

Could single vaccine treat all types of cancer?

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

Precision medicine has been sold as customizing treatments for patients, matching drugs to disease-causing genes that just a few thousand or even hundreds of patients carry.

Its boosters may have been underselling the concept: If a cutting-edge cancer treatment succeeds, it can be matched precisely to a single patient.

The experimental treatment, called a neoantigen vaccine, fires up the immune system to attack malignant cells. From the evidence so far, patients' tumors — even if they are all diagnosed as melanoma, for example, or breast or lung, or colorectal cancer — are as unique as the pattern of freckles on the faces of a kindergarten-full of redheads. That means vaccines to treat them will also be unique.

Although not a single such therapeutic vaccine has yet been approved for use, promising results from small studies, plus the general sense that the immune system may be cancer's most powerful foe, have led scientists from major cancer centers to launch clinical trials of these cancer vaccines and found companies to commercialize them. Investors are bullish enough on the approach to have put tens of millions of dollars into these startups, and established drug and biotech companies are racing to partner with them. The arrival of cheap, fast DNA sequencing has made individualized therapy practical, contributing to the explosion in interest.

Read full, original post: [Turning your cancer against itself](#)