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: December 2025 (Report No. 2)

Commission File Number: 001-40753

ICECURE MEDICAL LTD.
(Translation of registrant's name into English)

7 Ha'Eshel St., PO Box 3163
Caesarea, 3079504 Israel
(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

CONTENTS

On December 5, 2025, IceCure Medical Ltd. (the "Company") issued a press release titled "IceCure Receives Notice of Patent Allowance in China for a Novel Cryogen Flow Control to Optimize Patient Cryoablation Outcomes," a copy of which is furnished as Exhibit 99.1 with this Report of Foreign Private Issuer on Form 6-K.

The press release attached herewith as Exhibit 99.1 (excluding the third paragraph thereof) is incorporated by reference into the Company's Registration Statements on Form F-3 (File Nos. 333-258660, 333-267272 and 333-290046) and Form S-8 (Registration Nos. 333-270982, 333-264578, 333-262620 and 333-281587), filed with the Securities and Exchange Commission, to be a part thereof from the date on which this Report of Foreign Private Issuer on Form 6-K is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.

EXHIBIT INDEX

Exhibit No.	
99.1	Press release dated December 5, 2025 titled "IceCure Receives Notice of Patent Allowance in China for a Novel Cryogen Flow Control to Optimize Patient Cryoablation Outcomes".

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.

ICECURE MEDICAL LTD.

Date: December 5, 2025

By: /s/ Eyal Shamir
Name: Eyal Shamir
Title: Chief Executive Officer

Exhibit 99.1

IceCure Receives Notice of Patent Allowance in China for a Novel Cryogen Flow Control to Optimize Patient Cryoablation Outcomes

Cryogenic flow control enhances the efficacy and precision of cryoablation procedures

Robust IP portfolio becomes increasingly strategic as global interest in IceCure's platform and next-generation cryoablation technologies grows following ProSense®'s recent FDA marketing authorization in low-risk breast cancer

CAESAREA, Israel, December 5 2025 – IceCure Medical Ltd. (Nasdaq: ICCM) ("IceCure", "IceCure Medical" or the "Company"), developer of minimally-invasive cryoablation technology that destroys tumors by freezing as an option to surgical tumor removal, today announced it received a Notice of Allowance for a patent from the China National Intellectual Property Administration for its invention titled "Cryogen Flow Control" which relates to its next-generation XSense™ cryoablation system and probes.

A patent for this invention has been granted in Japan and is currently pending approval in the European Union, the U.S., and other major markets.

"We believe IceCure's commitment to technology innovation and our drive to make a significant impact on patient outcomes has resulted in our intellectual property portfolio in cryoablation reaching 55 patents granted and allowed across the globe," said Eyal Shamir, IceCure's Chief Executive Officer. "Our cryoablation systems and probes already have regulatory approval in China for indications including breast cancer, and we continue to innovate next-generation liquid nitrogen-based systems including XSense™ to further improve patient outcomes."

The notice of allowance for the patent addresses precise temperature control, which is crucial for efficacy and tissue safety in cryoablation procedures. Cryogenic flow control achieves this by utilizing sensor data to regulate the flow of cryogens, ensuring the desired temperature is reached and maintained at the distal tip of catheters and probes. This optimized cryogenic delivery enhances treatment effectiveness in cryoablation procedures. Advanced cryogen flow control systems may also offer functionalities, such as navigation and mapping support within the patient's anatomy, and be incorporated into a wide range of cryosurgical tools.

The ProSense® Cryoablation System is the first and only medical device to receive U.S. Food and Drug Administration ("FDA") marketing authorization for the local treatment of low-risk breast cancer with adjuvant endocrine therapy for women aged 70 and older, including patients who are not suitable for surgical alternatives for breast cancer treatment. A full list of benefits and risks can be found on the Company's website. XSense™ is the Company's next-generation cryoablation system.

About IceCure Medical

IceCure Medical (Nasdaq: ICCM) develops and markets advanced liquid-nitrogen-based cryoablation therapy systems for the destruction of tumors (benign and cancerous) by freezing, with the primary focus areas being breast, kidney, bone and lung cancer. Its minimally invasive technology is a safe and effective option to surgical tumor removal that is easily performed in a relatively short procedure. The Company's flagship ProSense® system is marketed and sold worldwide for the indications cleared and approved to date including in the U.S., Europe, and Asia.

Forward Looking Statement

This press release contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995 and other Federal securities laws. Words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates" and similar expressions or variations of such words are intended to identify forward-looking statements. For example, IceCure is using forward looking statements in this press release when it discusses: the pending approval of patents in the European Union, the United States and other major markets; its belief that commitment to technological innovation and its drive to make a significant impact on patient outcomes have contributed to the growth of its intellectual property portfolio; the expected benefits and performance of its next-generation XSense™ cryoablation system; its plans to continue innovating liquid nitrogen-based cryoablation technologies; the anticipated enhancement of treatment effectiveness and patient outcomes; and the potential future functionalities of cryogenic flow control systems across a wide range of cryosurgical tools. Historical results of scientific research and clinical and preclinical trials do not guarantee that the conclusions of future research or trials will suggest identical or even similar conclusions. Important factors that could cause actual results, developments and business decisions to differ materially from those anticipated in these forward-looking statements include, among others: the Company's planned level of revenues and capital expenditures; the Company's available cash and its ability to obtain additional funding; the Company's ability to market and sell its products; legal and regulatory developments in the United States and other countries; the Company's ability to maintain its relationships with suppliers, distributors and other partners; the Company's ability to maintain or protect the validity of its patents and other intellectual property; the Company's ability to expose and educate medical professionals about its products; political, economic and military instability in the Middle East, specifically in Israel; as well as those factors set forth in the Risk Factors section of the Company's Annual Report on Form 20-F for the year ended December 31, 2024 filed with the SEC on March 27, 2025, and other documents filed with or furnished to the SEC which are available on the SEC's website, www.sec.gov. The Company undertakes no obligation to update these statements for revisions or changes after the date of this release, except as required by law.

IR Contact:

Email: investors@icecure-medical.com
Michael Polyviou
Phone: 732-232-6914