New Psoriasis Drug Research

by YVONNE BANKS

Research Could Lead to New Psoriasis Drug

Psoriasis drug research has found a compound that targets the small piece of genetic material in cells that causes psoriasis. They have found that by blocking the genetic material called micro-RNA, inflammation in mice who had skin grafts from patients suffering with psoriasis was reduced.

Micro-RNA is a shorter piece of RNA that researchers believe is related to gene expression. The micro-RNAs link up with other RNAs to make them perform actions or make them cease doing any activity at all. The compound that is being used in experiments dealing with blocking micro-RNA is called antagomir. It specifically blocks a micro-RNA called miR-21 from linking and regulating other RNA strands. When miR-21 is blocked, inflammation from psoriasis is slowed. Earlier studies have noted that patients with psoriasis have elevated miR-21 levels.

This drug needs to be further tested on humans, so it has a few years before being made commercially available, and that will only happen if the experiments can be replicated in people. There are several ways to target the disease as well as finding how micro-RNA relates to health in general.

What Else You Should Know About miR-21

- The way miR-21 works is that it prevents the chain of reactions on the molecular level from occurring, for instance, the rapid growth of skin cells characteristic of psoriasis.
- Researchers have not determined the function of miR-21 in the body. Also, they do not know the implications of blocking miR-21 for the long-term. However, in the laboratory, genetically engineered mice that do not have miR-21 do not seem any different than mice with miR-21.

- Some researchers feel that the study will not yield any new drugs anytime soon and it will be costly to make since the antagomir molecule is biological.
- There will be some consideration as to how the drug will be administered to the patient. It may be likely that it will need to be applied to the skins, perhaps by using nanoparticles to carry the antagomir to the receptor areas of the miR-21.

Psoriasis Drug Research: Guselkumab

Another experimental drug by Johnson & Johnson, directed for use in moderate to severe psoriasis, has successfully improved scaly, uncomfortable psoriasis patches in study participants. Guselkumab has achieved the main objective in its Phase II study at every dosing regimen tested. It was shown to clear or reduce psoriasis after 16 weeks of treatment at a greater percentage than the placebo. It appears to be as good as or more effective the Humira within some tested doses.

There is great promise showing in the Phase IIb portion of the study, and if it continues to be successful, it will be the follow-up treatment to the company’s Stelara. Guselkumab works by blocking a protein that has been

associated with chronic inflammation and may be a culprit in psoriasis flare-ups. In the study, of 62% of the patients who received 100 milligrams of the medication every 8 weeks, they showed a 90% improvement. The results either remain consistent or there was even more improvement after 40 weeks of treatment.

If you are a psoriasis sufferer, you should ask your doctor about the best treatment options for you. You may be able to try guselkumab once it is available on the market. Until then, your doctor can help you manage your psoriasis with the medications available.