Breakthrough Eczema Drug Based on Mount Sinai Research

The U.S. Food and Drug Administration (FDA) has approved a new biologic drug that is considered a “breakthrough therapy” for adult patients with uncontrolled eczema—a group of inflammatory skin conditions. More than 30 million Americans have some form of eczema.

The drug, dupilumab, was approved in March 2017 after being fast-tracked by the FDA. Seminal research from Emma Guttman-Yassky, MD, PhD, Professor of Dermatology, and Medicine (Clinical Immunology), at the Icahn School of Medicine at Mount Sinai contributed to development of dupilumab. “It brings hope to patients who have tried everything,” says Dr. Guttman-Yassky.

The most common and severe type of eczema is atopic dermatitis, which causes the skin to become extremely itchy. Scratching irritates the skin and can lead to infection. The condition usually starts in infancy; half of children continue to have symptoms as adults.

“Living with eczema is like having poison ivy from head to toe. It affects every single aspect of your life,” says Austin Jacobson, one of Dr. Guttman-Yassky’s patients. Mr. Jacobson took part in a clinical trial of the drug, which is injected every two weeks, and still uses it today. He felt relief from itching “two hours after taking the first injection.” Mr. Jacobson says his skin, which had been “100 percent” covered with a scaly, flaking rash, is now largely clear. “The drug works,” he says of dupilumab. “It gives you your life back.”

Biologic therapies like dupilumab have the potential to produce fewer side effects than the traditional immune suppressants used widely to treat severe eczema. Dupilumab is recommended for patients who do not find relief with topical medications.

Eczema is thought to be caused by a combination of genetic, immune, and environmental factors. Everyday irritants, such as heat, tobacco smoke, or pollen, can trigger eczema.

Dr. Guttman-Yassky has received research funding from Regeneron, and drug and research support from Pfizer, and is working with most companies developing treatments for atopic dermatitis/eczema.

Possible Symptoms of Eczema

- Dry, extremely itchy skin
- Blisters that may ooze or crust
- Raw skin that may bleed from excessive scratching
- Dry, leathery areas that are darker or lighter than normal skin tone
- Red skin around the blisters
- Scaling or thickened skin

“’The drug works. It gives you your life back.’”
—Austin Jacobson

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We Can Help

The Mount Sinai Health System is home to one of the largest dermatology groups in the nation. Our specialists offer comprehensive care to treat acute, chronic, and life-threatening skin conditions.