UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 6-K

Report of Foreign Private Issuer
Pursuant to Rule 13a-16 or 15d-16
under the Securities Exchange Act of 1934

For the month of: August 2025

Commission file number: 001-36578

ENLIVEX THERAPEUTICS LTD.
(Translation of registrant's name into English)

14 Einstein Street, Nes Ziona, Israel 7403618
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F ☒ Form 40-F ☐

On August 14, 2025, Enlivex Therapeutics Ltd., a company organized under the laws of the State of Israel, issued a press release announcing that it will host a webinar on Monday, August 18, 2025, at 8:00 AM Eastern Time to present and discuss 3-month topline results from the Phase IIa stage of its Phase I/IIa ENX-CL-05-001 trial, a double-blind, randomized, placebo-controlled multi-centered study evaluating Allocetra™ in patients with moderate-to-severe knee osteoarthritis. A copy of such press release is furnished as Exhibit 99.1 to this Report on Form 6-K and incorporated herein by reference.

Exhibit No.	
99.1	Press Release issued by Enlivex Therapeutics Ltd. on August 14, 2025.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Enlivex Therapeutics Ltd.
(Registrant)

By: /s/ Oren Hershkovitz
Name: Oren Hershkovitz
Title: Chief Executive Officer

Date: August 14, 2025

Enlivex to Present 3-Month Topline Data from Phase IIa Moderate/Severe Knee Osteoarthritis Trial on August 18 Webinar

Webinar to Review Results from Multi-Center, Randomized, Double-Blind, Placebo-Controlled Study Evaluating Allocetra™ in Patients with Moderate to Severe Knee Osteoarthritis

Nes-Ziona, Israel, August 14, 2025 (GLOBE NEWSWIRE) -- Enlivex Therapeutics Ltd. (Nasdaq: ENLV, the "Company"), a clinical-stage macrophage reprogramming immunotherapy company, today announced it will host a webinar on Monday, August 18, 2025, at 8:00 AM Eastern Time to present and discuss 3-month topline results from the Phase IIa stage of its Phase I/IIa ENX-CL-05-001 trial, a double-blind, randomized, placebo-controlled multi-centered study.

The webinar will feature a detailed analysis of 3-month topline data from the Phase IIa stage of ENX-CL-05-001, a multi-center, two-stage Phase I/II trial evaluating Allocetra™ in patients with moderate-to-severe knee osteoarthritis.

Register now to reserve your spot for the webinar: https://www.redchip.com/webinar/ENLV/87053863717

Osteoarthritis, the most common form of arthritis, affects more than 32.5 million Americans and more than 300 million people worldwide; symptomatic knee osteoarthritis is especially prevalent and disabling, with 40% of men and 47% of women developing it in their lifetimes. The first stage of the trial, a Phase I open-label dose-escalation study, was completed to evaluate safety and tolerability and to determine optimal dosing.

The ongoing Phase IIa stage is a double-blind, randomized, placebo-controlled trial, assessing both safety and efficacy, with endpoints measuring joint pain and function versus placebo at 3, 6, and 12 months post-injection. An interim analysis, conducted by an independent third party, was designed to evaluate the potential benefits of expanding enrollment from 130 to 180 patients and to identify possible responder sub-populations. To date, 134 patients have completed the 3-month follow-up period, the trial's primary timepoint for measuring key endpoints.

ABOUT ENLIVEX

Enlivex is a clinical stage macrophage reprogramming immunotherapy company developing Allocetra™, a universal, off-the-shelf cell therapy designed to reprogram macrophages into their homeostatic state. Resetting non-homeostatic macrophages into their homeostatic state is critical for immune system rebalancing and resolution of life-threatening and life debilitating conditions. For more information, visit https://enlivex.com/.

Safe Harbor Statement: This press release contains forward-looking statements, which may be identified by words such as "expects," "plans," "projects," "will," "may," "anticipates," "believes," "should," "would," "could," "intends," "estimates," "suggests," "target," "has the potential to" and other words of similar meaning, including statements regarding expected cash balances, expected clinical trial results, market opportunities for the results of current clinical studies and preclinical experiments, the effectiveness of, and market opportunities for, ALLOCETRA™ programs. All such forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Investors are cautioned that forward-looking statements involve risks and uncertainties that may affect Enlivex's business and prospects, including the risks that Enlivex may not succeed in generating any revenues or developing any commercial products; that the products in development may fail, may not achieve the expected results or effectiveness and/or may not generate data that would support the approval or marketing of these products for the indications being studied or for other indications; that ongoing studies may not continue to show substantial or any activity; and other risks and uncertainties that may cause results to differ materially from those set forth in the forward-looking statements. The results of clinical trials in humans may produce results that differ significantly from the results of clinical and other trials in animals. The results of early-stage trials may differ significantly from the results of more developed, later-stage trials. The development of any products using the ALLOCETRA™ product line could also be affected by a number of other factors, including unexpected safety, efficacy or manufacturing issues, additional time requirements for data analyses and decision making, the impact of pharmaceutical industry regulation, the impact of competitive products and pricing and the impact of patents and other proprietary rights held by competitors and other third parties. In addition to the risk factors described above, investors should consider the economic, competitive, governmental, technological and other factors discussed in Enlivex's filings with the Securities and Exchange Commission, including in the Company's most recent Annual Report on Form 20-F filed with the Securities and Exchange Commission. The forward-looking statements contained in this press release speak only as of the date the statements were made, and we do not undertake any obligation to update forward-looking statements, except as required under applicable law.

ENLIVEX CONTACT

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