

What are Janus kinase (JAK) inhibitors?

JAK inhibitors are medications that can lower inflammation in the body. Some inflammation can help the body to fight infections or injuries. But too much inflammation is also the cause of certain skin problems. JAK inhibitors can help by lowering inflammation to improve skin diseases.

WHAT CONDITIONS ARE TREATED WITH JAK INHIBITORS?

JAK inhibitors are used to treat many different medical conditions in children and adults. The most common skin diseases treated with JAK inhibitors are alopecia areata (a form of hair loss) and atopic dermatitis (also known as eczema).

HOW ARE JAK INHIBITORS TAKEN?

JAK inhibitors are taken by mouth. They can be taken as a pill or a liquid once or twice a day.

ARE ANY TESTS NEEDED WHILE TAKING JAK INHIBITORS?

Yes. Before starting the medicine, a blood test is needed to make sure this medicine is safe for your child. Your child will also need blood tests while taking the JAK inhibitor. Your doctor will determine when follow up blood tests are needed.

WHAT ARE THE POSSIBLE SIDE EFFECTS OF JAK INHIBITORS?

Most people feel well on JAK inhibitors. There can be important side effects to watch for, like:

» A LOWERED IMMUNE SYSTEM

JAK inhibitors can make it harder to fight off infections. Your child could get sick more easily. Serious infections are rare. Tell your doctor if your child seems ill.

» CHANGES IN BLOOD TESTS, LIKE BLOOD COUNTS, LIVER ENZYMES, AND CHOLESTEROL

JAK inhibitors can affect how the body makes blood cells and how the liver works. They can also affect cholesterol. Blood tests help watch for these changes. If needed, the medication can be lowered or stopped.

» NAUSEA

JAK inhibitors can cause stomach aches and nausea.

» ACNE

Acne is a possible side effect. This can usually be treated with acne washes and creams.

» RISK OF BLOOD CLOTS

In people over the age of 50, there is a risk of blood clots and heart attacks. We have not seen this side effect in children.

You should let your doctor know if your child develops any new symptoms or feels different while taking a JAK inhibitor.

✔ HOW LONG WILL MY CHILD NEED TO TAKE JAK INHIBITORS?

JAK inhibitors are often taken for many months or years. Your doctor will help you make the best plan for your child. JAK inhibitors are not cures. If your child needs to stop them, the disease could come back.

✔ CAN MY CHILD GET VACCINES WHILE ON A JAK INHIBITOR?

Most vaccines are safe while your child is on a JAK inhibitor. "Live-virus" vaccines should not be given while your child is taking a JAK inhibitor.

Vaccines are an effective way to protect children from infections. There are different types of vaccines. Most vaccines do not contain any live infection. These non-live vaccines are safe while taking a JAK inhibitor. Some examples of non-live vaccines include the tetanus vaccine and the flu shot.

"Live-virus" vaccines are not recommended for people taking JAK inhibitors. These include the vaccines for chicken pox, and measles, mumps and rubella (MMR). If your child needs to get one of these live vaccines, the medication might be stopped for a short time before and after the vaccine.

You can find more information in the Patient Perspectives handout [Vaccine Considerations for Pediatric Populations](#).



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