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Iksuda Aims For Best-In-Class Cancer ADCs With Toolbox Approach To Technology

by Ayisha Sharma

Emerging Company Profile: While the UK biotech boasts a promising in-house platform technology, it believes a less restrictive approach to R&D could help it develop superior antibody-drug conjugates for cancer.

Iksuda Therapeutics is on mission to design and develop more securely conjugated and efficacious antibody-drug conjugates (ADCs) for the treatment of cancers and is taking a liberated approach to using technology.

The UK firm's story goes back to 2007 when investor IP Group founded a company called Glythera with two platforms focused respectively on half-life extension and conjugation technology (PermaLink). From 2007 through to 2011, Glythera was "very much focused on chemistry-driven invention but without much biological application," Iksuda CEO David Simpson told *Scrip*.

Key Takeaways:

- Iksuda's PermaLink technology can design ADCs insusceptible to drug de-conjugation.
- It has two lead assets targeting CD19 and HER2, respectively, in Phase I development.
- The firm is in the midst of a minimum \$70m series B raise to help reach proof-of-concept.

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At the time, Simpson had just exited his previous role leading biosimilar programs at *Actavis Generics* (later acquired by *Allergan AG*) and was asked to look at Glythera's platforms and formulate a new strategy going forward. "It was quite clear that the PermaLink platform – which

was treated as almost secondary in the company – could be taken forward to create significant value for patients,” the CEO said.

PermaLink utilizes cysteine-specific, vinyl pyridine-based chemistry to design ADCs with inherent conjugation stability, rendering them insusceptible to drug de-conjugation. Preclinical *in vivo* studies show PermaLink-based ADCs have improved tolerability and tumor response.

Simpson joined Glythera as chief operating officer in 2012 before switching roles to CEO two years later. In 2018, the firm changed its name to Iksuda, which is derived from the Sumerian word for “all conquering” and reflects its current focus on overcoming conjugation instability to create the next generation of ADCs. Then came a \$47m financing round which closed in 2021.

“We don’t want to develop technology-driven ADCs because that’s been done before; we want to develop the *best* ADCs we can and that requires a toolbox approach to technology,” Simpson explained. “So today, while we own some of our platforms – including conjugation and payload technologies – we’re pretty agnostic to what we use to create our drugs.”

Iksuda’s lead asset IKS03, which targets CD19, is a good example of this. The drug was designed using the ConjuALL and Prodrug PBD platforms developed by Korean firm and partner [LegoChem Biosciences, Inc.](#) IKS03 recently entered a Phase I dose-escalation and -expansion trial for advanced B-cell non-Hodgkin’s lymphoma (NHL).

The trial is expected to recruit 140 subjects across the US, Australia and Canada, according to ClinicalTrials.gov, with the first patient to be dosed this month. “We’re going with the classic three-plus-three trial design across all the jurisdictions,” Simpson said. “We will start in the US and build that program out for US approval and then move into Canada, Europe and probably Australia.”

Notably, Iksuda is in the midst of a minimum \$70m series B raise designed to extend its runway by another two years to enable Phase Ib proof-of-concept for both IKS03 and its other lead program, IKS014. The HER2-targeting program was in-licensed from LegoChem and Iksuda has worldwide rights to it, save for in China, where [Shanghai Fosun Pharmaceutical \(Group\) Co., Ltd.](#) is taking the reins and preparing for Phase III development.

“Fosun’s Phase II data looks very good by comparison to Enhertu...so this is a great de-risked opportunity for us,” the CEO explained. Iksuda is sponsoring a Phase I trial of IKS014 in HER2+ solid tumors that is expected to enroll 165 subjects in Australia according to ClinicalTrials.gov.

“We’re using Fosun’s drug product to open up early in Australia and then will backtrack to the US, EU and Canada with the understanding that there will be additional CMC work required,” Simpson noted.

Partnering For Global Success

Earlier in the pipeline, Iksuda has three programs in active development, including an asset targeting FOLR1 at the preclinical stage and two other discovery-stage programs with undisclosed targets.

As for long-term development and commercialization strategy, “our preference would be to partner for global success,” the CEO said, adding big pharma or ambitious biotech firms would be the preferred contenders. “We’re all here to develop differentiated therapies for patient benefit and we want somebody to be able to take those forward from us.”