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 2026

Commission File Number: **001-37384**

Lakefront Biotherapeutics
(Translation of registrant's name into English)

Schaliënhoevedreef 20T, 2800 Mechelen, Belgium
(Address of principal executive office)

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 [X] Form 40-F [ ]

The information contained in this Report on Form 6-K, including Exhibit 99.1, is hereby incorporated by reference into the Company's Registration Statements on Form S-8 (File Nos. 333-204567, 333-208697, 333-211834, 333-215783, 333- 218160, 333-225263, 333-231765, 333-249416, 333-260500, 333-268756, 333-275886, 333-283361, and 333-292050).

On November 4, 2026, the Registrant issued a press release, a copy of which is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

Exhibit 99.1. Press release dated November 4, 2026

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.

Lakefront Biotherapeutics
(Registrant)

Date: November 4, 2026

/s/ Ying Deng
Ying Deng
Authorized Officer

EXHIBIT 99.1

Lakefront Biotherapeutics Announces Poster Presentation at the 2026 American Society of Hematology Meeting

Gamgertamig data from ongoing Phase 1b studies suggest potential to retain remission after B cell reconstitution, maintained in the absence of background therapy for autoimmune cytopenias, consistent with an "immune reset"

Lakefront to host investor conference call on Monday, December 14 at 8 AM ET

Mechelen, Belgium; November 4, 2026, 15.01 CET – Lakefront Biotherapeutics NV (Euronext & NASDAQ: LKFT) today announced the acceptance of a poster presentation at the 2026 American Society of Hematology (ASH) Annual Meeting taking place on December 12-15 in New Orleans, LA.

"Prior to acquiring Ouro together with Gilead, we recognized gamgertamig's potential to change clinical practice for patients with chronic and refractory autoimmune cytopenias, based primarily on results from investigator-sponsored trials. It is exciting to explore the predictability of robust responses, and the potential for immune reset-type activity, in results from company-sponsored trials sponsored by both Lakefront and our China-based partner, Keymed," said Eric Hedrick, Chief Medical Officer of Lakefront. "We are looking forward to sharing updated data at ASH."

Presentation Details
Session Name: 311. Disorders of Platelet Number or Function: Clinical and Epidemiological: Poster II
Session Date: December 13, 2026
Session Time: 7:00-9:00 PM ET
Room: MCCNO - Hall F

Publication Number: 3008
Title: Initial global clinical experience with gamgertamig (CM336/OM336), a BCMAxCD3 T-cell engager, in relapsed/refractory autoimmune cytopenias (AICs) in two parallel ongoing studies (NCT07083960, NCT07175493)
Presenter: Phil Choi, MBBS, PhD

Preliminary data suggest potential to retain remission after B cell reconstitution, maintained in the absence of background therapy for AIC, consistent with an "immune reset".

Abstract Highlights

Patients	33 patients with autoimmune cytopenias (AICs) received gamgertamig, of which ◦ 22 patients with immune thrombocytopenia (ITP) ◦ 11 with autoimmune hemolytic anemia (AIHA) (warm AIHA=9, cold agglutinin disease (CAD)=1, mixed AIHA=1)
Dosing	Data are reported across three dose cohorts. All patients received short course subcutaneous dosing over a maximum of three weeks
Median disease duration	• ITP cohorts: 8.4 years (range: 1.7-46.5) • AIHA cohorts: 3.7 years (range: 1.5-26.5)
Responders	• ITP: 18/20 (90%) achieved response [platelet count ≥30 × 10^9/L and at least double from baseline]; ◦ 2/3 (67%), 4/5 (80%) and 12/12 (100%) patients in the low, mid, and high dose cohorts, respectively, ◦ with normalization of platelet count (≥150 × 10^9/L) observed in 17/18 (94%) responders • AIHA: All response-evaluable patients were in the mid and high dose cohorts and all achieved a response, defined as a ≥2 g/dL increase in hemoglobin from baseline: 6/6 (100%) and 3/3 (100%), respectively
Median time to response from first injection	• ITP: 11 days (range: 4-85) • AIHA: 22 days (range: 4-81)
Follow-up	• ITP: Among 20 response-evaluable patients, median follow-up was 141 days (range: 29-253) • AIHA: Among 9 response-evaluable patients with AIHA (wAIHA=7, CAD=1, mAIHA=1), median follow-up was 85 days (range: 57-198)
Durability of response	• ITP: Of the 18 responders, 15 (83%) had an ongoing response at the most recent follow-up • AIHA: Of the 9 responders, 8 (89%) had an ongoing response at the most recent follow-up.
Safety	• Grade 1 cytokine release syndrome (CRS) occurred in 6/33 patients (18%) • No Grade ≥2 CRS events were observed

	• No cases of immune effector cell-associated neurotoxicity syndrome (ICANS) or other neurotoxicity were observed • Infection was observed in 10/33 (30%) patients; most infections were Grade 1 or 2, all managed successfully.

Conference call
Lakefront will hold a conference call and webcast for investors following the day of presentation, on Monday, December 14 at 8:00 AM ET. To participate in the conference call, please register in advance using this link. Dial-in numbers will be provided upon registration. The conference call can be accessed 10 minutes prior to the start of the call by using the conference access information provided in the email received after registration, or by selecting the "*call me"* feature. The live webcast is available on https://lakefrontbio.com/events-presentations/ or via the following link. A replay will be available after the completion of the call in the Events & Presentations - Lakefront Biotherapeutics section of our website for a limited time.

Date & Time: Monday, December 14, 8:00 AM ET
Webcast link: Conference Registration
Dial-in: Toll Free: +1 844-543-0451

About Immune Thrombocytopenia (ITP)
Immune thrombocytopenia (ITP) is a rare, autoantibody-driven disease that results in the premature destruction of platelets, causing thrombocytopenia and an increased risk of bruising and bleeding. ITP affects approximately 120,000 people in the U.S. Beyond bleeding risk, people with chronic ITP often experience significant fatigue and reduced quality of life, along with side effects associated with long-term corticosteroid or immunosuppressive therapy. Despite currently available treatments, significant unmet need remains for therapies that provide safe and durable responses.

About Autoimmune Hemolytic Anemia (AIHA)
Autoimmune hemolytic anemia (AIHA) is a serious hematologic disease characterized by the production of autoantibodies that target and destroy red blood cells. AIHA affects an estimated 40,000 to 50,000 people in the U.S. Warm AIHA (wAIHA) is the most common form of AIHA, accounting for approximately 80% of cases, while cold agglutinin disease (CAD) is less prevalent. Common symptoms include fatigue, anemia, jaundice, splenomegaly, and, in severe cases, thromboembolism and cardiovascular complications. Despite recent advances in treatment, substantial unmet need remains for additional therapies that provide durable responses and improved long-term disease control.

About Gamgertamig
Gamgertamig is an investigational BCMAxCD3 bispecific T cell engager for the treatment of autoantibody-driven immune-mediated disease. Gamgertamig has been granted Orphan Drug Designation and Fast Track Designation by the U.S. FDA for certain autoimmune diseases. Gamgertamig is expected to enter registrational studies in 2027. Gamgertamig is in-licensed from Keymed Biosciences, which owns the rights to develop the program in Greater China.

About Lakefront Biotherapeutics
Lakefront Biotherapeutics is a biotechnology company dedicated to building a differentiated pipeline of medicines for patients with serious diseases in areas of high unmet need. The Company has established a clinical-stage portfolio in immunology and inflammation, anchored by gamgertamig, a potential first-in-class and best-in-class BCMAxCD3 T-cell engager for autoimmune diseases. Backed by deep deal-making expertise, operational flexibility, and a strong capital position, Lakefront identifies, acquires, and advances high-quality assets with clear potential to deliver meaningful patient impact and long-term shareholder value. For more information, visit https://www.lakefrontbio.com or follow us on LinkedIn or X.

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Forward-looking statements
This press release includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. These statements are often, but are not always, made through the use of words or phrases such as "anticipate," "expect," "plan," "estimate," "will," "continue," "aim," "intend," "future," "potential," "could," "indicate," "forward," "may," as well as similar expressions. Forward-looking statements contained in this press release include, but are not limited to, statements regarding Lakefront's plans to present at the ASH Annual Meeting; statements regarding the post-closing operations and benefits of the transaction with Gilead and Ouro; statements regarding the potential attributes and benefits of Lakefront's product candidates and partnered and licensed programs; and statements regarding gamgertamig's Phase 1/2 studies, including statements related to the expected timing, design and readouts of the gamgertamig studies and the expected benefits and potential of gamgertamig and BCMA-targeted T-cell engagers. Forward-looking statements involve known and unknown risks, uncertainties and other factors which might cause Lakefront's actual results to be materially different from those expressed or implied by such forward-looking statements. These risks, uncertainties and other factors include, without limitation, the risk that Lakefront will not be able to realize the benefits of Lakefront's transaction with Gilead, including with respect to Ouro; the risk that Lakefront will not be able to execute on Lakefront's currently contemplated business plan or strategy and/or will revise Lakefront's business plan or strategy; the risk that preliminary or interim clinical results may not be replicated in ongoing or subsequent clinical trials; the risk that ongoing and future clinical studies with Lakefront's product candidates, including gamgertamig and BCMA-targeted T-cell engagers, may not be completed in the currently envisaged timelines or at all; the inherent uncertainties associated with competitive developments, clinical trial and product development activities and regulatory approval requirements

(including that data from the ongoing and planned clinical research programs may not support registration or further development of gamgertamig due to safety, efficacy or other reasons); and the risk that Lakefront's estimations regarding its gamgertamig development programs and regarding the commercial potential of gamgertamig may be incorrect, as well as those risks and uncertainties identified in Lakefront's Annual Report on Form 20-F for the year ended December 31, 2025 filed with the U.S. Securities and Exchange Commission (SEC) and its subsequent filings with the SEC. All statements other than statements of historical fact are statements that could be deemed forward-looking statements. The forward-looking statements contained herein are based on management's current expectations and beliefs and speak only as of the date hereof, and Lakefront makes no commitment to update or publicly release any revisions to forward-looking statements in order to reflect new information or subsequent events, circumstances or changes in expectations. Further, Lakefront cannot assess the impact of each such factor on its business or the extent to which any factor, or combination of factors, may cause actual results to be materially different from those contained in any forward-looking statement.