

## Asthma breakthrough? ‘Blockbuster’ Gleevec cancer drug shows promise in treating severe cases

A blockbuster cancer drug may have a surprising new use: It’s showing real promise in treating severe asthma. That may help researchers better understand the basic biology of the chronic condition — and develop new medications, according to a small [proof-of-principle study](#) published on Wednesday in the New England Journal of Medicine.

The trial studied imatinib, known commonly under the brand name [Gleevec](#), in 62 patients with severe and difficult-to-treat asthma. Imatinib is a chemotherapy used to treat leukemia and other cancers.

Imatinib has been found, in mice, to inhibit the growth of mast cells, which are a type of white blood cell that are found in the airways of severe asthmatics. It’s long been hypothesized that mast cells may play a role in asthma — causing airways to secrete mucus, for instance, and causing them to be hyper-reactive, or “twitchy,” in response to allergens or pollutants, said lead investigator Dr. Elliot Israel, a researcher at Brigham and Women’s Hospital.

The study backs up that hypothesis.

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Mast cells have been implicated in many allergic reactions — but as far as most scientists can tell, they’re vestigial and fairly useless in terms of helping buoy a person’s immunity.

**The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Blockbuster cancer drug shows surprising promise in treating severe asthma](#)**