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 November 2025

001-36203 (Commission File Number)

CAN-FITE BIOPHARMA LTD.

(Exact name of Registrant as specified in its charter)

26 Ben Gurion Street Ramat Gan 5257346 Israel (Address of principal executive offices)

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

Form 20-F ⊠ Form 40-F □

The first paragraph of the press release attached hereto as Exhibit 99.1 is hereby incorporated by reference into the registrant's Registration Statements on Form S-8 (File Nos. 333-227753, 333-271384 and 333-278525) and Form F-3 (File Nos. 333-236064, 333-274316, 333-262055, 333-276000 and 333-281872), to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.

On November 18, 2025, Can-Fite BioPharma Ltd. issued a press release entitled "Can-Fite: 9-Year Survival with Complete Cure in an Advanced Liver Cancer Patient Treated with Namodenoson". A copy of this press release is furnished herewith as Exhibit 99.1.

EXHIBIT INDEX

Exhibit No. Description
99.1 Press Release dated November 18, 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.

Date: November 18, 2025 By: /s/ Motti Farbstein

Motti Farbstein Chief Executive Officer and Chief Financial Officer

Can-Fite: 9-Year Survival with Complete Cure in an Advanced Liver Cancer Patient Treated with Namodenoson

Pivotal Phase III liver cancer study enrolling in Europe and Israel

RAMAT GAN, Israel, November 18, 2025 -- Can-Fite BioPharma Ltd. (NYSE American: CANF) (TASE: CANF), a biotechnology company advancing a pipeline of proprietary small molecule drugs targeting oncological and inflammatory diseases, announced today that a patient treated with Namodenoson has reached an overall survival of 9 years to date with complete response to treatment.

The patient, who suffered from advanced liver cancer, was enrolled in Can-Fite's completed Phase II study and continues to be treated with Namodenoson through a compassionate use program. Nine years following treatment, the patient remains cancer-free and meets the definition of a complete responder based on the disappearance of ascites, normal liver function, and good quality of life.

Can-Fite is currently enrolling patients in Israel, Europe, and the U.S. for a pivotal Phase III clinical study of Namodenoson for patients with advanced hepatocellular carcinoma (HCC), the common form of liver cancer, as a 2nd or 3rd line treatment. The study protocol has been agreed upon with the U.S. Food and Drug Administration (FDA) and European Medicines Agency (EMA). Namodenoson has Orphan Drug status with both the FDA and EMA, as well as Fast Track Status with the FDA for the treatment of HCC. A compassionate use program has been ongoing in Israel and Romania.

"With Namodenoson's potent anti-cancer activity, along with its excellent tolerability, we aim to deliver longer survival for patients and hope to see outcomes that mirror the exceptional 9 year response achieved by the long-treated patient from our prior Phase II study. Namodenoson's highly selective action against tumor cells, combined with its protection of healthy liver tissue, has the potential to make our Phase III trial especially promising," stated Prof. Pnina Fishman, Can-Fite CSO & Chairperson.

According to the American Cancer Society, liver cancer accounts for more than 700,000 deaths globally each year. HCC is aggressive with poor survival rates. As new drugs that effectively and safely treat HCC are developed and approved, the market for HCC treatments is estimated by Delveinsight to reach \$6.1 billion by 2027 for the G8 countries.

About Namodenoson

Namodenoson is a small orally bioavailable drug that binds with high affinity and selectivity to the A3 adenosine receptor (A3AR). Namodenoson is currently being evaluated in a pivotal Phase III trial for advanced liver cancer, a Phase IIb trial for the treatment of Metabolic Dysfunction-associated Steatohepatitis (MASH), and in a Phase IIa study in pancreatic cancer. A3AR is highly expressed in diseased cells whereas low expression is found in normal cells. This differential expression may be one of the important factors that accounts for the excellent safety profile of the drug.

About Can-Fite BioPharma Ltd.

Can-Fite BioPharma Ltd. (NYSE American: CANF) (TASE: CANF) is an advanced clinical stage drug development Company with a platform technology that is designed to address multi-billion-dollar markets in the treatment of cancer, liver, and inflammatory disease. The Company's lead drug candidate, Piclidenoson reported topline results in a Phase III trial for psoriasis and commenced a pivotal Phase III trial. Can-Fite's liver drug, Namodenoson, is being evaluated in a Phase III trial for hepatocellular carcinoma (HCC), a Phase IIb trial for the treatment of MASH, and in a Phase IIa study in pancreatic cancer. Namodenoson has been granted Orphan Drug Designation in the U.S. and Europe and Fast Track Designation as a second line treatment for HCC by the U.S. Food and Drug Administration. Namodenoson has also shown proof of concept to potentially treat other cancers including colon, prostate, and melanoma. CF602, the Company's third drug candidate, has shown efficacy in the treatment of erectile dysfunction. These drugs have an excellent safety profile with experience in over 1,600 patients in clinical studies to date. For more information please visit: https://www.canfite.com/.

Forward-Looking Statements

This press release may contain forward-looking statements, about Can-Fite's expectations, beliefs or intentions regarding, among other things, its product development efforts, business, financial condition, results of operations, strategies or prospects. All statements in this communication, other than those relating to historical facts, are "forward looking statements". Forward-looking statements can be identified by the use of forward-looking words such as "believe," "expect," "intend," "plan," "may," "should" or "anticipate" or their negatives or other variations of these words or other comparable words or by the fact that these statements do not relate strictly to historical or current matters. Forward-looking statements relate to anticipated or expected events, activities, trends or results as of the date they are made. Because forward-looking statements relate to matters that have not yet occurred, these statements are inherently subject to known and unknown risks, uncertainties and other factors that may cause Can-Fite's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Important factors that could cause actual results, performance or achievements to differ materially from those anticipated in these forward-looking statements include, among other things, our history of losses and needs for additional capital to fund our operations and our inability to obtain additional capital on acceptable terms, or at all; uncertainties of cash flows and inability to meet working capital needs; the initiation, timing, progress and results of our preclinical studies, clinical trials and other product candidate development efforts; our ability to advance our product candidates into clinical trials or to successfully complete our preclinical studies or clinical trials; our receipt of regulatory approvals for our product candidates, and the timing of other regulatory filings and approvals; the clinical development, commercialization and market acceptance of our product candidates; our ability to establish and maintain strategic partnerships and other corporate collaborations; the implementation of our business model and strategic plans for our business and product candidates; the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and our ability to operate our business without infringing the intellectual property rights of others; competitive companies, technologies and our industry; risks related to any resurgence of the COVID-19 pandemic and the war between Israel and Hamas; risks related to not satisfying the continued listing requirements of NYSE American; and statements as to the impact of the political and security situation in Israel on our business. More information on these risks, uncertainties and other factors is included from time to time in the "Risk Factors" section of Can-Fite's Annual Report on Form 20-F filed with the SEC on March 28, 2024 and other public reports filed with the SEC and in its periodic filings with the TASE. Existing and prospective investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. Can-Fite undertakes no obligation to publicly update or review any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by any applicable securities laws.

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