

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

FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

PYXIS ONCOLOGY, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	83-1160910 (I.R.S. Employer Identification Number)
321 Harrison Avenue Boston, Massachusetts (Address of Principal Executive Offices)	02118 (Zip Code)

Pyxis Oncology, Inc. 2021 Equity and Incentive Plan

(Full title of the plan)

Lara Sullivan

President and Chief Executive Officer

Pyxis Oncology, Inc.

321 Harrison Avenue

Boston, Massachusetts 02118

(617) 221-9059

(Name, address, and telephone number, including area code, of agent for service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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 7(a)(2)(B) of the Securities Act.

EXPLANATORY NOTE

This Registration Statement on Form S-8 is being filed for the purpose of registering an additional 5,500,000 shares of common stock, par value \$0.001 per share (the “Common Stock”), of Pyxis Oncology, Inc., a Delaware corporation (the “Company” or the “Registrant”), to be issued pursuant to the First Amendment to the Pyxis Oncology, Inc. 2021 Equity and Incentive Plan (as amended, the “2021 Plan”), which Common Stock is in addition to the shares of Common Stock registered on the Registrant’s Registration Statement on Form S-8 filed with the Securities and Exchange Commission (the “Commission”) on October 22, 2021 ([File No. 333-260441](#)), March 29, 2022 ([File No. 333-263950](#)), March 22, 2023 ([File No. 333-270753](#)), and March 22, 2024 ([File No. 333-278159](#)) (collectively, the “Prior Form S-8s”).

This Registration Statement on Form S-8 relates to securities of the same class as that to which the Prior Form S-8s relate, and is submitted in accordance with General Instruction E to Form S-8 regarding Registration of Additional Securities. Pursuant to General Instruction E of Form S-8, the contents of the Prior Form S-8s, to the extent relating to the registration of Common Stock issuable under the 2021 Plan, as applicable, are incorporated herein by reference and made part of this Registration Statement on Form S-8, except as amended hereby.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The Registrant hereby incorporates by reference in this Registration Statement the following documents and information previously filed with the Commission:

1. The Registrant’s Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2023, filed with the Commission on March 21, 2024;
2. The Registrant’s Quarterly Report on [Form 10-Q](#) for the fiscal quarter ended March 31, 2024, filed with the Commission on May 14, 2024;
3. The Registrant’s Quarterly Report on [Form 10-Q](#) for the fiscal quarter ended June 30, 2024, filed with the Commission on August 14, 2024;
4. The Registrant’s Quarterly Report on [Form 10-Q](#) for the fiscal quarter ended September 30, 2024, filed with the Commission on November 12, 2024;
5. The Registrant’s Current Reports on Form 8-K filed with the Commission on [February 28, 2024](#), [March 13, 2024](#), [March 27, 2024](#), [March 27, 2024](#), [June 10, 2024](#), [June 12, 2024](#), and [October 23, 2024](#) except for any information not deemed to be filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”); and
6. The description of the Registrant’s Common Stock contained in the Registrant’s Registration Statement on [Form 8-A](#), filed with the Commission on October 5, 2021, and any other amendment or report filed for the purpose of updating such description, including [Exhibit 4.1](#) to the Registrant’s Annual Report on Form 10-K for the fiscal year ended December 31, 2022 filed with the Commission on March 22, 2023.

All documents subsequently filed by the Registrant with the Commission pursuant to Sections 13(a), 13(c), 14, and 15(d) of the Exchange Act prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the respective dates of filing of such documents (such documents, and the documents enumerated above, being hereinafter referred to as “Incorporated Documents”).

Any statement contained herein or in an Incorporated Document shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed Incorporated Document modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Notwithstanding the foregoing, unless specifically stated to the contrary, none of the information disclosed by the Registrant under Items 2.02 or 7.01 of any Current Report on Form 8-K, including the related exhibits under Item 9.01, that the Registrant may from time to time furnish to the Commission will be incorporated by reference into, or otherwise included in, this Registration Statement.

Item 8. Exhibits.

The following exhibits are incorporated herein by reference:

Exhibit No.	Description
4.1	<u>Amended and Restated Certificate of Incorporation of Pyxis Oncology, Inc. (filed as Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q, filed with the Commission on November 15, 2021 and incorporated herein by reference)</u>
4.2	<u>Amended and Restated Bylaws of Pyxis Oncology, Inc. (filed as Exhibit 3.2 to the Registrant's Quarterly Report on Form 10-Q, filed with the Commission on November 15, 2021, and incorporated herein by reference)</u>
4.3	<u>Pyxis Oncology, Inc. 2021 Equity and Incentive Plan (previously filed as Exhibit 4.4 to the Registrant's Registration Statement on Form S-8, filed with the Commission on October 22, 2021 and incorporated herein by reference)</u>
4.4	<u>First Amendment to Pyxis Oncology, Inc. 2021 Equity and Incentive Plan (previously filed as Appendix A-1 to the Registrant's Definitive Proxy Statement on Schedule 14A, filed with the Commission on September 25, 2024, and incorporated herein by reference)</u>
5.1*	<u>Opinion of Sidley Austin LLP with respect to the validity of issuance of securities</u>
23.1*	<u>Consent of Sidley Austin LLP (included in Exhibit 5.1)</u>
23.2*	<u>Consent of Independent Registered Public Accounting Firm</u>
24.1*	<u>Powers of Attorney (included on the signature page of the Registration Statement)</u>
107*	<u>Filing Fee Table</u>

* Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Boston, Massachusetts, on the 12th day of November, 2024.

Pyxis Oncology, Inc.

By: /s/ Lara Sullivan

Lara Sullivan, M.D.

President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Lara Sullivan, M.D. and Pamela Connealy and each of them, as such person's true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for such person and in such person's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or such person's substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Lara Sullivan</u> Lara Sullivan, M.D.	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	November 12, 2024
<u>/s/ Pamela Connealy</u> Pamela Connealy	Chief Financial Officer and Chief Operating Officer <i>(Principal Financial Officer)</i>	November 12, 2024
<u>/s/ Jitendra Wadhane</u> Jitendra Wadhane	Chief Accounting Officer <i>(Principal Accounting Officer)</i>	November 12, 2024
<u>/s/ John Flavin</u> John Flavin	Chairman of the Board of Directors	November 12, 2024
<u>/s/ Thomas Civik</u> Thomas Civik	Director	November 12, 2024
<u>/s/ Darren Cline</u> Darren Cline	Director	November 12, 2024
<u>/s/ Freda Lewis-Hall, M.D.</u> Freda Lewis-Hall, M.D.	Director	November 12, 2024
<u>/s/ Rachel Humphrey, M.D.</u> Rachel Humphrey, M.D.	Director	November 12, 2024
<u>/s/ Jakob Dupont, M.D.</u> Jakob Dupont, M.D.	Director	November 12, 2024
<u>/s/ Santhosh Palani, Ph.D., CFA</u> Santhosh Palani, Ph.D., CFA	Director	November 12, 2024
<u>/s/ Michael A. Metzger</u> Michael A. Metzger	Director	November 12, 2024

SIDLEY

SIDLEY AUSTIN LLP
ONE SOUTH DEARBORN STREET
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AMERICA ASIA PACIFIC EUROPE

November 12, 2024

Pyxis Oncology, Inc.
321 Harrison Avenue
Boston, Massachusetts 02118

Re: 5,500,000 shares of Common Stock, \$0.001 par value per share

Ladies and Gentlemen:

We refer to the Registration Statement on Form S-8 (the "Registration Statement") being filed by Pyxis Oncology, Inc., a Delaware corporation (the "Company"), with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration of 5,500,000 shares of common stock, \$0.001 par value per share (the "Common Stock"), of the Company, which may be issued under the Pyxis Oncology, Inc. 2021 Equity and Incentive Plan, as amended (the "Plan"), and the aggregate number of shares of Common Stock to be registered under the Registration Statement, the "Registered Shares").

This opinion letter is being delivered in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act.

We have examined the Registration Statement, the Company's Amended and Restated Certificate of Incorporation, the Company's Amended and Restated Bylaws, the Plan, the resolutions adopted by the board of directors of the Company relating to the Registration Statement and the Plan, the resolutions adopted by the stockholders of the Company relating to the Plan, and the proposal adopted by the stockholders of the Company relating to the Plan at the Company's Special Meeting of Stockholders on October 23, 2024. We have also examined originals, or copies of originals certified to our satisfaction, of such agreements, documents, certificates and statements of the Company and other corporate documents and instruments, and have examined such questions of law, as we have considered relevant and necessary as a basis for this opinion letter. We have assumed the authenticity of all documents submitted to us as originals, the genuineness of all signatures, the legal capacity of all persons and the conformity with the original documents of any copies thereof submitted to us for examination. As to facts relevant to the opinions expressed herein, we have relied without independent investigation or verification upon, and assumed the accuracy and completeness of, certificates, letters and oral

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Pyxis Oncology, Inc.

November 12, 2024

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and written statements and representations of public officials and officers and other representatives of the Company.

Based on the foregoing, we are of the opinion that each Registered Share that is newly issued pursuant to the Plan will be validly issued, fully paid and non-assessable when: (i) the Registration Statement, as finally amended, shall have become effective under the Securities Act; (ii) such Registered Share shall have been duly issued and delivered in accordance with the Plan; and (iii) a certificate representing such Registered Share shall have been duly executed, countersigned and registered and duly delivered to the person entitled thereto against payment of the agreed consideration therefor (in an amount not less than the par value thereof) or, if any such Registered Share is to be issued in uncertificated form, the Company's books shall reflect the issuance of such Registered Share to the person entitled thereto against payment of the agreed consideration therefor (in an amount not less than the par value thereof), all in accordance with the Plan.

This opinion letter is limited to the General Corporation Law of the State of Delaware. We express no opinion as to the laws, rules or regulations of any other jurisdiction, including, without limitation, the federal laws of the United States of America or any state securities or blue sky laws.

We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement and to all references to our Firm included in or made a part of the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act.

Very truly yours,

Sidley Austin LLP

/s/ Sidley Austin LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Pyxis Oncology, Inc. 2021 Equity and Incentive Plan of Pyxis Oncology, Inc. of our report dated March 21, 2024, with respect to the consolidated financial statements of Pyxis Oncology, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2023, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts
November 12, 2024

Calculation of Filing Fee Table

FORM S-8
(Form Type)Pyxis Oncology, Inc.
(Exact Name of Registrant as Specified in its Charter)

Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered	Proposed Maximum Offering Price Per Share	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
1 Equity	Common Stock, par value \$0.001 per share	Rules 457(c) and 457(h)	5,500,000	\$4.28	\$23,540,000.00	.0001531	\$3,603.97
Total Offering Amounts					\$23,540,000.00		\$3,603.97
Total Fee Offsets							-
Net Fee Due							<u>\$3,603.97</u>

Offering Note

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- (1) Pursuant to Rule 416 of the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers any additional shares of Registrant's Common Stock that become issuable under the plan set forth herein by reason of any stock dividend, stock split, recapitalization, or other similar transaction effected that results in an increase to the number of outstanding shares of Registrant's Common Stock, as applicable.
- (2) Estimated in accordance with Rules 457(c) and 457(h) under the Securities Act solely for the purpose of calculating the registration fee on the basis of \$4.28 per share, the average of the high and low prices of the Registrant's Common Stock on November 8, 2024 as reported on the Nasdaq Global Market.
- (3) Represents shares of Common Stock that were added to the shares authorized for issuance under the First Amendment to the Pyxis Oncology, Inc. 2021 Equity and Incentive Plan on October 23, 2024 following the approval of the Registrant's stockholders.

