

Fierce Biotech

Pfizer-Backed Bolt Therapeutics Strikes \$93.5M Funding Round as Lead Med Hits The Clinic

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After kick-starting its first-in-human test back in March, Bolt Therapeutics has nabbed a meaty \$93.5 million round to help fund its clinical work.

Bolt has an interesting history: One of the first immune-stimulating cancer drugs, prostate cancer vaccine Provenge, never quite lived up to expectations, but the scientist whose work led to the development of the product remains committed to immuno-oncology.

He's Edgar Engleman, M.D., professor of medicine and pathology at Stanford University. Now, his latest creation, backed by \$170 million in total venture funding to date, has hit the clinic after a five-year journey using part of this MOA.

Bolt's leading med, BDC-1001, is part of a new class of cancer drugs called immune-stimulating antibody conjugates (ISACs). The drug is a tumor-targeting antibody connected to an agent that stimulates the immune system.

In animal studies, the drug, which targets tumor marker HER2, eradicated large tumors, according to a recent presentation at the Society for Immunotherapy of Cancer meeting. The drug also protected the animals from the development of new tumors.

Back in March, Bolt started a phase 1 trial in patients with HER2-expressing solid tumors. Now, it has an extra \$93.5 million to push deeper into clinical work to see whether its candidate can pass muster.

The round was led by Sofinnova Investments with participation from new investors RA Capital Management, Surveyor Capital (a Citadel Company), Rock Springs Capital, Samsara BioCapital and Pfizer



Ventures as well as existing investors Novo Holdings, Vivo Capital, Pivotal bioVenture Partners and others.

As part of the financing, Jason Pitts, Ph.D., principal at Sofinnova Investments, joins the company's board.

He said: "We believe Bolt is well-positioned to execute on its vision of developing immuno-oncology therapies with the potential to generate systemic immunological memory and provide durable clinical benefit. I look forward to helping the company realize their goal of developing the ISAC platform across a range of solid tumor targets."

Antibody-drug conjugates (ADCs) are well established in oncology and continue to be a major focus of R&D. AstraZeneca and Daiichi Sankyo recently picked up an FDA approval for Enhertu, an HER2-targeting ADC, which is a humanized HER2 antibody connected to a payload that delivers chemotherapy directly to cancer cells.

Astellas and Seattle Genetics are working on an ADC that targets a protein commonly found in solid tumors, Nectin-4, which works by disrupting the infrastructure of cancer cells. They recently posted positive phase 1 trial results in patients with urothelial cancer who were treated with the drug along with Merck's PD-1 inhibitor Keytruda.

Bolt's approach is, however, different, because its ISAC technology is based around the idea of connecting antibodies to agents that stimulate the immune system to attack the cancer rather than to compounds that directly poison cancer cells. Further, it's designed to be able to be used as a solo therapy.