

Amy Rumbaugh

Judy Peck

English 2 Gifted

19 October 2008

### **Accutane: Miracle Drug or Death Trap**

ATTENTION ALL TEENAGERS! Are you self conscious about your acne? Do you stay home on the weekends because of your skin? Do you see your friend's skin clearing up and yours breaking out? Well guess what? There's a solution: it's Accutane! What? You've heard of Accutane? Well why don't you use it? You're parents think it's too dangerous? Well, what do they know? Maybe more than you think. You should be well informed before you make the decision to use Accutane, so read on and learn. Plus, if you know your facts, your parents are more likely to listen and agree with you. Sure this drug seems simple and harmless. If you're a boy, all you have to do is go to your doctor, sign a few forms and voila no more zits! For girls, however, it's a little more complicated but not impossible. The problem is that if you become pregnant while taking Accutane there could be a few serious complications, so you have to take a few blood tests and be on a birth control pill, but that's no big deal. This drug is amazing; it provides fast and permanent results—or so you're told.

#### **What IS Accutane?**

Accutane is a retinoid, or Vitamin A derivative, used to treat many different skin problems (Butler). Taken orally, Accutane does not require abrasive cleansers to the face. It eliminates that nasty acne causing bacteria that lurks deep inside your skin by drying out, or reducing, the sebaceous glands (“How does Accutane Work?”). Sebaceous glands are glands on the skin that open into a hair follicle and produce sebum, or oil (“Sebaceous Glands”). By



*One month of Accutane medication.*

Furthermore, Accutane makes the cells that are cast into sebaceous glands less sticky, and thus less likely to form pimples (Brannon). In layman's terms, this miracle drug cuts down the production of fat and grease in the skin (Black).

### **How can I be prescribed Accutane?**

The prescribed amount of Accutane varies from person to person. The dosage is determined by the standard of 120 mg of Accutane per one kilogram of the person's body weight ("How Does Accutane Work?"). A patient is usually prescribed with a low dose initially to allow the body to become accustomed to the new drug ("How Does Accutane Work?"). Gradually, the dose is increased throughout the course of treatment ("How Does Accutane Work?"). Depending on the situation, there are two paths of treatment for patients ("How Does Accutane Work?"). One method that is mostly used in the United States involves taking a higher dosage for a shorter amount of time ("How Does Accutane Work?"). This method means that all possible side effects would have to be tolerated during the first few months ("How Does Accutane Work?"). The other method entails consuming a dose lower than normal for a longer amount of time ("How Does Accutane Work?"). The benefits of this form of treatment are fewer side effects during the first months ("How Does Accutane Work?").

reducing the size of these glands, Accutane cuts down the amount of oil produced which, in turn, decreases the amount of zits on the body (Butler). Accutane also reverses the blockage of pilosebaceous follicles, which are hair follicles and their sebaceous glands. This reduces the number of Propionbacterium acnes (P. acnes) which are a major cause of acne (Butler).

In order to be prescribed Accutane, you should talk with your parents. Discuss your case and the benefits and risks associated with Accutane. Talk about whether they think it will be beneficial for you. If you decide that Accutane is the right choice for you, then the next step is to visit your doctor. He or she will discuss all the options and ask for your acne history. If you haven't tried other acne medications, the doctor may ask you to do so and come back if your skin still has not cleared up. If you have tried numerous treatments to no avail, and your parents agree, then Accutane will most likely be prescribed. If you are a boy, you must sign a consent form listing the adverse affects of Accutane and agree to monthly blood tests to ensure there are no complications and that you won't share your medication. Most often the doctor will prescribe Accutane in one-month intervals to ensure that you remain healthy enough to continue the treatment plan (Neergaard). If you are a girl, before the first prescription for your Accutane can be filled, you must take two pregnancy tests (with negative results). You must also agree to use two forms of preapproved birth control for one month before, one month after, and during Accutane treatment. Also, monthly doctor visits with negative pregnancy tests must be done before your next prescription can be filled. As with guys, blood tests will be taken to ensure your overall health. You must also sign the consent form saying that you understand the risks related to Accutane, won't share your medication, and register into the I PLEDGE program. I PLEDGE was designed to prevent pregnancies in Accutane patients (Neergaard).



Accutane has had an eventful history. In 1971, Roaccutane, sold as Accutane, was created by Roche Laboratories with a main goal of treating severe acne not plagued by other acne-fighting products ("Accutane Info"). Accutane was first approved by the Food and Drug Administration in 1982 (Gately). During the years of 1985 and 1986 Roche added numerous

side effects to the product's label: seizures, emotional instability, dizziness, nervousness, drowsiness, malaise (not feeling generally well), weakness, insomnia, lethargy, paresthesias (tingling, prickling, or numbness), and depression ("Accutane Info"). In 1977, Roche was forced to include "suicide attempt"



*Logo for the creators of Accutane*

to the side effects of this drug (Gately). Due to the serious dangers associated with becoming pregnant while taking Accutane, a petition to ban Accutane was circulated in 1988 ("Accutane Info"). The label of Accutane was updated again in 1998 to caution that some patients of Accutane have dealt with "depression, psychosis, and rarely suicide ideation, suicide attempts, and suicide" ("Accutane Info"). The FDA required all people using Accutane to sign a consent form before participating in treatment in 2001 (Gately). In 2005, the I PLEDGE program was introduced ("Accutane Info").

### **Benefits of Accutane:**

Accutane is the only prescription medication with the ability to clear relentless acne permanently when other methods have failed, including antibiotics (Meadows). Studies have



**September 14, 2005**  
**Start Accutane**

**October 14, 2005**  
**1 month Accutane**

1 month compare

shown that 85 percent of Accutane users experience permanent disappearance of their acne (Meadows). Accutane can eliminate nodular or cystic acne for people at all stages of life ("Accutane"). Cystic acne is defined as painful, swollen, red pustules on the skin (Mitchell). This type of acne leaves

the most visible scars which Accutane can also eliminate (“Accutane”). What makes this drug a godsend for people with severe acne is that it keeps working after treatment for months and even years (Bolding). Also, after discontinuing use of Accutane, the skin generally is more receptive to conventional acne treatment, such as over the counter face washes, that previously wouldn’t have made a difference (Brannon). “I would say it’s one of the major advances in the management of skin disease that we’ve seen in the past 10 years,” says Colin Ramsay, a dermatologist and representative of the government’s Department of Health and Welfare’s Expert Advisory Committee on Dermatology (Black). If used appropriately, this miracle drug can eliminate acne while increasing self esteem, confidence, and overall quality of life.

### **Drawbacks of Accutane:**

As with all medications, there are some risks associated with Accutane. There is no guarantee that this product will make the skin perfect. It doesn’t work for everyone, and for some people it requires more than one course of treatment (Meadows). Occasionally acne comes back after Accutane; acne returns after one year in 10 percent of patients and in two years that number increases to 25 percent (“How does Accutane Work?”). In some

cases, the acne on the body may appear to be getting worse, but eventually clearer skin will be visible (Meadows). Accutane also has a pretty hefty list of side effects. Some common side effects



*Dry lips are a side effect of Accutane*

are lip inflammation, drying of the skin and mucous membranes, peeling skin, poor night vision, dry mouth, increased sensitivity to sunlight, itching, nosebleed, irritated eyes and eyelids, dry eyes, joint and back pain, dizziness, drowsiness, nervousness, rashes, gastral problems, inflammatory bowel disease, fragile nails, thinning or dry hair, and pinkeye (White). Most of these side effects subside after Accutane is no longer in use and can be

tolerated by consuming more Vitamin E and using a good moisturizer (Bolding). Some less common, but still relevant side effects include changes in vision, hearing impairment, stroke, inflamed and bleeding gums, colitis, eczema, severe headaches, vomiting, upset stomach, difficulty breathing, rectal bleeding, and difficulty walking (Butler). If any of these serious symptoms are observed, a doctor should be seen right away. The monthly blood tests enable the doctors to keep an eye on the patient for elevated triglyceride levels which can be associated with pancreatitis, increase cholesterol levels, and liver function (Bolding). Accutane should not be taken if the patient is allergic to isotretinoin, acitretin, etretinate, tretinoin, or Vitamin A substances (“Accutane Info”). If any signs of an allergic reaction are detected, a doctor should also be consulted. Frequent signs of these allergic reactions are hives, difficulty breathing, and swelling of the face, lips, tongue, or throat (“Accutane Info”). In order to prevent complications, all other prescribed forms of acne medication should be halted during the course of treatment (“How Does Accutane Work?”). Other extremely serious side effects of Accutane are birth defects and mental disorders.

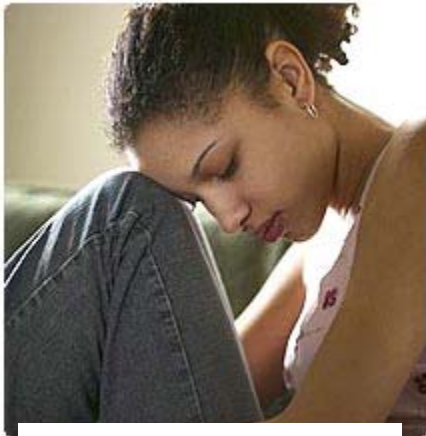
Accutane is considered teratogenic which means that it is able to cause birth defects (Meadows). Accutane users **SHOULD NOT** become pregnant. This is why if a female of child-bearing age wishes to use Accutane, they must be on two forms of birth control at all times while using this drug (Meadows). This warning should not be taken lightly. Accutane

can cause serious damage to the fetus during the first trimester (Black). Common types of birth defects connected to Accutane are hydrocephaly (enlargement of fluid-filled spaces of the brain), microcephaly (abnormally small head), heart defects, facial deformities (cleft lip and low-set,



poorly formed or missing ears), mental retardation, and learning disabilities (Meadows). It has been known for some time that Vitamin A and its derivatives are associated with birth defects, so it's no surprise that Accutane - a Vitamin A derivative - does the same (Black). Accutane can also affect the central nervous system of a fetus by preventing cell migration or killing cells altogether, which causes structural deformations (Black). One example of a baby born from an Accutane user is Michael; he is blind, mentally handicapped, and has facial malformations (Black). Accutane is also known to cause miscarriages and premature births (Meadows). It is not certain exactly how long Accutane stays in the body after treatment has ended; this is why birth control is still necessary one month after Accutane use and nursing mothers should not use it either (Black). The biggest problem people have with Accutane is that it causes "preventable birth defects," and that there is no fail proof method of birth control (Black).

While clear skin caused by Accutane may help lift stress and embarrassment, it may also cause serious mental disorders in its users (Meadows). While no scientific studies have been



*Accutane and depression*

done to link Accutane to depression and suicide, it's hard to avoid the numbers (Mitchell). The label of Accutane does warn of the possibility of severe mental disorders, including depression, suicide ideation, suicide attempts, and suicide that could occur (Mitchell). In 1998, an FDA memo stated that, "Accutane poses a significant public health threat and as such should be withdrawn from the market" (Mitchell).

Accutane is still being used by numerous people because there is too much good in it; clearing the skin of many who had lost hope. Between the years 1982 and 2000 the FDA reported 32 suicides of United States Accutane patients, twenty-four of these were people on Accutane and

the other thirteen committed suicides after discontinued use of the drug (Meadows). Another 110 people had been hospitalized with depression and suicide attempts (Meadows). This supports MD Jonathan Wilkin's statement: "In some cases, stopping Accutane alone may not be enough to relieve the mood changes" (Meadows). While depression and other serious mental problems are a great concern for Accutane users, most can use this acne-busting medication with no adverse mental affects. These warnings are just to inform of the possibility.

**Conclusion:**

Ultimately, the choice to use Accutane or not is up to the patient. Most people can take Accutane, clear up their skin, and live a normal, healthy life. There are just those few cases and serious side effects that every user should be aware of. If a patient uses Accutane the way it was prescribed by their doctor and follows all the rules and guidelines for use, then there should be no irreversible side effects. The future of Accutane looks bright; science and technology are becoming more evolved, and medicine is becoming safer. The FDA is doing everything in their power to prevent pregnancy in patients taking Accutane and to warn and prevent the other side affects linked to it (Neergaard). Being aware of the benefits and risks allows people to be better informed and to make better decisions. So, miracle drug or death trap, you choose.

**Works Cited:**

"Accutane." Acne Skin Care Products. 2008. 19 Oct 2008

<<http://www.docshop.com/education/dermatology/products/accutane/>>.

"Accutane Info." Accutane. 5 Oct 2008. 19 Oct 2008 <<http://accutane-info.com/>

Black, Debra. "The Accutane Controversy." SIRS Knowledge Source. 08 Oct 1988. 20

Sept 2008 <<http://sks.sirs.com/cgi-bin/hstarticledisplay?id=SFL3278106707%artno=0000000946&type=ART&shfilter=U&key=&title=The%20Accutane%20Controversy&res=Y&ren=N&gov=N&lnk=N&ic=N>>.

Bolding, Jim. "The Dangers of Accutane Acne Treatment." Articles Base. 21 Aug 2008. 19 Oct

2008 <<http://www.articlesbase.com/acne-articles/the-dangers-of-accutane-acne-treatment-531246.html>>.

Brannon, Heather. "Treatment of Acne with Isotretinoin - Accutane." About.com. 17 March

2005. 16 Oct 2008 <<http://dermatology.about.com/cs/isotretinoin/a/accutane.htm>>.

Butler, Carolyn. "The Great Benefits and Risks of Accutane." Revolution Health. 03 July 2007. 5

Oct 2008 <<http://www.revolutionhealth.com/conditions/skin/acne/treatment/overview/accutane>>.

"How Does Accutane Work?." Your Best Acne Treatment. 19 Oct 2008 <<http://www.your-best-acne-treatment.com/how-does-accutane-work.html>>.

Gately, Gary. "A Drug's Dark Side." SIRS Knowledge Source. 04 March 2001. 20 Sept 2008

<<http://sks.sirs.com/cgi-bin/hstarticledisplay?id=SFL378106707&artno=0000132865&type=ART&shfilter=U&key=&title=A%20Drug%27%20Dark%20Side&res=Y&ren=N&gov=N&lnk=N&ic=N>>.

Meadows, Michelle. "The Power of Accutane: The Benefits and Risks of a Breakthrough Acne

Drug." FDA. 28 Feb 2001. 17 Oct 2008

<[http://www.fda.gov/fdac/features/2001/201\\_acne.html](http://www.fda.gov/fdac/features/2001/201_acne.html)>.

Mitchell, Steve. "Hill Committee: Accutane Causes Suicide." SIRS Knowledge Source. 11 Dec

2002. 10 Sept 2008 <[http://sks.sirs.com/cgi-bin/hst-article-display?id=SFL3781-](http://sks.sirs.com/cgi-bin/hst-article-display?id=SFL3781-06707&artno=0000163415&type=ART&shfilter=U&key=&title=Hill%20Committee%3A%20Accutane%20Causes%20Suicide&res=Y&ren=N&gov=N&lnk=N&ic=N)

[06707&artno=0000163415&type=ART&shfilter=U&key=&title=Hill%20Committee%3A%20Accutane%20Causes%20Suicide&res=Y&ren=N&gov=N&lnk=N&ic=N](http://sks.sirs.com/cgi-bin/hst-article-display?id=SFL3781-06707&artno=0000163415&type=ART&shfilter=U&key=&title=Hill%20Committee%3A%20Accutane%20Causes%20Suicide&res=Y&ren=N&gov=N&lnk=N&ic=N)>.

Neergaard, Lauran. "FDA Puts New Restrictions on Accutane." SIRS Knowledge Source. 12

Aug 2005. 10 Sept 2008 <[http://sks.sirs.com/cgi-bin/hst-articledisplay?id=SFL37816707](http://sks.sirs.com/cgi-bin/hst-articledisplay?id=SFL37816707&artno=0000218802&type=ART&shfilter=U&key=&title=FDA%20Puts%20New%20Restrictions%20on%20Accutane&res=Y&ren=N&gov=N&lnk=N&ic=N)

[&artno=0000218802&type=ART&shfilter=U&key=&title=FDA%20Puts%20New%20Restrictions%20on%20Accutane&res=Y&ren=N&gov=N&lnk=N&ic=N](http://sks.sirs.com/cgi-bin/hst-articledisplay?id=SFL37816707&artno=0000218802&type=ART&shfilter=U&key=&title=FDA%20Puts%20New%20Restrictions%20on%20Accutane&res=Y&ren=N&gov=N&lnk=N&ic=N)>.

"Sebaceous Gland." The Free Dictionary. 2008. 19 Oct 2008

<<http://encyclopedia.farlex.com/sebaceous+gland>>.

White, Alison. "Accutane Medicine for Acne - Uses, Dosage & Side Effects." Articles Base. 27

Dec 2007. 16 Oct 2008 <<http://www.articlesbase.com/medicine-articles/accutane-medicine-for-acne-uses-dosage-side-effects-291579.html>>.

### **Photo Credits:**

Accutane Before and After. Online Image. Rosacea Blog. 25 Mar. 2006. 19 Oct. 2008

<[http://www.rosacea.co.uk/blog/2006\\_03\\_01\\_archive.html](http://www.rosacea.co.uk/blog/2006_03_01_archive.html)>.

Accutane Pills. Online Image. Order Accutane. 2 May 2008. 19 Oct. 2008

<<http://orderaccutane.name/>>.

Cracked Lips. Online Image. Visual DX Health. 2006. 19 Oct. 2008

<<http://www.visualdxhealth.com/teen/cheilitis.htm>>.

Doctor. Online Image. Parent Talk Today. 11 May 2008. 19 Oct. 2008

<[http://www.parenttalktoday.com/parenttalk/parenting\\_teens/page/2/](http://www.parenttalktoday.com/parenttalk/parenting_teens/page/2/)>.

Geraghty, Laurel. Accutane Causes Birth Defects. Online Image. The New York Times. 12 Jan.

2006. 19 Oct. 2008 <<http://www.nytimes.com/2006/01/12/fashion/thursdaystyles/>

[12skin.html?\\_r=1&oref=slogin](http://www.nytimes.com/2006/01/12/fashion/thursdaystyles/12skin.html?_r=1&oref=slogin)>.

Monheit, Michael. Accutane and Depression. Online Image. What Is Accutane and Its Relation

to Depression and Suicide? 2008. 19 Oct. 2008

<<http://www.monheit.com/accutane/what.shtml>>.

Roche Laboratories. Online Image. American Society of Transplantation. 2008. 19 Oct. 2008

<[http://www.ast.org/index2.cfm?Section=events&Sub1Section=past\\_meeting\\_archives&](http://www.ast.org/index2.cfm?Section=events&Sub1Section=past_meeting_archives&)

[content=sayegh\\_pres\\_address.html](http://www.ast.org/index2.cfm?Section=events&Sub1Section=past_meeting_archives&content=sayegh_pres_address.html)>.