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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: March 2024 (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

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On March 12, 2024, IceCure Medical Ltd. (the "Company") issued a press release titled "IceCure Receives Notice of Patent Allowance in Japan for a Novel Cryogen Flow Control to Optimize Patient Outcomes," a copy of which is furnished as Exhibit 99.1 with this Report of Foreign Private Issuer on Form 6-K.

The first two paragraphs and the section titled "Forward Looking Statements" in the press release furnished herewith are incorporated by reference into the Company's Registration Statements on Form F-3 (Registration Nos. [333-258660](#) and [333-267272](#)) and Form S-8 (Registration Nos. [333-270982](#), [333-264578](#), and [333-262620](#)), 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a part thereof from the date on which this Report of Foreign Private Issuer on Form 6-K is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.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 No.

99.1	<a href="#">Press release dated March 12, 2024, titled "IceCure Receives Notice of Patent Allowance in Japan for a Novel Cryogen Flow Control to Optimize Patient Outcomes."</a>
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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: March 12, 2024

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

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

- *Innovating as a global leader in cryoablation technologies, with 42 patents issued and allowed*
- *Cryogenic flow control enhances the efficacy and precision of cryoablation procedures*

**CAESAREA, Israel**, March 12, 2024 – IceCure Medical Ltd. (Nasdaq: ICCM) (“IceCure” or the “Company”), developer of the ProSense® System, a minimally-invasive cryoablation technology that destroys tumors by freezing as an alternative to surgical tumor removal, today announced it has received a Notice of Allowance from the Japan Patent Office (the “JPO”) for its patent application titled “Cryogen Flow Control”. Once granted, the patent will be in effect until 2042. A patent for this invention is pending approval in European Union, the U.S., and other major markets.

Precise temperature control 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.

“We believe that cryogen flow control will be instrumental in enabling practitioners to perform accurate navigation and cryo-mapping to achieve cryoablation efficiency and expand cryoablation treatment to more clinical applications in the future,” stated Eyal Shamir, IceCure’s Chief Executive Officer. “As a leader in cryoablation technology worldwide, we continue to innovate and build our IP portfolio. This Notice of Allowance in Japan further fortifies our position in an important market, served in partnership with our in-country distributor, Terumo.”

### About ProSense®

The ProSense® Cryoablation System provides a minimally invasive treatment option to destroy tumors by freezing them. The system uniquely harnesses the power of liquid nitrogen to create large lethal zones for maximum efficacy in tumor destruction in benign and cancerous lesions, including breast, kidney, lung, and liver.

ProSense® enhances patient and provider value by accelerating recovery, reducing pain, surgical risks, and complications. With its easy, transportable design and liquid nitrogen utilization, ProSense® opens that door to fast and convenient office-based procedures for breast tumors.

### About IceCure Medical

IceCure Medical (Nasdaq: ICCM) develops and markets ProSense®, an advanced liquid-nitrogen-based cryoablation therapy for the treatment 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 alternative to hospital surgical tumor removal that is easily performed in a relatively short procedure. The system is marketed and sold worldwide for the indications cleared and approved to date including in the U.S., Europe, and China.

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### Forward Looking Statements

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, the Company uses forward-looking statements when it discusses that advanced cryogen flow control systems may also offer other and that the Company believes that cryogen flow control will be instrumental in enabling practitioners to perform accurate navigation and cryo-mapping, that the Company is continuing to innovate and build its IP portfolio and that this Notice of Allowance in Japan further fortifies the Company’s position in Japan. 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, 2022 filed with the SEC on March 29, 2023, and other documents filed with or furnished to the SEC which are available on the SEC’s website, [www.sec.gov](http://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.

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