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
of the Securities Exchange Act of 1934

For the month of July 2025
Commission File Number: 001-37643

PURPLE BIOTECH LTD.
(Translation of registrant's name into English)

4 Oppenheimer Street, Science Park, Rehovot 7670104, 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 ☐

On July 23, 2025, Purple Biotech Ltd. (the "**Company**" or the "**Registrant**") issued a press release "**Purple Biotech CEO Issues Letter to Shareholders Highlighting Pipeline Progress and Clinical Milestones Achieved in First Half of 2025"**, which is attached hereto as Exhibit 99.1.

Exhibit	
99.1	Press Release

Incorporation by Reference

This Report on Form 6-K, including all exhibits attached hereto, is hereby incorporated by reference into each of the Registrant's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on May 20, 2016 (Registration file number 333-211478), the Registrant's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on June 6, 2017 (Registration file number 333-218538), the Registrant's Registration Statement on Form F-3, as amended, originally filed with the Securities and Exchange Commission on July 16, 2018 (Registration file number 333-226195), the Registrant's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on March 28, 2019 (Registration file number 333-230584), the Registrant's Registration Statement on Form F-3 filed with the Securities and Exchange Commission on September 16, 2019 (Registration file number 333-233795), the Registrant's Registration Statement on Form F-1 filed with the Securities and Exchange Commission on December 27, 2019 (Registration file number 333-235729), the Registrant's Registration Statement on Form F-3 filed with the Securities and Exchange Commission on May 13, 2020 (Registration file number 333-238229), the Registrant's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on May 18, 2020 (Registration file number 333-238481), each of the Registrant's Registration Statements on Form F-3 filed with the Securities and Exchange Commission on July 10, 2020 (Registration file numbers 333-239807 and 333-233793), the Registrant's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on April 4, 2022 (Registration file number 333-264107) and the Registrant's Registration Statement on Form F-3 filed with the Securities and Exchange Commission on March 23, 2023 (Registration file number 333-270769), the Registrant's Registration Statement on Form F-3, as amended, originally filed with the Securities and Exchange Commission on December 8, 2022 (Registration file number 333-268710), the Registrant's Registration Statement on Form F-1, as amended, originally filed with the Securities and Exchange Commission on October 30, 2023 (Registration file number 333-275216) and the Registrant's Registration Statement on Form F-1, filed with the Securities and Exchange Commission on July 22, 2024 (Registration file number 333-280947), 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.

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.

July 23, 2025

PURPLE BIOTECH LTD.

By: */s/ Gil Efron*
Gil Efron
Chief Executive Officer

Purple Biotech CEO Issues Letter to Shareholders Highlighting Pipeline Progress and Clinical Milestones Achieved in First Half of 2025

REHOVOT, Israel, July 23, 2025 (GLOBE NEWSWIRE) -- Purple Biotech Ltd. ("Purple Biotech" or "the Company") (NASDAQ/TASE: PPBT), a clinical-stage company developing first-in-class therapies that seek to overcome tumor immune evasion and drug resistance, today issued the following letter to shareholders from Chief Executive Officer Gil Efron, highlighting the Company's scientific progress, operational execution, and strategic milestones during the first half of 2025.

Dear Shareholders,

I am pleased to report that the first half of 2025 has been marked by meaningful scientific advancements across all of our core programs, prudent financial management, and continued investor support. Despite a challenging market environment, our team remained focused on delivering value-creating data and positioning Purple Biotech for anticipated upcoming catalysts.

2025 First Half Highlights

CM24 (α-CEACAM1 monoclonal antibody)

- Our Phase 2 dataset demonstrated strong objective response rates (ORR) in biomarker-enriched subgroups of second line PDAC patients, as outlined below. These results suggest compelling efficacy signals. Importantly, these findings reinforce the potentially significant role of our identified biomarkers in guiding future patient selection and clinical trial design.
  - ORR for the intent-to-treat (ITT) group: 25% versus 7% in control group
  - ORR in biomarker-enriched subgroups: 37.5% (with serum or tumor CEACAM1 levels) and 31% (with serum CEACAM1 or myeloperoxidase (MPO) levels) versus 0% in control group.
- Completed final analysis of our Phase 2 study in second-line PDAC and presented results at AACR 2025:
  - Progression-free survival (PFS): hazard ratio (HR)=0.75 in the ITT group; biomarker-enriched subgroups HR=0.22 and 0.39
  - Overall survival (OS): HR=0.81 in the ITT group; biomarker-enriched subgroups HR=0.05 and 0.28

  We believe that these results support the advancement of a future biomarker-driven Phase 2b study, with the potential for improved outcomes.

CAPTN-3 Tri-Specific Antibody Platform

- Presented comprehensive *in vivo* and *ex vivo* data at EACR 2025, highlighting the synergistic activity of the platform's masked CD3, NKG2A, and tumor-associated antigen arms.
- Novel capping technology demonstrated potential to enhance safety and potency.
- Platform was spotlighted by Dr. Amir Horowitz at ASGCT 2025 for its approach to targeting the HLA-E/NKG2A axis to selectively activate NK and CD8+ T cells, potentially addressing treatment resistance.

NT219 (IRS1/2 degrader & STAT3 blocker)

- Initiated a Phase 2 combination study with PD-1 or EGFR inhibitors, in collaboration with the University of Colorado
- Biomarker insights (pIGF1R, pSTAT3) from the Phase 1 trial were presented at AACR 2025.

Upcoming Catalysts

- Plan to advance CM24 into a biomarker-driven Phase 2b study in second-line PDAC targeting approximately 165 patients
- Targeting investigational new drug (IND) application submission to the U.S. Food and Drug Administration for the first development candidate from our novel CAPTN-3 platform in 2026, with plans to initiate first-in-human trials following IND approval.
- Expect to generate interim NT219 Phase 2 data in 2026, alongside new preclinical data for next-generation assets.

We maintained disciplined cash management in the first half of 2025, and currently expect our financial runway to extend into mid-2026. Additional funding will be required to support the execution of future clinical studies.

I would like to thank our dedicated employees, collaborators, and investors for their ongoing support. We remain committed to executing our strategy and driving meaningful clinical and shareholder value.

Sincerely,

Gil Efron

Chief Executive Officer

Purple Biotech Ltd.

About Purple Biotech

Purple Biotech Ltd. (NASDAQ/TASE: PPBT) is a clinical-stage company developing first-in-class therapies that seek to overcome tumor immune evasion and drug resistance. The Company's oncology pipeline includes CM24, NT219, and CAPTN-3. CM24 is a humanized monoclonal antibody that blocks CEACAM1, which supports tumor immune evasion and survival through multiple pathways. CEACAM1 on tumor cells, immune cells and neutrophil extracellular traps is a novel target for the treatment of multiple cancer indications. As proof of concept of these novel pathways, the Company completed a Phase 2 study for the treatment of pancreatic ductal adenocarcinoma (PDAC) with CM24 as a combination therapy with the anti-PD-1 checkpoint inhibitor nivolumab and chemotherapy, demonstrating clear and consistent improvement across all efficacy endpoints and the identification of two potential serum biomarkers and other potential tissue biomarkers. NT219 is a dual inhibitor, novel small molecule that simultaneously targets IRS1/2 and STAT3. A Phase 1 dose escalation study was concluded as a monotherapy and in combination with cetuximab, in which NT219 demonstrated anti-tumor activity in combination with cetuximab in second-line patients with recurrent and/or metastatic squamous cell carcinoma of the head and neck (R/M SCCHN). A Phase 2 study in collaboration with the University of Colorado, to treat R/M SCCHN patients with NT219 in combination with cetuximab or pembrolizumab was initiated. The Company is also advancing CAPTN-3, a preclinical platform of conditionally activated tri-specific antibodies, which engage both T cells and NK cells to induce a strong, localized immune response within the tumor microenvironment. The cleavable capping technology confines the compound's therapeutic activity to the local tumor microenvironment, thereby potentially increasing the anticipated therapeutic window in patients. The third arm specifically targets the Tumor Associated Antigen (TAA). The technology presents a novel mechanism of action by unleashing both innate and adaptive immune systems to mount an optimal anti-tumoral immune response. IM1240 is the first tri-specific antibody in development that targets the 5T4 antigen, which is expressed in a variety of solid tumors and is associated with advanced disease, increased invasiveness, and poor clinical outcomes. The Company's corporate headquarters is located in Rehovot, Israel. For more information, please visit https://purple-biotech.com/.

Forward-Looking Statements and Safe Harbor Statement

Certain statements in this press release that are forward-looking and not statements of historical fact are forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements include, but are not limited to, statements that are not statements of historical fact, and may be identified by words such as "believe", "expect", "intend", "plan", "may", "should", "could", "might", "seek", "target", "will", "project", "forecast", "continue" or "anticipate" or their negatives or variations of these words or other comparable words or by the fact that these statements do not relate strictly to historical matters. You should not place undue reliance on these forward-looking statements, which are not guarantees of future performance. Forward-looking statements reflect our current views, expectations, beliefs or intentions with respect to future events, and are subject to a number of assumptions, involve known and unknown risks, many of which are beyond our control, as well as uncertainties and other factors that may cause our actual results, performance or achievements to be significantly different from any future results, performance or achievements expressed or implied by the forward-looking statements. Important factors that could cause or contribute to such differences include, among others, risks relating to: the plans, strategies and objectives of management for future operations; product development for NT219, CM24 and IM1240; the process by which such early stage therapeutic candidates could potentially lead to an approved drug product is long and subject to highly significant risks, particularly with respect to a joint development collaboration; the fact that drug development and commercialization involves a lengthy and expensive process with uncertain outcomes; our ability to successfully develop and commercialize our pharmaceutical products; the expense, length, progress and results of any clinical trials; the impact of any changes in regulation and legislation that could affect the pharmaceutical industry; the difficulty in receiving the regulatory approvals necessary in order to commercialize our products; the difficulty of predicting actions of the U.S. Food and Drug Administration or any other applicable regulator of pharmaceutical products; the regulatory environment and changes in the health policies and regimes in the countries in which we operate; the uncertainty surrounding the actual market reception to our pharmaceutical products once cleared for marketing in a particular market; the introduction of competing products; patents obtained by competitors; dependence on the effectiveness of our patents and other protections for innovative products; our ability to obtain, maintain and defend issued patents; the commencement of any patent interference or infringement action against our patents, and our ability to prevail, obtain a favorable decision or recover damages in any such action; and the exposure to litigation, including patent litigation, and/or regulatory actions, and other factors that are discussed in our Annual Report on Form 20-F for the year ended December 31, 2024 and in our other filings with the U.S. Securities and Exchange Commission ("SEC"), including our cautionary discussion of risks and uncertainties under "Risk Factors" in our Registration Statements and Annual Reports. These are factors that we believe could cause our actual results to differ materially from expected results. Other factors besides those we have listed could also adversely affect us. Any forward-looking statement in this press release speaks only as of the date which it is made. We disclaim any intention or obligation to publicly update or revise any forward-looking statement or other information contained herein, whether as a result of new information, future events or otherwise, except as required by applicable law. You are advised, however, to consult any additional disclosures we make in our reports to the SEC, which are available on the SEC's website, https://www.sec.gov.

CONTACTS:

Company Contact:
IR@purple-biotech.com