
**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 September 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 ☒ 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 September 22, 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 September 22, 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: September 23, 2026

/s/ Ying Deng

Ying Deng
Authorized Officer

Acquisition of Own Shares

Mechelen, Belgium; September 22, 2026, 22.01 CET; regulated information

Within the framework of the repurchase program announced on June 9, 2026, Lakefront Biotherapeutics NV (Euronext & NASDAQ: LKFT) ("Lakefront") announces that between September 14, 2026 and September 18, 2026 it has repurchased 108,679 Lakefront shares via a discretionary mandate to an independent financial intermediary, as follows:

Date of purchase	Market/MTF	Number of shares	Average price paid (€)	Total (€)	Lowest price paid (€)	Highest price paid (€)
14/09/2026	XAMS	20,177	23.47	473,481.55	23.24	23.62
14/09/2026	CEUX	2,697	23.55	63,515.43	23.50	23.58
14/09/2026	AQEU	984	23.56	23,179.30	23.50	23.60
14/09/2026	TQEX	638	23.55	15,027.20	23.52	23.62
15/09/2026	XAMS	20,575	23.31	479,683.49	23.16	23.74
15/09/2026	CEUX	1,673	23.40	39,150.88	23.20	23.72
15/09/2026	AQEU	659	23.23	15,307.58	23.20	23.30
15/09/2026	TQEX	1,676	23.31	39,068.06	23.24	23.44
16/09/2026	XAMS	20,489	24.14	494,606.51	23.70	24.34
16/09/2026	CEUX	2,809	24.12	67,749.43	23.88	24.36
16/09/2026	AQEU	143	24.28	3,472.04	24.28	24.28
16/09/2026	TQEX	1,273	24.25	30,874.83	23.84	24.38
17/09/2026	XAMS	14,964	24.38	364,808.85	24.20	24.86
17/09/2026	CEUX	1,370	24.27	33,247.30	24.20	24.30
17/09/2026	AQEU	400	24.29	9,717.92	24.28	24.34
17/09/2026	TQEX	730	24.28	17,725.71	24.24	24.34
18/09/2026	XAMS	15,116	25.16	380,250.54	25.06	25.40
18/09/2026	CEUX	1,261	25.09	31,643.03	25.06	25.44
18/09/2026	AQEU	861	25.18	21,681.87	25.06	25.44
18/09/2026	TQEX	184	25.22	4,640.55	25.12	25.40
Total		108,679	24.00	2,608,832.08	23.16	25.44

As of market close on 18 September 2026, Lakefront holds 1,527,534 of its own ordinary shares.

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.

For further information, contact Lakefront Biotherapeutics:

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Forward-looking statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, all of which involve certain risks and uncertainties. These statements are often, but are not always, made through the use of words or phrases such as “believe,” “anticipate,” “expect,” “intend,” “plan,” “seek,” “upcoming,” “future,” “estimate,” “may,” “will,” “could,” “would,” “potential,” “forward,” “goal,” “next,” “continue,” “should,” “encouraging,” “aim,” “progress,” “remain,” “explore,” and “further,” as well as similar expressions. These statements include, but are not limited to, statements regarding Lakefront’s plans to repurchase its ordinary shares. Lakefront cautions the reader that forward-looking statements are based on our management’s current expectations and beliefs and are not guarantees of future performance. Forward-looking statements may involve known and unknown risks, uncertainties and other factors which might cause actual events, financial condition and liquidity, performance, or achievements, or the industry in which we operate, to be materially different from any

historic or future results, financial conditions, performance or achievements expressed or implied by such forward-looking statements. In addition, even if our results, performance, financial condition and liquidity, and the development of the industry in which Lakefront operates are consistent with such forward-looking statements, they may not be predictive of results or developments in future periods. Such risks include, but are not limited to, those risks and uncertainties that can be found in our filings and reports with the Securities and Exchange Commission (“SEC”), including in our most recent annual report on Form 20-F filed with the SEC and our subsequent filings and reports filed with the SEC. Given these risks and uncertainties, the reader is advised not to place any undue reliance on such forward-looking statements. In addition, even if the result of our operations, financial condition and liquidity, or the industry in which we operate, are consistent with such forward-looking statements, they may not be predictive of results, performance or achievements in future periods. These forward-looking statements speak only as of the date of publication of this release. We expressly disclaim any obligation to update any such forward-looking statements in this release to reflect any change in our expectations or any change in events, conditions or circumstances, unless specifically required by law or regulation.