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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: September 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 September 16, 2024, IceCure Medical Ltd. (the "Company") issued a press release titled "Study Published in the British Journal of Radiology Demonstrates IceCure's ProSense® is a Safe Procedure with 97.7% Technical Success Rate in Treating Tumors of the Lung, Bone, and Soft Tissues" a copy of which is furnished as Exhibit 99.1 with this Report of Foreign Private Issuer on Form 6-K.

The first, third, fourth and fifth paragraphs and the section titled "Forward Looking Statements" in the press release furnished herewith as Exhibit 99.1 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](#), [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a part thereof from the date on which this Report of Foreign Private Issuer on Form 6-K is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.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 No.

99.1	<a href="#">Press release dated September 16, 2024, titled "Study Published in the British Journal of Radiology Demonstrates IceCure's ProSense® is a Safe Procedure with 97.7% Technical Success Rate in Treating Tumors of the Lung, Bone, and Soft Tissues."</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: September 16, 2024

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

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**Study Published in the British Journal of Radiology Demonstrates  
IceCure's ProSense® is a Safe Procedure with 97.7% Technical  
Success Rate in Treating Tumors of the Lung, Bone, and Soft Tissues**

- *Liquid nitrogen- (LN<sub>2</sub>) based ProSense® found to have favorable safety compared to argon-based cryoablation systems, as well as being more cost effective and easier to manage*
- *Independent study conducted at the European Institute of Oncology (IEO) demonstrates interventional radiology use cases for ProSense® for indications that are approved in various markets across the world*

CAESAREA, Israel, September 16, 2024 – IceCure Medical Ltd. (Nasdaq: ICCM) (“IceCure”, “IceCure Medical” or the “Company”), developer of minimally-invasive cryoablation technology that destroys tumors by freezing as an alternative to surgical tumor removal, today announced the publication of an independent study led by Dr. Franco Orsi, Director of Interventional Radiology at the European Institute of Oncology (IEO) in Milan, Italy and an expert ProSense® user. The study titled “Liquid Nitrogen-Based Cryoablation: Complication Rates for Lung, Bone, and Soft Tissue Tumors” was published by Oxford University Press on behalf of the British Institute of Radiology.

“Cryoablation with liquid nitrogen has a growing role in early oncology treatments across a wide variety of cancer types and particularly for patients who may have multiple comorbidities and/or who want to avoid surgery. As interventional radiologists are increasingly and effectively using cryoablation, it’s important to note Dr. Orsi and his colleagues underscore in the paper that interventional radiology is now the fourth pillar of the oncology field, alongside clinical oncology, surgical oncology and radiation therapy,” stated IceCure’s Chief Executive Officer, Eyal Shamir. “We are very pleased that ProSense® is providing a minimally invasive option to treat cancer patients early, safely and effectively.”

The study assessed the complication rate both during and 24 hours after treatment with IceCure’s cryoablation system in 85 patients who were treated for 96 lesions (tumors), 36.4% of which were lesions in bones, 18.8% in lungs, and 44.8% in soft tissue. The primary technical success rate, defined as complete tumor coverage, was 97.7% (83 of 85 patients). Patients with benign and malignant tumors were treated for either curative or palliative intent. Minor complications resolved themselves without intervention or merely required simple interventions such as drainage. The study concluded that cryoablation using an LN<sub>2</sub>-based system, such as ProSense®, is safe across various tumor sizes and locations, with only minor complications observed.

LN<sub>2</sub>-based cryoablation was compared to argon-based systems in the study who point to the benefits of LN<sub>2</sub> procedures including its suitability for office-based procedures performed under local anesthesia, compared to argon systems which typically require general anesthesia and are therefore less suitable for office procedures. The study also addresses the challenges of argon systems requiring large argon gas cylinders, which necessitate dedicated storage space and trained personnel for transport, as well as the higher cost of the procedure due to the use of multiple cryoprobes as well as the use of noble gases, argon and helium. The study demonstrates that LN<sub>2</sub>-based systems, such as ProSense®, are more cost effective and easier to manage.

Two previously published independent lung cancer studies of ProSense® in the treatment of lung cancer, which evaluated the procedure’s local control and recurrence free rate, reported 96% and 100% three-year recurrence free rates. Independent and IceCure-sponsored studies of other interventional radiology indications are ongoing.

#### About IceCure Medical

IceCure Medical (Nasdaq: ICCM) develops and markets advanced liquid-nitrogen-based cryoablation therapy systems 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 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 China.

#### 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, IceCure is using forward looking statements in this press release when it discusses the growing role of liquid nitrogen-based cryoablation in early oncology treatments. 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, 2023 filed with the SEC on April 3, 2024, 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:

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