Keytruda drug treats cancer based on tumor's genetics rather than its location

In a first for precision medicine, a cancer drug has won regulatory approval based on the genetic characteristic of tumors, rather than their location in the body.

On [May 23], the U.S. Food and Drug Administration said it had approved Keytruda, an immunotherapy, for patients who have genetic glitches in so-called "mismatch repair" genes.

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Keytruda is the first that can be given to anyone who harbors one of two relatively rare genetic abnormalities, and is suffering from a solid tumor, such as pancreatic or lung cancer. Olivier Lesueur, managing partner at Bionest Partners, a consulting firm, calls the approval a "breakthrough in the way we see and define cancer."

Keytruda works by unleashing the body's immune system to attack tumors, and was first approved to treat advanced skin cancer in 2014. Such drugs, called checkpoint inhibitors, have had remarkable success, including saving the life of former U.S. President Jimmy Carter. The downside of immunotherapy is that not all patients seem to benefit, for reasons that remain uncertain.

Keytruda
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The new approval only applies to patients for whom traditional treatment, like chemotherapy, has already failed. But genetic tests to identify patients with mismatch repair genes are widely available and cost $300 to $600…Keytruda itself costs around $150,000 a year.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: Drug Is First to Treat Cancer Based on Genetics, Not Location