

Prospectus Supplement No. 4

AMERICAN ONCOLOGY NETWORK, INC.  
*Primary Offering of*  
8,337,500 Shares of Class A Common Stock  
*Secondary Offering of*  
51,161,832 Shares of Class A Common Stock  
6,113,333 Warrants to Purchase Shares of Class A Common Stock

This prospectus supplement is being filed to update and supplement the information contained in the prospectus dated May 3, 2024 (the “*Prospectus*”), which forms part of our registration statement on Form S-1 (No. 333-274975), as amended, with the information contained in our Current Report on Form 8-K, filed with the Securities and Exchange Commission (the “*SEC*”) on July 25, 2024 (the “*Current Report*”). Accordingly, we have attached the Current Report to this prospectus supplement.

The Prospectus and this prospectus supplement relate to: (i) the issuance by us of up to 8,337,500 shares of class A common stock, par value \$0.0001 per share (the “Class A Common Stock”), of American Oncology Network, Inc., a Delaware corporation (the “Company” “we,” “us,” or “AON”), to be issued upon the exercise of 8,337,500 public warrants, which entitles its holder to purchase shares of Class A Common Stock at an exercise price of \$11.50 per share and (ii) the resale of (a) an aggregate of 51,161,832 shares of Class A Common Stock by certain of the selling securityholders named in the Prospectus (each a “Selling Securityholder” and, collectively, the “Selling Securityholders”) and (b) 6,113,333 private placement warrants to purchase shares of Class A Common Stock issued to the Selling Securityholders.

This prospectus supplement updates and supplements the information in the Prospectus and is not complete without, and may not be delivered or utilized except in combination with, the Prospectus, including any amendments or supplements thereto. This prospectus supplement should be read in conjunction with the Prospectus and if there is any inconsistency between the information in the Prospectus and this prospectus supplement, you should rely on the information in this prospectus supplement. Terms used in this prospectus supplement but not defined herein shall have the meanings given to such terms in the Prospectus.

You should read the Prospectus, this prospectus supplement and any additional prospectus supplement or amendment carefully before you invest in our securities. Our Class A Common Stock is traded on the OTCQX Best Market under the symbol “AONC”. Our warrants are listed on the OTCQB Venture Market under the symbol “AONCW.” On July 25, 2024, the closing price of our Class A Common Stock was \$2.17 and the closing price of our warrants was \$0.12.

**Investing in our Class A Common Stock and warrants involves a high degree of risk. See the section titled “*Risk Factors*” beginning on page 13 of the Prospectus and in our other documents subsequently filed with the SEC.**

**Neither the SEC nor any other state securities commission has approved or disapproved of these securities or passed on the adequacy or accuracy of the Prospectus or this prospectus supplement. Any representation to the contrary is a criminal offense.**

July 25, 2024

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

**FORM 8-K**

**CURRENT REPORT**  
Pursuant to Section 13 or Section 15(d)  
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): July 19, 2024

**American Oncology Network, Inc.**  
(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**001-40177**  
(Commission File Number)

**85-3984427**  
(I.R.S. Employer  
Identification Number)

**14543 Global Parkway, Suite 110**  
**Fort Myers, FL**  
(Address of principal executive offices)

**33913**  
(Zip Code)

**(833) 886-1725**  
(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934:

<b>Title of each class</b>	<b>Trading Symbol(s)</b>	<b>Name of each exchange on which registered</b>
Class A common stock, par value \$0.0001, per share	AONC	NONE
Warrants, each whole warrant exercisable for one share of Class A common stock at an exercise price of \$11.50 per share	AONCW	NONE

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 or Rule 12b-2 of the Securities Exchange Act of 1934.

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

### **Item 1.01 Entry Into a Material Definitive Agreement.**

On July 19, 2024, American Oncology Network, Inc. (the “Company”) and AEA Growth Management LP (“AEA”) entered into a Stockholders Agreement that provides for certain customary shareholder protection in the event that AEA and their affiliated entities (the “AEA Parties”) collectively and beneficially own at least 40% of outstanding voting power of the Company (the “Stockholders Agreement Effectiveness Date”).

The shareholder protections include the following:

- *Independent Board Members and Corporate Governance:* Designation of two directors (the “Independent Directors”) for whom the AEA Parties have agreed to vote in director elections for election to the Company’s board of directors (the “Board”), including (i) at least one independent director by mutual agreement of the other then-sitting independent directors and (ii) one minority independent director (the “Minority Independent Director”), and maintenance of the Nominating and Governance Committee of the Board, which shall be comprised of at least two independent directors.
- *Co-sale right:* In the event the AEA Parties propose to sell more than 10% of the Company’s outstanding equity securities, the other shareholders of the Company have the right to participate in such sale, subject to certain exceptions (such sale a “Co-Sale Transaction”).
- *Minority Independent Director Consent:* For two years following the Stockholders Agreement Effectiveness Date, without the consent of the Minority Independent Director, the Company shall not (i) amend its charter, bylaws or organization documents of any of the Company’s subsidiaries that would adversely affect the rights of the minority stockholders in a disproportionate manner, nor (ii) enter into any transaction with the AEA Parties, other than (x) a Co-Sale Transaction, (y) any transaction expressly permitted under the Stockholders Agreement, and (z) standard employee benefits and director and officer indemnification agreements.
- *AEA Parties Standstill:* The AEA Parties agree to refrain from taking any action that would directly or indirectly cause its ownership of the Company to exceed 80% of the Company’s outstanding voting power, without the consent in writing of the Minority Independent Director.

The Stockholder Agreement terminates upon the earliest of (i) the consummation of a short-form merger pursuant to Section 253 of the Delaware General Corporation Law, (ii) the date that the AEA Parties cease to beneficially own, directly or indirectly, at least 25% of the outstanding voting securities of the Company, (iii) the time at which none of the Company’s securities are owned by any person or entity other than the AEA Parties, and (iv) June 10, 2027, if the Stockholders Agreement Effectiveness Date has not occurred by then.

**SIGNATURE**

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 hereunto duly authorized.

**AMERICAN ONCOLOGY NETWORK, INC.**

By: /s/ Todd Schonherz

Name: Todd Schonherz

Title: Chief Executive Officer

Dated: July 25, 2024