

Health | May 30, 2017 | By Korin Miller

The Truth About Whether Accutane Can Actually Cause Depression

Here's what you need to know about the potential risks of taking isotretinoin.



In a recent interview with *Yahoo*, actress Bella Thorne says that she thinks a controversial acne medication known for its potentially harmful side effects may have negatively affected her mental health. "Accutane made me depressed," she said.

Yahoo points out that Accutane was pulled from shelves in 2009, although several forms of the generic version, isotretinoin, still exist on the market. Thorne was referencing a common message about isotretinoin that you may have heard before—that it can lead to depression or suicide. Here's what you need to know about the risks of taking isotretinoin.

Isotretinoin is a retinoid, a form of vitamin A, and it's exceptionally good at treating severe, disfiguring nodular acne.

Isotretinoin is an incredibly potent medication and has potentially severe side effects, but it's one of the most effective acne medications out there. Although it's a type of retinoic acid, which is derived from vitamin A, it's different than other retinoid treatments for anti-aging since it's taken orally rather than applied topically. Isotretinoin affects the central nervous system in different ways, including by binding onto the retinoid receptors in the brain. Research has found a link between isotretinoin and the parts of the brain that are associated with depression, and other studies have looked at whether taking isotretinoin can lead to mental health symptoms associated with vitamin A toxicity, including depression.

Accutane is the most well-known form of isotretinoin, but it was discontinued in 2009 after researchers found it potentially increased the risk of inflammatory bowel disease. Although that brand name for isotretinoin is no longer on the market, the drug is still available today under names like Absorica, Claravis, and Sotret. The Mayo Clinic notes that isotretinoin should be used only after other acne medicines have failed to help the skin condition.

In 2005, the U.S. Food and Drug Administration issued an alert based on reports of suicide and suicidal attempts associated with the use of isotretinoin.

Isotretinoin was approved in 1982 to treat certain types of acne, but after years of controversy and reports of suicide and suicidal attempts, the FDA issued an alert for consumers and added a black box warning—the most serious warning regarding side effects—on its packaging. “All patients treated with isotretinoin should be observed closely for symptoms of depression or suicidal thoughts, such as sad mood, irritability, acting on dangerous impulses, anger, loss of pleasure or interest in social or sports activities, sleeping too much or too little, changes in weight or appetite, school or work performance going down, or trouble concentrating; or for mood disturbance, psychosis, or aggression, the organization said, noting that patients should stop taking the drug and seek medical advice right away if they experience any of those symptoms.

The FDA also asks isotretinoin patients to enroll in iPledge, a computer-based risk management system that uses trackable links between prescriber, patient, pharmacy, and wholesaler to control prescribing, using, dispensing, and distribution of isotretinoin. A brochure for the program also warns that the drug “may cause serious mental health problems” including depression, psychosis, and suicide.

But studies have been mixed on whether the drug does indeed cause these serious mental health problems.

In 2017, a meta-analysis published in the *Journal of the American Academy of Dermatology* concluded that isotretinoin is not associated with an increased risk for depression, and that treatment of acne seems to improve depressive symptoms. However, a 2012 meta-analysis published in the *Journal of Clinical Psychiatry* found that, while infrequent, there is a reported link between isotretinoin use and depression—and higher doses of the drug are linked with more psychiatric side effects. The meta-analysis authors noted that isotretinoin studies are limited in their size and conducting a large trial brings up ethical questions when there is “adequate aggregate information supporting a causal role of isotretinoin in the development of depression in some individuals.” Study authors concluded that isotretinoin does not cause depression, but can increase a person’s risk of depression (especially if they’re predisposed to it).

So why is there this discrepancy in the various research studies? A meta-analysis published in the *World Journal of Psychiatry* in 2015 points out that many of the reviewed studies conducted by psychiatrists showed an increased risk of depression, attempted suicide, and suicide completion after a person used isotretinoin. Studies led by dermatologists found that isotretinoin may have an antidepressant impact, since it can improve self-image and make a patient feel better. The differing views of whether there’s a causal link between the drug and depression may be because dermatologists may not have been aware of the occurrence of psychiatric disorders, the review authors said.

For patients suffering from severe acne, it can be hard to separate out the mental consequences of having the skin condition (especially during your teenage years), and the medication itself. Clinical psychologist John Mayer, PhD, tells SELF that he’s frequently referred patients who are prescribed isotretinoin for a psychological evaluation by doctors who want to make sure their patients are OK to use the drug. “Studies have shown that in vulnerable individuals the biologic effect of this drug can, as I call it, ‘set the table’ for depression and related psychological disorders,” he says. People who are considered for isotretinoin have severe acne, he points out, and therefore fall into the category of “vulnerable.” “Think of the consequences of living with the [blemishes] that come with severe acne, especially in your teens, when identity, self-esteem, and social standing are being developed,” he says.

The drug is a long-term treatment and often makes a person’s skin look worse before it gets better, which can further increase a person’s feelings of depression and/or hopelessness if they’re already prone to those feelings, Mayer adds.

People considering isotretinoin to treat their acne should weigh the risks for depression and other mental health conditions along with other serious side effects of the drug.

Most acne medications, including isotretinoin, are considered safe if they’re used properly, **Gary Goldenberg, M.D.**, medical director of the Dermatology Faculty Practice at the Icahn School of Medicine at Mount Sinai, tells

SELF. “Each medication has some associated risks and adverse effects, but these are usually manageable by your dermatologist,” he says.

But no matter how strong or weak the link between depression, suicide, and isotretinoin may be, most experts agree that everyone, especially those who are predisposed to mental health issues, should proceed with caution and should be screened for risk factors. Patients should also be routinely monitored for neuropsychiatric side effects, such as headaches. In addition, people who want to take isotretinoin should discuss the potential for the drug's other serious side effects with their dermatologist.

These side effects include the risk of birth defects, premature birth, and miscarriage if a woman becomes pregnant while taking the drug (this is why women must take regular pregnancy tests and use two forms of birth control while on isotretinoin). And isotretinoin can cause intense abdominal and stomach pain, nausea, vomiting, and vision changes in rare cases, according to the Mayo Clinic. If you're taking isotretinoin and experience abdominal discomfort, diarrhea, or rectal bleeding, talk to your doctor ASAP about whether it might be due to your meds.

If you are considering isotretinoin for severe acne, Mayer advises talking to your physician about possible psychological side effects and being aware of the warning signs to look out for if you decide to take the medication. This is especially important for someone with a history of depression, depressive symptoms or suicidal thoughts, as they're at a higher risk for more severe symptoms on the drug. Most people don't suffer from depression and suicidal thoughts while on the drug, Mayer says, but it has happened—and it's important to know your risk.