

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 2024 (Report No. 4) Commission file number: 001-37600 NANO DIMENSION LTD. (Translation of registrant's name into English) 2 Ilan Ramon Ness Ziona 7403635 Israel (Address of principal executive offices) 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 23, 2024, NanoDimension Ltd. (the "Company") issued a press release titled "Nano Dimension Responds to Desktop Metal's Lawsuit Regarding Merger Agreement", a copy of which is furnished herewith as Exhibit 99.1 and incorporated by reference herein. This Report of Foreign Private Issuer on Form 6-K is incorporated by reference into the Company's registration statements on Form F-3 (File No. Nos. 333-255960, 333-233905, 333-251155, 333-252848, and 333-278368) and Form S-8 (File No. 333-214520, 333-248419 and 333-269436), filed with the Securities and Exchange Commission, to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.

Exhibit No. 99.1 Press release issued by Nano Dimension Ltd. on December 23, 2024, titled "Nano Dimension Responds to Desktop Metal's Lawsuit Regarding Merger Agreement"

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 Dimension Ltd. (Registrant) Date: December 23, 2024 By: /s/ Dotan Bar-Natan Name: Dotan Bar-Natan Title: General Counsel

Exhibit 99.1 Nano Dimension Responds to Desktop Metal's Lawsuit Regarding Merger Agreement Waltham, Mass., Dec. 23, 2024 (GLOBE NEWSWIRE) --Nano Dimension Ltd. (Nasdaq: NNDM) ("Nano Dimension" or the "Company"), a supplier of Additive Manufacturing solutions, today shared its response to a December 20, 2024 lawsuit filed by Desktop Metal, Inc. (NYSE: DM) ("Desktop Metal") against the Company in the Delaware Court of Chancery alleging Nano Dimension has failed to use its reasonable best effort to obtain regulatory approval in connection with the merger agreement between the parties dated July 2, 2024 (the "Merger Agreement"). The Company believes the lawsuit is without merit and inconsistent with the terms of the Merger Agreement, particularly with respect to the Company's right to work through the review process that is under way with the Committee on Foreign Investment in the United States ("CFIUS"). The Company believes the lawsuit is nothing more than an effort by Desktop Metal to prevent the Company from exercising its rights under the Merger Agreement and to impose deadlines and obligations that are inconsistent with that agreement. The Company intends to vigorously defend itself and preserve its rights under the Merger Agreement.

About Nano Dimension Ltd. Nano Dimension (Nasdaq: NNDM) offers a variety of Digital Manufacturing technologies serving customers across vertical target markets such as aerospace and defense, advanced automotive, high-tech industrial, specialty medical technology, and R&D and academia. With its suite of digital manufacturing technologies, Nano Dimension is enabling its customers with prototyping and high-mix-low-volume production, along with IP security, design-for-manufacturing capabilities, and more sustainable means of fabrication. For more information, please visit <https://www.nano-di.com/>

Forward-Looking Statements This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. For example, Nano is using forward-looking statements in this press release when it discusses (i) its beliefs regarding the merits of the lawsuit filed by Desktop Metal, (ii) its beliefs regarding the lawsuit with respect to Nano's rights under the Merger Agreement and (iii) its intention to vigorously defend itself against the lawsuit and preserve its rights under the Merger Agreement. Such forward-looking statements include statements regarding Nano's future intentions, strategic plan, events or developments that Nano intends, expects, projects, believes or anticipates will or may occur in the future. Such statements are based on management's beliefs and assumptions made based on information currently available to management. When used in this communication, the words "outlook," "guidance," "expects," "believes," "anticipates," "should," "estimates," "may," "will," "intends," "projects," "could," "would," "estimate," "potential," "continue," "plan," "target," or the negative of these words or similar expressions are intended to identify forward-looking statements, though not all forward-looking statements contain these identifying words. These forward-looking statements involve known and unknown risks and uncertainties, which may cause the Company's actual results and performance to be materially different from those expressed or implied in the forward-looking statements. Accordingly, we caution you that any such forward-looking statements are not guarantees of future performance and are subject to risks, assumptions, estimates and uncertainties that are difficult to predict. Because such statements deal with future events and are based on the current expectations of Nano, they are subject to various risks and uncertainties. Factors and risks that may cause Nano's actual results or performance to be materially different from those expressed or implied in the forward-looking statements include, but are not limited to, (i) the occurrence of any event, change or other circumstance that could give rise to the termination of the proposed transaction; (ii) the satisfaction of the closing conditions of the proposed transaction; and (iii) other risks related to the completion of the proposed transaction and actions related thereto. Except as otherwise required by law, Nano undertakes no obligation to publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. References and links to websites have been provided as a convenience, and the information contained on such websites is not incorporated by reference into this communication. Nano is not responsible for the contents of third-party websites. Nano Dimension Contacts Investors: Julien Lederman, VP Corporate Development | ir@nano-di.com Media: Kal Goldberg / Bryan Locke / Kelsey Markovich | NanoDimension@fgsglobal.com