Clinical Trial Genetically Matches Cancer Patients With Possible Treatment Options

Tulane Cancer Center is currently enrolling patients in The National Cancer Institute's Molecular Analysis for Therapy Choice clinical trial (NCI-MATCH). This precision medicine trial genetically analyzes patients' tumors to determine whether they contain abnormalities for which a targeted drug exists and then assigns treatment based on the abnormality. It seeks to determine the effectiveness of treating patients based on the genetic profiles of their specific tumors.

This trial builds on decades of research into the genetic mutations that lead to cancer and the development of drugs that specifically target those mutations. It represents the culmination of efforts to create a precision medicine effort to treat cancer.

Which Drugs Are Being Studied?
The drugs included in the trial have either been approved by the U.S. Food and Drug Administration for the treatment of cancers or are still being tested but have shown effectiveness against tumors with a particular genetic alteration. Drugs may be added over time as pharmaceutical companies and others develop promising new targeted therapies.

Who Is Eligible?
Adults 18 years or older with advanced solid tumors and lymphomas that are no longer responding or never responded to standard therapy and have begun to grow may be candidates for the trial. The most common cancers included are those of the breast, colon, lung and prostate. However, one goal of the trial is to enroll patients with rare cancers, such as those of the eye, ureter and pituitary gland.

"Most clinicians and investigators in the oncology community believe this is the way we'll treat all cancers eventually. We're going to find an agent specific to that individual's tumor at the molecular level rather than specific to an organ type."

-- William "Rusty" Robinson, M.D.
Enrollment Process
In the initial screening phase, a biopsy procedure is used to remove tumor samples for DNA sequencing. The specimens are sent to one of four genetic testing labs, where they are analyzed for more than 4,000 genetic abnormalities across 143 genes. This process typically takes less than two weeks.

If an abnormality is detected that is targeted by one of the drugs being studied in the trial, patients are further evaluated to determine if they meet the specific eligibility requirements of that sub-study.

Once enrolled, patients are treated with the targeted drug for as long as their tumor shrinks or remains stable. Patients with tumors that share the same genetic abnormality, regardless of tumor type, will receive the drug that targets that abnormality.

Patients can be considered for a second arm of the study if the first treatment they received was not successful and if genetic testing shows that the second abnormality is targeted by a drug being studied in the trial.

Costs
The trial covers the cost of the biopsy and molecular tests, and patients will receive the drugs without charge if they are eligible to enroll. Unless they are informed otherwise, patients or their health plan will need to cover all other costs, including the cost of tests, procedures or medicines to manage any side effects of the biopsy and treatment. Enrollees will not be paid for participation.

For More Information...
To learn more about NCI-MATCH, please consult your oncologist or contact Aniko Vigh, M.D., director of Tulane Cancer Center’s Office of Clinical Research at avigh@tulane.edu or 504-988-6061.

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