SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934

Nano-X Imaging Ltd.

(Name of Issuer)

Ordinary Shares

(Title of Class of Securities)

(CUSIP Number)

11/12/2026

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- ☐ Rule 13d-1(b)
- ☑ Rule 13d-1(c)
- ☐ Rule 13d-1(d)

SCHEDULE 13G

CUSIP No.

1	Names of Reporting Persons YA II PN, Ltd.	
2	Check the appropriate box if a member of a Group (see instructions) ☑ (a) ☐ (b)	
3	Sec Use Only	
4	Citizenship or Place of Organization CAYMAN ISLANDS	
Number of Shares Beneficially	5	Sole Voting Power 0.00

Owned by Each Reporting Person With:	6	Shared Voting Power 8,638,180.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 8,638,180.00
9		Aggregate Amount Beneficially Owned by Each Reporting Person 8,638,180.00
10		Check box if the aggregate amount in row (9) excludes certain shares (See Instructions) ☐
11		Percent of class represented by amount in row (9) 9.9 %
12		Type of Reporting Person (See Instructions) OO

Comment for Type of Reporting Person: Based on 86,468,270 ordinary shares, consisting of 78,747,008 ordinary shares outstanding as of November 12, 2026, plus an additional 7,721,262 ordinary shares that may be issued to YA II PN, Ltd. ("YA II") pursuant to the Standby Equity Distribution Agreement (the "Resale SEPA") for up to $40 million of ordinary shares, and the Standby Equity Distribution Agreement (the "Primary SEPA" and collectively with the Resale SEPA, the "SEPA") for up to $10 million of ordinary shares, each entered into on November 12, 2026 between YA II and Nano-X Imaging Ltd. (the "Issuer").

SCHEDULE 13G

CUSIP No.

1		Names of Reporting Persons YA Global Investments II (U.S.), LP
2		Check the appropriate box if a member of a Group (see instructions) ☑ (a) ☐ (b)
3		Sec Use Only
4		Citizenship or Place of Organization DELAWARE
Number of Shares Beneficially Owned by Each Reporting Person With:	5	Sole Voting Power 0.00
	6	Shared Voting Power 8,638,180.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 8,638,180.00
9		Aggregate Amount Beneficially Owned by Each Reporting Person 8,638,180.00

10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)	☐
11	Percent of class represented by amount in row (9)	9.9 %
12	Type of Reporting Person (See Instructions)	OO

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SCHEDULE 13G

CUSIP No.

1	Names of Reporting Persons Yorkville Advisors Global, LP	
2	Check the appropriate box if a member of a Group (see instructions)	☑ (a) ☐ (b)
3	Sec Use Only	
4	Citizenship or Place of Organization	DELAWARE
Number of Shares Beneficially Owned by Each Reporting Person With:	5 Sole Voting Power	0.00
	6 Shared Voting Power	8,638,180.00
	7 Sole Dispositive Power	0.00
	8 Shared Dispositive Power	8,638,180.00
9	Aggregate Amount Beneficially Owned by Each Reporting Person	8,638,180.00
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)	☐
11	Percent of class represented by amount in row (9)	9.9 %
12	Type of Reporting Person (See Instructions)	OO

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Standby Equity Distribution Agreement (the "Primary SEPA" and collectively with the Resale SEPA, the "SEPA") for up to $10 million of ordinary shares, each entered into on November 12, 2026 between YA II and Nano-X Imaging Ltd. (the "Issuer").

SCHEDULE 13G

CUSIP No.

1	Names of Reporting Persons Yorkville Advisors Global II, LLC	
2	Check the appropriate box if a member of a Group (see instructions) ☑ (a) ☐ (b)	
3	Sec Use Only	
4	Citizenship or Place of Organization DELAWARE	
Number of Shares Beneficially Owned by Each Reporting Person With:	5	Sole Voting Power 0.00
	6	Shared Voting Power 8,638,180.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 8,638,180.00
9	Aggregate Amount Beneficially Owned by Each Reporting Person 8,638,180.00	
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions) ☐	
11	Percent of class represented by amount in row (9) 9.9 %	
12	Type of Reporting Person (See Instructions) OO	

Comment for Type of Reporting Person: Based on 86,468,270 ordinary shares, consisting of 78,747,008 ordinary shares outstanding as of November 12, 2026, plus an additional 7,721,262 ordinary shares that may be issued to YA II PN, Ltd. ("YA II") pursuant to the Standby Equity Distribution Agreement (the "Resale SEPA") for up to $40 million of ordinary shares, and the Standby Equity Distribution Agreement (the "Primary SEPA" and collectively with the Resale SEPA, the "SEPA") for up to $10 million of ordinary shares, each entered into on November 12, 2026 between YA II and Nano-X Imaging Ltd. (the "Issuer").

SCHEDULE 13G

CUSIP No.

1	Names of Reporting Persons YAII GP, LP

2	Check the appropriate box if a member of a Group (see instructions)	☑ (a) ☐ (b)
3	Sec Use Only	
4	Citizenship or Place of Organization	DELAWARE
Number of Shares Beneficially Owned by Each Reporting Person With:	5 Sole Voting Power	0.00
	6 Shared Voting Power	8,638,180.00
	7 Sole Dispositive Power	0.00
	8 Shared Dispositive Power	8,638,180.00
9	Aggregate Amount Beneficially Owned by Each Reporting Person	8,638,180.00
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)	☐
11	Percent of class represented by amount in row (9)	9.9 %
12	Type of Reporting Person (See Instructions)	OO

Comment for Type of Reporting Person: Based on 86,468,270 ordinary shares, consisting of 78,747,008 ordinary shares outstanding as of November 12, 2026, plus an additional 7,721,262 ordinary shares that may be issued to YA II PN, Ltd. ("YA II") pursuant to the Standby Equity Distribution Agreement (the "Resale SEPA") for up to $40 million of ordinary shares, and the Standby Equity Distribution Agreement (the "Primary SEPA" and collectively with the Resale SEPA, the "SEPA") for up to $10 million of ordinary shares, each entered into on November 12, 2026 between YA II and Nano-X Imaging Ltd. (the "Issuer").

SCHEDULE 13G

CUSIP No.

1	Names of Reporting Persons	YAII GP II, LLC
2	Check the appropriate box if a member of a Group (see instructions)	☑ (a) ☐ (b)
3	Sec Use Only	
4	Citizenship or Place of Organization	DELAWARE
Number of Shares Beneficially Owned by Each	5 Sole Voting Power	0.00
	6 Shared Voting Power	

Reporting Person With:		8,638,180.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 8,638,180.00
9		Aggregate Amount Beneficially Owned by Each Reporting Person 8,638,180.00
10		Check box if the aggregate amount in row (9) excludes certain shares (See Instructions) ☐
11		Percent of class represented by amount in row (9) 9.9 %
12		Type of Reporting Person (See Instructions) OO

Comment for Type of Reporting Person: Based on 86,468,270 ordinary shares, consisting of 78,747,008 ordinary shares outstanding as of November 12, 2026, plus an additional 7,721,262 ordinary shares that may be issued to YA II PN, Ltd. ("YA II") pursuant to the Standby Equity Distribution Agreement (the "Resale SEPA") for up to $40 million of ordinary shares, and the Standby Equity Distribution Agreement (the "Primary SEPA" and collectively with the Resale SEPA, the "SEPA") for up to $10 million of ordinary shares, each entered into on November 12, 2026 between YA II and Nano-X Imaging Ltd. (the "Issuer").

SCHEDULE 13G

CUSIP No.

1		Names of Reporting Persons Mark Angelo
2		Check the appropriate box if a member of a Group (see instructions) ☑ (a) ☐ (b)
3		Sec Use Only
4		Citizenship or Place of Organization NEW JERSEY
Number of Shares Beneficially Owned by Each Reporting Person With:	5	Sole Voting Power 0.00
	6	Shared Voting Power 8,638,180.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 8,638,180.00
9		Aggregate Amount Beneficially Owned by Each Reporting Person 8,638,180.00
10		Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)

☐

Percent of class represented by amount in row (9)

11

9.9 %

Type of Reporting Person (See Instructions)

12

OO

Comment for Type of Reporting Person: Based on 86,468,270 ordinary shares, consisting of 78,747,008 ordinary shares outstanding as of November 12, 2026, plus an additional 7,721,262 ordinary shares that may be issued to YA II PN, Ltd. ("YA II") pursuant to the Standby Equity Distribution Agreement (the "Resale SEPA") for up to $40 million of ordinary shares, and the Standby Equity Distribution Agreement (the "Primary SEPA" and collectively with the Resale SEPA, the "SEPA") for up to $10 million of ordinary shares, each entered into on November 12, 2026 between YA II and Nano-X Imaging Ltd. (the "Issuer").

SCHEDULE 13G

Item 1.

Name of issuer:

(a)

Nano-X Imaging Ltd.

Address of issuer's principal executive offices:

(b)

OFER TECH PARK 94 SHLOMO SHMELTZER ROAD PETACH TIKVA, L3, 4970602

Item 2.

Name of person filing:

(a)

YA II PN, Ltd.

Address or principal business office or, if none, residence:

(b)

1012 Springfield Ave., Mountainside, NJ 07092

Citizenship:

(c)

Cayman Islands

Title of class of securities:

(d)

Ordinary Shares

CUSIP No.:

(e)

Item 3. If this statement is filed pursuant to §§ 240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

(a) ☐ Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);

(b) ☐ Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);

(c) ☐ Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);

(d) ☐ Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);

(e) ☐ An investment adviser in accordance with § 240.13d-1(b)(1)(ii)(E);

(f) ☐ An employee benefit plan or endowment fund in accordance with § 240.13d-1(b)(1)(ii)(F);

(g) ☐ A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);

(h) ☐ A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);

(i) ☐ A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);

(j) ☐ A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J). If filing as a non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J),
please specify the type of institution:

(k) ☑ Group, in accordance with Rule 240.13d-1(b)(1)(ii)(K).

Item 4. Ownership

Amount beneficially owned:

(a)

8,638,180

(b) Percent of class:

9.9 %

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote:

0

(ii) Shared power to vote or to direct the vote:

8,638,180

(iii) Sole power to dispose or to direct the disposition of:

0

(iv) Shared power to dispose or to direct the disposition of:

8,638,180

Item 5. Ownership of 5 Percent or Less of a Class.

Item 6. Ownership of more than 5 Percent on Behalf of Another Person.

Not Applicable

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

Not Applicable

Item 8. Identification and Classification of Members of the Group.

If a group has filed this schedule pursuant to §240.13d-1(b)(1)(ii)(K), so indicate under Item 3(k) and attach an exhibit stating the identity and Item 3 classification of each member of the group. If a group has filed this schedule pursuant to §240.13d-1(c) or §240.13d-1(d), attach an exhibit stating the identity of each member of the group.

YA II PN, Ltd. ("YA II") entered into the Standby Equity Distribution Agreement (the "Resale SEPA") for up to $40 million of ordinary shares, and the Standby Equity Distribution Agreement (the "Primary SEPA" and collectively with the Resale SEPA, the "SEPA") for up to $10 million of ordinary shares, each entered into on November 12, 2026, between YA II and Nano-X Imaging Ltd. (the "Issuer"). Under the SEPA, the Issuer has the option to issue and sell up to $50 million of its ordinary shares to YA II, and YA II is obligated to purchase such shares, at a price and on the terms and subject to the conditions set forth in the SEPA. Under the SEPA, the Issuer is prohibited from issuing and selling shares to YA II to the extent that it would cause the aggregate number of ordinary shares then beneficially owned by YA II and its affiliates to exceed 9.99% of the then outstanding ordinary shares of the Issuer. YA II is beneficially owned by YA Global Investments II (U.S.), LP (the "YA Feeder"). Yorkville Advisors Global, LP (the "YA Advisor") is the investment manager to YA II. Yorkville Advisors Global II, LLC (the "YA Advisor GP") is the general partner to the YA Advisor. YAII GP, LP (the "YA GP") is the general partner to the YA Feeder. YAII GP II, LLC (the "Yorkville GP") is the general partner to the YA GP. Mark Angelo makes the investment decisions on behalf of YA II. Accordingly, each of YA II, YA Feeder, the YA Advisor, the YA Advisor GP, the YA GP, the Yorkville GP and Mark Angelo may be deemed affiliates and therefore may be deemed to beneficially own the same number of ordinary shares. For purposes of this filing, each of the reporting persons is deemed an affiliate of each other reporting person.

Item 9. Notice of Dissolution of Group.

Not Applicable

Item 10. Certifications:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect, other than activities solely in connection with a nomination under § 240.14a-11.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

YA II PN, Ltd.

Signature: /s/ David Gonzalez
Name/Title: David Gonzalez, General Counsel
Date: 11/13/2026

YA Global Investments II (U.S.), LP

Signature: /s/ David Gonzalez
Name/Title: David Gonzalez, General Counsel
Date: 11/13/2026

Yorkville Advisors Global, LP

Signature: /s/ David Gonzalez
Name/Title: David Gonzalez, General Counsel
Date: 11/13/2026

Yorkville Advisors Global II, LLC

Signature: /s/ David Gonzalez
Name/Title: David Gonzalez, General Counsel
Date: 11/13/2026

YAII GP, LP

Signature: /s/ David Gonzalez
Name/Title: David Gonzalez, General Counsel
Date: 11/13/2026

YAII GP II, LLC

Signature: /s/ David Gonzalez
Name/Title: David Gonzalez, General Counsel
Date: 11/13/2026

Mark Angelo

Signature: /s/ Mark Angelo
Name/Title: Mark Angelo
Date: 11/13/2026