

# Ask the doctor about...



## BIOLOGIC DRUGS FOR ATOPIC DERMATITIS (ECZEMA)



Dr. Melinda  
Gooderham

Eczema Society of Canada asked leading Canadian dermatologist, clinical researcher, and atopic dermatitis (eczema) expert Dr. Melinda Gooderham to help us better understand the use of biologic drugs in the treatment of atopic dermatitis.

### WHAT ARE BIOLOGIC DRUGS

Biologic drugs, sometimes called “biologics”, are a new type of medication approved for the treatment of atopic dermatitis (AD). On a basic level, to create biologic drugs, scientists engineer proteins that come from living tissues or cells that are created in a laboratory.

### HOW DO BIOLOGICS WORK TO IMPROVE ATOPIC DERMATITIS SYMPTOMS?

Our immune systems fight off harmful bacteria and viruses using proteins called interleukin, or IL for short. People with inflammatory conditions, like AD, have an overactive immune system. This overactive immune response causes the body to mistakenly attack itself. In AD, this overreaction results in inflammation of the skin caused by IL, and biologics work to block these proteins from binding to cell receptors. This stops the process of immune overreaction and stops the cycle of inflammation.

### HOW DOES A PATIENT TAKE A BIOLOGIC DRUG?

Biologics are not a topical treatment (such as a cream) or an oral treatment (such as a pill). Biologics are taken through the skin (with a needle injection) or intravenously (through the veins). In the case of AD, the first biologic developed is dupilumab, and it is taken by injection.

### ARE BIOLOGIC DRUGS SAFE?

Overall, biologics are a safe class of medication, but all medications carry the risk of side effects, and it is always advisable to discuss these risks with your own doctor. It is especially important to talk to your doctor if you are trying to conceive, become pregnant, or are breastfeeding.

### ARE BIOLOGICS A NEW CLASS OF MEDICATION?

Biologics have been used for over a decade to treat other conditions including psoriasis, rheumatoid arthritis, and inflammatory bowel conditions.

### WHICH ATOPIC DERMATITIS PATIENTS WOULD BENEFIT FROM BIOLOGIC DRUGS?

For many patients with AD, appropriate skin care such as bathing and moisturizing, along with topical treatments, will manage their condition. However, for some patients who live with moderate-to-severe AD, the current therapies may not adequately control their disease and they may benefit from a biologic.

### WHY ARE BIOLOGICS SO EXPENSIVE?

Biologic drugs are expensive because they represent a major scientific advancement in the treatment of inflammatory conditions. The research and development of biologic drugs takes many years and is a very expensive process.

### WHAT IS DUPIXENT™ (DUPILUMAB)?

Dupixent™ (dupilumab) is the first biologic drug approved by Health Canada for the treatment of AD in adults who have failed to respond to other therapies. Dupixent™ (dupilumab) works to stop the immune system by blocking IL, which lowers the level of inflammation, and therefore decreases the symptoms of AD. The most common side effects with Dupixent™ (dupilumab) are conjunctivitis (commonly called pink eye), injection site reactions, and cold sores on the mouth or lips.



Eczema Society of Canada thanks Dr. Melinda Gooderham for her volunteer contribution to this educational resource.

For additional information or support visit [www.eczemahelp.ca](http://www.eczemahelp.ca) or call 1-855-ECZEM-1

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