MedicalXpress

Life sciences startup licenses technology to detect cancer cells

November 19 2015

The founder of a life sciences startup that is commercializing a Purdue University innovation says a test to detect circulating tumor cells in a patient's bloodstream could improve the chances of survival and quality of life.

Cagri Savran, founder and manager of Savran Technologies, said there is only one test approved currently by the U.S. Food and Drug Administration to detect rare tumor cells.

"Unfortunately, this device misses a lot of cells, which leads to false negative results," he said. "When a device doesn't work well, not only do the personnel at pathology labs in hospitals not want to buy it, but they also are not using the test as much as they should."

Purdue researchers, led by Savran, have developed a minimally invasive technology that is highly effective and adaptable in detecting rare target cells. The technology was exclusively licensed to the company by the Purdue Research Foundation Office of Technology Commercialization. More than 20 startups based on Purdue intellectual property were launched in the 2015 fiscal year.

"Our technology utilizes a design that recognizes a very small number of target cells. It can remove a significant portion of the other cells that you don't want to detect," said Savran, who also is an associate professor in Purdue's School of Mechanical Engineering. "It can be adapted to detect different types of cells that signify the presence of different diseases in a

sample and is flexible enough to use a variety of samples including blood, urine and other fluids.

"Our belief is that this combination of features will encourage doctors to order more tests more frequently to reliably observe how their patients are doing. This could improve the chances of survival as well as quality of life. It could give doctors the opportunity to make more informed decisions about what treatments they prescribe."

Savran said the company faces further steps before its test can be sold to pathology labs and hospitals.

"We need approval from the FDA, which requires several rounds of clinical trials. We need partners who can help us pay for them, as well as partners who can help us further develop the technology for other applications," he said.

Provided by Purdue University