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 October 2023

Commission File Number: 001-39461

NANO-X IMAGING LTD

Communications Center Neve Ilan, Israel 9085000 (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 □

On October 3, 2023, NANO-X IMAGING LTD (the "Company") issued a press release, a copy of which is attached hereto as Exhibit 99.1 and incorporated herein by reference.

The information contained in this report is hereby incorporated by reference into the Registration Statement on Form S-8, File No. 333-248322.

EXHIBIT INDEX

Exhibit	No.	Exhibit

99.1 Press release, dated October 3, 2023

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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.

NANO-X IMAGING LTD

By: /s/ Ran Daniel

Name: Ran Daniel

Title: Chief Financial Officer

Date: October 3, 2023

Nanox Announces Strategic Manufacturing Agreement with Varex Imaging Corporation to Advance the Nanox.ARC Medical Imaging System

NEVE ILAN, Israel and SALT LAKE CITY – October 3, 2023, ("Nanox" or the "Company," Nasdaq: NNOX), an innovative medical imaging technology company today announced the entrance into a manufacture and supply agreement with Varex Imaging Corporation ("Varex," Nasdaq: VREX), a leading innovator, designer and manufacturer of X-ray imaging components, under which Varex will supply X-ray tubes utilizing the Nanox digital X-ray source for the Nanox.ARC system. The agreement was entered into after Varex completed, over the last several months, an assessment of Nanox's novel digital X-ray source.

The Nanox.ARC is a 3D tomosynthesis multisource imaging system that uses a proprietary and novel digital cathode X-ray source that Nanox believes can achieve the same functionalities as legacy X-ray cathodes, while allowing for lower-cost production than existing medical imaging systems. The Company's holistic, end-to-end imaging solution integrates the Nanox.ARC and Nanox's teleradiology services, and, in the future, Nanox intends to add artificial intelligence ("AI") technology for a seamless continuum from image capture through AI analysis and interpretation by trained radiologists.

Varex Imaging Corporation is a leading independent supplier of medical X-ray imaging components and image processing solutions, playing an important role in applications like medical imaging, cargo screening, and border security for global X-ray imaging system manufacturers. With a history spanning over 70 years, Varex's commitment lies in supporting its partners' success and advancing product development to benefit healthcare and industrial applications on a global scale.

"We are pleased to announce our manufacturing and supply agreement with Nanox. This agreement reflects our belief in the future importance of cold cathode technology," said Sunny Sanyal, Chief Executive Officer of Varex Imaging. Sanyal added, "Together, we aim to advance medical imaging technology, reduce costs and make a meaningful impact on global healthcare. We look forward to a fruitful and innovative journey ahead."

Under the agreement, Nanox may order X-ray tubes from Varex for use in its Nanox.ARC system. Varex agreed to manufacture and supply the X-ray tubes in exchange for payment therefor in the form of a revenue-sharing fee (subject to a minimum annual amount per system) based on the Company's pay-per-scan revenue from Nanox.ARC systems using Varex X-ray tubes worldwide. Subject to receipt of requisite local regulatory clearance, Nanox has also agreed to use Varex X-ray tubes in minimum percentage of all Nanox.ARC systems that are deployed and operating.

"Nanox is proud to collaborate with such a trusted and esteemed US partner in medical imaging, especially as we diligently work toward the commercialization of our Nanox.ARC medical imaging system," said Erez Meltzer, Chief Executive Officer of Nanox. "Our agreement reflects the ingenuity of the Nanox.ARC and our commitment to pioneering a new era in global healthcare accessibility."

On April 28, 2023, the Company received a 510(k) clearance from the U.S. Food and Drug Administration to market the multi-source Nanox.ARC (including the Nanox.CLOUD, its accompanying cloud-based infrastructure), as a stationary X-ray system intended to produce tomographic images of the human musculoskeletal system adjunctive to conventional radiography, on adult patients. This device is intended to be used in professional healthcare facilities or radiological environments, such as hospitals, clinics, imaging centers and other medical practices by trained radiographers, radiologists and physicians. Representing a major advancement in X-ray tube technology, Nanox.ARC is a multi-source digital 3D tomosynthesis system that utilizes novel, cold cathode X-ray tubes, which the Company intends to offer using an innovative pay-per-scan business model.

Nanox is making progress toward commercialization of the Nanox.ARC system. Nanox has installed Nanox.ARC systems in Nigeria, Morocco and Ghana for demonstration and training purposes. Nanox aims to increase early detection of medical conditions that are discoverable by X-ray by improving access to imaging, in line with its vision to close the health equity gap in medical imaging.

About Nanox

We, NANO-X IMAGING LTD or Nanox (Nasdaq: NNOX), are focused on applying our proprietary medical imaging technology and solutions to make diagnostic medicine more accessible and affordable across the globe.

Nanox's vision is to increase access, reduce costs and enhance the efficiency of routine medical imaging technology and processes, in order to improve early detection and treatment, which Nanox believes is key to helping people achieve better health outcomes, and, ultimately, to save lives.

The Nanox ecosystem includes Nanox.ARC – a multi-source Digital Tomosynthesis system that is cost-effective, and user-friendly; an AI-based suite of algorithms that augment the readings of routine CT imaging to highlight early signs often related to chronic disease, (Nanox.AI); a cloud-based infrastructure (Nanox.CLOUD); and a proprietary decentralized marketplace, through Nanox's subsidiary, USARAD Holdings Inc., that provides remote access to radiology and cardiology experts; and a comprehensive teleradiology services platform (Nanox.MARKETPLACE).

Together, Nanox's products and services aim to create a worldwide, innovative, and comprehensive solution that connects medical imaging solutions, from scan to diagnosis. For more information, please visit www.nanox.vision.

About Varex

Varex Imaging Corporation is a leading innovator, designer and manufacturer of X-ray imaging components, which include X-ray tubes, digital detectors and other image processing solutions that are key components of X-ray imaging systems. With a 70+ year history of successful innovation, Varex's products are used in medical imaging as well as in industrial and security imaging applications. Global OEM manufacturers incorporate the company's X-ray sources, digital detectors, connecting devices and imaging software in their systems to detect, diagnose, protect and inspect. Headquartered in Salt Lake City, Utah, Varex employs approximately 2,300 people located in North America, Europe, and Asia. For more information visit vareximaging.com.

Forward-Looking Statements – Nanox

This press release may contain forward-looking statements that are subject to risks and uncertainties. All statements that are not historical facts contained in this press release are forward-looking statements. Such statements include, but are not limited to, any statements relating to the initiation, timing, progress and results of the Company's research and development, manufacturing, and commercialization activities with respect to its X-ray source technology and the Nanox.ARC, the ability to realize the expected benefits of its recent acquisitions and the projected business prospects of the Company and the acquired companies. In some cases, you can identify forward-looking statements by terminology such as "can," "might," "believe," "may," "estimate," "continue," "anticipate," "intend," "should," "plan," "should," "could," "expect," "predict," "potential," or the negative of these terms or other similar expressions. Forward-looking statements are based on information the Company has when those statements are made or management's good faith belief as of that time with respect to future events and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements. Factors that could cause actual results to differ materially from those currently anticipated include: risks related to (i) Nanox's ability to complete development of the Nanox System; (ii) Nanox's ability to successfully demonstrate the feasibility of its technology for commercial applications; (iii) Nanox's expectations regarding the necessity of, timing of filing for, and receipt and maintenance of, regulatory clearances or approvals regarding its technology, the Nanox.ARC and Nanox.CLOUD from regulatory agencies worldwide and its ongoing compliance with applicable quality standards and regulatory requirements; (iv) Nanox's ability to realize the anticipated benefits of the recent acquisitions, which may be affected by, among other things, competition, brand recognition, the ability of the acquired companies to grow and manage growth profitably and retain their key employees; (v) Nanox's ability to enter into and maintain commercially reasonable arrangements with third-party manufacturers and suppliers to manufacture the Nanox.ARC; (vi) the market acceptance of the Nanox System and the proposed pay-per-scan business model; (vii) Nanox's expectations regarding collaborations with third-parties and their potential benefits; (viii) Nanox's ability to conduct business globally; (ix) changes in global, political, economic, business, competitive, market and regulatory forces; (x) the costs incurred with respect to and the outcome of the securities class action litigation and the SEC inquiry Nanox is currently subject to and any similar or other claims and litigation it may be subject to in the future; and (xi) risks related to business interruptions resulting from the COVID-19 pandemic or similar public health crises, among other things.

For a discussion of other risks and uncertainties, and other important factors, any of which could cause Nanox's actual results to differ from those contained in the Forward-Looking Statements, see the section titled "Risk Factors" in Nanox's Annual Report on Form 20-F for the year ended December 31, 2022, and subsequent filings with the U.S. Securities and Exchange Commission. The reader should not place undue reliance on any forward-looking statements included in this press release.

Except as required by law, Nanox undertakes no obligation to update publicly any forward-looking statements after the date of this report to conform these statements to actual results or to changes in the Company's expectations.

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NANOX

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