Drug trial, dubbed ‘Master Protocol,’ uses tumor genomics to customize treatments

(Summary)

Drug trials based on a tumor’s genetic profile is the future of cancer drug research, allowing researchers to accept a wide variety of patients into clinical trials.

Cancer drugs are developed to target molecular abnormalities in tumors, but each abnormality is extremely rare, so patients with the same kind of cancer generally do not have identical tumors. When screening patients for drug trials, researchers must comb through hundreds of potential patients before they can find even one whose cancer matches the genetic profile a specific drug was created to target.

Vali Papadimitrakopoulou, an oncologist at the MD Anderson Cancer Center in Houston is the head of a new trial, dubbed “The Master Protocol,” that will test drugs on squamous cell lung cancer based on the unique DNA of each participant’s tumors. Papadimitrakopoulou and his team compiled “the most common genomic profiles” of squamous cell lung cancer and then identified novel drugs that “could address each form of the disease.”

Papadimitrakopoulou and his colleagues will begin the innovative drug trial in 2014. They are anticipating the new trial method will be expanded to include other types of cancer, and potentially other types of diseases as well.

Read the full, original story here: Genomics Could Blow Up the Clinical Trial

Additional Resources:

- “Customizing Treatments for Deadly Prostate Cancer With Tumor Genomics,” Science Daily