Highly Mutated Cancers Respond Better to Immutherapy

Researchers have long sought a way to select the people who are most likely to respond to the treatments, and spare others the side effects.

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Immunotherapy has saved countless lives, but it is not effective for all cancer patients, and predicting who should be using this therapy has been difficult. New results from Luc G. Morris, MD (Damon Runyon Clinical Investigator ’14-’17), and sponsor Timothy A. Chan MD, PhD, now sheds light on this dilemma. Tumors with a large number of DNA mutations are more likely to respond to immunotherapies than are cancers with fewer mutations — and result in longer survival for people who receive treatment. Researchers have long sought a way to select the people — generally a minority of patients — who are most likely to respond to immunotherapies and to spare others from the treatments’ side effects, which can include kidney failure and lung problems.

The data also showed that the number of mutations that predicted a good response to immunotherapy varied from one type of cancer to another. This means that researchers would need to set a mutation threshold for each cancer type if they want to use this approach in clinical tests.

The research was published in Nature Genetics. Read more about it in Forbes.

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