

## Natural genetic mutations inspire promising bio-pharmaceutical treatments

Steven Pete can't feel pain. Timothy Dreyer has bones several times thicker than the average human. Both conditions were caused by a combination of genetic mutations. While both conditions have negatively impacted the men's health at various points in their lives, researchers at pharmaceutical companies are paying through the roof to have access to their DNA, and that of others like them. If the researchers can develop drugs that mimic the effects of the mutations, they may be able to create treatments to solve some of the most challenging disorders, according to [an article published](#) in Bloomberg.

Take, for example, the pharmaceutical company Amgen. By looking at the effects of Dreyer's thick-bone mutation, they reasoned, they could find a treatment for osteoporosis. People with sclerosteosis, the condition that results from high bone density, are missing a protein that inhibits how thick bones can grow. So the researchers tried hundreds of antibodies over several years to develop a drug that blocks the protein in osteoporosis patients to help their bones grow thicker, reversing the effects of the disease. They tested the drug on mice that went into space (where bones usually lose density) and it worked well—the mice that were given the drug gained bone mineral density while those who were not lost it. Now they are in the final stages of human trials that seem similarly promising.

**The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: [New drugs mimic genetic mutations to make humans more super](#)**