# Purple Biotech Presents New Preclinical Data at EACR 2026 Highlighting IM1240's Anti-Tumor Activity, Favorable Safety and Pharmacokinetic Profile, and Broad Therapeutic Window

*Non-human primate (NHP) toxicology study validates the CAPTN-3 masking strategy, with IM1240 showing an 8-fold longer half-life, 16-fold greater exposure, and a markedly improved cytokine-release safety profile compared to the non-capped variant*

*IM1240 demonstrated anti-tumor activity across PD-1- and chemotherapy-resistant patient-derived tumor samples in head and neck, bladder, and lung cancers, with the NKG2A arm identified as a key contributor to this anti-tumor efficacy*

*IM1240 induced immune cell structures associated with effective anti-tumor responses and a favorable prognosis in patient-derived non-small cell lung cancer (NSCLC) explants*

REHOVOT, Israel, June 11, 2026 (GLOBE NEWSWIRE) -- Purple Biotech Ltd. ("Purple Biotech" or the “Company") (NASDAQ/TASE: PPBT), a clinical-stage oncology company developing a next-generation immunotherapy platform designed to maximize anti-cancer potency while minimizing toxicity, today announced the presentation of new preclinical data from its lead CAPTN-3 program, IM1240, at the European Association for Cancer Research (EACR) 2026 Annual Congress, being held June 8-11, 2026, in Budapest, Hungary.

A non-GLP toxicology study in NHPs validates the CAPTN-3 masking strategy and supports the planned advancement of IM1240 toward a first-in-human clinical study in 2027. Additionally, efficacy data in patient-derived samples from PD-1-resistant head and neck squamous cell carcinoma (HNSCC) metastatic lymph nodes, NSCLC and bladder cancer, generated in collaboration with the laboratory of Dr. Amir Horowitz at the Tisch Cancer Institute at the Icahn School of Medicine at Mount Sinai, highlight the essential role of the NKG2A arm in IM1240-mediated anti-tumor immunity and further strengthen CAPTN-3’s differentiation and clinical potential.

**Poster Title:** Toxicology study results in NHP validated improved PK and safety profile of CAPTN-3 masking design, revealing an extended therapeutic window
**Abstract:** EACR26-0695
**Session:** Immunotherapy
**Date:** Wednesday, June 10, 2026

**Summary of data presented at EACR 2026:**

- IM1240 induced apoptosis of PD-1-resistant patient-derived biopsies from six HNSCC metastatic lymph node samples and one enfortumab vedotin/pembrolizumab-resistant muscle-invasive bladder cancer sample, with both the CD3 and NKG2A functional arms required for full activity.

- In a PD-1/chemotherapy-resistant NSCLC patient-derived explant, IM1240 induced mature tertiary lymphoid structures (TLS) – immune cell organizations associated with effective anti-tumor immunity and favorable clinical prognosis – while increasing CD8 T cell and NK cell abundance and reducing regulatory T cells (Tregs) and tumor cells. These effects were not observed with IM1340, the NKG2A loss-of-function variant, underscoring the essential and differentiated contribution of the NKG2A arm.

- In a non-GLP dose-range finding toxicology study in NHPs, IM1240 demonstrated markedly superior pharmacokinetics (PK) compared to the non-capped variant IM1222, including an approximately 8-fold longer half-life and 16-fold greater systemic exposure. IM1240 showed dose-proportional PK with a broad therapeutic window, as systemic exposure associated with tumor regression in mouse models remained well below the tolerated levels in NHPs.

- The CAPTN-3 masking strategy effectively mitigated peripheral T-cell activation and prevented systemic cytokine release in NHPs, which is associated with one of the main safety challenges of T-cell engagers, cytokine release syndrome (CRS):

    - IM1240 induced minimal IL-6 and TNF-α at 10 mg/kg dose, whereas the non-capped IM1222 induced robust cytokine release at just 0.03 mg/kg – a more than 300-fold difference in the dose required to trigger cytokine release.

    - The IM1240 capping design also improved the PK profile by reducing the CD3-mediated antigen sink effect and incorporating human serum albumin to further extend half-life, as compared to the non-capped variant IM1222.

- IM1240 demonstrated ~14-fold slower clearance than active non-capped IM1222, supporting extended exposure and potential efficacy; rapid clearance of peripherally released non-capped IM1222 reduces systemic accumulation and lowers CRS risk and off-tumor toxicity.

“The preclinical data we are presenting at EACR 2026 demonstrate the full strength of the CAPTN-3 design. In NHPs, our masking strategy delivered markedly superior pharmacokinetics and an improved safety profile compared to the non-capped variant, establishing a broad therapeutic window that supports our planned path to the clinic.” said Dr. Hadas Reuveni, VP R&D of Purple Biotech. “In collaboration with Dr. Amir Horowitz from Mount Sinai, we explored IM1240’s activity and mechanism of action in patient-derived tumors from PD-1/SoC-resistant patients. Data generated in Dr. Horowitz’s lab demonstrated cancer cell apoptosis induced by IM1240 across multiple PD1-resistant biopsies from HNSCC metastatic LN and muscle-invasive bladder cancer, where functional NKG2A and CD3 arms were both required for full activity, highlighting the potential of IM1240 design for patients who progressed on previous line/s of treatment. Additionally, we present for the first time tissue profiling analyses of NSCLC patient-derived explants showing that IM1240 treatment - unlike the NKG2A loss-of-function variant - drives substantial immune remodeling, characterized by the formation of mature tertiary lymphoid structures (TLS), a hallmark of effective anti-tumor immunity and favorable prognosis, along with increased CD8 T and NK cell abundance and reduced Treg levels.. These immune changes correlate with robust anti-tumor activity and underscored the critical contribution of the NKG2A arm, and further support IM1240’s potential to reprogram the tumor microenvironment and deliver meaningful clinical benefit in immunotherapy-resistant tumors.”

**About Purple Biotech**

Purple Biotech Ltd. (NASDAQ/TASE: PPBT) is a clinical-stage company developing a next-generation immunotherapy platform designed to maximize anti-cancer potency while minimizing toxicity. The Company is focused on advancing its lead program, CAPTN-3 - a platform of masked tri-specific antibodies that simultaneously target tumors while engaging both T cells and NK cells. Capping technology confines immune activation to the tumor microenvironment, significantly expanding the therapeutic window compared to conventional T-cell engagers. The platform's lead candidate, IM1240, is advancing toward the clinic, and its second candidate, IM1305, is in preclinical development. The Company's pipeline also includes additional clinical-stage assets, for which further development is pending partnering or investment, including CM24, a CEACAM1-blocking antibody that demonstrated improved outcomes across all efficacy endpoints in a Phase 2 study for the treatment of pancreatic ductal adenocarcinoma, and NT219, a dual IRS1/2 and STAT3 inhibitor in a Phase 2 study for the treatment of recurrent and/or metastatic squamous cell carcinoma of the head and neck. The Company is headquartered in Rehovot, Israel. For additional information about the Company, 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 CAPTN-3; 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, 2025 as such factors may be updated from time to time 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 on 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.

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