

# Lixte's Big Bet: Making Other Cancer Drugs Work Harder

written by Tracy Hughes | December 9, 2025

[Lixte Biotechnology Holdings, Inc.](#) (Nasdaq: LIXT) is a Nasdaq-listed biotech with an unusually focused story: one main drug, LB-100, and one big idea—**don't replace existing cancer treatments, make them work harder**. With a market value of roughly US\$25–27 million and only a few million shares outstanding, the scientific ambition is worthy of review.

At the center of it all is LB-100, a first-in-class inhibitor of an enzyme called PP2A (protein phosphatase 2A). PP2A is one of the cell's master "off switches," helping keep growth signals in check and coordinating DNA repair. **Lixte's premise is straightforward in concept: if you temporarily turn that off switch off in cancer cells, you can push them into overdrive, make them less able to fix the damage done by chemotherapy or radiation, and at the same time make them more visible to the immune system.** The company's own materials describe LB-100 as stimulating cancer-cell proliferation while inhibiting DNA repair, which sounds counterintuitive but is exactly what you want if another therapy is waiting to deliver the knockout punch.

**On the immunotherapy side, the same drug is designed to create more "noise" for the immune system to hear.** By interfering with RNA splicing and PP2A-controlled signaling, LB-100 promotes the production of abnormal proteins—neoantigens—and cytokines, and enhances T-cell proliferation. In plainer English, it tries to turn a "cold" tumor that the immune system mostly ignores into a "hot" one that looks obviously foreign to immune cells. Lixte likes to call this broader concept "activation lethality":

activating growth and stress pathways so aggressively that the cancer cell essentially burns itself out, while immunotherapy and chemotherapy exploit that moment of weakness.

The pipeline is compact and easy to follow. Proof-of-concept trials are under way in ovarian clear-cell carcinoma, metastatic microsatellite-stable (MSI-low) colon cancer and advanced soft-tissue sarcomas, all settings where conventional options are poor. In ovarian clear-cell carcinoma, LB-100 is being combined with GSK's PD-1 inhibitor dostarlimab in a Phase 2 trial run by MD Anderson and Northwestern University. In metastatic MSI-low colon cancer, the company is testing LB-100 plus dostarlimab at the Netherlands Cancer Institute, with support from F. Hoffmann-La Roche ([LIXTE Programs](#)). Behind those clinical efforts sits a growing stack of preclinical and translational data, including a Nature-linked observation that tumors with inactivating PP2A mutations respond better to checkpoint inhibitors—human evidence that dialling down PP2A can, at least in some contexts, make immunotherapy work better.

The last 90–120 days have added a second act to the story. In late November, Lixte closed the [acquisition](#) of Liora Technologies Europe Ltd., whose LiGHT System is an electronically controlled proton-therapy platform installed at the UK's Daresbury Laboratory within the Science and Technology Facilities Council complex, a site that has seen more than US\$300 million invested in the technology. The plan, as CEO Geordan Pursglove describes it, is to use that platform to build a proton-therapy “center of excellence” and, over time, move toward a recurring-revenue model by jointly operating treatment centers rather than simply selling equipment ([LIXTE Proton-Therapy](#)). Strategically, that nudges Lixte from a one-drug biotech into a broader oncology platform straddling drugs and devices.

October's Q4 priorities [press release](#) made that shift explicit. The company reaffirmed LB-100 as its lead value driver while telling investors it is in advanced negotiations on acquisitions of "complementary oncology assets" and is investing in quality, CMC and regulatory infrastructure to be able to integrate whatever it buys. In other words, Lixte is trying to build a multi-asset oncology franchise off a PP2A beachhead, not remain a single-asset option on one mechanism.

Unusually for a company this small, treasury management has also become part of the narrative. In August, the board updated its treasury policy to allow up to 50% of its reserves to be held in cryptocurrencies, explicitly framing that as a hedge and a potential source of returns. By September, Lixte had actually [executed](#) on that policy, purchasing 10.5 bitcoin and 300 ether for about US\$2.6 million—roughly 43.6% of its treasury at the time—with the board authorizing an allocation up to 50%. For a US\$25-million oncology issuer, that is a bold choice: some investors will see it as forward-leaning balance-sheet management, others as an unnecessary layer of volatility on top of already substantial drug-development risk.

The leadership bench helps explain both the deal-making and the crypto experiment. Geordan Pursglove, now Chairman, President and Chief Executive Officer, is not a lab-coat CEO. His background is in mergers and acquisitions, capital markets and operational scaling across sectors including technology, logistics, customer experience, sports and marketing. That toolkit has been on display in 2025: Lixte completed two financings totaling US\$6.5 million, re-established its scientific advisory committee, and received a Nasdaq Hearings Panel letter confirming it had regained compliance with Nasdaq's "Equity Rule" by lifting shareholders' equity above the US\$2.5 million minimum for continued listing. In a market where many micro-cap biotechs quietly slip off the major exchanges, simply

hanging on to the Nasdaq listing is a non-trivial achievement.

He is flanked by a management and governance team that looks more like a crossover investor syndicate than a typical one-asset biotech. Chief Scientific Officer Bas van der Baan spent more than 20 years in oncology and diagnostics, including senior roles at precision-oncology firm Agendia, where he helped drive clinical trials from design to commercialization. CFO Peter Stazzone brings 25 years of finance and accounting experience, including CFO roles at multiple companies and board-level audit work at Beyond Commerce, backed by an MBA in finance and CPA credentials. On the board, alternative-investments veteran Jason Sawyer, addiction-treatment CEO and CFO Lourdes Felix, and technology operator and former Microsoft and Starbucks executive Guy Primus round out a group that has collectively raised and deployed hundreds of millions of dollars across sectors. Overseeing the science from the outside is a high-caliber advisory committee chaired by Professor René Bernards, a leading figure in molecular carcinogenesis from the Netherlands Cancer Institute, alongside senior clinicians from City of Hope and Taipei Medical University.

For now, Lixte Biotechnology Holdings, Inc. (Nasdaq: LIXT) remains an early-stage oncology platform with no approved products and a balance sheet that mixes traditional cash reserves with a material allocation to bitcoin and ether. The core bet, if one steps back from the noise, is that a first-in-class PP2A inhibitor that makes other cancer drugs work better—combined with a foothold in proton therapy and a deliberately more adventurous capital-markets posture—can ultimately support a very different company than the one we see today. Those who want to dig into the mechanism, the clinical trials or the Liora proton-therapy acquisition can find more information at [lixte.com](http://lixte.com).

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