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

Commission File Number: 001-40753

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

7 Ha'Eshel St., PO Box 3163 <u>Caesarea, 3079504 Israel</u> (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 March 4, 2024, IceCure Medical Ltd. (the "Company") issued a press release titled "IceCure's ProSense" a Promising Alternative Treatment for Extra-Pelvis Endometriosis: Independent Study Presented at ECR 2024," a copy of which is furnished as Exhibit 99.1 with this Report of Foreign Private Issuer on Form 6-K.

The first five 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. <u>333-258660</u> and <u>333-267272</u>) and Form S-8 (Registration Nos. <u>333-264578</u>, and <u>333-264578</u>, a

Exhibit No.

99.1 Press release dated March 4, 2024, titled "IceCure's ProSense[®] a Promising Alternative Treatment for Extra-Pelvis Endometriosis: Independent Study Presented at ECR 2024."

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.

By: <u>/s/ Eyal Shamir</u>

Name: Eyal Shamir Title: Chief Executive Officer

Date: March 4, 2024

2

IceCure's ProSense[®] a Promising Alternative Treatment for Extra-Pelvis Endometriosis: Independent Study Presented at ECR 2024

• MRI reveals disappearance of hemorrhagic signal and development of necrotic changes

• Pain reduced from a median of 7 on a scale of 0 - 10 to a median of 1, with some patients reporting 0

CAESAREA, Israel, March 4, 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 that results from an independent study conducted at University Hospital, Nimes, France, titled "BEYOND PAIN: Cryoablation of endometriotic nodules using liquid nitrogen" were presented at the European Congress of Radiology ("ECR") 2024 in Vienna, Austria on February 29, 2024.

Five doctors participated in the study, including interventional radiologist and ProSense[®] user Prof. Julien Frandon, who has previously led hands-on training sessions with ProSense[®] at multiple medical conferences.

The investigator-initiated single-site study enrolled 7 women, ages 30-45 years, with endometriosis in the abdominal wall and para-diaphragmatic areas. Treatment with ProSense[®] cryoablation took about 30 minutes.

One month following treatment, assessment by MRI revealed hemorrhagic signal had disappeared and necrotic changes developed. All patients were satisfied with the treatment and reported their pain decreased from a median of 7 on a visual analog scale of 0 - 10 to a median of 1, with some patients reporting 0.

The study concluded that based on the investigator's experience, ProSense[®] and single-probe percutaneous cryoablation with liquid nitrogen appears to be a promising alternative that offers speed, minimally invasive qualities, safety and more cost-effective treatment of extra-pelvis endometriosis. Since the results are based on a limited number of patients, further data is required with a larger patient cohort to gain comprehensive understanding of this treatment approach.

Prof. Frandon commented, "At our hospital in Nimes, we use ProSense® because, as a single probe, liquid nitrogen-based system, it's easier for our team of interventional radiologists to use than traditional multi-probe, argon-based systems. Since 2019, we have performed more than 150 ProSense® procedures with great efficacy, safety and patient satisfaction. I'm happy to see a growing number of indications treated with cryoablation, benefitting patients from early, minimally-invasive intervention."

"While surgical removal would have been the standard of care treatment for endometriosis nodules, ProSense[®] gives interventional radiologists and other practitioners a safe and effective minimally-invasive option. We are very pleased that all patients treated in this study were relieved of their endometriosis condition and pain within as little as a month following treatment," stated IceCure CEO Eyal Shamir.

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 procedure for breast tumors.

About IceCure Medical

IceCure Medical (Nasdaq: ICCM) develops and markets $ProSense^{\mathbb{R}}$, 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.

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 statement in this press release when it discusses ProSense as being a promising alternative treatment for extra-pelvis endometriosis. 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 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

Todd Kehrli

Phone: 310-625-4462