bayer

http://www.accessdata.fda.gov/drugsatfda\_docs/label/2012/022532s001lbl.pdf

**Drospirenone and ethinyl estradiol**, (Drospirenone 3 mg and ethinyl estradiol 0.03 mg)

**Drospirenone and ethinyl estradiol,** (Drospirenone 3 mg and ethinyl estradiol 0.02 mg)

**Gianvi,** (Drospirenone 3 mg and ethinyl estradiol 0.02 mg)-- Bayer/ Teva Pharmaceuticals and Barr Laboratories (generic YAZ)

Loryna, (Drospirenone 3 mg and ethinyl estradiol 0.02 mg) -- Sandoz (generic YAZ)

**Ocella**, (Drospirenone 3 mg and ethinyl estradiol 0.03 mg) -- Bayer/ Teva Pharmaceuticals and Barr Laboratories (generic YASMIN)

**Safyral**, (Drospirenone 3 mg, ethinyl estradiol 0.03 mg, and levomefolate calcium 0.451 mg)-Bayer (combines Yasmin with a vitamin B, folate)

http://www.accessdata.fda.gov/drugsatfda docs/label/2012/022574s004lbl.pdf

**Syeda**, (Drospirenone 3 mg and ethinyl estradiol 0.03 mg) -- Sadoz (generic YASMIN)

**Yasmin**, (Drospirenone 3 mg and ethinyl estradiol 0.03 mg) -- Bayer

http://www.accessdata.fda.gov/drugsatfda\_docs/label/2012/021098s022lbl.pdf

Yaz, (Drospirenone 3 mg and ethinyl estradiol 0.02 mg) -- Bayer

http://www.accessdata.fda.gov/drugsatfda docs/label/2012/022574s004lbl.pdf

**Zarah**, (Drospirenone 3 mg and ethinyl estradiol 0.03 mg) -- Watson

From September 1, 2010 through March 31, 2012: Approximately 18.9 million prescriptions for Drospirenone-containing contraceptive products were dispensed and approximately 2.7 million patients received a dispensed prescription in the outpatient retail pharmacy setting. Listed below is the nationally estimated number and percentages for Drospirenone contraceptives marked by the patients' age (0-13, 14-17, 18+) in US outpatient retail pharmacies, in the aforementioned time period of September 1, 2010 through March 31, 2012.

Drospirenone: 18,970,934 (100.0%) Gianvi: 6,503,735 (34.3%)

0-13 years: 52,841 (0.3%) 0-13 years: 23,229 (0.4%)

14-17 years: 1,502,976 (7.9%) 14-17 years: 644,190 (9.9%)

18+ years: 17,414, 694 (91.8%) 18+ years: 5,836,273 (89.7%)

Unknown age: 423 (0.0%) Unknown age: 43 (0.0%)

7 1 2 000 000 (10 20/)	0.12 1.77( (0.20/)
Zarah: 3,090,060 (16.3%)	0-13 years: 1,776 (0.2%)
0-13 years: 7,041 (0.2%)	14-17 years: 38,059 (3.8%)
14-17 years: 173,417 (5.6%)	18+ years: 966,114 (96.0%)
18+ years: 2,909,600 (94.5%)	Unknown age: 5 (0.0%)
Unknown age: 2 (0.0%)	Loryna: 685,120 (3.6%)
Ocella: 2,875,264 (15.2%)	0-13 years: 1,752 (0.3%)
0-13 years: 6,470 (0.2%)	14-17 years: 64,330 (9.4%)
14-17 years: 181,188 (6.3%)	18+ years: 619,038 (90.4%)
18+ years: 2,687,461 (93.5%)	Syeda: 361,114 (1.9%)
Unknown age: 146 (0.0%)	0-13 years: 778 (0.2%)
Yaz: 2,685,240 (14.2%)	14-17 years: 23,932 (8.4%)
0-13 years: 4,907 (0.2%)	18+ years: 336,403 (93.2%)
14-17 years: 198,094 (7.4%)	Unknown age: 1 (0.0%)
18+ years: 2,482,053 (92.4%)	Safyral: 198,203 (1.0%)
Unknown age: 187 (0.0%)	0-13 years: 809 (0.4%)
Beyaz: 1,565,235 (8.3%)	14-17 years: 16,567 (8.4%)
0-13 years: 6,073 (0.4%)	18+ years: 180,826 (91.2%)
14-17 years: 163,052 (10.4%)	Vestura: 1,008 (0.0%)
18+ years: 1,396,070 (89.2%)	0-13 years: 6 (0.6%)
Unknown age: 39 (0.0%)	14-17 years: 146 (14.5%)
Yasmin 28: 1,005,955 (5.3%)	18+ years: 855 (84.9%)

# Lawsuits against Bayer (JZ)

In January 2012, there were about 10,000 lawsuits filed against Bayer by women who suffered from blood clots, or the families of the women who have died while taking Yasmin, Yaz, Ocella or Gianvi. As of July 2013, the leading manufacturer of Drospirenone oral contraceptives, Bayer Healthcare Pharmaceuticals, had settled the claims of 6,760 U.S. plaintiffs for a total of \$1.4 billion. This left about 5,400 claims of related injuries, still pending. About 2,800 of these unsettled claims involved cases regarding blood clots. Until March, Bayer was only settling claims based on a case-by-case analysis of medical records for blood clot injuries only. In March

Bayer agreed to address gallbladder injuries related to the drugs, that has totaled about 8,800 plaintiffs.

# http://www.fda.gov/Drugs/DrugSafety/ucm299305

# What does it take to remove a drug? (JZ)

The FDA decides a drug is not safe enough to stay on the market when the risks outweigh the benefits. This occurs when the safety issues associated with that drug cannot be corrected, and often includes the serious side effects that have been discovered after the drug was approved. Since some people may rely heavily on a specific drug, this process is done very carefully such that no one is on danger without the product.

Often times, safety concerns discovered after approval can be addressed by adding additional information and warnings to the product label. If warnings and other measures to minimize the risks associated with the drug are not enough to protect a patient's safety (i.e. the risks outweigh the benefits), the FDA and/or manufacturer may decided to remove the product from the market.

Should the FDA make the decision, the manufacturer is notified that the drug should no longer be marketed. The manufacturer usually stops marketing the drug voluntarily. However, if the manufacturer disagrees or does not comply, the FDA can take legal action to remove the unsafe drug and withdraw it's original approval.

http://www.fda.gov/AboutFDA/Transparency/Basics/ucm194984.htm

# **Contraception Options (KR)**

There are many different options out there for different types of contraception. Making the right choice for your body and your lifestyle is up to you, not your doctors. Don't feel pressured into taking something you're not comfortable with, and don't be afraid to ask questions. Today there are so many methods out there. Of course there is abstinence, and family planning but these are not the option many are looking for. There are many, many different types of oral contraceptives, some that even have low hormone dosages. Here are different options you have both hormonal, and nonhormonal:

**Hormonal Methods**- interfere with ovulation, fertilization or implantation of an egg in the uterus wall;

• Oral contraception; in which hormones such as estrogen or progestin prevent the ovaries from releasing an egg. The pill also causes physiological changes to the uterus wall changing the lining and mucus of the cervix to prevent sperm from fertilizing an egg. Doctors usually advise women who are older than 35, smoke, have history of blood clots or history of endometrial, liver or breast cancer not to take the pill. Also, antibiotics can have an effect on how the pill works, so if you need to take an antibiotic, and are on the pill, you should ask your doctor if you should use alternate forms of birth control while being medicated. Oral contraceptives when taken at the same time daily are 95% effective, but may be less effective in overweight women. Side effects include: dizziness,

nausea, changes in mood, weight gain, high blood pressure, blood clots, heart attack, stroke and vision problems.

- Hormone patches; mimics oral contraceptives, except instead of physically taking a pill everyday, you just put the patch on your lower abdomen, butt, outer arm or upper body. Just like the pill it contains and releases the hormones estrogen and progestin to prevent release of eggs from the ovaries. Patches contain higher doses of estrogen than other methods. They are applied to the body once a week for three weeks and then removed for the fourth week to allow for menstruation. The patch is 95% effective, but may be less effective in overweight women. Side effects include: same as oral contraceptives.
- **Hormone shot;** this method only involves the hormone progestin, which is injected into the body by buttocks or arm every three months. Just like the pill and the patch, it prevents release of eggs from the ovaries and changes the cervical mucus. The shot should not be used as a long term birth control method, after two years it can lead to a temporary loss of bone density, which can lead to fractures. The shot however is 99% effective. The reason it is more effective than oral contraceptives or the patch is because you don't have to remember to take a pill or change a patch, so it decreases the probability of human error. Side effects include: spotting, weight gain, sore breasts, headaches and bone loss with long term usage.
- Vaginal ring; these are thin, flexible rings that also release estrogen and progestin and stop the ovaries from releasing eggs, while thickening the cervical mucus. The ring can be inserted by yourself for three weeks and taken out on the fourth to allow for menstruation. Rings are 95% effective. Side effects include: same as those for oral contraceptives, vaginal swelling, irritation and discharge.
- Implantable rod; implanted in the upper arm by your doctor and release hormones which change the lining of the uterus to prevent sperm from joining with an egg. These rods are effective for up to three years and have a 99% effective rate, but may not work as well for overweight women. Side effects include: acne, weight gain, headache, hair loss, depression, mood changes, ovarian cysts, and lowered sex drive.
- Intrauterine device. IUDs are small T-shaped devices that your doctor inserts into the uterus. There are two major kinds; copper and hormonal. Copper IUDs release copper into the uterus preventing sperm from reaching the egg. Even if the sperm does fertilize the egg, the IUD will prevent the egg from implanting itself into the uterus wall. These can stay in place for 5-10 years. Hormonal IUDs contain the hormone progestin and prevent the ovaries from releasing an egg. It also, in the case of fertilization, will prevent the egg from implanting itself in the uterus wall. Hormonal IUDs can stay in place for up to five years. IUDs are up to 99% effective. Side effects include: cramps, spotting, pelvic inflammatory disease, infertility and tears or holes in the uterus.

**Non-Hormonal Methods-** physical barriers preventing sperm from reaching the cervix;

• **Diaphragm/cervical caps/cervical shield;** barrier methods help to physically block sperm from entering the cervix and reaching an egg. The three devices are all cups that are placed in the cervix prior to intercourse. The only differences between them are what

they are made out of. The diaphragms and cervical caps are made of latex and the shield is made of silicone. All three methods must be left in place for up to 8 hours after intercourse to be effective. The diaphragm must be removed after 24 hours and the caps and shields must be removed after 48 hours or they can lead to toxic shock. These barrier methods used along with spermicide are 75% effective. Side Effects include: irritation, allergic reaction, urinary tract infection and toxic shock.

- Cervical sponges; contraceptive sponges are usually made out of polyurethane foam and contain spermicide. The sponge can be effective for up to 24 hours and needs to be left in for up to 6 hours after intercourse to prevent pregnancy. It must be removed after a maximum of 30 hours because they can lead to toxic shock. Only one kind is sold in the US. Any woman who has allergies to spermicide should not use this method. This method is 88% effective. Side effects include: irritation, allergic reaction, abnormal pap smears and toxic shock.
- Female and male condoms; physically prevent sperm from entering the vagina. Usually both are made of thin flexible rubber packaged with lubricant. Female condoms can be inserted 8 hours before sex. You should use a new condom each time you have intercourse, and they should be stored in cool dry places to be most effective. These methods are 80-90% effective if stored and used correctly. Side effects include: irritation and allergic reaction.

It is up to you to make an informed decision, and that's what we want women to realize. If you don't take advantage of the resources out there, and the information available, you may end up in a position like many of the women who were prescribed Yaz are in. It is our goal to make you informed on the complications pills like Yaz can cause, and to make known the other options you have. Of course, all options of birth control methods come with their pro's and con's; we've provided tables in the appendices with the different methods described here, as well as some comparisons. It is now up to you to make an informed choice.

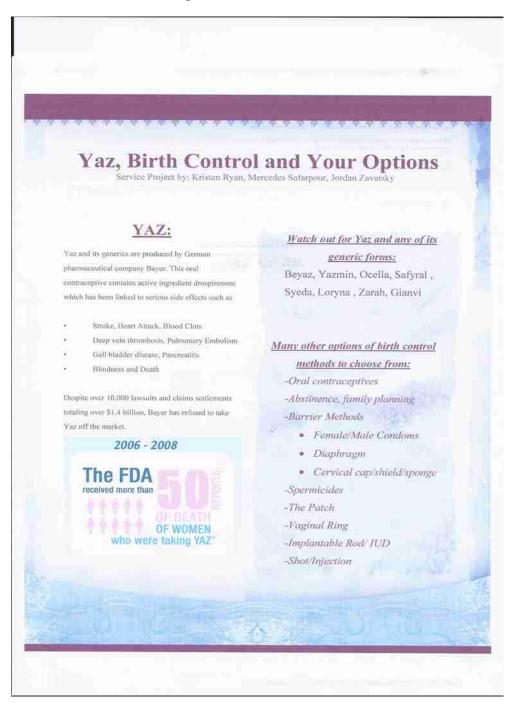
http://womenshealth.gov/publications/our-publications/fact-sheet/birth-control-methods.cfm

#### The Service Project: Spreading the Word (MS)

Our project consisted of spreading the word about the harmful effects Yaz and its generics have had on the women taking it. We have decided to post in forums, such as the facebook: <a href="https://www.facebook.com/pages/Yaz-Birth-Control-Forum/240899222804">https://www.facebook.com/pages/Yaz-Birth-Control-Forum/240899222804</a>, with a link to our paper and our YouTube video. The best way to get the word out about this issue is to reach out to the girls and women taking it. The first place we turn to is the internet, and that being said, this facebook in particular has many personal stories and side effects these women experienced by taking Yaz. We are also trying to help by compiling a list of other forms of birth control and their side effects, that can be found in the appendices of our paper. By having many resources to go to when looking for alternative birth controls, after reading about Yaz, you can make an educated decision as to what could be a safe alternative for you.

# **Reaching Out On Campus (KR)**

With multiple health centers and pharmacies right here on campus where many college girls go to receive forms of contraception or go for routine checkups, it would be beneficial to our cause to try and spread the word through them. In an effort to connect to girls directly around us here at Rutgers, we have reached out to all of the health centers on all campuses to try to help inform our fellow classmates about the dangers of Yaz and safe alternatives they have, and can ask the doctor about. We have created an informative flyer with information about Yaz and alternative forms of birth control, that girls will be able to access.



# **Appendices:**

Problem	Solution	<u>Pill</u>
ACNE, UNWANTED HAIR	Higher estrogen, lower androgen	Brevicon, Mircette, Modicon, Ortho-Cyclen, NuvaRing, Ortho Tri-Cyclen, Yaz, Estrostep Fe (the last three are FDA-approved for acne)
BREAKTHROUGH BLEEDING(SPOTTING), OVARIAN CYSTS	Higher estrogen, higher progestin, lower androgen	Desogen, Ortho-Cept, Ovcon 50, Yasmin, Zovia 1/50E, NuvaRing
BREAST SORENESS	Lower estrogen, lower progestin pill, or progestin-only pill	Alesse, Yaz, Loestrin 24 Fe or Loestrin 1/20, Mircette, Ortho-Micronor
DEPRESSION,MOODINESS, IRRITABILITY	Lower progestin	Alesse, Brevicon, Levlite, Modicon, Ortho-Cyclen, Ortho Tri-Cyclen, Ovcon 35, Tri-Levlen, Triphasil, Loestrin 1/20, Yasmin, NuvaRing
ENDOMETRIOSIS (The uterine lining grows in the fallopian tubes or ovaries, causing bleeding and, potentially, cysts and scarring)	Lower estrogen, higher progestin, or "no-period" pills like Seasonique, Seasonale, and Lybrel (which stop your period, or reduce its frequency) for continual hormones	Demulen 1/35, Levlen, Levora, Loestrin 1.5/30, Loestrin 1/20, Lo Ovral, Nordette, Zovia 1/35E. (Take these pills continuously, no placebos, to skip your period. For a

	without fluctuation.	light period, take placebos for four days.)
HEADACHES	Low estrogen, low progestin; hormonal fluctuations can trigger headaches. For menstrual migraines, Seasonale or Seasonique keep hormones stable, stopping a migraine-causing "drop."	Alesse, Brevicon, Levlite, Modicon, Necon 1/35, Ortho-Cyclen, Othro Tri-Cyclen, Ovcon 35, Tri-Levlen, Triphasil. (Triphasic pills can cause hormonal fluctuation, but not enough to notice.)
SEVERE MENSTRUAL CRAMPS	Higher progestin or no- period pills, although most pills will help.	Demulen 1/35, Desogen, Mircette, Loestrin 1.5/30, Ortho-Cept, Yasmin, Seasonale, Seasonique, Lybrel
IRREGULAR/PAINFUL PERIODS, PMS, PMDD	Low progestin, low androgen pills, as well as no-period pills	Yaz (FDA indication for PMDD), Loestrin 24 Fe, Seasonale, Seasonique, Lybrel
WEIGHT GAIN	Low estrogen, low progestin	Alesse, Levlite, Loestrin 1/20, Yasmin; any pill with less estrogen than your current one. (Yaz and Yasmin both help with bloat.)
POLYCYSTIC OVARIAN SYNDROME	Low androgen, low progestin	Ortho Tri-Cyclen, Yaz, Yasmin
BREAST-FEEDING, AVOIDING ESTROGEN	Progestin-only pills, or mini pills, which contain no estrogen	Ovrette, Ortho-Micronor

 $\underline{http://womenshealth.gov/publications/our-publications/fact-sheet/birth-control-methods.cfm}$ 

#### **Editorial**

Kristen Ryan

Letters to the Editor Girls' Life Magazine 4529 Harford Road Baltimore, MD 21214

Dear Karen,

My name is Kristen Ryan, and I'm a 23 year old college student attending Rutgers University. Over the past few months I've been part of a group doing a research project on birth control methods, dangers and side effects. What sparked an interest in this topic for me, was an incident I had while being on a birth control pill, Yaz, for a prolonged period of time. I had been taking the pill for over five years, and began to have heart palpitations. After going to the doctor and getting my heart tested and blood work, we found it was being caused by the birth control. I immediately stopped taking this pill, and switched to a different pill. If I had been educated on the side effects and dangers of the pill Yaz before I had taken it for five years, I would not have had to go through that. Who knows what other detriment that pill did to my body.

For young girls today, birth control is a huge issue. A lot of girls are menstruating and becoming sexually active at a much younger age than in the past. This has caused a surge of birth control methods to be spit out of pharmaceutical companies left and right. I believe it is really important for teenage girls to know the side effects of these medications and to know they have options about birth control. In an effort to raise awareness and allow girls to make an educated decision on what methods to use, we have put together a research paper and informative pieces on the dangers of certain birth control pills, (ex.Yaz) and other options girls may have.

For more information or a link to this paper please contact me at <a href="kryan732@gmail.com">kryan732@gmail.com</a>. I would love to help get the word out to young girls that they do have options, and they should think twice about what their doctors may be prescribing them. They have the right to ask questions and make an informative decision about the type of medication they take and how to take care of their bodies.

Sincerely, Kristen Ryan

#### **Editorial**

Mercedes Safarpour Sent to USA Today via Twitter and Facebook (10/29/2013)

Now with the Affordable Care Act in play, there will be a surge of young women searching for forms of contraception now that it's more affordable. Learning about the side effects of each form of contraception is extremely important, especially if you are seriously considering taking it. I have been involved in a research project on the birth control Yaz in particular, and its dangerous and potentially deadly side effects women have been experiencing. It's important to be

informed about the medications you are taking. Stay tuned for a link to our paper and our youtube video. @USATODAYhealth

#### **Editorial**

Jordan Zavatsky

Stephanie Kaplan Editor-in-Chief Her Campus Media 1089 Commonwealth Avenue Boston, MA 02215 Dear Stephanie,

My name is Jordan Zavatsky, a senior studying biological sciences at Rutgers University in New Jersey. I'm currently enrolled in an ethics course, which requires us students to take a stance on an issue in society we feel strongly about. I have decided to do research on the dangers and effects of oral birth controls containing the active ingredient Drospirenone (Yaz, Yasmon, Ocella and Gianvi, to name a few). In hopes of spreading the information found, I have decided to turn to the Internet, specifically sites that are geared towards women in their late teens and twenties. I want women to not only feel more inclined to research what they are being prescribed but also make more informed decisions when it comes to deciding on contraception methods.

As a female in my twenties, I understand the nuisances associated with menstruating and the conveniences of birth control methods. I, among many others would be especially enticed by a birth control that is advertised as doing more than just preventing pregnancy. Yaz and its derivative forms (all containing Drospirenone) treat PMDD (sever PMS), acne and were advertised as a lifestyle drug. From September 1, 2010 through March 31, 2012, approximately 18.9 million prescriptions for Drospirenone-containing contraceptive products were dispensed and approximately 2.7 million patients received their prescriptions.

However enticing, as of January 2012 there was 10,000 lawsuits filed against Bayer Healthcare Pharmaceuticals for allegations of death, blood clots, high levels of potassium and gallbladder issues related to these drugs. Yet, they are still being prescribed and new derivatives are being generated.

Being young, active and healthy, most women in their late teens/ twenties won't think of themselves as targets to the adverse effects of oral contraceptives. We all know medications have side effects; we just don't think anything is actually going to happen to us. In getting this information out, I have compiled a research paper and a video with some of my peers. We hope to spread awareness of the dangers, share personally stories of adverse effects, and encourage women to make informed decisions when deciding on a birth control method. As a woman, a former National Women's Health Week Ambassador, and Editor-in-Chief at HerCampus, we are asking for your help to share the link to our video, our research paper and pass along this information. If you have any questions, please feel free to contact me at Jordanzavatsky@gmail.com. We really appreciate any and all help!

Best regards,

Jordan Zavatsky