Vividion seeks to deploy its synthetic and proteomic chemistry platforms to identify druggable targets.

Unlocking the proteome to redefine druggability.

CEO: Diego Miralles, M.D.
Founded: 2014
Based: San Diego
Clinical focus: Expanding the druggable proteome to address difficult targets

The scoop: Spun out of the Scripps Research Institute, Vividion Therapeutics aims to deploy its synthetic and proteomic chemistry platforms to "dramatically expand" the number of therapeutic targets. Its technology identifies previously unknown druggable targets in the human proteome—the entire set of proteins that can be expressed by the human genome.

What makes Vividion Fierce: In traditional drug discovery, a selected target is screened against a library that can contain hundreds of thousands of compounds. But this approach is limited. While potential drugs are legion, conventional target-specific assays are tested against just a small part of the proteome, which can lead to problems later on in development.

"I think this technology has the chance to truly change the horizon line for chemical-based therapeutics," said Executive Chairman Tom Daniel, who previously served as president of global research and early development at Celgene.

"We as an industry have struggled with inefficiency and safety issues appearing late in programs and the horrible failure to target proteins that are highly validated, but not druggable," Daniel said.

Vividion was founded in 2014, but it officially launched in February this year with a $50 million series A. While in stealth mode, the company developed its technology, spun out of the labs of Benjamin Cravatt, Phil Baran and Jin-Quan Yu at Scripps. The platform can now chemically annotate the proteome—which is distinct in each cell—in a wide range of cells and tissues to identify sites that can be drugged.

"It became clear around the time of founding that the platforms emerging from the Cravatt lab had tremendous potential for expanding druggability of the human proteome," Daniel said at

launch. “Between 2014 and present, these platforms were further optimized, refined, and applied in several important biological systems, bolstering confidence in their transformative potential to discover progressable chemical leads for compelling, but previously intractable targets.”

The biotech isn’t ready to disclose any specific targets or therapeutic areas just yet, but expects to home in on some within the next 6 to 12 months, Daniel said.

“At the moment, we’re playing out capability to make certain it is robust and delivers all the potential we think it might,” he said. A recent study out of Cravatt’s lab showed the tech is now able to tag residues of the protein lysine, as well as cystine residues, which broadens even further the tech’s capability to annotate the proteome.

If Vividion can pull it off, its technology could play a role in advance targeting capability, not just in the company's internal programs, but across the industry. Several corporate partners are courting the biotech, and Vividion is “quite optimistic” about its ability to grow one of them into a strategic partnership to extend its technology.

In the near term, the biotech has built out its scientific advisory board, moved into a new space and is hiring aggressively to fulfill the obligations of the strategic partnership.

Investors: Arch Venture Partners, Cardinal Partners, Versant Ventures