

THE LATEST ON

ATOPIC DERMATITIS

A COMMON THREAD: NEW GENE VARIANTS

Experts have known of a handful of genes that raise the risk for atopic dermatitis (AD) and other types of eczema. But these genes do not nearly account for the full role they believe genetics plays in who develops these skin conditions. New research has uncovered several previously unknown genes that help fill in the gaps. In a study of 20,000 people with eczema and 380,433 without, genetic analysis revealed three new gene variants that are more common in people with eczema. Findings like these can lead to new medications that disable the disease-causing genes.

SOURCE: Nature Communications

1 in 5

Number of adults with AD who also have asthma.

SOURCE: National Eczema Association

6 in 10

SOURCE: National Eczema Association

Number of adults with moderate to severe AD who report itching that lasts at least 12 hours a day.

CAN VIRTUAL TALK THERAPY HELP WITH CARE?

Stress and anxiety can be triggers of atopic dermatitis. Medicines for AD can help relieve itchy, inflamed skin, but they don't address stress. That's why researchers in Sweden tested internet-based cognitive behavioral therapy (a type of talk therapy with a mental health professional) as a treatment for atopic dermatitis. When they added it to regular symptom care, they found that 12 weeks of virtual talk therapy significantly reduced the stress, insomnia, and depression associated with atopic dermatitis. In fact, it made people feel better overall than symptom care alone.

SOURCE: JAMA Dermatology

DUST MITES DELIVER

New research finds that immunotherapy with dust mite extract could bring major benefits to people with atopic dermatitis. Dust mites are a common trigger of allergic reactions, so researchers tried to help people with AD build up immunity to the allergen. After 18 months of treatment with dust mite extract drops under the tongue every 3 days, people with atopic dermatitis had less itching and fewer or smaller skin lesions than those who got a placebo. For some people, the itching and the rash went away completely. The results of this study could lead to new immunotherapy treatments for atopic dermatitis.

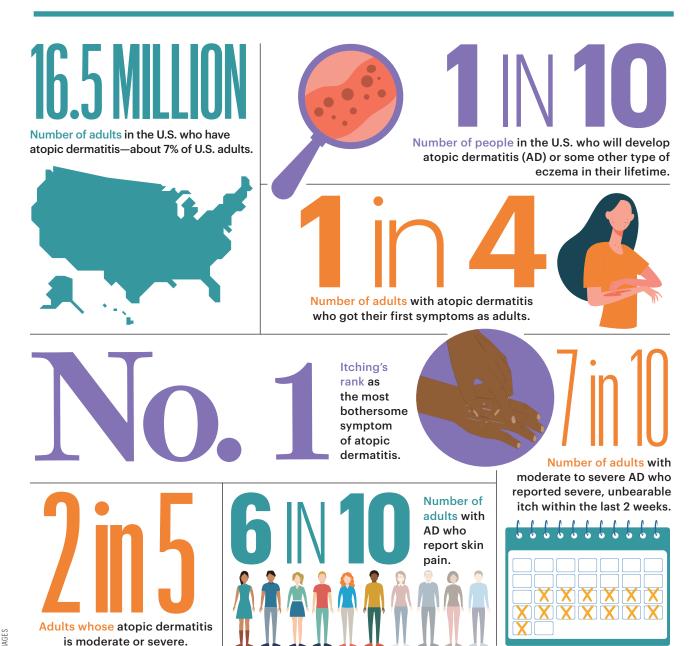
SOURCE: Journal of Allergy and Clinical Immunology in Practice



STATS & FACTS

By Sonya Collins

Reviewed by Brunilda Nazario, MD, WebMD Chief Physician Editor, Medical Affairs





For people 12+ years with moderate to severe eczema (atopic dermatitis) that did not respond to previous treatment and their eczema is not well controlled using other pills or injections, including biologics, or the use of other pills or injections is not recommended.



In clinical trials, RINVOQ helped treat eczema symptoms to provide:

RAPID & SIGNIFICANT Skin Clearance

- Many saw clear or almost-clear skin at 16 weeks
- Many saw 75% skin clearance at 16 weeks—some as early as 2 weeks
- Some even saw 100% skin clearance at 16 weeks



- Many felt significantly less itch at 16 weeks
- Some as early as 1 week





You deserve symptom relief. Ask your eczema specialist about RINVOQ today.

USE AND IMPORTANT SAFETY INFORMATION

WHAT IS RINVOQ?

RINVOQ is a prescription medicine used to treat adults and children 12 years of age and older with moderate to severe eczema (atopic dermatitis) that did not respond to previous treatment and their eczema is not well controlled with other pills or injections, including biologic medicines, or the use of other pills or injections is not recommended. RINVOQ is safe and effective in children 12 years of age and older weighing at least 88 pounds (40 kg) with atopic dermatitis. It is not known if RINVOQ is safe and effective in children under 12 years of age with atopic dermatitis.

What is the most important information I should know about RINVOQ?

RINVOQ may cause serious side effects, including:

• Serious infections. RINVOQ can lower your ability to fight infections. Serious infections have happened while taking RINVOQ, including tuberculosis (TB) and infections caused by bacteria, fungi, or viruses that can spread throughout the body. Some people have died from these infections. Your healthcare provider (HCP) should test you

for TB before starting RINVOQ and check you closely for signs and symptoms of TB during treatment with RINVOQ. You should not start taking RINVOQ if you have any kind of infection unless your HCP tells you it is okay. If you get a serious infection, your HCP may stop your treatment until your infection is controlled. You may be at higher risk of developing shingles (herpes zoster).

- Increased risk of death in people 50 years and older who have at least 1 heart disease (cardiovascular) risk factor.
- Cancer and immune system problems. RINVOQ may increase your risk of certain cancers. Lymphoma and other cancers, including skin cancers, can happen. Current or past smokers are at higher risk of certain cancers, including lymphoma and lung cancer. Follow your HCP's advice about having your skin checked for skin cancer during treatment with RINVOQ. Limit the amount of time you spend in sunlight. Wear protective clothing when you are in the sun and use sunscreen.
- Increased risk of major cardiovascular (CV) events, such as heart attack, stroke, or death, in people 50 years and older who have at least 1 heart disease (CV) risk factor, especially if you are a current or past smoker.

- Blood clots. Blood clots in the veins of the legs or lungs and arteries can happen with RINVOQ. This may be lifethreatening and cause death. Blood clots in the veins of the legs and lungs have happened more often in people who are 50 years and older and with at least 1 heart disease (CV) risk factor.
- Allergic reactions. Symptoms such as rash (hives), trouble breathing, feeling faint or dizzy, or swelling of your lips, tongue, or throat, that may mean you are having an allergic reaction have been seen in people taking RINVOQ. Some of these reactions were serious. If any of these symptoms occur during treatment with RINVOQ, stop taking RINVOQ and get emergency medical help right away.
- Tears in the stomach or intestines and changes in certain laboratory tests. Your HCP should do blood tests before you start taking RINVOQ and while you take it. Your HCP may stop your RINVOQ treatment for a period of time if needed because of changes in these blood test results.

Do not take RINVOQ if:

 You are allergic to upadacitinib or any of the ingredients in RINVOQ.

What should I tell my HCP BEFORE starting RINVOQ?

Tell your HCP if you:

 Are being treated for an infection, have an infection that won't go away or keeps coming back, or have symptoms of an infection, such as:

- Blood in phlegm

- Cough

- Weight loss

- Diarrhea or stomach pain

- Burning when urinating

or urinating more

often than normal

- Fever, sweating, or chills
- Shortness of breath
- Warm, red, or painful skin or sores on your body
- Muscle aches
- Feeling tired
- ie acries
- Have TB or have been in close contact with someone with TB.
- Are a current or past smoker.
- Have had a heart attack, other heart problems, or stroke.
- Have or have had any type of cancer, hepatitis B or C, shingles (herpes zoster), blood clots in the veins of your legs or lungs, diverticulitis (inflammation in parts of the large intestine), or ulcers in your stomach or intestines.

Please see additional Important Safety Information on the following page of this advertisement.

Please see Brief Summary of Full Prescribing Information on the following pages of this advertisement.

IMPORTANT SAFETY INFORMATION (continued from previous page)

- Have other medical conditions, including liver problems, low blood cell counts, diabetes, chronic lung disease, HIV, or a weak immune system.
- Live, have lived, or have traveled to parts of the country, such as the Ohio and Mississippi River valleys and the Southwest, that increase your risk of getting certain kinds of fungal infections. If you are unsure if you've been to these types of areas, ask your HCP.
- Have recently received or are scheduled to receive a vaccine. People who take RINVOQ should not receive live vaccines.
- Are pregnant or plan to become pregnant. Based on animal studies, RINVOQ may harm your unborn baby. Your HCP will check whether or not you are pregnant before you start RINVOQ. You should use effective birth control (contraception) to avoid becoming pregnant during treatment with RINVOQ and for 4 weeks after your last dose.
- Are breastfeeding or plan to breastfeed. RINVOQ may pass into your breast milk. Do not breastfeed during treatment with RINVOQ and for 6 days after your last dose.

Tell your HCP about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements. RINVOQ and other medicines may affect each other, causing side effects.

Especially tell your HCP if you take:

- Medicines for fungal or bacterial infections
- Rifampicin or phenytoin
- Medicines that affect your immune system

If you are not sure if you are taking any of these medicines, ask your HCP or pharmacist.

What should I do or tell my HCP AFTER starting RINVOQ?

- Tell your HCP right away if you have any symptoms of an infection. RINVOQ can make you more likely to get infections or make any infections you have worse.
- Get emergency help right away if you have any symptoms of a heart attack or stroke while taking RINVOQ, including:
- Discomfort in the center of your chest that lasts for more than a few minutes or that goes away and comes back
- Severe tightness, pain, pressure, or heaviness in your chest, throat, neck, or jaw
- Pain or discomfort in your arms, back, neck, jaw, or stomach

- Shortness of breath with or without chest discomfort
- Breaking out in a cold sweat
- Nausea or vomiting
- Feeling lightheaded
- Weakness in one part or on one side of your body
- Slurred speech

- Tell your HCP right away if you have any signs or symptoms of blood clots during treatment with RINVOQ, including:
- Swelling
- Pain or tenderness in one or both legs
- Sudden unexplained chest or upper back pain
- Shortness of breath or difficulty breathing
- Tell your HCP right away if you have a fever or stomacharea pain that does not go away, and a change in your bowel habits.

What are the common side effects of RINVOQ?

These include upper respiratory tract infections (common cold, sinus infections), shingles (herpes zoster), herpes simplex virus infections (including cold sores), bronchitis, nausea, cough, fever, acne, headache, increased blood levels of creatine phosphokinase, allergic reactions, inflammation of hair follicles, stomach-area (abdominal) pain, increased weight, flu, tiredness, lower number of certain types of white blood cells (neutropenia, lymphopenia), muscle pain, flu-like illness, rash, increased blood cholesterol levels, and increased liver enzyme levels.

A separation or tear to the lining of the back part of the eye (retinal detachment) has happened in people with atopic dermatitis treated with RINVOQ. Call your HCP right away if you have any sudden changes in your vision during treatment with RINVOQ.

These are not all the possible side effects of RINVOQ.

How should I take RINVOQ?

RINVOQ is taken once a day with or without food. Do not split, crush, or chew the tablet. Take RINVOQ exactly as your HCP tells you to use it. RINVOQ is available in 15 mg, 30 mg, and 45 mg extended-release tablets.

This is the most important information to know about RINVOQ. For more information, talk to your HCP.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch or call 1-800-FDA-1088.

If you are having difficulty paying for your medicine, AbbVie may be able to help. Visit AbbVie.com/myAbbVieAssist to learn more.

Please see Brief Summary of Full Prescribing Information on the following pages of this advertisement.

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RINVOQ® (RIN-VOKE) (upadacitinib) extended-release tablets, for oral use

CONSUMER BRIEF SUMMARY

Consult Package Insert for full Prescribing Information

Patient Information

Read the Medication Guide that comes with RINVOQ® before you start taking it and each time you get a refill. There may be new information. This brief summary is not comprehensive and does not take the place of talking with your doctor about your medical condition or treatment. For a copy of the full Prescribing Information, visit www.RINVOQ.com or call 1-800-2-RINVOQ (1-800-274-6867).

What is the most important information I should know about RINVOO?

RINVOQ can cause serious side effects, including: 1. Serious Infections.

RINVOQ is a medicine that affects your immune system. RINVOQ can lower the ability of your immune system to fight infections. Some people have had serious infections while taking RINVOQ. including tuberculosis (TB), and infections caused by bacteria, fungi, or viruses that can spread throughout the body. Some people have died from these infections.

- Your healthcare provider should test you for TB before starting treatment with RINVOQ.
- Your healthcare provider should watch you closely for signs and symptoms of TB during treatment with RINVOO.
- . You should not start taking RINVOQ if you have any kind of infection unless your healthcare provider tells you it is okay. You may be at a higher risk of developing shingles (herpes zoster).
- Before starting RINVOQ, tell your healthcare provider if you:
- · are being treated for an infection.
- · have had an infection that does not go away or that keeps coming back.
- have diabetes, chronic lung disease, HIV, or a weak immune system
- · have TB or have been in close contact with someone with TB.
- have had shingles (herpes zoster).
- · have or have had hepatitis B or C.
- live or have lived, or have traveled to certain parts of the country (such as the Ohio and Mississippi River valleys and the Southwest) where there is an increased chance for getting certain kinds of fungal infections. These infections may happen or become more severe if you use RINVOQ. Ask your healthcare provider if you do not know if you have lived in an area where these infections are common.
- think you have an infection or have symptoms of an infection such as:
- fever. muscle cough sweating, or aches weight loss chills feeling tired
 burning
- shortness of blood in your when you phleam urinate or breath warm, red, diarrhea or urinating or painful stomach more often

pain

skin or sores

on your body After starting RINVOQ, call your healthcare provider

than usual

right away if you have any symptoms of an infection. RINVOQ can make you more likely to get infections or make worse any infections that you have. If you get a serious infection, your healthcare provider may stop your treatment with RINVOQ until your infection is controlled.

2. Increased risk of death in people 50 years of age and older who have at least 1 heart disease (cardiovascular) risk factor and are taking a medicine in the class of medicines

called Janus kinase (JAK) inhibitors. RINVOQ is a JAK inhibitor medicine.

3. Cancer and immune system problems.

RINVOQ may increase your risk of certain cancers by changing the way your immune system works.

Lymphoma and other cancers, including skin cancers can happen in people taking RINVOQ. People taking a medicine in the class of medicines called Janus kinase (JAK) inhibitors have a higher risk of certain cancers including lymphoma and lung cancer, especially if you are a current or past smoker.

Tell your healthcare provider if you have ever had any type of cancer. Follow your healthcare provider's advice about having your skin checked for skin cancer during treatment with RINVOQ. Limit the amount of time you spend in sunlight. Avoid using tanning beds or sunlamps. Wear protective clothing when you are in the sun and use a sunscreen with a high protection factor (SPF 30 and above). This is especially important if your skin is very fair or if you have a family history of skin cancer.

4. Increased risk of major cardiovascular events such as heart attack, stroke or death in people 50 years of age and older who have at least 1 heart disease (cardiovascular) risk factor and taking a medicine in the class of medicines called JAK inhibitors, especially if you are a current or past smoker.

Get emergency help right away if you have any symptoms of a heart attack or stroke while taking RINVOQ, including:

- discomfort in the center of your chest that lasts for more than a few minutes, or that goes away and comes back
- severe tightness, pain, pressure, or heaviness in your chest, throat, neck, or jaw
- pain or discomfort in your arms, back, neck, jaw, or stomach
- shortness of breath with or without chest discomfort
- breaking out in a cold sweat
- nausea or vomiting
- feeling lightheaded
- weakness in one part or on one side of your body
- slurred speech

5. Blood Clots (thrombosis).

Blood clots in the veins of your legs (deep vein thrombosis, DVT) or lungs (pulmonary embolism, PE) and arteries (arterial thrombosis) can happen in some people taking RINVOQ. This may be life-threatening and cause death. Blood clots in the veins of the legs (DVT) and lungs (PE) have happened more often in people who are 50 years of age and older and with at least 1 heart disease (cardiovascular) risk factor

taking a medicine in the class of medicines called Janus kinase (JAK) inhibitors.

- Tell your healthcare provider if you have had blood clots in the veins of your legs or lungs in
- Get medical help right away if you have signs and symptoms of blood clots during treatment with RINVOQ, including:

- swelling
- sudden unexplained
- pain or chest or upper back pain tenderness in shortness of breath or one or both legs difficulty breathing
- **6. Allergic reactions.** Symptoms such as rash (hives), trouble breathing, feeling faint or dizzy, or swelling of your lips, tongue, or throat, that may mean you are having an allergic reaction have been seen in people taking RINVOQ. Some of these reactions were serious. If any of these symptoms occur during treatment with RINVOQ, stop taking RINVOQ and get emergency medical help right away.
- 7. Tears (perforation) in the stomach or intestines.
- Tell your healthcare provider if you have had diverticulitis (inflammation in parts of the large intestine) or ulcers in your stomach or intestines. Some people taking RINVOQ can get tears in their stomach or intestines. This happens most often in people who take nonsteroidal antiinflammatory drugs (NSAIDs), corticosteroids, or methotrexate.
- Get medical help right away if you get stomacharea pain, fever, chills, nausea, or vomiting.

8. Changes in certain laboratory test results.

Your healthcare provider should do blood tests before you start taking RINVOQ and while you take RINVOQ to check for the following:

- low neutrophil and lymphocyte counts. Neutrophils and lymphocytes are types of white blood cells that help the body fight off infections.
- low red blood cell counts. Red blood cells carry oxygen. Low red blood cells means you may have anemia, which may make you feel weak and
- increased cholesterol levels. Your healthcare provider should do blood tests to check your cholesterol levels approximately 12 weeks after you start taking RINVOQ, and as needed.
- elevated liver enzymes. Liver enzymes help to tell if your liver is functioning normally. Elevated liver enzymes may indicate that your healthcare provider needs to do additional tests on your

You should not take RINVOQ if your neutrophil count, lymphocyte count, or red blood cell count is too low or your liver tests are too high. Your healthcare provider may stop your RINVOQ treatment for a period of time if needed because of changes in these blood test results.

See "What are the possible side effects of RINVOQ?" for more information about side effects.

What is RINVOQ?

RINVOQ is a prescription medicine that is a Janus kinase (JAK) inhibitor. RINVOQ is used:

- to treat adults with moderate to severe rheumatoid arthritis when 1 or more medicines called tumor necrosis factor (TNF) blockers have been used. and did not work well or could not be tolerated.
- to treat adults with active psoriatic arthritis when 1 or more medicines called tumor necrosis factor (TNF) blockers have been used, and did not work well or could not be tolerated.

- to treat adults and children 12 years of age and older with moderate to severe eczema (atopic dermatitis) that did not respond to previous treatment and their eczema is not well controlled with other pills or injections, including biologic medicines, or the use of other pills or injections is not recommended.
- to treat adults with moderate to severe ulcerative colitis when 1 or more medicines called tumor necrosis factor (TNF) blockers have been used, and did not work well or could not be tolerated.
- to treat adults with active ankylosing spondylitis when 1 or more medicines called tumor necrosis factor (TNF) blockers have been used, and did not work well or could not be tolerated.

RINVOQ is safe and effective in children 12 years of age and older weighing at least 88 pounds (40 kg) with atopic dermatitis.

It is not known if RINVOQ is safe and effective in children with juvenile idiopathic arthritis, with psoriatic arthritis, or with ankylosing spondylitis.

It is not known if RINVOQ is safe and effective in children under 12 years of age with atopic dermatitis

It is not known if RINVOQ is safe and effective in children with ulcerative colitis.

Do not take RINVOQ if you are allergic to upadacitinib or any of the ingredients in RINVOQ. See the end of this Consumer Brief Summary for a complete list of ingredients in RINVOQ.

Before taking RINVOQ, tell your healthcare provider about all of your medical conditions, including if you:

- See "What is the most important information I should know about RINVOQ?"
- have an infection.
- are a current or past smoker.
- have had a heart attack, other heart problems, or stroke.
- · have liver problems.
- have kidney problems.
- have unexplained stomach (abdominal) pain, have a history of diverticulitis or ulcers in your stomach or intestines, or are taking NSAIDs.
- have low red or white blood cell counts.
- have recently received or are scheduled to receive an immunization (vaccine). People who take RINVOQ should not receive live vaccines.
- are pregnant or plan to become pregnant. Based on animal studies, RINVOQ may harm your unborn baby.

Females who are able to become pregnant:

- Your healthcare provider will check whether or not you are pregnant before you start treatment with RINVOQ.
- You should use effective birth control (contraception) to avoid becoming pregnant during treatment with RINVOQ and for 4 weeks after your last dose of RINVOQ.
- Tell your healthcare provider if you think you are pregnant or become pregnant during treatment with RINVOQ.
- If you take RINVOQ during pregnancy, contact AbbVie Inc. at 1-800-633-9110, or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch to provide information about the health of you and your baby.
- are breastfeeding or plan to breastfeed. RINVOQ may pass into your breast milk. You and your healthcare provider should decide if you will take RINVOQ or breastfeed. Do not breastfeed during treatment with RINVOQ and for 6 days after your last dose of RINVOQ.

Tell your healthcare provider about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements. RINVOQ and other medicines may affect each other causing side effects.

Especially tell your healthcare provider if you take:

- medicines for fungal infections (such as ketoconazole, itraconazole, posaconazole or voriconazole) or clarithromycin (for bacterial infections) as these medicines may increase the amount of RINVOQ in your blood.
- rifampicin (for bacterial infections) or phenytoin (for neurological disorders) as these medicines may decrease the effect of RINVOQ.
- medicines that affect your immune system (such as azathioprine and cyclosporine) as these medicines may increase your risk of infection.

Ask your healthcare provider or pharmacist, if you are not sure if you are taking any of these medicines.

Know the medicines you take. Keep a list of them to show your healthcare provider and pharmacist when you get a new medicine.

How should I take RINVOQ?

- Take RINVOQ exactly as your healthcare provider tells you to use it.
- . Take RINVOQ 1 time a day with or without food.
- Swallow RINVOQ tablets whole. Do not split, crush, or chew the tablets.
- If you take too much RINVOQ, call your healthcare provider or poison control center at 1-800-222-1222, or go to the nearest hospital emergency room right away.

What are the possible side effects of RINVOQ?

RINVOQ may cause serious side effects, including:

 See "What is the most important information I should know about RINVOQ?"

Common side effects include upper respiratory tract infections (common cold, sinus infections), shingles (herpes zoster), herpes simplex virus infections (including cold sores), bronchitis, nausea, cough, fever, acne, headache, increased blood levels of creatine phosphokinase, allergic reactions, inflammation of hair follicles, stomach-area (abdominal) pain, increased weight, flu, tiredness, lower number of certain types of white blood cells (neutropenia, lymphopenia), muscle pain, flu-like illness, rash, increased blood cholesterol levels, and increased liver enzyme levels.

Separation or tear to the lining of the back part of the eye (retinal detachment) has happened in people with atopic dermatitis treated with RINVOQ. Call your healthcare provider right away if you have any sudden changes in your vision during treatment with RINVOQ.

These about side effects. You may report side effects to FDA at 1-800-FDA-1088.

How should I store RINVOQ?

- Store RINVOQ at 36°F to 77°F (2°C to 25°C).
- Store RINVOQ in the original bottle to protect it from moisture.
- Keep RINVOQ and all medicines out of the reach of children.

General information about the safe and effective use of RINVOQ.

Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. Do not use RINVOQ for a condition for which it was not prescribed.

Do not give RINVOQ to other people, even if they have the same symptoms that you have. It may harm them.

You can ask your pharmacist or healthcare provider for information about RINVOQ that is written for health professionals.

What are the ingredients in RINVOQ 15 mg tablets?

Active ingredient: upadacitinib

Inactive ingredients: colloidal silicon dioxide, ferrosoferric oxide, hypromellose, iron oxide red, magnesium stearate, mannitol, microcrystalline cellulose, polyvinyl alcohol, polyethylene glycol, talc, tartaric acid and titanium dioxide.

What are the ingredients in RINVOQ 30 mg tablets?

Active ingredient: upadacitinib

Inactive ingredients: colloidal silicon dioxide, hypromellose, iron oxide red, magnesium stearate, mannitol, microcrystalline cellulose, polyvinyl alcohol, polyethylene glycol, talc, tartaric acid and titanium dioxide

What are the ingredients in RINVOQ 45 mg tablets?

Active ingredient: upadacitinib

Inactive ingredients: colloidal silicon dioxide, hypromellose, iron oxide yellow and iron oxide red, magnesium stearate, mannitol, microcrystalline cellulose, polyvinyl alcohol, polyethylene glycol, talc, tartaric acid and titanium dioxide.

Manufactured by: AbbVie Inc., North Chicago, IL 60064, USA RINVOQ[®] is a registered trademark of AbbVie Biotechnology Ltd. ©2019-2022 AbbVie Inc.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch or call 1-800-FDA-1088.

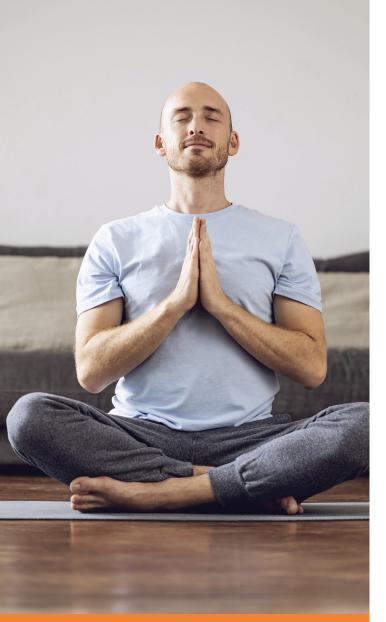
If you are having difficulty paying for your medicine, AbbVie may be able to help. Visit AbbVie.com/myAbbVieAssist to learn more.

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THE IMPACT ON YOUR MENTAL HEALTH

HOW ATOPIC DERMATITIS MAY LEAD TO DEPRESSION

By Kendall K. Morgan Reviewed by Brunilda Nazario, MD, WebMD Chief Physician Editor, Medical Affairs It might seem surprising that atopic dermatitis (AD), commonly known as eczema, would affect your mental health. But studies have shown this in people of all ages. Adults with AD are more likely to get a new diagnosis of depression or anxiety. The worse the AD is, the more likely this will happen. Many adults with AD had it early in life also, and it turns out that the depressive symptoms in AD often start early, too.

Katrina Abuabara, MD, a dermatologist at UCSF Health, says there are likely many factors at play. Just dealing with a chronic condition makes life more difficult. Having red and itchy skin can affect the way you see yourself and how other people see vou.

"Eczema can affect interactions with peers and colleagues," she says. The anxiety and stress that goes with this also can lead to flares, setting up a vicious cycle.

EXERCISE

Exercise is a good way to manage stress, anxiety, and depression. In fact, exercise works about as well as anti-depressant medicines for treating mild or moderate depression.

"A lot of people [with eczema] have exercise-induced itch," Abuabara says. "It can affect the ability to exercise."

POOR SLEEP

"Eczema also is associated with poor sleep, which certainly impacts mental health," she says.

The itching and scratching of AD can make it hard to sleep enough. Studies also have shown that people with AD have worse sleep quality even when the disease isn't especially active.

WHEN TO **GET HELP**

You may need help for depression if you've had these symptoms for 2 weeks or more:

ADHD

People with especially severe atopic dermatitis of any age also have an increased risk for attention deficit hyperactivity disorder (ADHD). It's possible this has something to do with the itchy skin and inadequate sleeping.

Abuabara says it may just be that the two conditions come with some similar symptoms. Both groups don't sleep well and fidget a lot from chronic itching, she says.

MIND-BODY CONNECTION

The inflammation that goes with AD might also send messages straight to your brain that play some role in worsening mental health. There's some emerging evidence that treating the AD may improve your mental health outlook, too, Abuabara says.

"You can't predict when a flare will come and that can be hard to live with," Abuabara says. "It's important for doctors and patients to know that mental health is associated [with AD], so providers can direct them to appropriate treatment and patients know what to look for."

MY JOURNEY WITH ATOPIC **DERMATITIS**



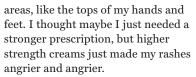
By Khiara Johnson

Reviewed by Brunilda Nazario, MD, WebMD Chief Physician Editor, Medical Affairs

I was 5 years old when eczema popped up on my skin and into my life. I don't think it's a coincidence that my symptoms came on soon after a traumatic event in my life. I believe everything is holistic and connected. Because I didn't have the opportunity to talk out my stress, it showed up on my skin. I started having dry, scaly, itchy spots on my neck, in the creases on my arm, and on the back of my leg. Even though I lived in hot, sunny Florida where everyone wore shorts, I stuck with pants. But hiding my legs only exacerbated the problem.

Fast forward 4 years. My family moved to Virginia, and I started using a prescription topical steroid, which to me seemed like a magic ointment. Literally within hours of trying it, my eczema was gone. Through my teenage years and into my early 20s, I got to live with my skin out. I felt free.

And then around 25-I don't know if it was hormones or life stress-my eczema came back. This time it was different—the magic ointment no longer worked. In fact, after I tried it, the eczema seemed to get more aggressive, and it started affecting new



Then the spots began to grow and connect. I was so frustrated because not only was the steroid not working, it was making things much worse. Eventually I learned that I had developed topical steroid withdrawal (TSW)-a rare adverse reaction that happens when you stop using topical steroids. My skin had become addicted. So I found an online group with other people dealing







KHIARA'S TIPS

- + Find the right skin care for you. I always use shea butter to moisturize. It's chemical-free skin and fade
- + Be diet smart. Eat more foods that are healing for your gut and for your skin.
- + Don't wait on life. Live while you heal. Find ways to enjoy

with the same thing and I learned I had to go through a long, grueling withdrawal. But I knew I had to do it to break free from my severe symptoms.

I won't sugarcoat it—withdrawal was hell on Earth. About 98% of my body was covered with angry inflamed eczema-like rashes. If I had to describe it to somebody who never went through it, I would say it's like a million fire ants crawling on your skin and stinging you. I couldn't sleep. My body couldn't maintain a steady temperature. My hair fell out in clumps, and I shed so much skin every day that I would have to sweep it up. I

found some relief in the tub. I remember laying in the water and literally crying out to God, "Please, help me." At my lowest, I wanted to die.

I'm a person of faith, and my faith was strong, but I also knew faith without works is dead, so I started making some life changes. I revamped my diet and bulked up on foods that wouldn't disturb my gut: red, yellow, and orange peppers rich in vitamin C, blueberries, raw sunflower seeds. And once I could sweat without causing too much of a flare, I started to move a little bit. I worked on lowering my

stress as best I could.

Little by little, those changes-and time-got me to where I am now. I'm not completely healed, and still deal with lasting post-inflammatory hyperpigmentation that often plagues darker skin complexions like mine, but my eczema is nowhere near what it used to be. Looking back at pictures now, I can't believe what I've lived through. But I believe my healing started in the mind first. I decided I was going to commit to the process, no matter how long it took, and now here I am, living skin out again.

BEYOND FIRST-LINE TREATMENT

WHEN GO-TO THERAPIES DON'T WORK, WHAT'S NEXT?

By Rachel Reiff Ellis

Reviewed by Brunilda Nazario, MD, WebMD Chief Physician Editor, Medical Affairs

The mainstay treatment for atopic dermatitis is topical steroids—medicated creams and ointments you rub onto your skin. But for many people with moderate to severe atopic dermatitis, topical steroids aren't enough to keep symptoms under control.

"Topical steroids are the cornerstone of therapy, but they're really a short-term solution to a long-term problem," says Linda F. Stein Gold, MD, director of dermatology clinical research and division head of dermatology at Henry Ford Health System in Detroit.

When you need other solutions, your doctor may turn to:

NONSTEROIDAL TOPICALS

Your doctor can combine these options with topical steroids. This adds to your treatment and also covers more skin, Stein Gold says.

"Because these treatments don't have the same side effects as steroid creams, you can use them on more of your body, like the face and skin folds," she says.

Types of nonsteroidal topicals include:

- Disease-modifying antirheumatic drugs (DMARDs) that block the pathways of inflammation seen in AD.
- JAK inhibitors that target specific pathways of inflammation.
- Topical PDE-4 inhibitors that regulate the production of proteins called cytokines that are involved in inflammation.
- Calcineurin inhibitors that block chemicals in your body that contribute to flares.

SYSTEMIC OPTIONS

Instead of treating your symptoms through the skin barrier, these treatments go through your bloodstream. "Systemic agents are reserved for more moderate or severe disease," Stein Gold says.

Types of systemic options include:

- Oral conventional DMARDs.
- In January 2022, the FDA
 approved two new oral JAK
 inhibitors for atopic dermatitis.
 They have fewer side effects
 than traditional oral immuno suppressive medications that
 doctors have moved away from,
 as well as oral steroids.
- Oral steroids. These suppress your immune system to help control inflammation. They can have several serious side effects if you use them longer than a month.
- Injectable antibodies. There are two biologic treatments your doctor can prescribe in injection form. These targeted treatments are a type of drug called a monoclonal antibody. They home in on specific molecules to control inflammation.

PHOTOTHERAPY

Also called light therapy, this treatment uses UV light to help reduce your symptoms. Your doctor may recommend it if your symptoms are widespread or on your hands and feet and other treatments haven't helped.

"Phototherapy can also sometimes be helpful if you don't want to use a systemic option and don't respond adequately enough to topical medication," Stein Gold says.

