

Business

Startup to use 'natural killer' cells on cancer: Catamaran Bio debuts with \$42 million from VC investors



JOHN SOARES

Researchers at Catamaran Bio are working to harness so-called killer cells to fight cancer.

By Jonathan Saltzman GLOBE STAFF

n a blustery day last December, five biotech entrepreneurs and scientists walked past snowdraped Boston Common and entered Yvonne's, the cozy supper club and bar, to discuss a new potential biotechnology company to fight cancer.

There, over libations poured at a mahogany bar, they talked about the recent

success of groundbreaking drugs that harness the immune system to combat blood cancers. Could they do something similar to treat solid tumors, which are far more common? Could they use "natural killer" cells, a potent immunological weapon that can be harvested from healthy people? If so, what would be the best approach?

Eleven months after that brainstorming session, a new startup, Catamaran Bio, was unveiled Monday. The company has been quietly incubating at LabCentral in Cambridge since July and has \$42 million raised by five venture capital firms, including the founding investor, SV Health Investors, of Boston.

"This was a group of people who had wanted to do something together for a long time," said Houman Ashrafian, managing partner of SV Health Investors, who was among the five men who met at Yvonne's. The potency of natural killer, or NK, cells, he said, "was the lightning rod that drew us together."



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Catamaran Bio sees promis in employing immunotherapy to fight cancer.

In recent years, immunotherapy drugs such as Kymriah, Novartis's one-time cell therapy for leukemia, have emerged as among the most promising treatments for blood cancers. The approach, also called CAR-T therapy, relies on harvesting patients' T cells — a type of white blood cell — and genetically rewiring them to home in on cancer after they are infused back into patients.

The process can take several weeks, from the collection of T cells to infusion. And CAR-T therapies can carry jaw-dropping price tags. Kymriah costs \$475,000 for a course of treatment. Yescarta, a treatment for non-Hodgkin's lymphoma developed by Gilead's Kite Pharma unit, costs \$373,000.

Catamaran wants to do something similar for solid tumors found in diseases like lung cancer and kidney cancer. Instead of harvesting T cells from the cancer patients being treated, the company wants to ob-

tain natural killer cells — another form of white blood cells — from healthy people. Scientists would use these cells, which have natural cancer-fighting properties, to develop an "off-the-shelf" drug for people diagnosed with malignant tumors.

There are no approved cell therapies for solid tumors, according to Vipin Suri, chief scientific officer of Catamaran, a cofounder of Obsidian Therapeutics of Cambridge and one of the men who went to Yvonne's. But several companies are working on using natural killer cells to attack those types of cancer, including Japanbased Takeda Pharmaceutical, which is collaborating with the University of Texas MD Anderson Cancer Center.

Suri said it's unclear whether such a treatment would require only one dose or multiple doses. "For some cancers, repeat dosing may ensure better patient outcomes, and others may not require repeat dosing," he said in an e-mail. He added

that it's premature to discuss the cost of any potential drug.

Like most startups, Catamaran has a small staff, just 16 employees. It recently moved to a bigger space inside LabCentral.

Two venture capital firms led Catamaran's first major fund-raising round, Sofinnova Partners and Lightstone Ventures. The other investors, in addition to SV Health, are Takeda Ventures (the corporate venture arm of the Japanese drug giant) and Astellas Venture Management.

Why the name Catamaran?

"Catamarans move swiftly in the water with efficiency, riding above choppy seas with little drag," said Suri, who added that their two hulls symbolize the startup's potential products and approach.

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